

THE ARCHITECTS' JOURNAL



Standard contents

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

NEWS and COMMENT

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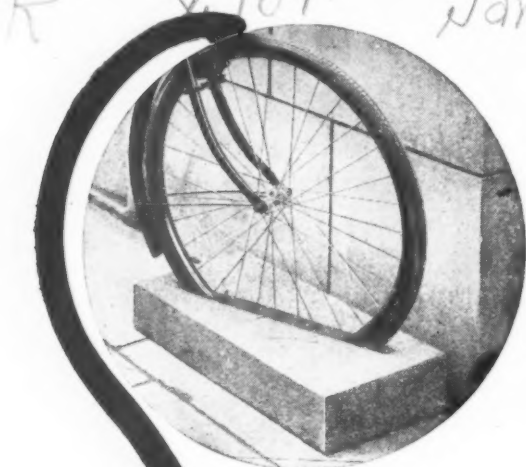
★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to H one week, I to Z the next. In all cases where the town is not mentioned the word LONDON is implicit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

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.	Ardwick 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
BAE	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	British Steelwork Association. Eggington House, Buckingham Gate, S.W.1.	Victoria 7301-2-3
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
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 7070
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.	Sloane 4280
CUJC	Coal Utilization Joint Council. 54, Victoria Street, S.W.1.	Victoria 9851
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
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	Flush Door Manufacturers Association. Stapleford Road, Trowell, Nottingham.	Ilkeston 623/4/5
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

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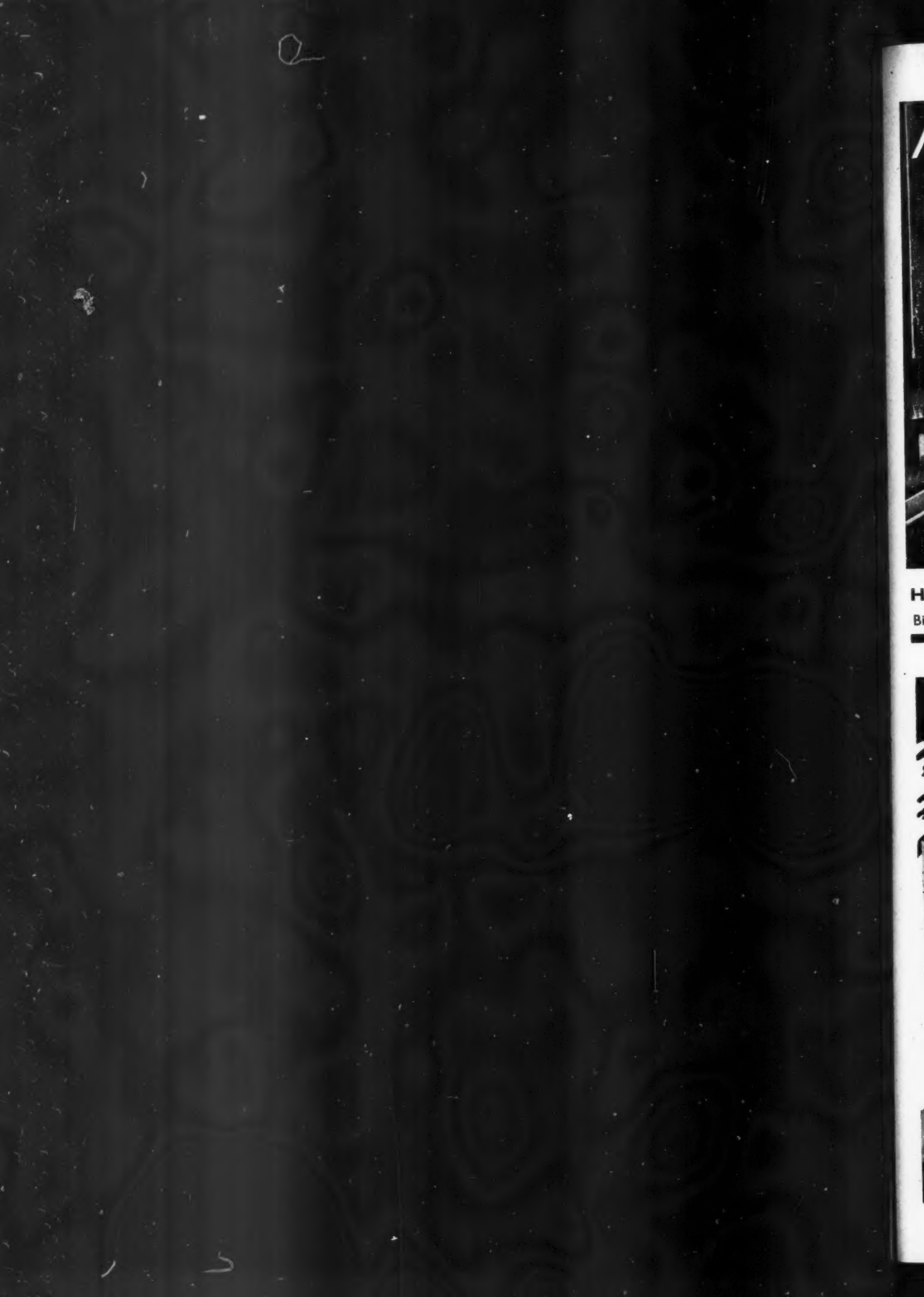
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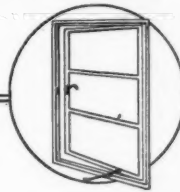
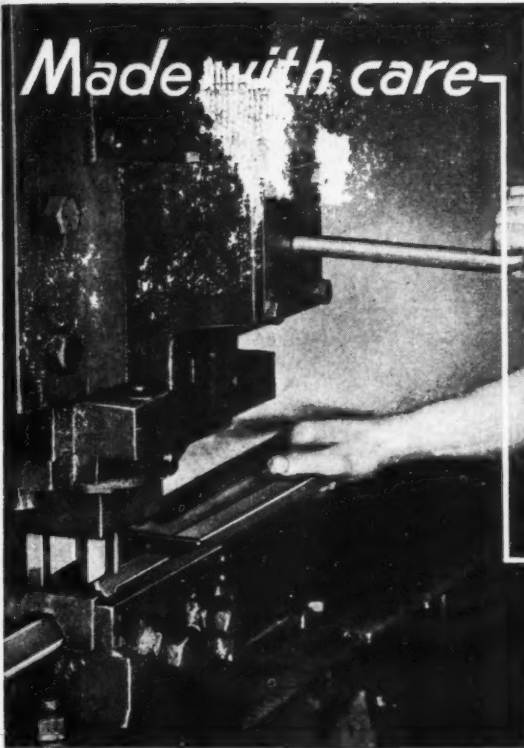
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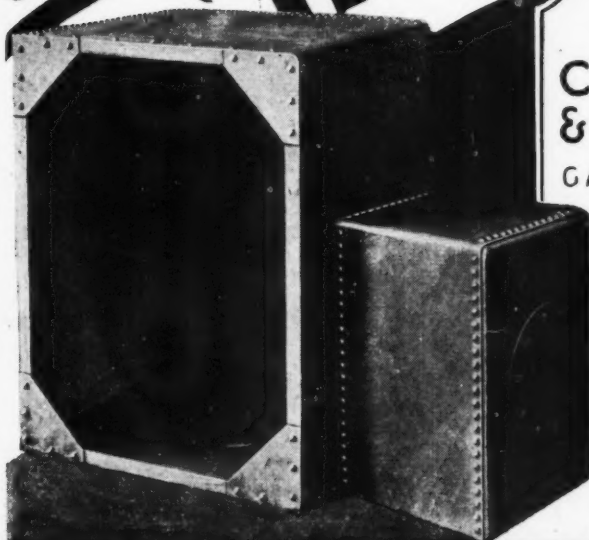
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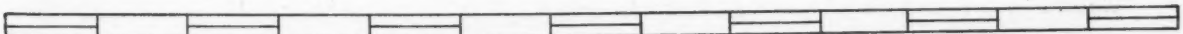
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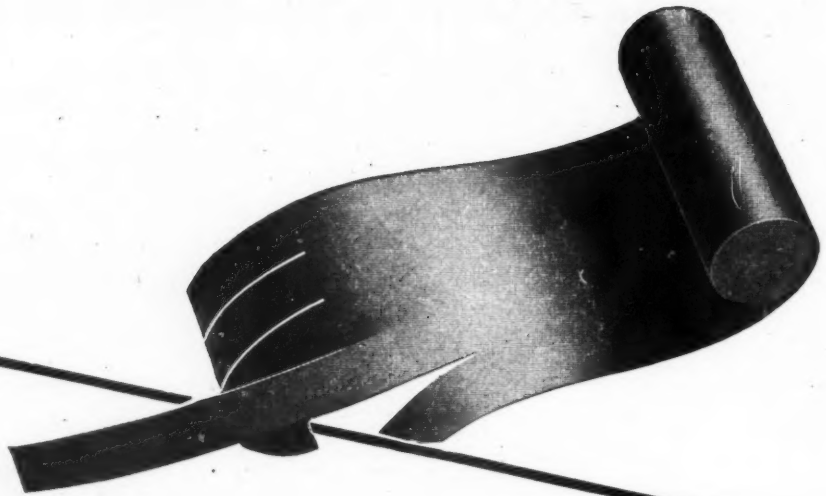


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The Bristol Channel and the Severn Estuary, by their physical character encouraged the growth of mediaeval commerce; the tidal rise and fall being valuable assets to all types of shipping. The maritime and commercial development of Bristol was fostered by the Norman Kings of England. A trading community must have existed before 1188 and possibly a hundred years earlier.

Trade with Ireland was without doubt one of the earliest contacts of the port and remained throughout the middle ages of great importance. From the Irish ports of Waterford, Cork, Kinsale, Limerick, Galway and Sligo came fish, hides, skins of wild animals, horses, timber, flax and linen. Return cargoes of salt, iron, wine, leather and cloth were taken from Bristol.

Bristol became a staple town in 1353 and the second port in the kingdom, doing a vast trade in wines from Gascony and Brittany in addition to her Irish commerce.

The trade routes of the Bristol Merchants fringed the great Atlantic and inevitably their eyes and thoughts were turned towards the ocean. Merchant Venturers had already financed one ill favoured expedition in search of the "Islande of Brasylle" at the time when the Venetian seaman John Cabot came to make his home in Bristol so that he might seek support from the Venturers for

exploration of the Western seas. Cabot led several Bristol financed expeditions, but success came when Henry VII granted him a patent "to seek out and discover 'in Bristol ships manned by Bristol men,' whatever isles, countries, regions or provinces, which before that time had been unknown to all Christians."

It was primarily a voyage of discovery and not a trading venture, though the shrewd Bristol Merchants undoubtedly had future trade in mind. Sailing with the North Star on his starboard beam, Cabot struck the "New Found Land" four hundred leagues from England.

In subsequent voyages with his son Sebastian, he discovered and opened up the Northern seaboard of America. It was a forbidding and unpromising land with none of the gold of the colourful Central America, nor the silks and spices of the Indies.

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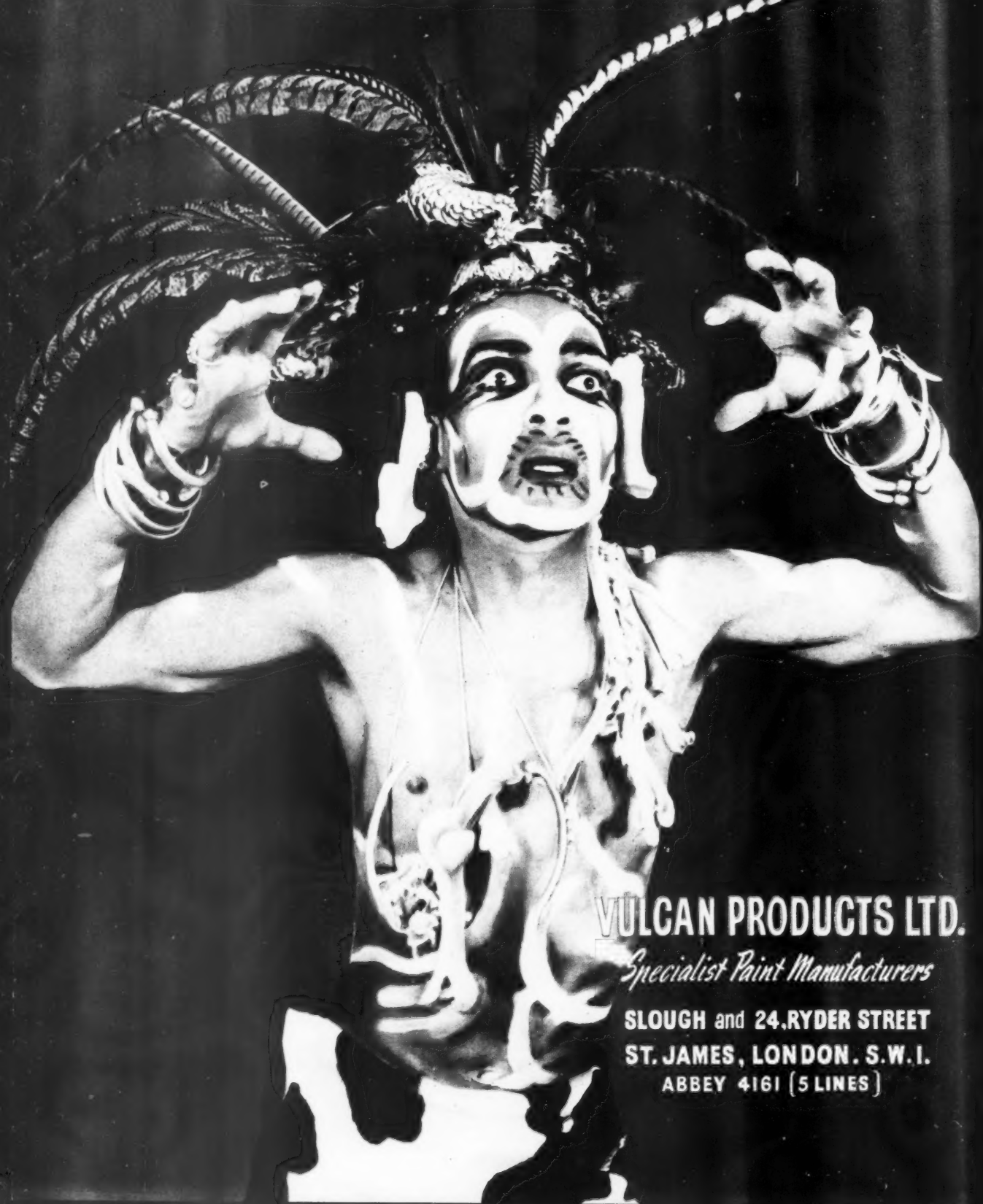
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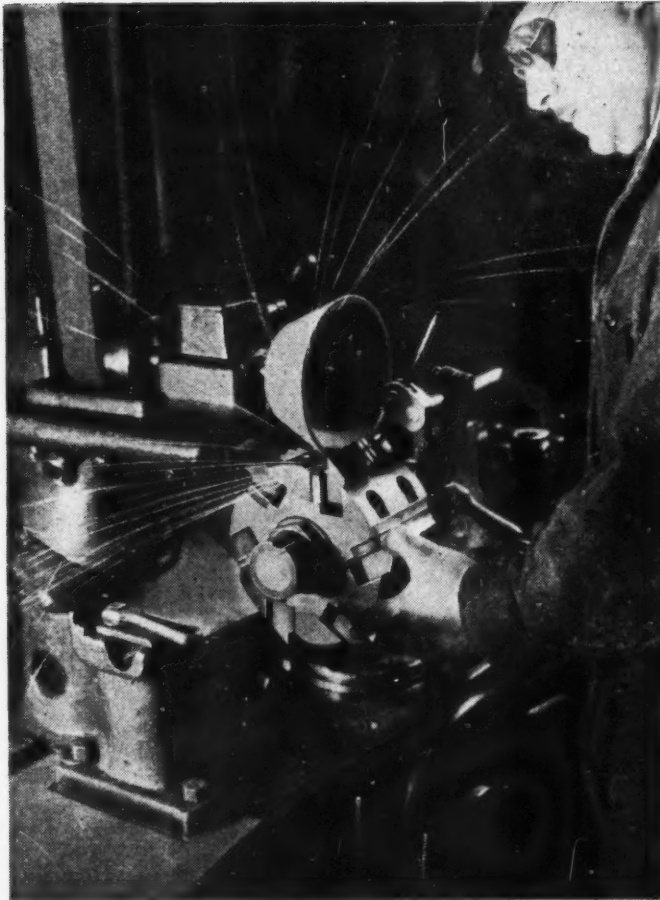
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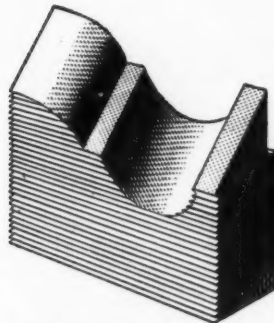
- (a) The precision grinding machine.
- (b) The cutting tools to be ground.

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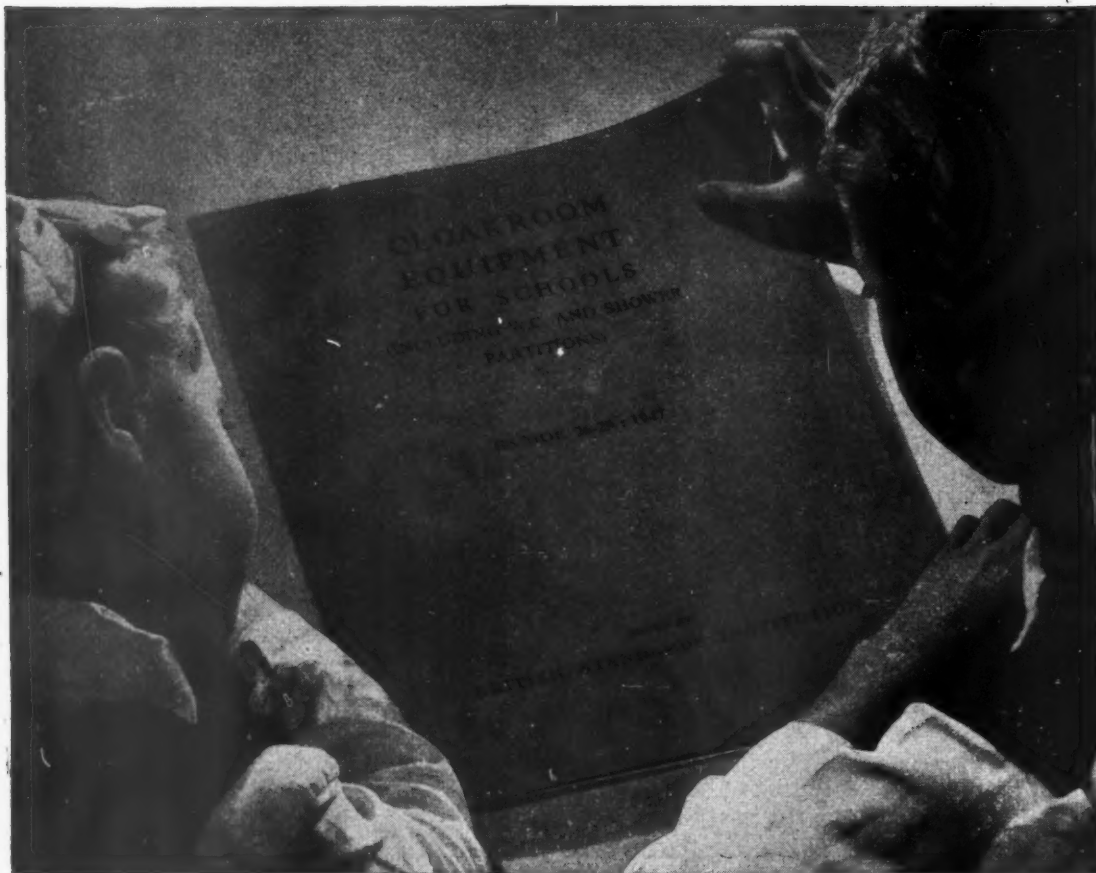
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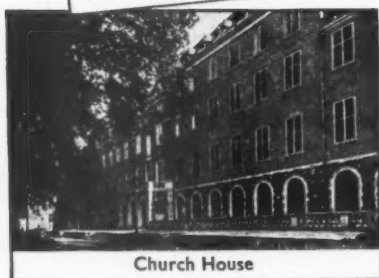
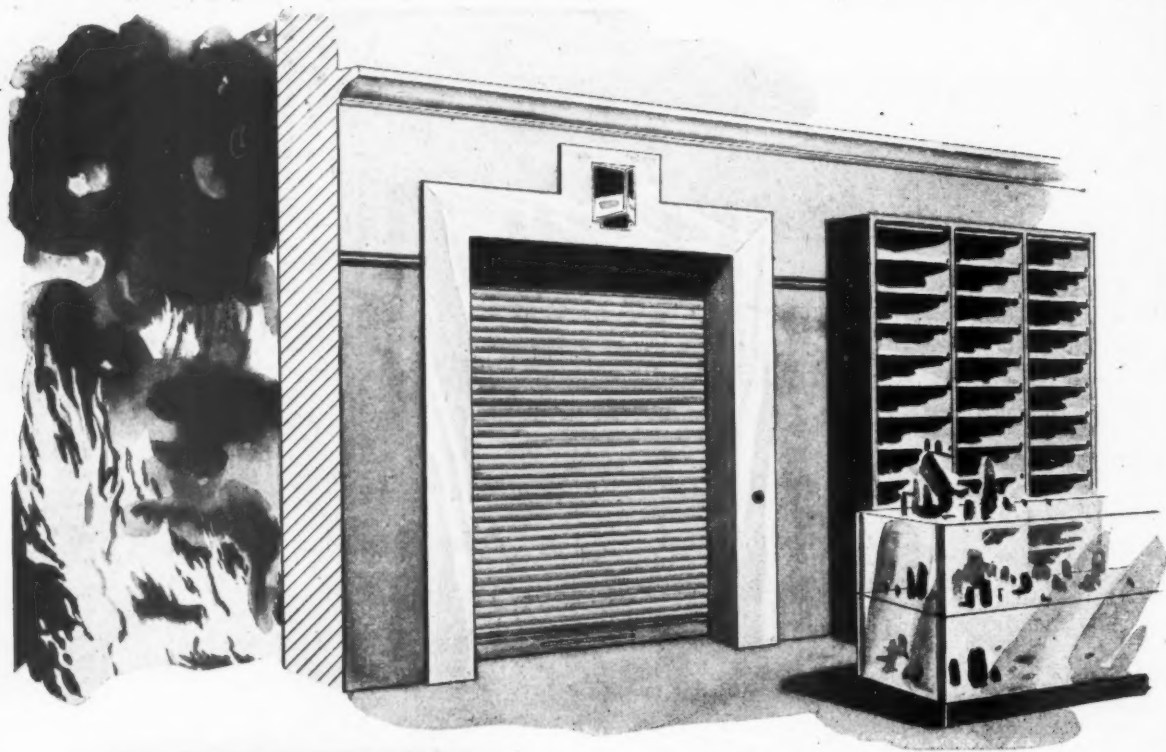
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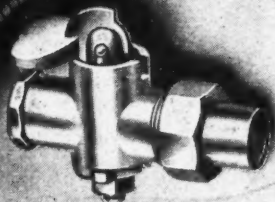
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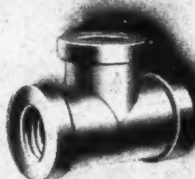
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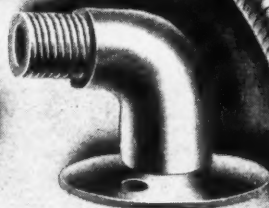
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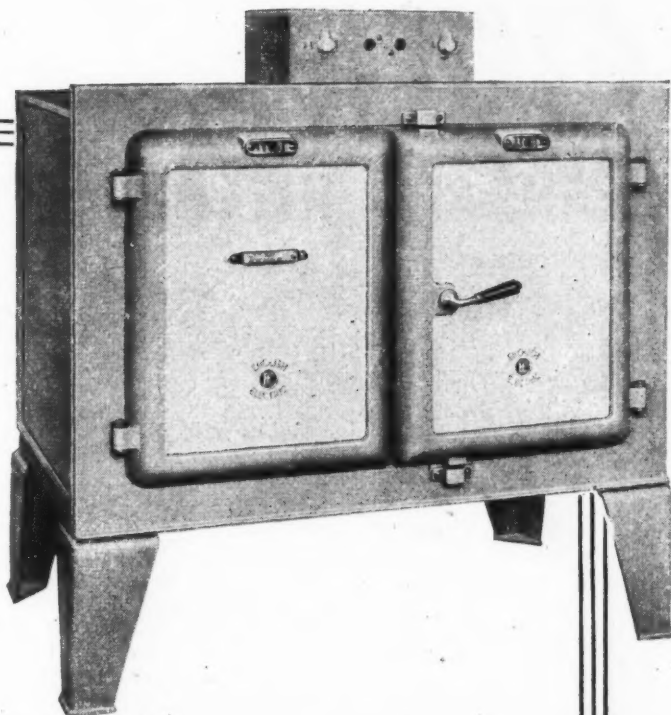
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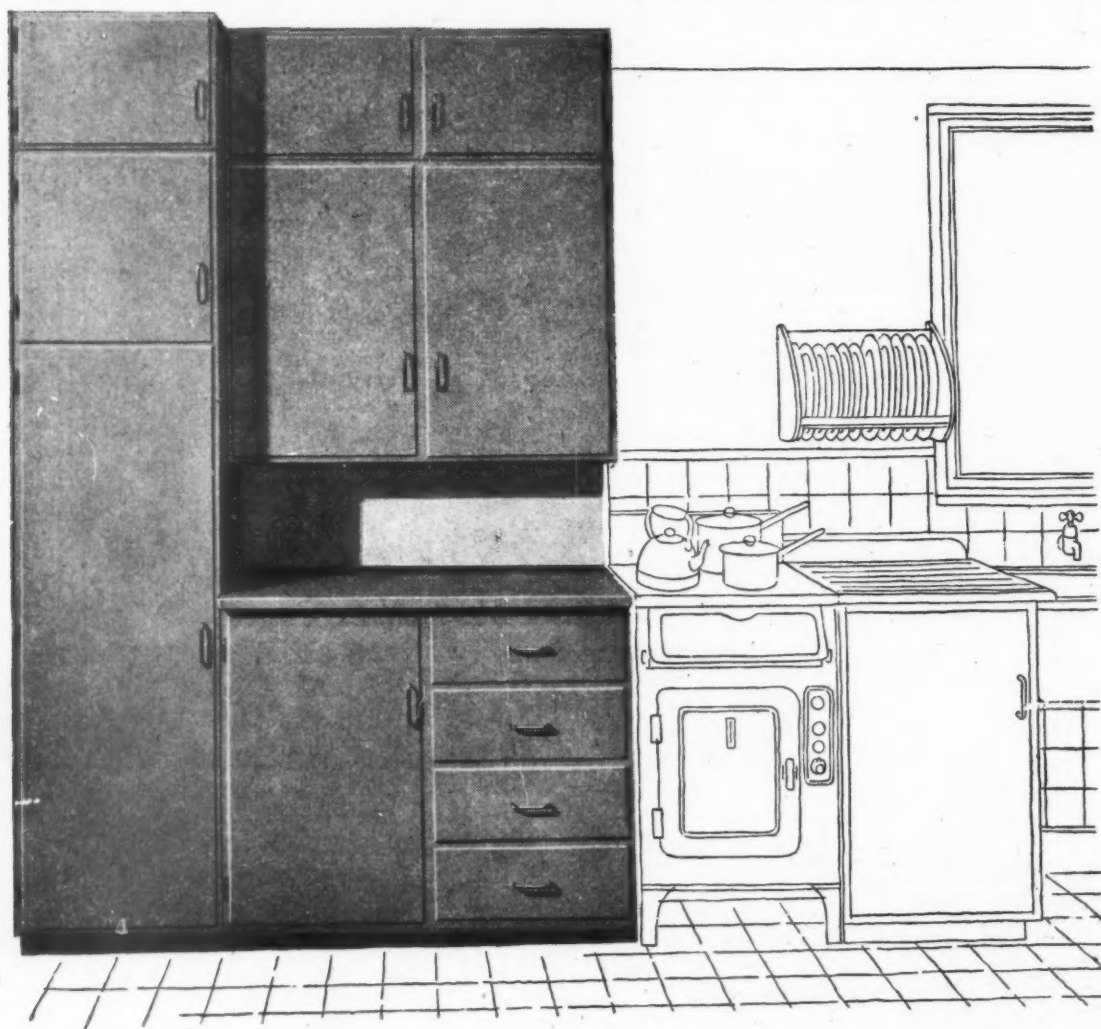


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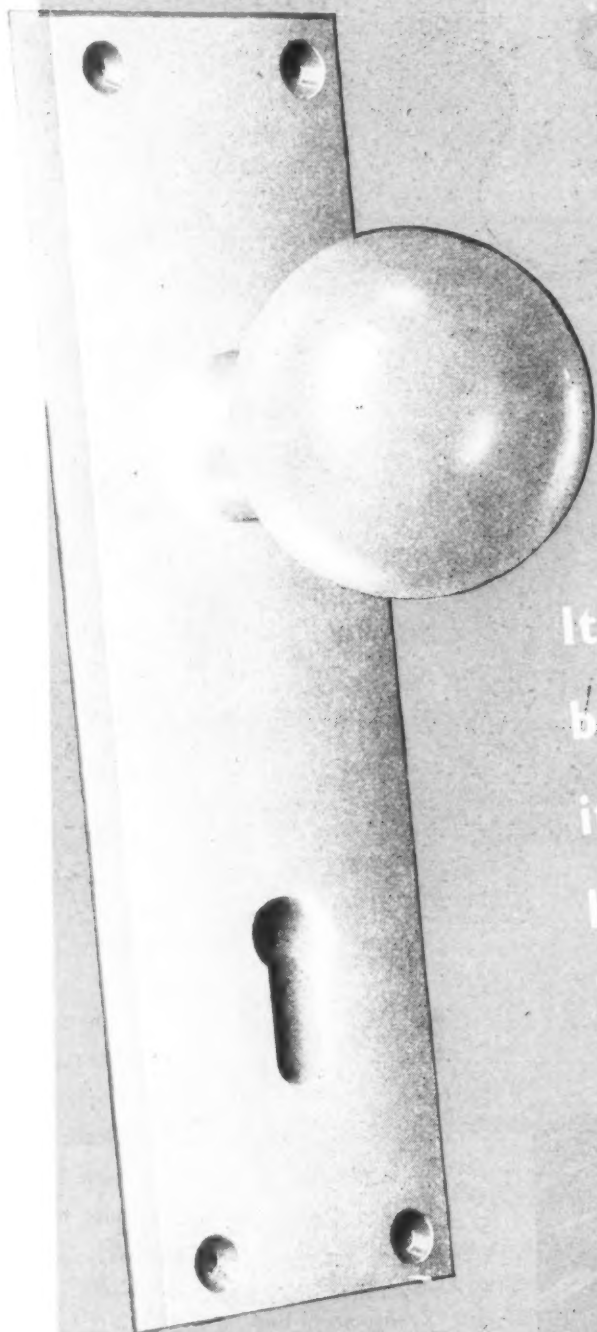
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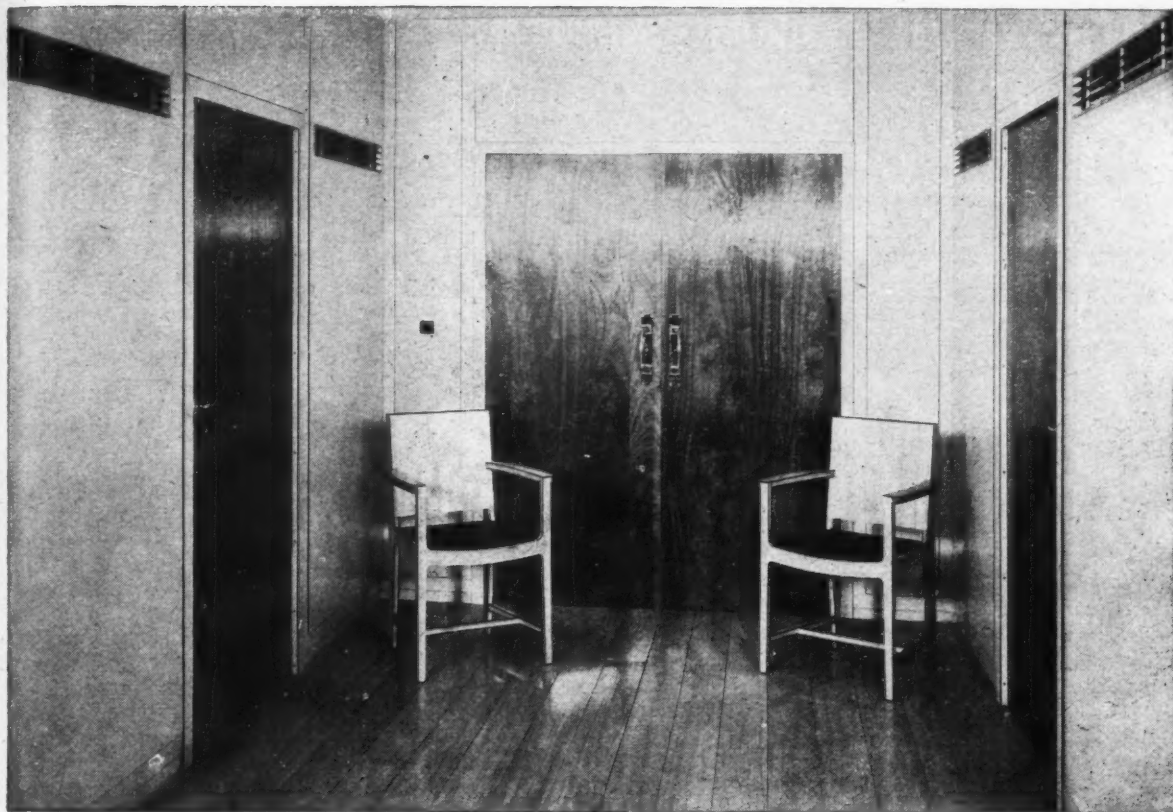
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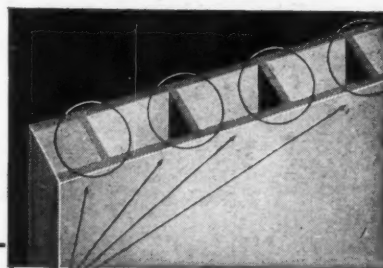
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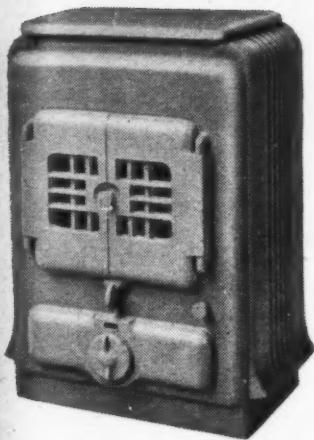
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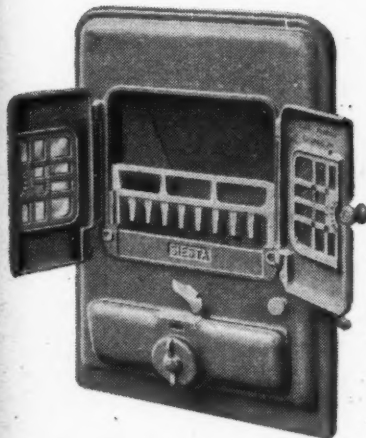
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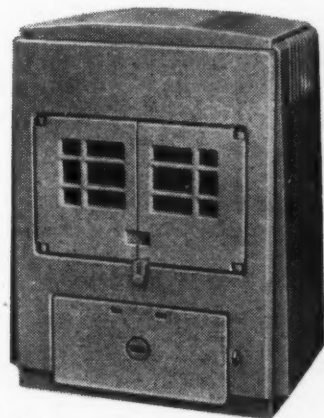
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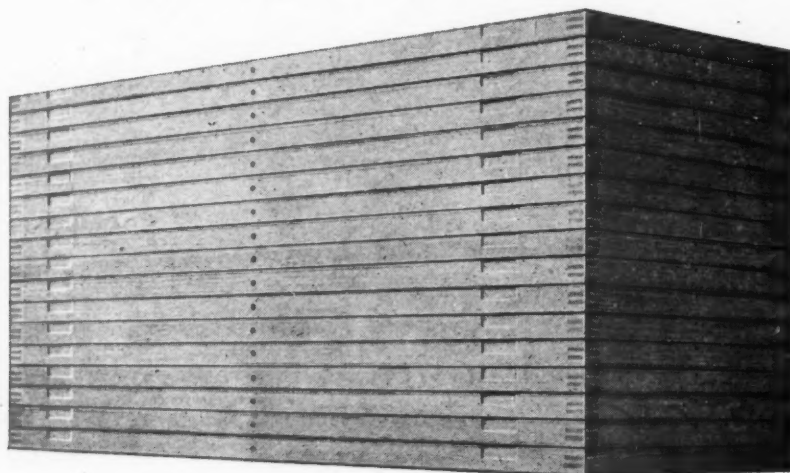
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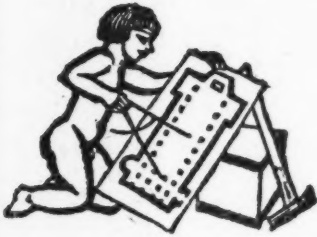
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In common with every other periodical this JOURNAL is rationed to a small part of its pre-war needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order." Subscription rates: by post in the U.K. or abroad, £1 15s. od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the JOURNAL and made of raw material now in short supply, are not necessarily available for export.



DIARY FOR JANUARY FEBRUARY AND MARCH

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

CHIPPING NORTON. *Exhibition: Ideas on Design in the Home.* Guide lecturer: G. Borchard. At the School House. (Sponsor, ACGB.) UNTIL JAN. 13

LONDON. Mrs. M. Pleydell-Bouverie. *Housing in US as I Saw It.* The Housing Centre, 13, Suffolk Street, Haymarket, S.W.1. (Sponsor, HC.) Buffet lunch 12.45 p.m.—1.15 p.m., 2s. 6d. Talk 1.15 p.m.—2.15 p.m., 6d. JAN. 20

Sir Thomas Bennett. *The Evolution of a New Town.* Ordinary General Meeting of the Royal Institution of Chartered Surveyors. At 12, Great George Street, S.W.1. 5.30 p.m. JAN. 5

Exhibition of Art, Chiefly from the Dominions of India and Pakistan. At the Royal Academy Galleries, Piccadilly. An exhibition of sculpture, painting, textiles, jewellery, furniture. 10-7. Sundays 2-7. Admission 1s. 6d. UNTIL FEB. 29

Richard Sheppard. *The Making of Architecture.* Christmas holiday lectures for boys and girls. Illustrated by lantern slides. In the Henry Jarvis Memorial Hall, RIBA, 66, Portland Place, W.1. Tickets free on application to the Secretary, RIBA. Envelopes should be marked "Christmas Lectures." 3 p.m. JAN. 5, 7 AND 9

London Master Builders' Association. *Central Area No. 1. Sixth Annual General Meeting.* At Derry and Toms' Restaurant, Kensington High Street, W.8. Principal speakers: E. J. Smith and P. Smallwood. 2.30 p.m. JAN. 7

J. F. L. Crocott. *Comfort Cooling in the Tropics.* At the Institution of Civil Engineers, Great George Street, S.W.1. (Sponsor, IHVE.) 6.0 p.m. JAN. 7

Robert Nott. *Planning Developments Abroad—Germany.* At the Planning Centre, 28, King Street, W.C.2. (Sponsor, TCPA.) 6.15 p.m. JAN. 7

E. H. Macmillen. *Some Aspects of the Supervision of Civil Engineering and Building Contracts in Wartime.* At 11, Upper Belgrave Street, S.W.1. (Sponsor, ISE.) 6.0 p.m. JAN. 8

Hotel, Restaurant and Catering Exhibition. A section will be devoted to hotel and restaurant design and construction. At Olympia. (Sponsor, Trade and Technical Exhibition, Ltd.) JAN. 16-24

R. Nicholas. *Planning Developments Abroad—Poland.* At the Planning Centre, 28, King Street, W.C.2. (Sponsor, TCPA.) 6.15 p.m. JAN. 13

RIBA Award of Prizes and Studentships. Criticism of work submitted by Ralph Tubbs. At 66, Portland Place, W.1. (Sponsor, RIBA.) 6 p.m. JAN. 13

Midwinter Madness. New Year party and dance. At Caxton Hall, Westminster. (Sponsor, Polytechnic Architectural Students' Society.) 7.30-11.30 p.m. JAN. 15

S. M. Reisser. *The Welding of Bridges and Buildings.* At Manson House, Portland Place, W.1. (Sponsor, Institute of Welding.) 7.30 p.m. JAN. 19

Building Contractors' Plant. The Problems Associated with Its Use. A course of eight lecture discussions. Jan. 21, J. F. Eden, *Introduction.* Jan. 28, Sir George M. Burt, *The Contractor's View (i).* Feb. 4, W. Barker, *The Plant Manager's View (i).* Feb. 11, A. G. Raven, *The General Foreman's View (i).* Feb. 18, Howard V. Lobb, *The Architect's View.* Feb. 25, Norman E. Wates, *The Contractor's View (ii).* March 3, H. E. Hodgson, *The Plant Manager's View (ii).* March 10, A. G. Buck, *The General Foreman's View (ii).* At the LCC Brixton School of Building, Ferndale Road, S.W.4. 7.0 p.m. Wednesday evenings. JAN. 21-MARCH 10

COMPETITIONS

Competition for War Memorial at Liverpool. The Imperial War Graves Commission invites designs in competition for a memorial to be erected on the promenade at Liverpool to the Missing Naval Auxiliary Personnel of the Second World War. Open to architects who are ex-serving members of His Majesty's Forces. Assessor: Edward Maufe. Premiums: £100, £60 and £30. Last day for receiving designs, January 16. JAN. 16

Royal National Eisteddfod of Wales Architectural Competitions, 1948. Competition 192 for a county college. Competition 193 for a neighbourhood unit layout. Assessors: C. F. Bates and T. Alwyn Lloyd. Premiums: £50 in each case. Conditions and entry forms from Rev. W. J. Samuel, General Secretary, 38, Dunraven Place, Bridgend. Entries to be submitted between June 5 and 14. JUNE 5-14

N E W S

THURSDAY, January 1, 1948
No. 2760 Vol. 107

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Roofing: General
Construction

22.F1 Plaxstele Sus-
pended Ceilings

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

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

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

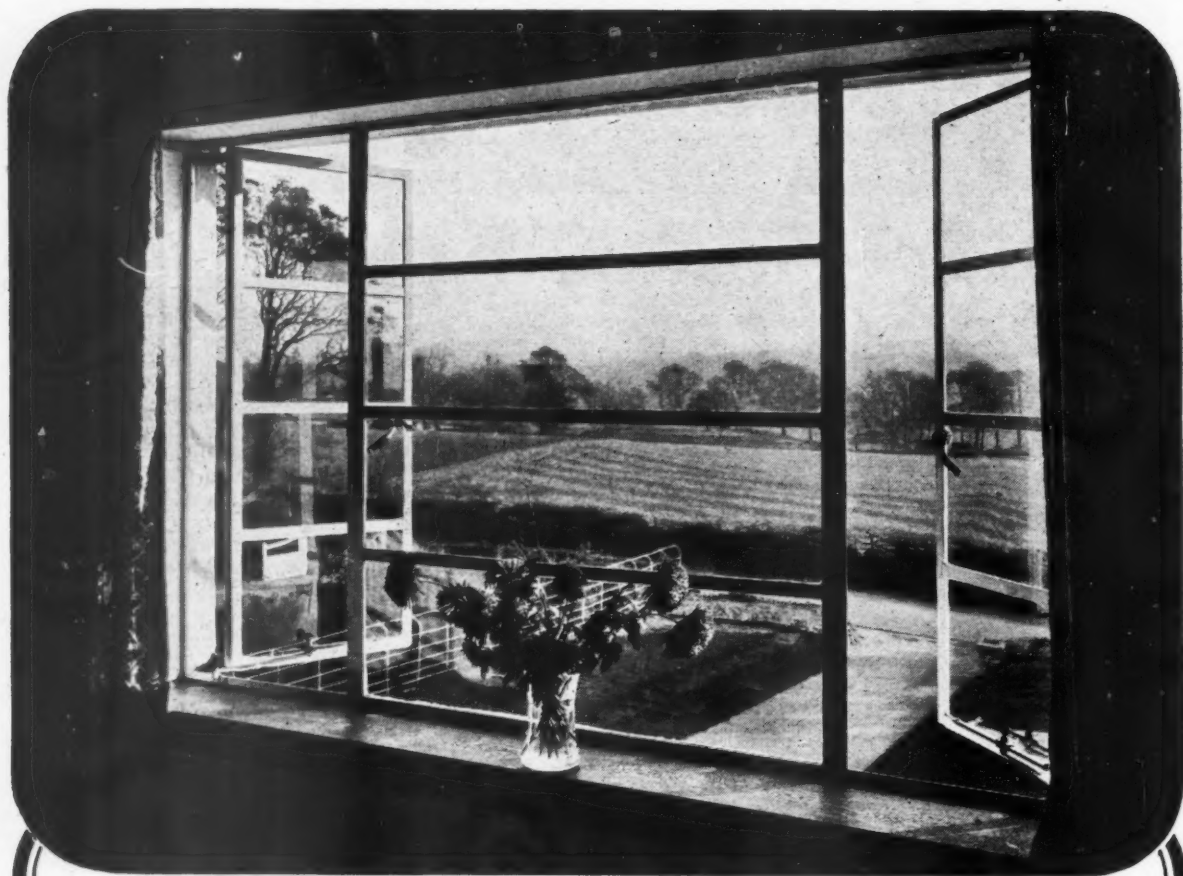
Any feature marked with more than two stars is very big building news indeed.

Among steps to be taken to increase the use of pedestrian crossings is the ILLUMINATION OF BELISHA BEACONS.

Low-power lamps will be placed inside the orange globes, but highway authorities have been asked not to light the beacons until this is made a legal requirement, which will not be until conditions permit.

★ Plans of every DEVELOPMENT IN GREAT YARMOUTH are to be placed before a local panel of architects.

The views of all members of this panel, even if in a minority, are to be placed before the town council, which will regard the opinions expressed as confidential. The Planning Committee has adopted this procedure and will reconsider it in three months in the light of experience obtained.



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From AN ARCHITECT'S Commonplace Book

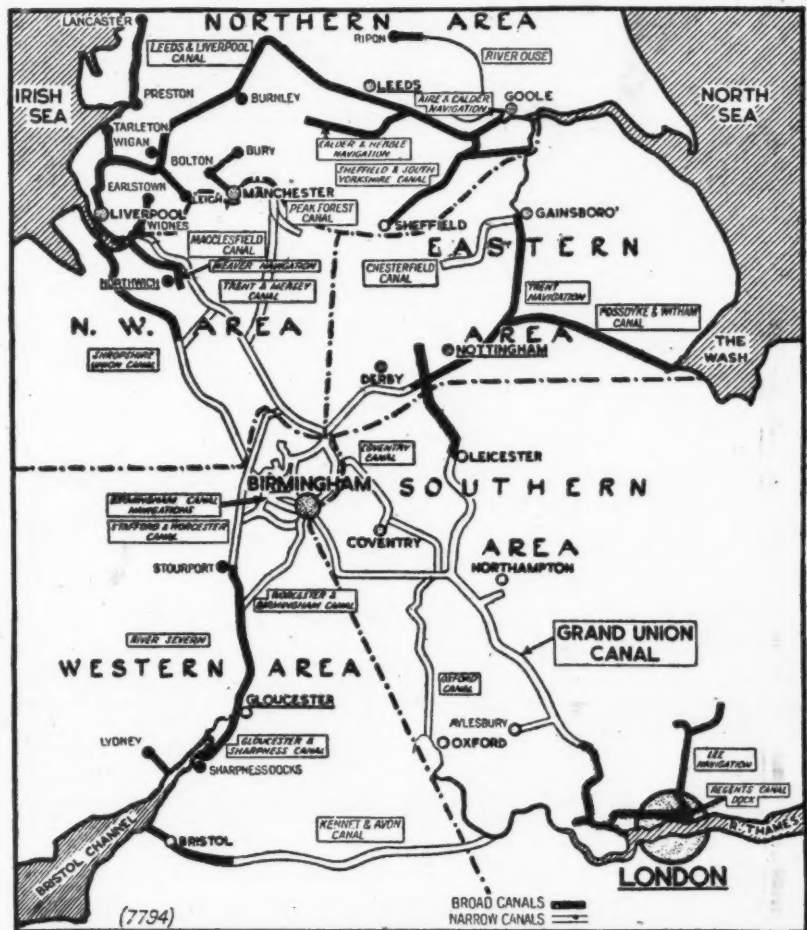
EXPERIMENT. [From *The English Seaside*, by H. G. Stokes (Sylvan Press).] The Chatsworth green-houses may have translated Paxton from a gardener to the honoured designer of the Great Exhibition building which spent its later years on Sydenham Hill as the Crystal Palace, but there were others less fortunate, because less skilled, in their enterprises. There was, for example, the Brighton Antheum, father of all our winter garden pavilions. This was of a curious design. It was in fact a dome, but unlike that of St. Peter's which it exceeded in diameter, this dome rested on the ground, so that although its grandeur and beauty impressed all beholders the whole effect rather resembled half a gigantic orange. Possibly because Dr. Johnson had complained that Brighton could not even provide a tree from which a man could hang himself, the Antheum was designed to accommodate the trees of "the Eastern and Western forest as well as the exotic shrub or flower." Doubtless it also would have sheltered at least one aspidistra. The summit of the dome was 64 ft. above ground; the width of the base was 164 ft. and the whole consisted of a number of iron girders springing to a central point, the intervening spaces being glazed. The privileged few permitted to inspect the building before removal of the scaffolding were filled with admiration for the boldness of its conception and the marvellous skill with which it had been constructed; but the architect, poor man, had misgivings already and asked that before the scaffolding were removed the structure could be examined by a competent engineer. But alas, the scaffolding was taken down prematurely. "Shortly before seven o'clock the gardener became alarmed by a loud cracking noise . . . The whole top of the dome fell in with awful rapidity. The huge iron girders collapsed one after the other like a pack of cards, accompanied by a noise resembling the continued firing of cannons." Not until twenty years later was the wreckage cleared away to make room for the new Palmeira Square.

The Minister of Works has announced that, as a temporary measure, the GRINLING GIBBONS STATUE OF JAMES II is to be erected on the National Gallery site.

Mr. Key said he felt that, as the statue of James II is generally acknowledged to be one of the best of the London statues, it should be placed in a more central position than Chelsea Hospital. The matter will be reconsidered when the new Government offices in Whitehall are completed and the adjoining gardens laid out. When a more suitable site is found or becomes available, he would consult the Royal Fine Arts Commission again.

★
From today the CANALS OF ENGLAND are divided into five areas under the Transport Commission.

Sir Cyril Hurcomb, chairman of the Commission, stated in London recently that the organisation would be similar to that for the railway network. At the head would be the Docks and Inland Waterways Executive, with Sir Reginald Hill as chairman. Areas provisionally arranged and officials appointed are:—Northern: Headquarters, Leeds; Manager, Mr. H. B. Emley, of the Aire and Calder Navigation Authority. North-Western: Northwich; Mr. C. M. Marsh, Weaver Navigation. Eastern: Nottingham; Mr. J. T. Evans, Trent Navigation. Western: Gloucester; Mr. A. C. Lisle, Sharpness Docks and Gloucester and Birmingham Navigation. Southern: London; Mr. C. Saywood, Grand Union Canal Co. Administration of the 69 miles of the Caledonian and Crinan canals in Scotland will be transferred to the Waterways Executive in March. Railway-owned canals will be managed by the Railway Executive for the time being.



A plan showing the canals of England divided into five areas. The boundary of each area is shown by a broken line.



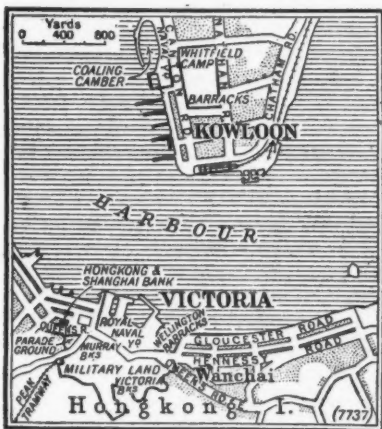
Photo Album: Farm Buildings in Austria

Although buildings like these farm buildings at Sölden are a very common sight in the Alps they are always attractive to the eyes of an Englishman. It may be because they are so un-English with their wide, overhanging verges, low-pitched shingle roofs, and ridges often running the

shortest way on plan. The square windows set perfectly in the plain white-washed walls give great charm to this particular example. In its Alpine setting nothing could be better; so-called chalet types in this country are another story. (Photo: Norman Westwood, A.R.I.B.A.)

A report by The Times Hongkong Correspondent discusses TOWN-PLANNING PROBLEMS IN THE CITY OF VICTORIA on Hongkong Island.

The expansion of the business centre of the city has for long been frustrated by the location, in the heart of that district, of some 98 acres of property leased to the Army Council and the Admiralty, and utilized as barracks, parade grounds, official residences, and a Royal Naval Yard. The military lands not only occupy a locality which would be ideal for the construction of the urgently needed new office buildings; their location prevents the Peak (cable) tramway station from being moved down to the main level, and necessitates a 10-minute walk, mostly up-hill, from the centre of the town to the lower terminus. In its present position between the business section and the densely populated Wanchai area the dockyard and its workshops cannot provide housing for its Chinese labour force. Moreover, the land today is far too valuable to remain undeveloped as an office centre. A few months ago the site of the old City Hall, adjoining the Hongkong and Shanghai Bank, realized over \$258 (£16) a square foot at public auction. At two-fifths of this figure, the naval and military lands would be worth over £25 million. Provision would have to be made—in the event of a sale—for the surrender of much land for new roads and piers. But there is no reason to doubt that new and up-to-date barracks, and a modern naval dockyard could be constructed elsewhere on the island out of the proceeds of a sale. The Army and Navy also occupy good-sized plots in the heart of the ceded area of Kowloon, including Whitfield Camp and Barracks (41 acres), and the naval camber (15 acres). The camp and barracks are the only undeveloped area suited for housing schemes within easy reach of the cross-harbour ferries; the naval camber occupies a frontage urgently required for wharf and warehouse accommodation. The loan by the home Government to Hongkong of the services of Sir Patrick Abercrombie, the town-planning expert, who has recently spent several weeks on the island, suggests that the future development of Hongkong is to form the subject of careful study and planning. It is expected that the question of giving up the naval and military lands in the congested Victoria and Kowloon areas will receive serious consideration.



The map and news paragraph above show that Britain is not the only country that has difficulties over land requisitioned for the Armed Forces. The recent White Paper on requirements for service lands in the UK poses a bigger but similar problem. The map shows the 98 acres in Kowloon and Victoria used for service purposes.

OUR TECHNICAL INFORMATION SERVICE

TWELVE months ago, *Information Centre* first appeared in its present classified form, an innovation introduced as one step in a general post-war extension of the JOURNAL's technical policy. Unfortunately, however, owing to the paper restrictions which followed the fuel crisis in February, 1947, this policy has never been fully implemented, and it seems worth while at this stage to recapitulate the ideas upon which it is based.

Architects require two kinds of technical information: first, technical news to keep them adequately informed of developments in the building industry in this country and elsewhere; secondly, information chosen chiefly for its value on a long term basis, capable of easy filing in a readily accessible form for day-to-day reference.

Information Centre is designed to fulfil both these requirements. Every week the technical department examines a considerable mass of literature, which is distributed to the members of a team of independent specialists, each an important authority on his own subject. Short abstracts and critical comments on the material are then prepared, edited and made up for publication. In this way a very large number of English and foreign journals are regularly examined, together with trade literature, books, reports, British Standards, and so forth, and readers can rely on having brought to their notice virtually every important technical development within (subject to the present limitation of space) a short while of publication. In view of present paper restrictions it is not possible to deal with other than the more important items received, but in due course the feature will become sufficiently comprehensive to make reference to the original document usually unnecessary.

Information Sheets are, of course, designed for long term reference rather than as a means of presenting news, but *Information Sheet* policy has been fully discussed in recent leaders and it is unnecessary to say more here. Another regular feature which is part of the technical service is *The Industry*, a development, on a broader basis, of the pre-war *Trade Notes*. It provides general news of the building industry and reviews technical developments of all kinds.

An innovation of a year ago which will ultimately appear regularly is *Current Technique*, designed to draw attention to structural and similar ideas being used in current building—ideas which might not otherwise appear in published form until the completion of the whole building some time later.

Another function of the *Technical Section* is to answer readers' queries on any subject connected with building. Those of a specific nature are dealt with by correspondence and the single example printed each week under the heading *Questions and Answers* gives little idea of the volume of queries handled daily by our technical department. For enquiries of a more general nature, when information on trade subjects is sought,

the *Enquiry Form*, printed each week, provides a most useful service. Over 12,500 of these enquiries have been dealt with in under two years.

To repeat, there can be no doubt that to-day the architect must have a reliable and up-to-date system of reference data as well as full information about day-to-day technical developments. It is our conviction that both these essential services must be to a great extent the responsibility of the technical press, hence our policy of organizing the *Technical Section* of the JOURNAL on a proper scientific basis, designed to provide a world technical news service and to build up for the architect, in his own office, the most complete body of technical data ever planned. Of necessity this service must for some time continue on an attenuated scale, and it is our constant regret that lack of paper has prevented an early fruition of our post-war plans.



The Architects' Journal

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

COUNCIL BANQUET

Feature of the private banquet to the delegates which concluded the AA celebrations was a television broadcast specially arranged by the BBC for the occasion. From the Alexandra Palace, John Summerson sent greetings to the diners grouped round their sets in Bedford Square, and then chaired with practised ease a discussion between George Kadleigh, Hugh Casson and AA student Peter Dickinson upon the meaning and future of modern architecture.

Inevitably, as the broadcast was included in the normal programme, the story put over with the help of photographs, sketches and models was, like most after-dinner stories, well known to all present. (Some of us remember see-

ing Mr. Summerson at the game before, struggling way back in 1937 with knitting needles and bath mat to explain point construction to the Mars Group Exhibition). Television, properly organized on a commercial basis, is almost unknown outside the country. The BBC is to be congratulated upon seeing the chance of publicising abroad, through foreign delegates to the AA Centenary, its achievement in this branch.

SELF-HELP, 1847-1947

The AA has always encouraged, and sometimes acted on, the expression of student opinion, and it will be interesting to see what comes out of one of the less publicised items in its centenary programme. While past achievements were being celebrated on the upper floors of Bedford Square, the foundations of the future were being well and truly laid by an international student conference in the basement. Some twelve nations were represented and (thanks to a recent war) a wider range of ages than one would normally expect; the tone was high—if at times also a little dry. Clearly self-help is as real to-day as it was in 1847.

The value of such a conference lies largely in exchange of information. Mutual criticism under the AA Group System must have seemed as revolutionary to some of the visitors as the Viennese student's choice of his own teacher to some of his hosts. But there was general approval for a number of positive proposals.

On the technical side, one proposal was that time would be saved (and "misfits" avoided to some extent) by a general background training in ordinary schools; others were that individual research is preferable to specialized lectures, and that a common basic education might well be given to the whole building team.

The AA's "practical work" in Morwell Street was compared with foreign students' experience on actual building sites, which has the advantage of permitting site organization and labour problems to be studied too. The International Union of Students is to organize a public conference in the summer, and CIAM is to be asked to help in the preparations.

CONWAY

A consulting engineer has reported the state of the suspension bridge at Conway to be deteriorating. The Mayor has suggested that the Ministry of Transport should consider throwing a Bailey bridge over the river as a temporary measure to relieve the situation. In that case, why should not the Bailey bridge be constructed on the alignment of the by-pass bridge suggested by Evan Harrison in the ARCHITECTS' JOURNAL for February 7th, 1946?

This would provide an opportunity for testing the utility of that scheme, and its construction would in no wise interfere with the repair—or widening—of the existing bridge, as it might do if placed alongside it. A temporary bridge could be well designed, would not conflict with the existing structure, and the traffic circulation would be improved.

There might be some realignment required—judging from the sketch plan in the article—on the north side of the "Spur Wall" in order to connect to existing roads, and the question of levels and existing properties needs consideration, but it should be feasible from an engineering point of view.

THE SITUATION IN GERMANY

I have just heard from a German architect, who gives some interesting information on the state of architecture in the British and American zones of

LETTERS

*Eric Brown, A.R.I.B.A.**Stefan Buzas**Hidalgo Moya, A.R.I.B.A.**Geoffrey Powell, A.R.I.B.A.**Philip Powell**Barbara Priestley**Peter Dunham, F.R.I.B.A.*

The AA Centenary

SIR,—On reading the ARCHITECTS' JOURNAL for December 11 we are astonished that, apart from a casual and obscure reference by ASTRAGAL, there is no mention of the great work done for the AA by Frederick Gibberd, as war-time Principal of the School.

ERIC BROWN
STEFAN BUZAS
HIDALGO MOYA
GEOFFREY POWELL
PHILIP POWELL
BARBARA PRIESTLEY

London

[Our correspondents may be sure that no slight on Frederick Gibberd was intended. In the small space available it was impossible to give more than a mention to many people whose work for the AA deserved a larger tribute. The AJ takes this opportunity of adding Gibberd's name to its list of memorable AA personalities; also the name of Jellicoe, Gibberd's predecessor as wartime Principal.—Editor.]

To Professional Services

SIR,—I would like to support your recent leader on the inadequate remuneration provided by the special RIBA scale of fees for State-aided housing.

The fundamental trouble is that the scale for the administration and supervision of the actual building operations is absurdly low. The scale allows 60 per cent. of the fees for the design, preparation of drawings and all usual work up to the placing of the contract, and I think the remuneration for these services is reasonable and adequate. However, the remaining part of the fee is supposed to cover the services for which the architect is normally paid 2 per cent. on the cost of the works, and I maintain strongly that there is just as much, if not more, work and time involved in the supervision and administration of housing work as with other types of buildings.

Take the example in Mr. Down's recent letter to you, that of 30 houses, where the contract sum for the houses themselves would be about £40,000. The special scale fee for the supervision, etc., of these houses would be approximately £223 compared with a normal scale fee for supervision of a contract of this size of £800. The difference between these two amounts is more than is received for services up to placing of contract as mentioned above, so that theoretically the architect must be out of pocket even under easier conditions than pertain now, but beset by the chaotic difficulties of to-day the situation is even more disastrous.

I would mention that the example used is for the first 30 houses at the top of the special scale; the comparison for the last 30 at the bottom of the scale is absurd, yet the last 30 take just as long to build and will probably be just as much trouble.

Dunstable.

PETER DUNHAM



The object: see below

shoes or part of a pig's foot. It is a model for a penholder evolved by an industrial designer, Ivor Ash. It is scientifically shaped to fit the hand comfortably, and Astragal must admit that it does; but whether it would slip conveniently into the pocket is another matter.

Whether the design is intended for a fountain-pen or the old-style dip-and-run is by no means clear, but if it is a fountain the location of the ink-sac or reservoir and the method of filling are a mystery . . . and if it isn't, in this day and age, it ought to be. Perhaps the biggest query of all is whether the evolution of such strange shapes is the most useful activity for an industrial designer; whether it is likely to convince the hard-headed industrialist that the designer is a key man whom it would be sheer bad business to neglect.

ASTRAGAL



A proposed by-pass bridge for Conway. See Astragal's note opposite

Germany to-day. There seems to be little confidence amongst architects that they will ever have any real work to do; repair work takes up most of their time, building materials are very scarce and, apart from a few competitions, the preparatory work for large-scale reconstruction has hardly begun. Some architects are working with building contractors on prefabricated building parts, mostly in reinforced concrete, as wood will probably disappear from the building market within the next few years.

Moves are taking place to re-establish the architectural organisations; the disintegrating effect of the four zones is a serious handicap. There seem to be four possibilities:—

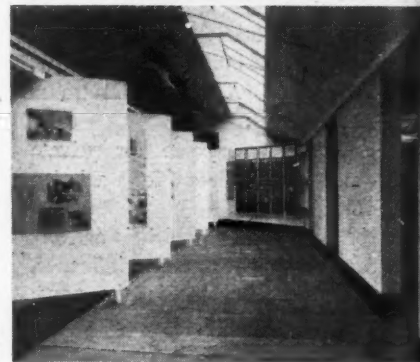
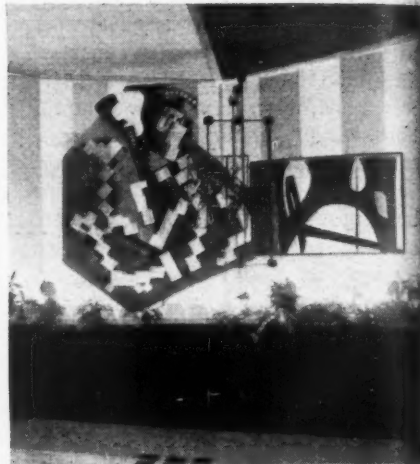
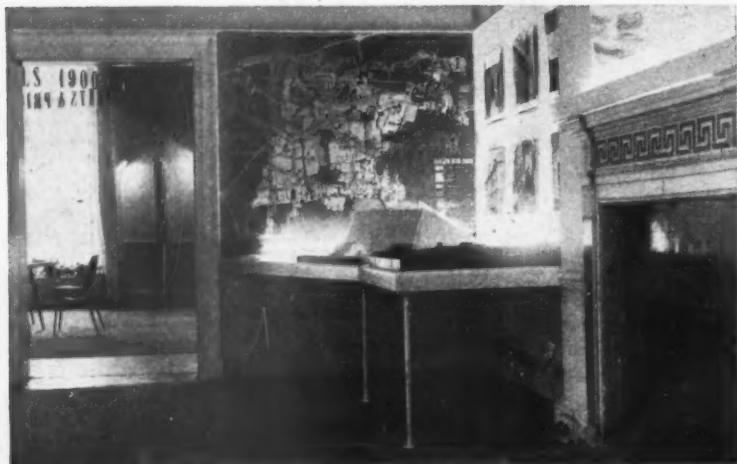
- 1: the old Werkbund;
- 2: the old BDA (Bund Deutscher Architekten);
- 3: new societies, some for private architects, others for salaried officials;
- 4: the trade union, which is actively campaigning for greater influence, with more success in the north than in the south.

Opinion is divided on the necessity for trade unionism in the profession, and the BDA is floundering on this point. But, in the words of my correspondent, "the daily struggle of life is so overwhelming that there is little time to think all these things over."

THE MYSTERY OBJECT

The Object I illustrated last week is not, as reader H. R. Finn, of Fareham, writes to suggest, a piece of modern sculpture, a bone for polishing

AA CENTENARY EXHIBITION



An important part of the Centenary Celebrations at the Architectural Association is the Centenary Exhibition. It covers the work of the last hundred years and provides a survey of British architecture during the Victorian era and after, but its real purpose is to show the part which the AA has played during that time and to give some idea of its multifarious activities. A small exhibition of portraits of past presidents, on the ground floor, is an interesting cross-section of portrait painting through three generations. Apart from the intrinsic and personal aspect of the portraits, the works of such painters as Rothenstein, Orpen, and Augustus John are exhibited. In the Library is shown representative work of AA Presidents from 1847-1900. This gives some idea of the rapidity with which architectural fashions changed in the sedate Victorian era, and reflects also how the Gothic and Classic revivals flourished side by side—the obsession with style rather than function—combined with the earliest attempts to create a new architecture. Around the room is shown a selection of books written by AA members during the last hundred years, and some of the treasures of the AA Library are also exhibited.

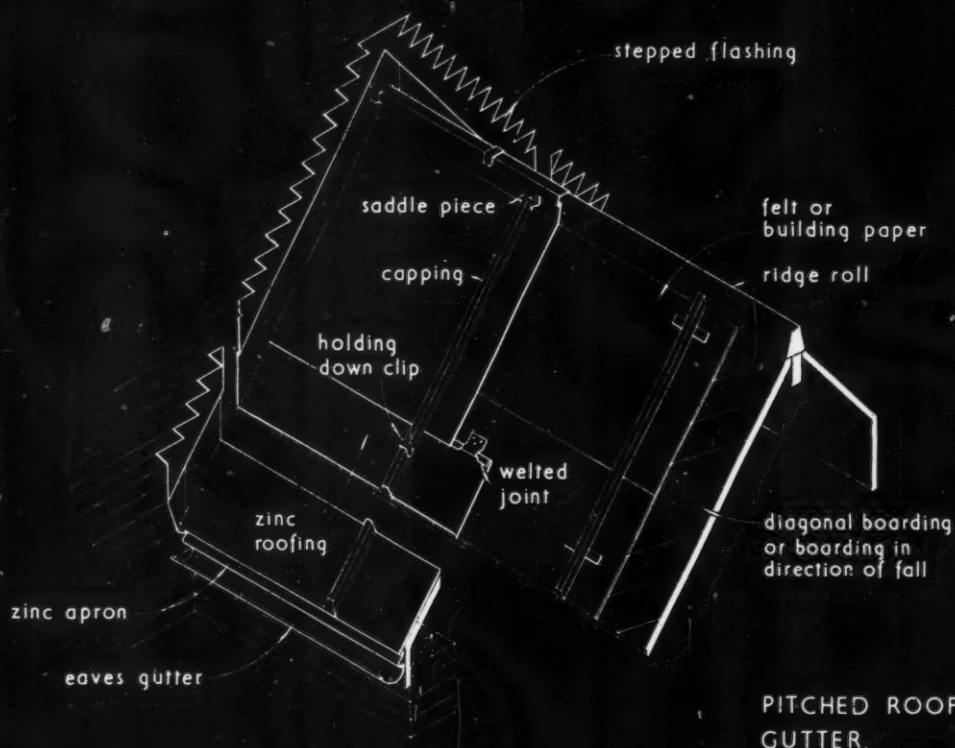
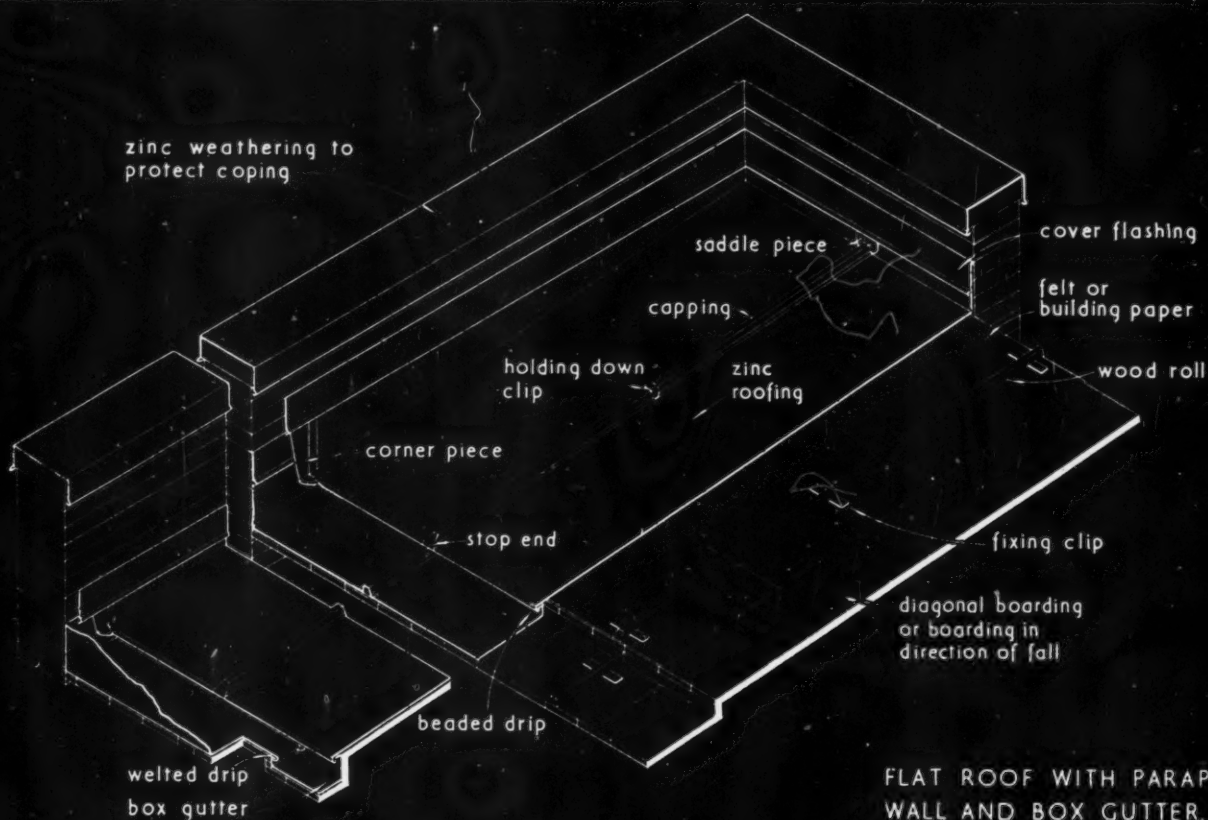
In the two Members' Rooms are examples of the work of Presidents of the AA and of Principals of the AA School from the beginning of the century. An adjoining room is devoted to the AA Scrap Book—prints, drawings and documents—illustrating the life of the AA through a hundred years. Two studios, on the second and third floors, show some of the work done by students. Architect to the Exhibition was Colin St. Clair Oakes, M.B.E., R.S., A.R.I.B.A. The sculptured panels depicting the various premises of the Association and the sculptured centrepiece are by William L. Stevenson, O.B.E. The Exhibition remains open until January 7.

Left, top to bottom: the two Members' Rooms, showing examples of the work of Presidents of the AA and Principals of the AA School and the exhibition of students' work. Above, the sculptured centrepiece, by William L. Stevenson, from the AA Scrap Book Room, and another view of the exhibition of students' work.

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CONSTRUCTION OF ZINC ROLL-CAP ROOFING.

Compiled from information supplied by Zinc Development Association.

10.J1 ZINC ROLL-CAP ROOFING : GENERAL CONSTRUCTION

General

This Sheet is the first of a series illustrating the use of zinc in building construction and describes the general use of roll-cap roofing for flat and pitched roofs. The system enables roofs to be laid without the use of solder (except for minor details) and without nails or screws passing through the exposed surfaces of zinc. Provision is made for expansion and contraction.

Material

Zinc is a non-rusting metal which on exposure to the atmosphere forms its own protective coating. This coating, having the same coefficient of expansion as the metal itself, does not peel off with changes in temperature. Such corrosion as occurs is uniform, and very slow. The life of the sheet is therefore in proportion to its thickness. While the extra cost of a thick sheet adds but little to the total cost of a roof, it can be safely said that No. 14 zinc gauge sheet, properly laid, will provide a trouble-free roof for 40 years and probably more in any normal land or marine atmospheres.

Construction Generally

Roof boarding : Should preferably be of well-seasoned yellow or red deal not less than $\frac{1}{2}$ in. thick and laid in the direction of, or diagonally across the fall of the roof. Oak, western red cedar and knotty woods should be avoided as these contain substances which may corrode the metal.

Felt or building paper : To be laid over the boarding to prevent condensation forming on the underside of the metal and to provide thermal and sound insulation. The most suitable felt is brown inodorous felt usually supplied in 32 in. wide rolls. It should be laid across the fall of the roof, all joints being butted. Building paper, coated both sides, is laid in the same manner as felt except that the joints are lapped about 2 in.

Wood rolls : To be of timber similar to the roof boarding and nailed to roof boarding from eaves to ridge.

Zinc : To be laid from the eaves upwards and should not be less than No. 14 zinc gauge in thickness. Standard sheets are 3 ft. wide by 7 ft. or 8 ft. long. The zinc gauge rises in number with thickness and should not be confused with Imperial Standard Wire Gauge. Corresponding gauge numbers and thicknesses are No. 14 zinc gauge (21 I.S.W.G.) = 0.031 in. : No. 15 zinc gauge (20 I.S.W.G.) = 0.036 in. : No. 16 zinc gauge (19 I.S.W.G.) = 0.041 in.

The sides of the sheets are turned up against the rolls, and the rolls and turned up edges covered with zinc capping. Ends of sheets are jointed by drips or by welged joints according to the pitch of the roof.

Pitched Roofs

The steepness of pitch is immaterial as zinc does not creep. With a pitch of more than 1 in 8, drips may be dispensed with and ends of sheets joined by means of welged joints. Using 8 ft. sheets these occur at approximately 7 ft. 9 in. centres, 3 in. of each sheet being used for the folds of the welt. Staggering of welged joints is not necessary as the thickness of the

folds in the side turn-ups is taken up against the wood rolls. The lower ends of bottom sheets are constructed as at drips in flat roofs.

Flat Roofs

The minimum fall should be $1\frac{1}{2}$ in. in 8 ft. Drips must be provided—at 7 ft. 6 in. centres for an 8 ft. sheet—to ensure weatherproof joints between ends of sheets. Drips are in the form of vertical steps not less than $2\frac{1}{2}$ in. high for a beaded drip or 2 in. for a welged drip.

Box Gutter

A typical box gutter used with flat roofs is illustrated on the face of this Sheet. It is constructed with falls and drips as for flat roofs. Depth at highest point should be at least 2 in. and width 9 in. The side of the gutter against a wall is turned up at least 4 in. and flashed. Cesspools, when used, should be at least 4 in. deep, the full width of the gutter and as large as possible, the lining on all sides being carried up to the top of the gutter sole.

Chutes should empty into rain water heads not smaller than the width of the chute. Swan necks are connected direct to rain water pipes.

Eaves Gutter

Three sections of eaves gutter are illustrated on Sheet 33.U1. The weathering between roof and gutter is made by a zinc apron sometimes formed into the shape of a T for easy fixing. Where the depth between the roof and gutter is large enough a plain apron may be fixed to the fascia board.

Finish

Painting of zinc is not necessary to prevent corrosion. If painting is desired, for decorative purposes, the zinc must be allowed to weather for about two months and may then be painted after dirt and loose powder have been brushed away. Should it be impracticable to delay painting the zinc may be treated with a solution of copper sulphate (6 oz. copper sulphate to 1 gallon of water) until it darkens. After it has dried, and any loose powder been removed, the paint may be applied. Proprietary solutions are also available for this purpose.

British Standard

B.S. 849: 1939—Plain sheet zinc roofing—should be consulted on all matters connected with the specification of zinc sheets for building and the approved method of laying.

Further Information

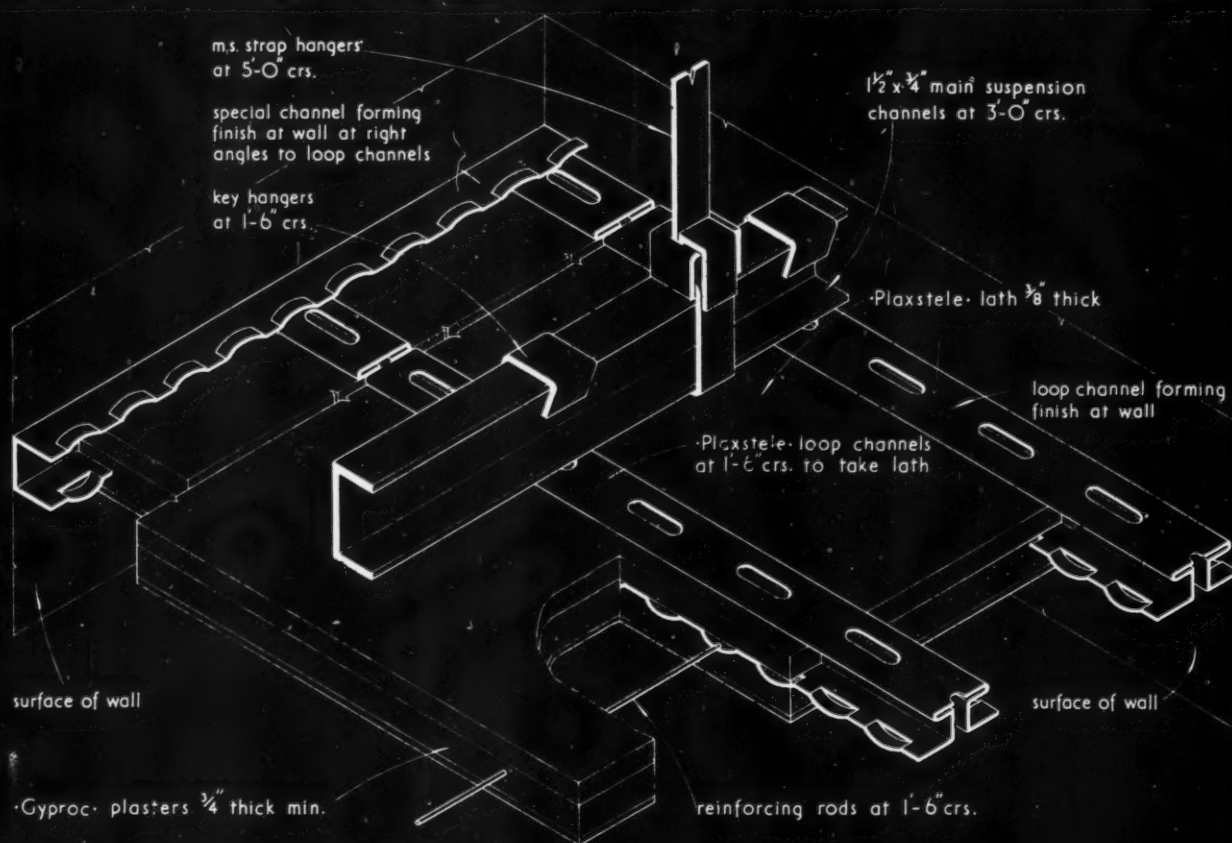
The Zinc Development Association maintains a workshop for the production of models and prototypes of zinc roofing work and is available to answer questions and advise on technical problems dealing with this subject generally.

Compiled from information supplied by :

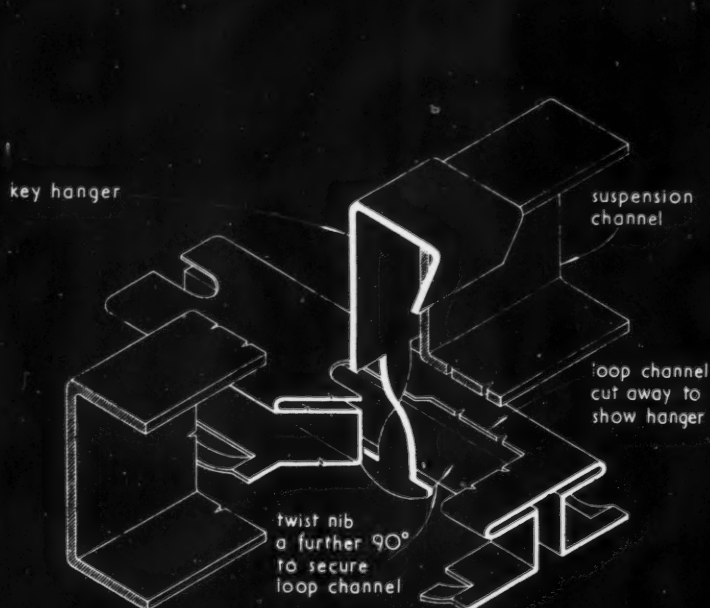
Zinc Development Association.

Address : Lincoln House, Turl Street, Oxford.

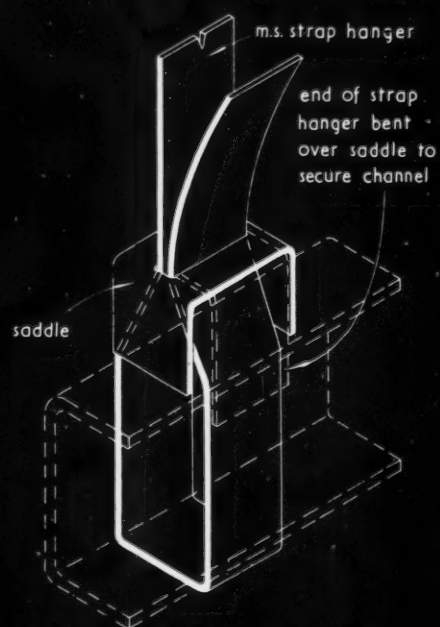
Telephone : Oxford 47988.



GENERAL ASSEMBLY OF COMPONENT PARTS.



DETAIL OF KEY HANGER SECURING LOOP CHANNEL TO MAIN CHANNEL.



DETAIL SHOWING ASSEMBLY OF M.S. STRAP HANGER AND SADDLE.

22.F1 ·PLAXSTELE· SUSPENDED CEILINGS

This Sheet describes the ·Plaxstele· system of suspended ceilings and supersedes previous Sheets in the original Library on the same subject: Nos. 689 and 825.

General System

Mild steel suspension and jointing members, ·Plaxstele· lath, small reinforcing rods, and undercoats and finishing coat of ·Gyproc· plasters form this ceiling system. Main channels are suspended from the structural roof or floor by means of mild steel strap hangers. Keyed at right angles to the channel are cold rolled steel loop-channel sections which support the ·Plaxstele· lath. Support at walls is provided by continuous loop channel sections. The ·Plaxstele· lath is inserted into the groove in the loop channels, reinforcing rods being threaded through the loops of the steel channel section underneath the ·Plaxstele· lath to form a rigid grid over which plaster is applied.

·Plaxstele· ceilings may be hung from any type of construction, and the depth of suspension may be adjusted to suit requirements. Mild steel strap hangers are supplied to the length and shape specified.

Suspension

The sizes, general assembly and maximum spacing of the suspension members are shown on the face of this Sheet. Both main suspension channels and strap hangers should be arranged to be within 1 ft. 6 in. of the walls at the boundary of the ceiling. The strap hangers which support the main channels are made to any length and may be nailed or screwed to timber roof or floor members or may be folded and clipped round steel structural members. After anchoring the strap hanger a special saddle component is threaded on to it. The end of the hanger is bent round the main suspension channel, and then bent over so that the saddle is forced down on to the top of the channel. A twisted key hanger, slipped over the top flange of the suspension channel, allows a loop channel to be hung from the key when the nib at its lower end is clipped into narrow slots provided in the top of the loop channel. The nib at the lower end of the key is then twisted at right angles to the slot, tightly fixing the loop channel and forming a rigid grid. A summary of methods for attaching strap hangers to structural roof or floor members is shown on Sheet 26.J3. All metal parts that come into contact with plaster are protected by sherardising to minimise corrosion.

Plasterboard

·Plaxstele· laths are supplied in sheets measuring 3 ft. 0 in. by 1 ft. 5½ in. by ½ in. thick.

Plastering

Plastering is simplified by this system in that it allows the construction of large areas of ceiling unbroken by beams and girders, saving the time which would be involved in plastering the sides of beams, forming cornices, etc. A brief recommended specification is: First undercoat ¾ in. thick, one part Paristone Hardwall (Haired) Plaster to two parts by weight (i.e., 1:1 by volume) of clean, sharp sand conforming to Class A of B.S. 1198. Second undercoat ¼ in. thick. Sand proportion increased to three parts by weight. Finishing coat not less than ¼ in. thickness of three volumes Paristone Hardwall (Unhaired) Plaster gauged with one volume lime putty. Alternatively, Glastone Hardwall Finishing Plaster may be used neat.

Lime or cement and sand mixes should never be applied direct to ·Plaxstele· lath, neither should the surface of ·Plaxstele· lath be moistened before plastering.

Fire Resistance

The system is designed to form a 1 in. ceiling slab of gypsum which, being suspended, gives a higher fire rating than a ceiling of similar thickness fixed direct to joists.

Thermal Insulation

A typical structure consisting of a ·Plaxstele· ceiling suspended below the underside of the joists of a typical timber floor consisting of tongued and grooved boarding on joists has a thermal transmittance "U" value of 0.27; calculated on a heat flow in an upward direction.

Trade Mark

This is a proprietary system manufactured under the registered trade mark ·Plaxstele·.

Compiled from information supplied by:

Gyproc Products Ltd.

Head Office: Westfield, Upper Singlewell Road, Gravesend, Kent.

Telegrams: Gyproc, Gravesend.

Telephone: Gravesend 4251-4.

London Office: Morris House, Jermyn Street, London, S.W.1.

Telephone: Whitehall 9821-5.

Glasgow Office: Gyproc Wharf, Shieldhall, Glasgow, S.W.1.

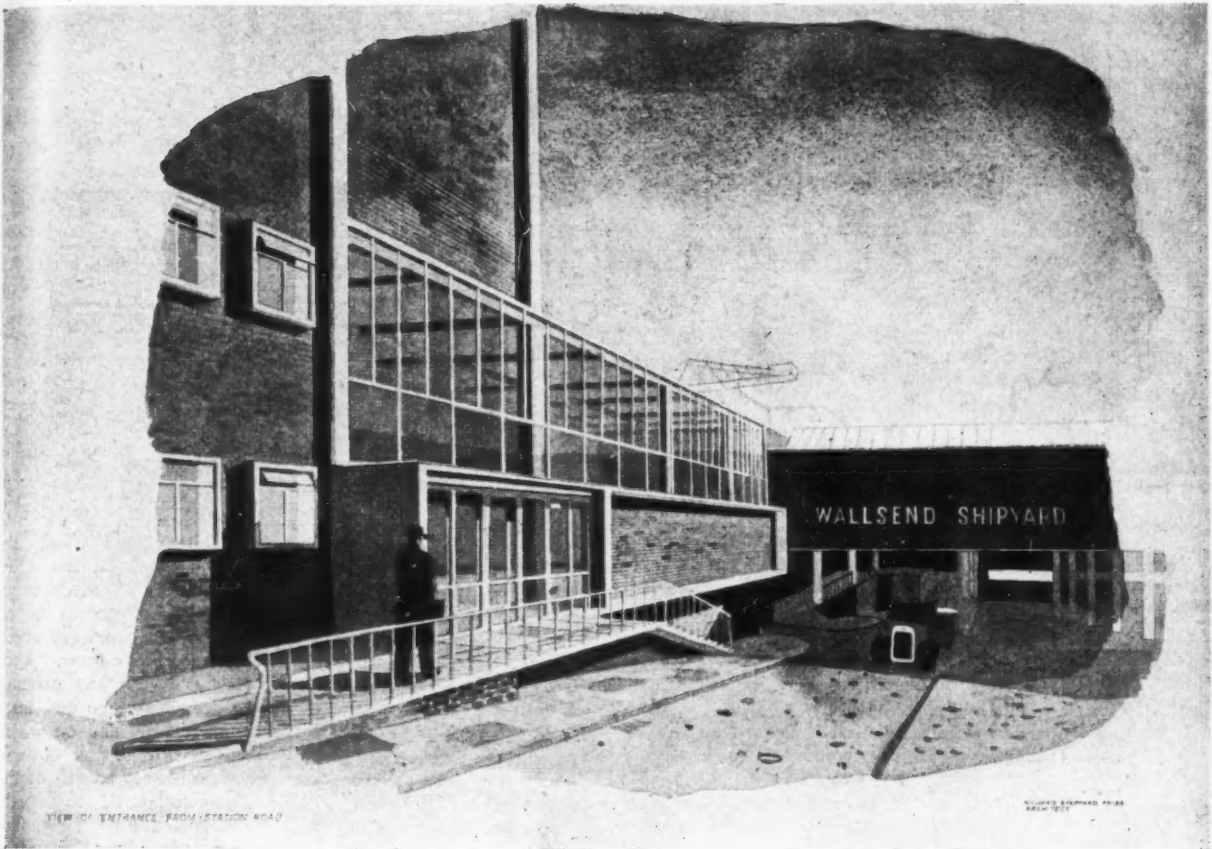
Telephone: Govan 614-6.

Telegrams: Gyproc, Glasgow.

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The Architects' Journal Library of Information Sheets.

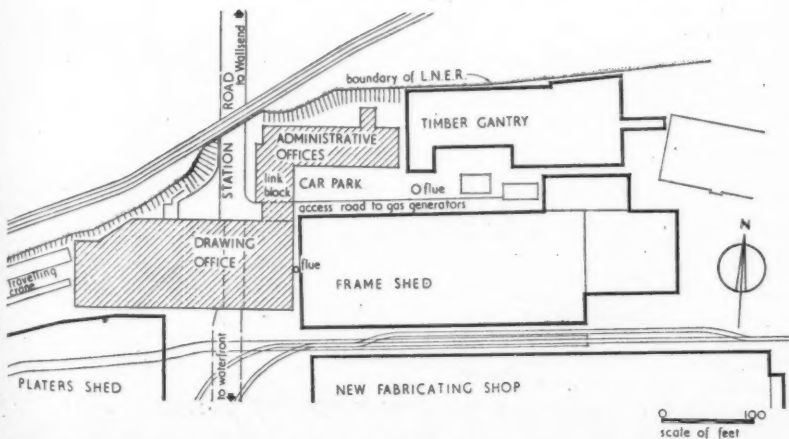
Editor: Cotterell Butler, A.R.I.B.A.



The entrance from Station Road.

OFFICE BLOCK

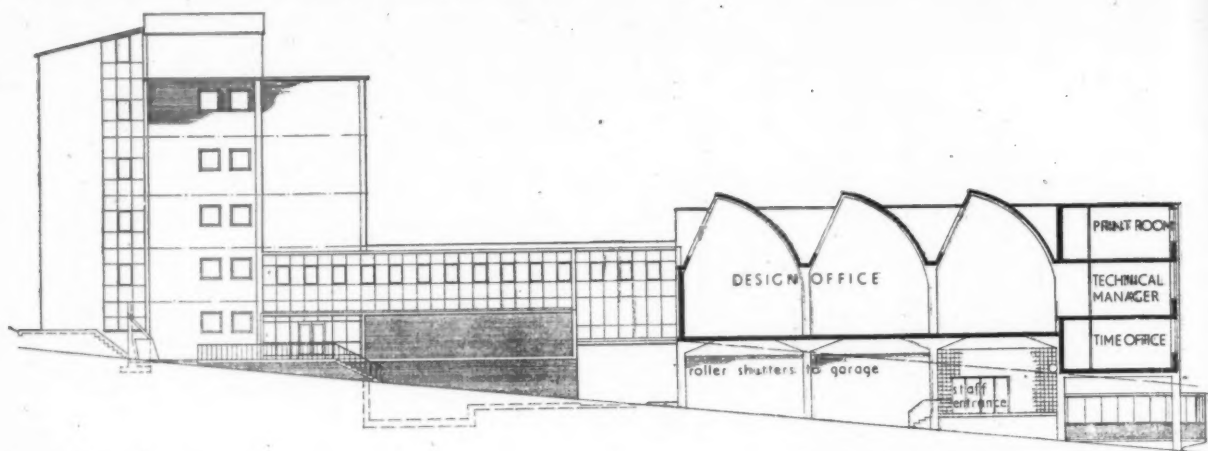
FOR A SHIPYARD. I— DRAWING OFFICE



BLOCK PLAN. DRAWING OFFICE (LEFT). ADMINISTRATIVE OFFICES (TOP CENTRE)

DESIGNED BY
RICHARD SHEPPARD
AND JEAN
SHUFFLEBOTHAM.

ASSISTANTS: GEOFFREY
ROBSON AND
C. E. BANTIN

WEST ELEVATION OF
ADMINISTRATIVE OFFICESCROSS SECTION THROUGH
DRAWING OFFICE

GENERAL.—In order to increase efficiency and economy in ship-building, Swan Hunter & Wigham Richardson find it necessary to reconstruct their original West Yard at Wallsend-on-Tyne, and the new arrangement of berths, railway lines and fabricating sheds requires the removal of their drawing and administrative offices, at present scattered about in obsolete and inconvenient buildings. New offices have to be built before the old can be demolished, and the only available space lies across the main entrance to the yard on either side of the approach road (Station Road). This falls into two main areas: (1) N.E. area (to obtain which 150 ft. of an old timber storage gantry had to be demolished) on which the administrative office block is being built; (2) S.W. area, now occupied by time offices, etc., on which the drawing office block is to be built. In addition, the clients require a large gallery for exhibition of models of ships built in their yard (including the original *Mauretania*). This is incorporated in a low block linking the two main blocks.

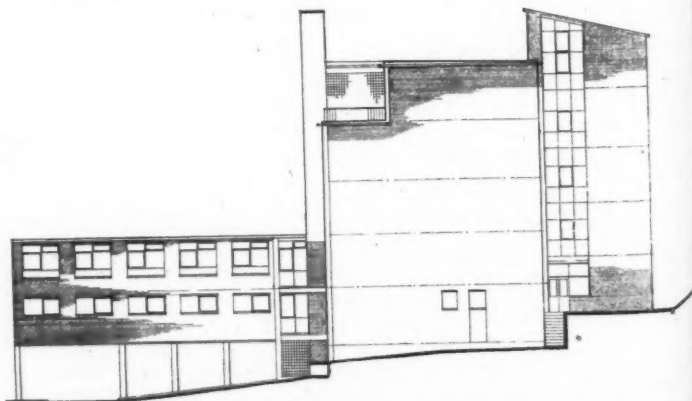
SITE.—The dominant characteristics of the site are (1) an average fall of 1 in 10 from north to south, considerably more at the railway embankment forming the northern boundary of the site. (2) The position of Station Road, cutting the site into two areas and forming the only access to the west yard, over which a clear headroom of 11 ft. 8 in. must be retained. (3) The minor road giving access to gas producer plant and transformers, to the east, requiring 11 ft. clear headroom. (4) The subsoil is largely blue clay, which has necessitated the use of piled foundations,

and great care had to be exercised to provide retaining walls to prevent subsidence of the railway embankment and abutments of the railway bridge over Station Road. Further complications are the presence of a large steel chimney on the west side of the frame shed, and a steel pipe carrying hot gases from the gas producers to a plate furnace. This has now been buried in a brick conduit below the branch road in order to give access to the staff car park.

DRAWING OFFICE BLOCK.—The drawing offices have a floor area of 240 ft. by 75 ft. and are entirely top lit by a north light shell concrete roof; the drawing office block includes a covered concourse and cycle store, garages, main staff entrance hall and gatehouse and turnstile through which all workers enter the yard, with a three-storey block of offices on its south face. Turnstiles connect by staircase to the time offices (connected via link block with general offices). On the second floor is the senior drawing office staff at a

slightly higher level than the drawing office and on the third floor are the print room, drawings store, etc. Direct access to all floors is from the yard via stairs and lift in the S.E. corner. Yard personnel have constant need of access to drawing office and large table tops are provided on which to spread drawings. A covered way runs the whole length of the building from south to north, giving access to the drawing office block and administrative office block, without permitting workers to leave the yard. Electrically-operated steel roller shutters close the main entrance underneath the drawing office block, and the minor road under the link block.

BUILDING PROGRAMME.—The first section, to be illustrated next week, includes the administrative offices and link block. It is being carried out in three stages and separate contracts have been let for (a) demolition; (b) piling, retaining walls and foundations; and (c) superstructure. The

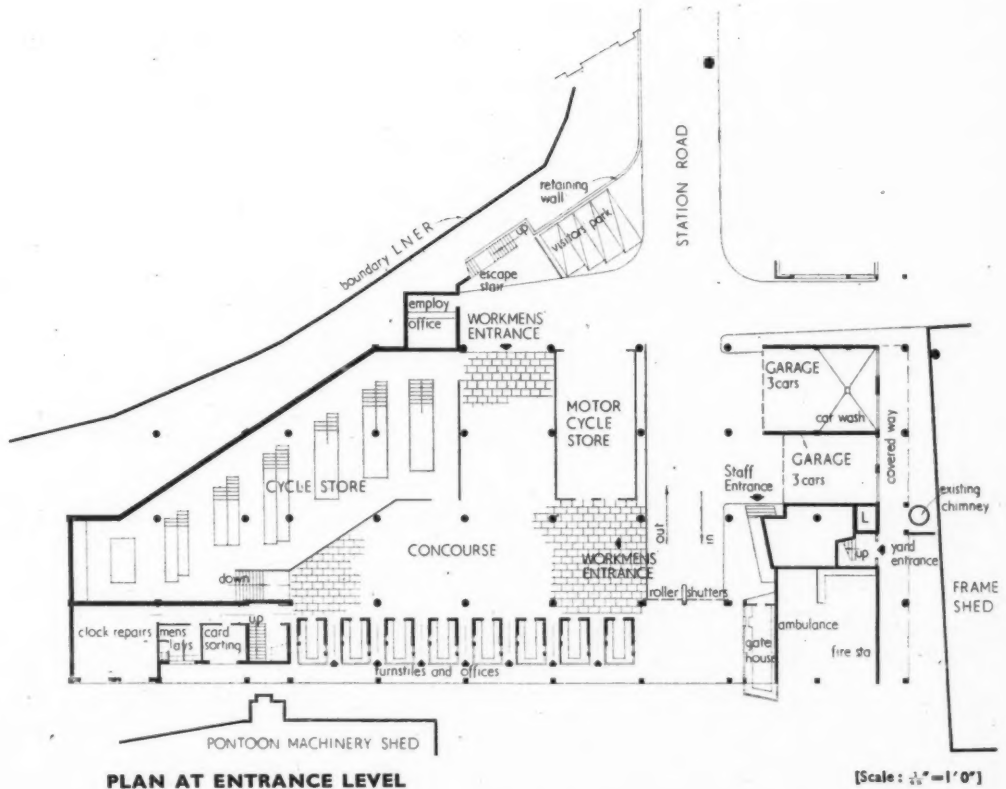
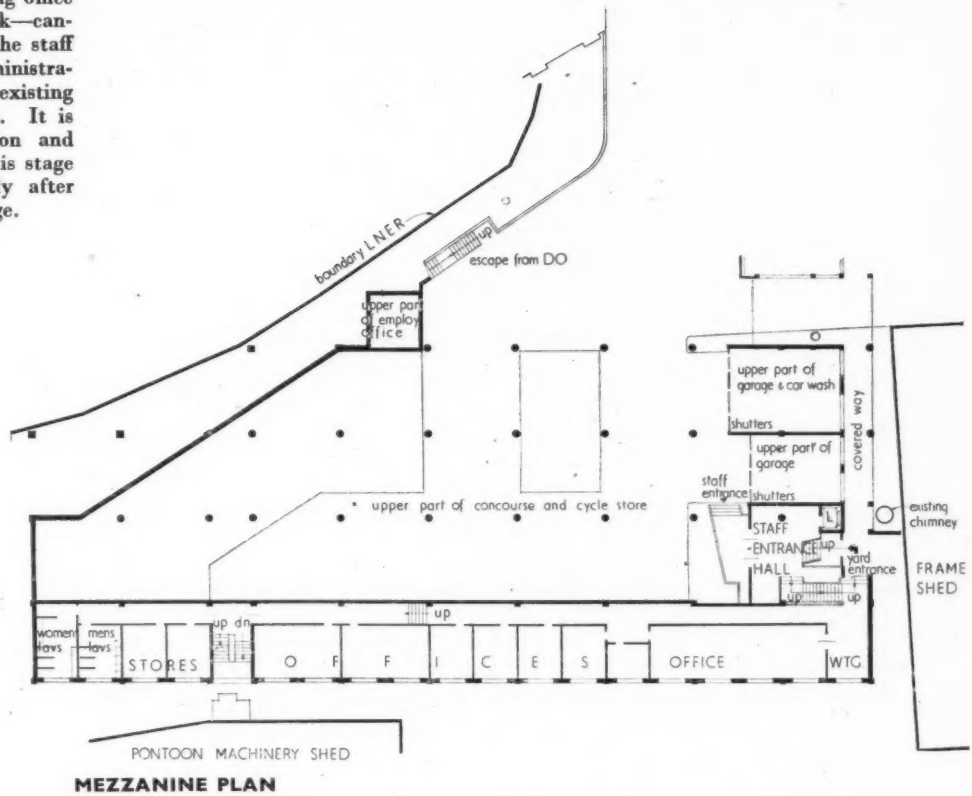


EAST ELEVATION OF ADMINISTRATIVE OFFICES

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

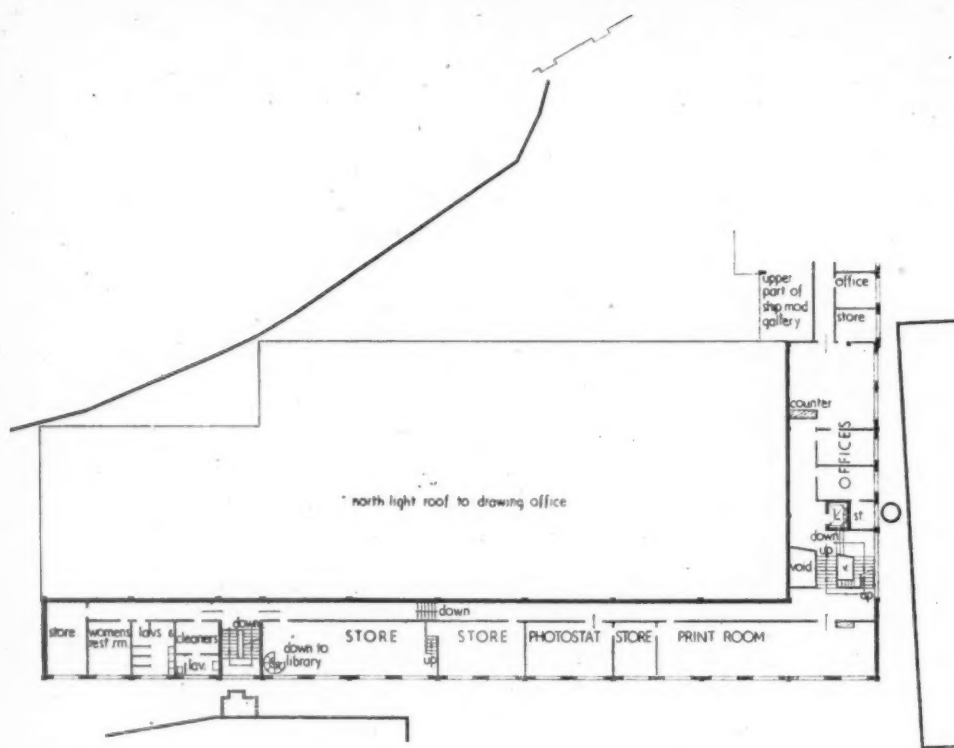
OFFICE BLOCK AT WALLSEND:

second section—the drawing office block, illustrated this week—cannot be commenced until the staff have moved into the administrative office block, leaving existing offices free for demolition. It is hoped that the demolition and foundation contract for this stage will carry on immediately after completion of the first stage.

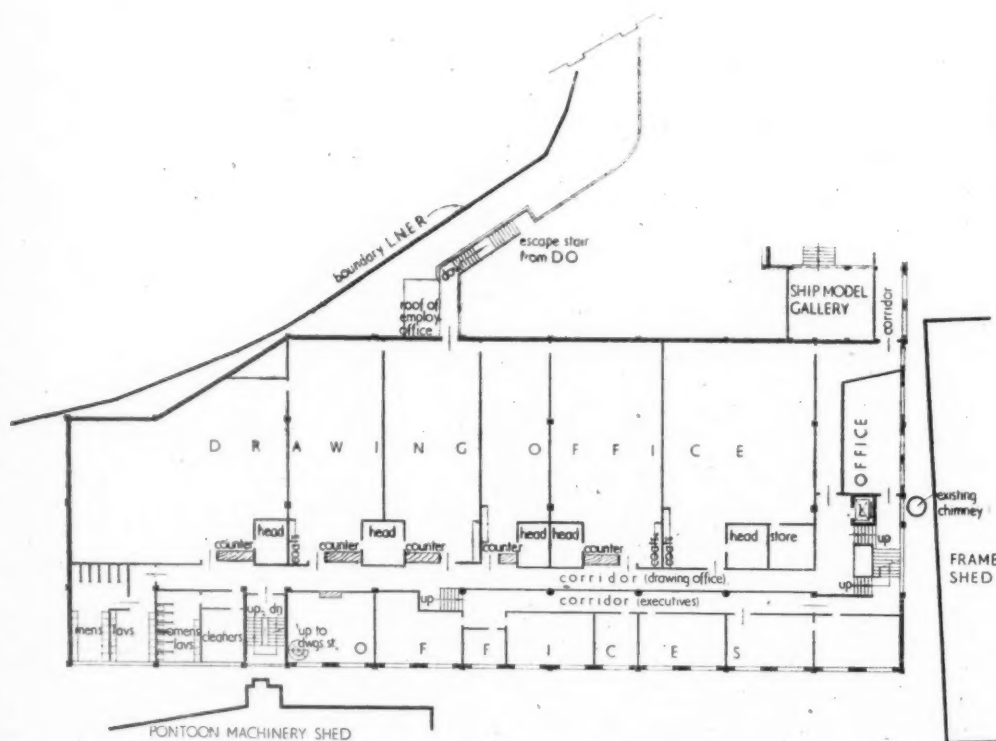


BY RICHARD SHEPPARD AND JEAN SHUFFLEBOTHAM

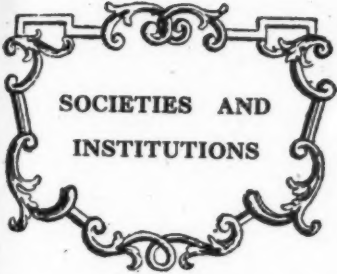
**PLAN OF TOP FLOOR
OF DRAWING OFFICE
BLOCK**



PLAN AT DRAWING LEVEL	MAIN OFFICE
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OFFICE BLOCK FOR A SHIPYARD,
WALLSEND. I—THE DRAWING OFFICE
DESIGNED BY RICHARD SHEPPARD AND JEAN SHUFFLEBOTHAM



SOCIETIES AND INSTITUTIONS

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

AA

Hope Bagenal

December 18. At 36, Bedford Square, W.C.1. An address, ENGLISH ARCHITECTURE SINCE 1847, by Hope Bagenal, on the occasion of the AA centenary celebrations.

Hope Bagenal: The railway age, when it came, provided a fine field for building of all kinds. The wealth expended was enormous, and as public works they vie, in my opinion, with the Roman roads and the pyramids of Egypt: not only bridges and viaducts, but light spans for roofing and new types of building for new uses. Technically, railways began in the cast iron age and passed through the wrought iron age and so to the age of mild steel. The great roofs of St. Pancras and the Albert Hall are wrought iron. The buildings of the early railways are now receiving attention from our students. The different railway companies adopted different styles; thus the Great Northern was Italian, the Midland, Gothic. All over the country the original small railway stations can still be seen. Sometimes they alter their style with the geology; for instance, the Great Northern Railway stations change from Italian to Gothic where they cross the magnesian limestone.

Various æsthetic lessons arise from the railway age. Owing to their acceptance of a traditional style, I have sometimes found in isolated sidings buildings in which the miracle has happened; some goods shed or signal box which uses column, pediment and podium for a functional purpose, and reveals to the astonished eye of the archaeologist nothing less than the rationale of the classic. Thus these little, smoke-grimed buildings, by sheer structural response to eternal forces, show a contemplative beauty and monumentality.

There is another lesson to be learned from the railways. Æsthetically the locomotive became a ritual shape; that is to say, a subject of connoisseurship to the master; with the result that designers responded like artists, and a period of technical stability, in

the 'seventies to the 'nineties, brought some types of express engine to an extraordinary pitch of gracefulness. The point here is that this culmination occurred during a period of stability in requirements. The shapes were objects of interest and reverence to all classes. They were not associated with war. They achieved a something which in æsthetics should be acknowledged, a functional beauty, call it a grace, something which is not contemplative beauty and must be distinguished from it.

There was in the Victorian age a creative sweep, a hope, a sense of achievement in the air, and not confined only to the designers. When a man has a real chance of making something that he wants to make, of doing something that he wants to do, he will willingly put up with poor quarters and small rations, with the risk of disease; in other words, he will put up with insecurity for the sake of satisfying his creative instincts. That is what many of us feel today, but also we see today the counterparts of those early mechanics; we see them in our aeroplane testing sheds, where young men feel the creative urge, the adventure. Personally, I regard our Victorian age as a great creative forge from which came indiscriminately good things and bad. Decade after decade, new things came with turbulence—missionary journeys, new styles in female dress, dozens of good poets and essayists, earth-shaking biologists, the electrical industry, G. I. Bert and Sullivan, the safety bicycle, and so on and so on; and not only the stuff itself, but good novelists to paint and portray and leave a record: thus and not otherwise looked and moved and thought the generation of our astonishing grandparents.

Ruskin brought the most powerful criticism to bear on the economics of nineteenth century industrialism, and inspired William Morris and the Art Workers Guild, who developed Guild Socialism and the ideas also of the early town planners. Why did not a really great school of building emerge? They revolutionised our sense of materials; they brought back surface quality, texture, the idea of response to weathering; they showed what was the real palette of the builder in our climate, the art of the matt surface, as distinct from the classical art of the glossy surface. They produced men who shall always be fine artists to me; yet the great type buildings did not appear. It was not in this country, but later, in Sweden, that the luxuriant crafts movement came to be dominated and disciplined by a school of architecture, and there in the Stockholm Town Hall we seem to see the full achievement of an art of building such as the English Art Workers Guild dreamed of.

In England the lessons of the Art Workers Guild in one respect are permanent, and their development with respect to texture and weathering has become a permanent acquisition. The Art Workers Guild had a gospel well preached by Morris and Lethaby, that art is handwork nobly done, that man is a skill-loving animal, that hand and eye working together can do what the machine cannot do, that craftsmanship is a necessary activity and is our birthright; in short, that we must face the fact that machine-based industrialism is a wrong turning, a blind alley. This unpopular doctrine has for years been well known; today it is highly relevant, and is almost the only issue that matters.

Meanwhile, the English domestic vernacular had developed at the end of the Victorian era, which laid the basis of modern housing, and we find early planned estates—Bedford Park, Bournville, Port Sunlight. Its style was contributed to by something important, the reassertion of those eternal values of dignity and convenience well known in the eighteenth century and called, roughly, Georgian. This was not a revival, but a picking up again of a central, enduring thread. It at once gave a norm, a standard of value; and we find in the work of Guy Dawber, Baillie-Scott, Ernest Newton and many others a thoroughly English con-

tribution to European building art. In the admirable Welwyn Garden City we find these enduring standards of good taste in housing united with the new theories of communal planning and topographical layout instead of geometrical layout.

About the time that Welwyn Garden City was starting, the great change in architectural education took place, and the full-time day schools began to exert an influence. The result of this was that for the first time in England the organic planning of buildings was properly taught. Also, in Robert Atkinson's lectures in this room, for the first time the rationale of style was taught as contemplative research to slow climatic experiment. Here, it seemed to me, for the first time was an adequate theory, an adequate æsthetic, of style.

What happened historically seems to me to be this. When modern planning and the tasks before it came to be examined, the actual field to be covered was found to be enormous—a multiplicity of new requirements, new building types of all kinds, the chaos of modern industrialism, the adventures of modern science, all impinged on the designer, inspiring him, exacting his whole attention, exhausting his forces. There was no energy left for the contemplative side. To this was added the new sociological studies, to which all that was best of the student groups responded.

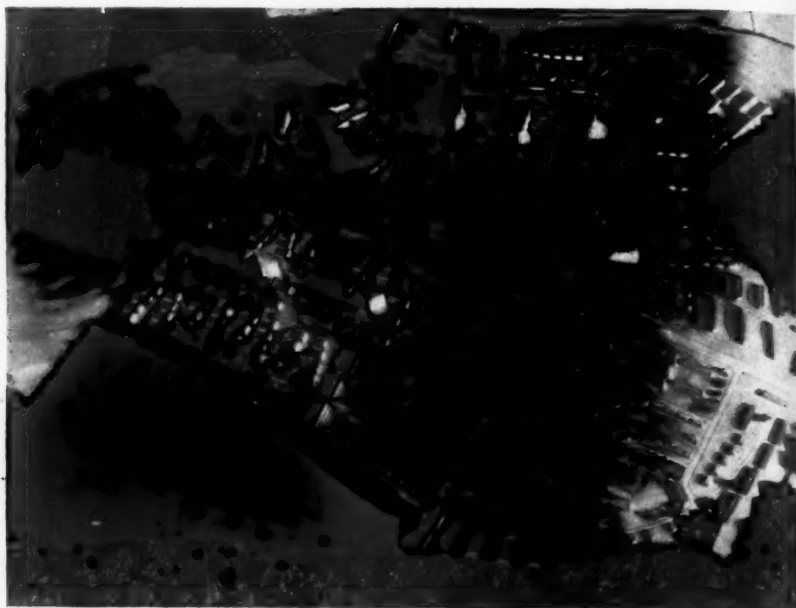
It is clear that we must widen our view and make it more realistic; we must admit the idea of designing for environment. Nothing is more interesting than to note the response to climate of building forms in different parts of the world. I wrote recently for information about climatic practice in South Africa, to Capetown, and received an interesting reply. In respect of anti-solar design, there is a very fine traditional technique in Mediterranean and Middle East countries, and this tradition, not the Gothic, should have been taken as the basis of style in Australia, where temperatures up to 118 deg. are encountered.

We look with affection and regard on our daughter communities in all parts of the world, and we realise what a fine thing the Commonwealth is, but we shall not avoid various conflicts and problems by going to other parts of the world. At every turn new forces are coming in conflict with the old, but we in Europe are and remain the parent communities, still sending forth, out of a rich home life, our children and our ideas. Even as we feel today the frustration of poverty, we feel also the will to recreate, re-model, reconstruct, the conviction that civilisation is all here in the mind, waiting to be incarnated. This European originating power has gone forth and transformed the whole world, and has brought this situation about, but the originators have not learned yet to live together in harmony; they form a talented family whose members do not get on.

How shall we get on? How shall these different expressions of the human spirit, these spiritual opposites, recognise each other and yet preserve their own integrity? These different species, are they necessary? Do they matter? Yes, we know they do. Let us then recognise that we must face certain things, restore the supremacy of the contemplative element, face disagreeable things, be prepared to habituate ourselves to insecurity and poverty for the sake of those fundamentals in which we believe.

I would leave with you this thought. There is in nature a curious phenomenon known by naturalists as symbiosis, or the living together of two individuals of different species for the sake of mutual advantage. The examples are generally quite humble little lives—rats and owls which share the same burrow, and so on—but what I would point to is that during the evolutionary process, over an unimaginable stretch of time, through adventures and exploratory contacts and with a little co-operation, the mutual suspicions of the two creatures are eventually stilled and converted.

A bird's-eye view of the model of the complete scheme.

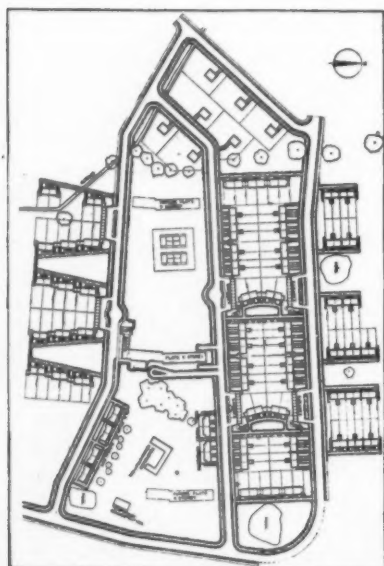


HOUSING

SCHEME NEAR COVENTRY

DESIGNED BY ARCON

Described by the instigator of the scheme, Dr. K. Barlow



Detail lay-out of first section of development. Approximately 200 dwellings in all.

Brandon Woods is an experiment in planning. The families who will live there formed the Family Health Club Housing Society. They are not the passive raw material of the planner but an active group of friends who constitute a community before the first stone of their neighbourhood has been laid.

Their aim is to establish in and about their homes the circumstances in which family health will thrive. They have therefore consulted together and taken advice about this, so that when they instructed the architects they had a reasonable consensus of opinion about what they wanted.

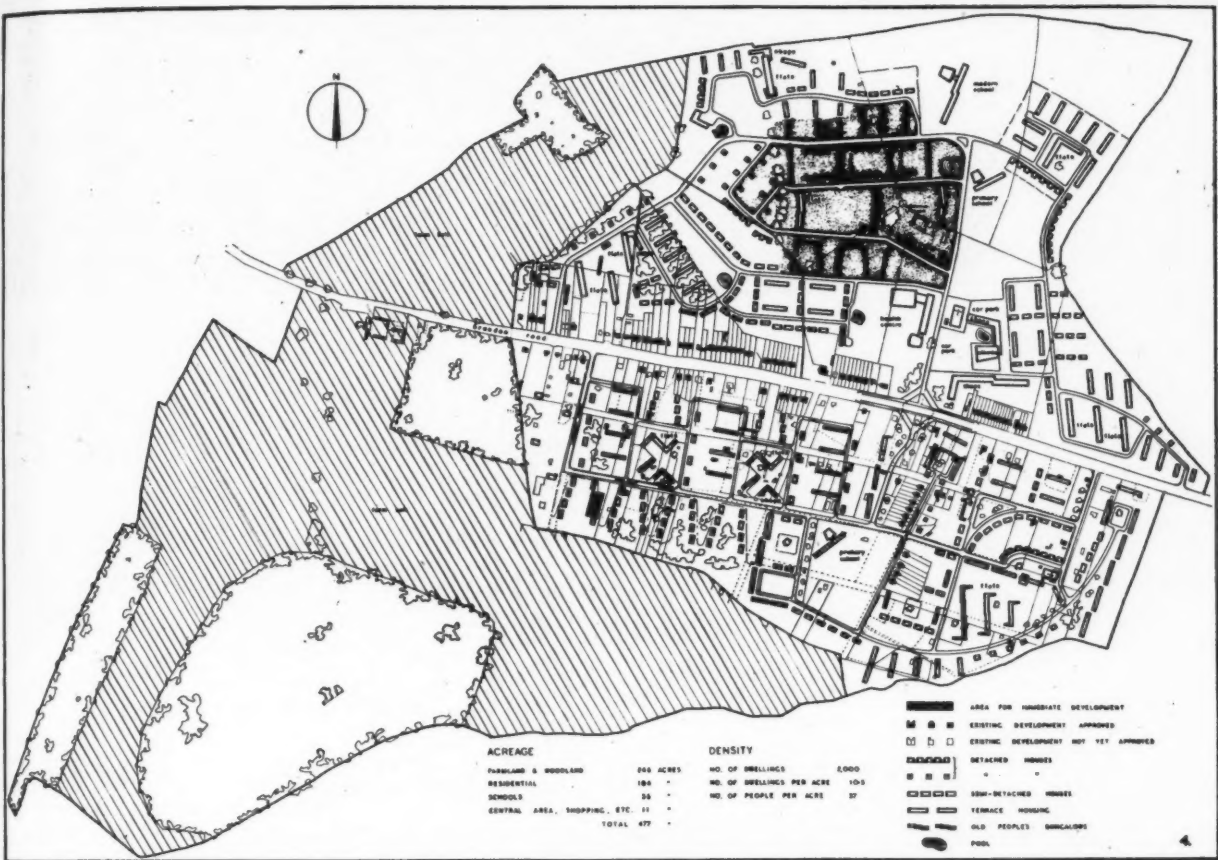
Health they understand in a positive sense—mature development and full living. Here they are calling to their aid a dietetic farm as the basis of their nutritional service and a Family Health Club—along the lines of the famous Peckham Experiment.

Architecturally they aim to learn from experience. A unit of 200 dwellings was first planned in detail against a rough overall plan for a community of 2,000 dwellings. It was hoped to use experience gained from construction of this first sub-neighbourhood as a guide in laying the second two hundred and so on. It is to be noted that the tenants were known before the houses were planned and the architects have had the advantage of consulting with them throughout.

Two years of study led the Society to attempt a novel layout, to try and get an arrangement of life centred round one community focus and to get dignity and spaciousness with economy of land. The plans now illustrated were the outcome.

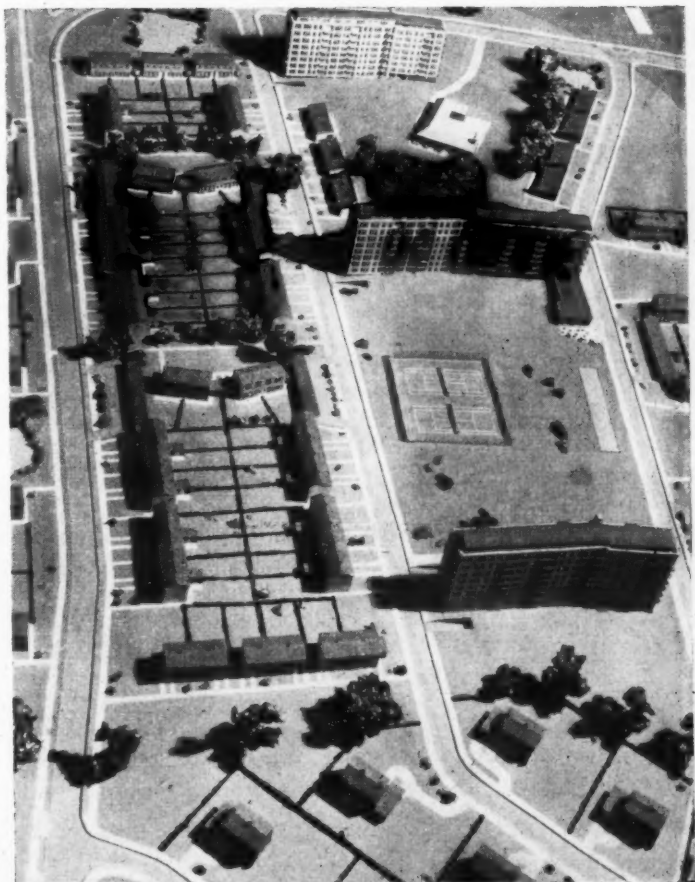
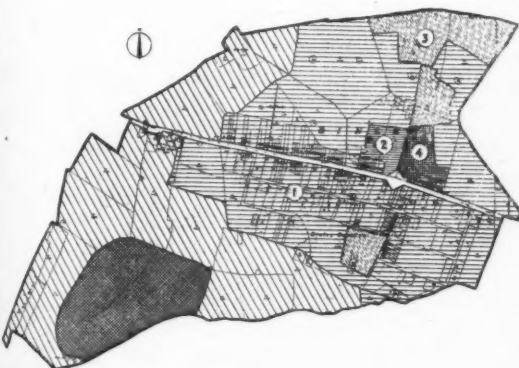
Planning approval was refused and upheld on appeal to the Minister on the ground that nine-storey flats "Would be unduly conspicuous and out of keeping in a rural and farm setting."

Planners should ponder this decision. Either it is arbitrary and irresponsible. Or it is a precedent—a test case deliberately decided by the Minister. On the assumption that a responsible decision has been taken two things are to be said. First that the responsible judgment of prospective tenants carries no weight with the Minister. Second, that the

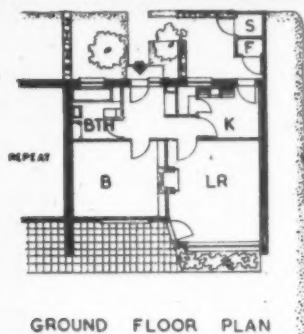


Ministry rejects categorically the principle of building upwards to economise in the use of good farming land. The sprawl of towns is, it seems, to continue by order of the Ministry of Town and Country Planning.

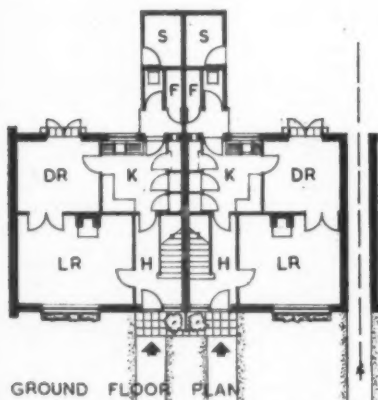
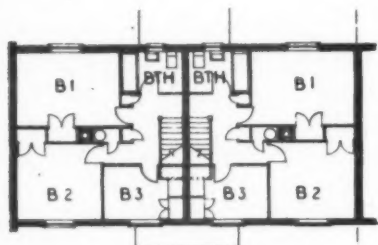
The implications for the overall development of Britain are disturbing. What is called a neighbourhood unit has already become standardized. It exists as an architectural idea and is imposed by authority upon a passive but disgruntled people. In the work of the architect, experiment and design outside of these narrow limits has no place. He, too, is subject to authority and one which legislates on taste without appeal.



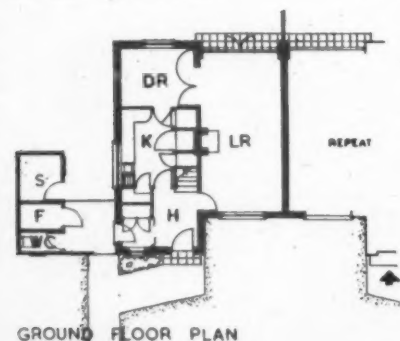
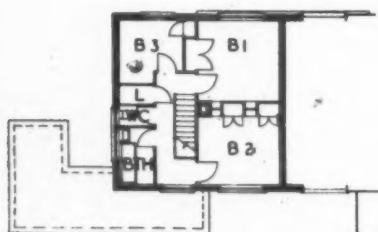
Top, the general lay-out of the whole scheme. The first section to be developed is stippled. Right, a view of the model of the first section; left, the zoning arrangements.



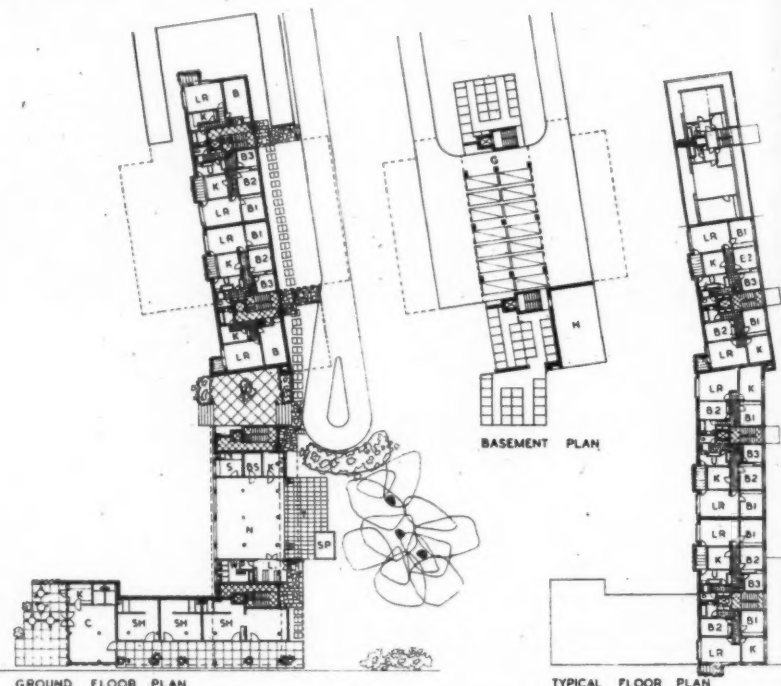
GROUND FLOOR PLAN
OLD PEOPLE'S BUNGALOWS



GROUND FLOOR PLAN
TERRACE TYPE



GROUND FLOOR PLAN
SEMI-DETACHED TYPE



Top, a view of the model of the first section ; middle, plans of the blocks of flats ; left, type plans for houses.

On 450 acres of land just outside Coventry, the Family Health Club Housing Society (Coventry), Ltd., proposes to provide accommodation for 2,000 families, drawn proportionately from all income groups and housed in detached, semi-detached or terrace houses or in flats. The built up area will be surrounded on three sides by a farm—run by the Society. There will be a central area, with shopping centre, church, administrative buildings, car park and cinema and shopping facilities at various points throughout the estate. The health centre, on a central site of five acres and built on the lines of the Peckham Health Centre as a club, will form a focal

point of the social life of the community and cater for the leisure time of the complete family. Facilities will provide an annual health overhaul for each family, a restaurant, bar, dancing and dramatics, billiards, table tennis, football, cricket, tennis, and there will be a covered-in swimming pool. In the first 200 dwellings there will be seven detached, 12 semi-detached four-bedroomed houses, 36 semi-detached three-bedroomed houses, 70 terrace houses, 68 flats in nine-storey blocks, and 14 old people's bungalows. In the early days of the scheme Mr. Fello Atkinson, A.R.I.B.A., collaborated with Arcon on the north side of the Brandon Wood Road.

A HOUSING SCHEME
NEAR COVENTRY
DESIGNED BY ARCON

INFORMATION CENTRE . INFORMATION SHEETS
 QUESTIONS AND ANSWERS . CURRENT TECHNIQUE
 THE INDUSTRY . PRICES . TECHNICAL ARTICLES

TECHNICAL SECTION

CODES OF PRACTICE AND BUILDING ECONOMIES

The economic use of structural materials has perhaps never been of such importance as at present. The shortages of timber, steel and coal (a material consumed in the production of both steel and cement) call for the greatest possible economy to achieve the maximum output of buildings with the limited resources available. The way in which materials are used depends largely on the designer, but since he is controlled by codes and by-laws he is not free to adopt the results of recent research and experience gained abroad, unless the operative codes are brought fully up to date. The Codes of Practice Committee is, therefore, in a key position to increase the efficiency of the industry. Where do we stand in this respect at present?

As far as timber is concerned the Draft B.S. C. of P. Code 112 : 1947 (see 18.11 in this issue) gives a proper basis for the future and great progress has already been made in reducing the quantities required for domestic buildings.

With regard to structural steel, the Draft B.S. C. of P. Code 1.21 : 1946* allows substantial savings on present practice, and its implementing at an early date and general incorporation in the by-laws of all public authorities concerned with building is most desirable.

So far progress seems good, but the position is less satisfactory with reinforced concrete. The Draft B.S. C. of P. Code 1.22 : 1946† needs a thorough revision to bring it in line with the requirements of modern design and it remains to be seen how far these will be met in the final code.‡

There is, for instance, one important new development in the use of concrete and steel which deserves full consideration. We refer to composite concrete-steel structures, which, so far have not been provided for in any British code, and are practically ignored in actual practice. This form of construction (which has been repeatedly referred to in Information Centre)§ is becoming more and more popular abroad. By composite structures is meant beams consisting of steel joists with reinforced concrete slab compression members cast on top, not "composite structures" as recommended in the MOW Post-war Building Studies No. 8. In composite structures, such as developed abroad during the last decade, the steel need not be encased and compound action between the steel joist and the reinforced concrete slab is secured by anchors welded to the top flange of the joist and embedded in the concrete. The full efficiency of such structures, both in static and dynamic loading, has been established beyond doubt, and the saving in weight of steel is considerable. At the same time, an increased rigidity is obtained.

It is not surprising that before the war efforts to save steel were confined to other countries, but times have changed. For many years we shall not be able to afford any waste and have to take advantage of every improvement in the use of materials. The introduction of composite structures would contribute to this aim and a Code of Practice would give an impetus to their application which otherwise will only be casual and raise difficulties in dealing with Authorities.

* See Information Centre 2751 : 3.10.46.
 ‡ To be issued as No. 114.

† See Information Centre 2726 : 19.9.46
 § See Information Centre 1859 : 1.3.45, 2688 : 29.8.46, 2769 : 17.10.46, 20.16 : 27.3.47.

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.

2.24 planning: general APPEAL DECISIONS

Bulletin of Selected Appeal Decisions. Ministry of Town and Country Planning. (HMSO, No. 1, September, 1947, 6d.)

Important new periodical publication summarizing selected appeal cases in order to provide information on special issues and to assist Local Authorities in dealing with future development applications involving problems similar to those dealt with under appeal.

6.15 planning: social and recreational WATLING ESTATE

Watling Revisited. PEP. (Political and Economic Planning, Broadsheet No. 270, August 15, 1947, 2s.)

Interesting account of social clubs' and societies' activities and influence at LCC Watling housing estate founded in 1927. History of estate. Technique of collecting relevant information. Development of community and similar associations during two decades. Problem of adequate provision of meeting places. Tenants' participation in communal activities. Conclusions.

10.25 design: domestic OFFICE BUILDINGS

New Departures in Office Building Design. Lathrop Douglas. (Architectural Forum [USA], October, 1947, pp. 119-122.)

Requirements of modern office buildings. Modular design to achieve flexibility. Advantages of low cost of maintenance.

The author has investigated a great number of skyscrapers and has found that many of them are just façade-first designs. The main requirement of an office building is comfortable, efficient, flexible, standardised, economically operable office space. Flexibility is the most important criterion. It can only be achieved by a suitable fenestration module. In comparing several examples the author arrives at the conclusion that alternative 4 ft. windows and piers give exceptional flexibility, office widths can be as desired. Very suitable also is a 4 ft. module to provide offices of 8, 12, 16 ft.

Of great importance is the arrangement

of the columns. A smooth interior surface of the external walls is advantageous, with columns either projecting outwards or hidden within the walls. The system of cantilevered floors with columns set back a few feet from the exterior is suitable for an all-glass wall, but renders the provision of partitions complicated. Excessive depth of space is a waste of money. The depth from the outside wall should not be much over 25 ft.

From the economic point of view it has to be borne in mind that as inflation proceeds, annual charges on the capital investment do not increase, but maintenance costs go steadily upwards.

18.11 construction: theory CODE FOR TIMBER

The Structural Use of Timber in Buildings (Interim). Draft BS. C of P Code 112:1947. (British Standards Institution, 7s. 6d.)

Recommendations for the quality of materials, design considerations, work off site, work on site. The use of plywood. Testing of prototypes.

Although timber is one of the oldest building materials, or perhaps just for this reason, its use has hitherto been mainly based on rule of thumb methods. Theoretical considerations have been of far less influence on the design of timber structures than in the case of steel or reinforced concrete.

The present draft code is the first step towards preparing a scientific basis for the design. This approach has been made possible by the establishment of stress grading rules, which have been formulated in recent years with reference to the effect on the strength of timber of knots and other visible imperfections. (See Nos. 2104:13.9.45, 2114:20.9.45, 2658:8.8.46.) As is pointed out in the introduction, the code is issued as an interim code since in many respects there is still a dearth of information, notably in connection with the application of plywood and glues to structural uses. Acknowledgment is made to the Forest Products Laboratory of the US Department of Agriculture, on whose work much of the data in this code is based.

Regarding the quality of materials, the greatest emphasis is laid on the moisture content as the decisive factor for the life-time of timber structures. The moisture content to which timber should be seasoned depends on the position of the timber in the building and varies between wide limits, from 12 per cent. upwards.

The permissible stresses to be adopted for timber depend far more on the particular circumstances than for steel or concrete. e.g., an important factor is the duration of loading, generally disregarded with other structural materials. A timber member can sustain a very much greater load for a period of a few minutes than it can for a period of several years. Other effects to consider are notches, the shape of box members composed of small sizes, the number of laminations in the case of laminated members, and, of course, the slenderness ratio of compression members. All these effects, as well as the risk of decay when the moisture content may exceed 22 per cent. are taken into account by "modification factors," which are tabulated for each effect. The permissible stresses are obtained by multiplying the basic stresses given for various qualities of timber by the appropriate modification factors.

The strength of a timber structure depends greatly on the strength of the joints. The members may be connected by nails, screws, bolts or special connectors like split rings, claw plates, etc. (see No. 1146:20.5.43). For all these cases the load-bearing capacities are tabulated. The most efficient method of jointing members in timber structures is by means of connectors, the use of which in groups is well illustrated. The dimensions

of grooves and recesses are also specified. Recommendations for the use of glued joints are also included, although it is realised that certain types of adhesives have not been available for sufficient time to provide conclusive proof of their durability over a longer period.

The information on plywood is based on data given by the Douglas Fir Plywood Association and refers only to Douglas fir plywood of US manufacture. The design of plywood structures requires special considerations, mainly because of the so-called "rolling shear" action between the plies. In a panel with a stressed plywood cover, the critical stress will occur between the plies rather than between the joist and the plywood (see No. 2398:21.2.46).

For joists, rafters and purlins in dwellings not exceeding two storeys in height tables have been extracted from the Housing Manual Technical Appendices, 1944 (see No. 1791:11.2.45).

For cases where owing to the unconventional nature of the construction accurate calculations are not possible, the Code suggests that tests should be made to ensure that the construction has adequate stiffness and strength. The method of testing and the tests to be applied are specified.

This Code is a most valuable contribution to the design of timber structures. It should be instrumental in improving their quality and, at the same time, in achieving a saving in the quantity of materials used. Full advantage of this code can only be taken by those familiar with the principles of structural design, but it contains much useful information for everybody concerned with the structural application of timber.

23.47 heating and ventilation PANEL HEATING

Control of Radiant Panel Heating. J. E. Haines. (Plumbing and Heating Journal [USA], September, 1947, pp. 46-50.)



THE LIBRARY OF INFORMATION SHEETS

As from this week the classification symbol will be printed on the face of each Information Sheet vertically as well as horizontally. This is being introduced as a result of a suggestion by Mr. Peter Ray. It enables those readers who keep their Information Sheets horizontally in a filing cabinet to read the symbol more easily.



Perfect listening here... without a radio set

AT ARLINGTON HOUSE, PICCADILLY, a perfect radio reception is laid on in every flat by private wire. Residents do not require a radio set at all, so there is no tuning to do! They have only to turn the programme switch to enjoy crystal-clear listening—without a trace of fading, distortion or interference.

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Rediffusion engineers arranged to relay B.B.C. programmes to Arlington House by private wire, and the architect included the internal wiring in his general design, and selected loudspeakers that suited his plans for interior decoration. Rediffusion loudspeakers can be supplied in a wide range of models. There are panels for wall or ceiling mounting, as well as special units for built-in furniture, which were chosen for Arlington House.

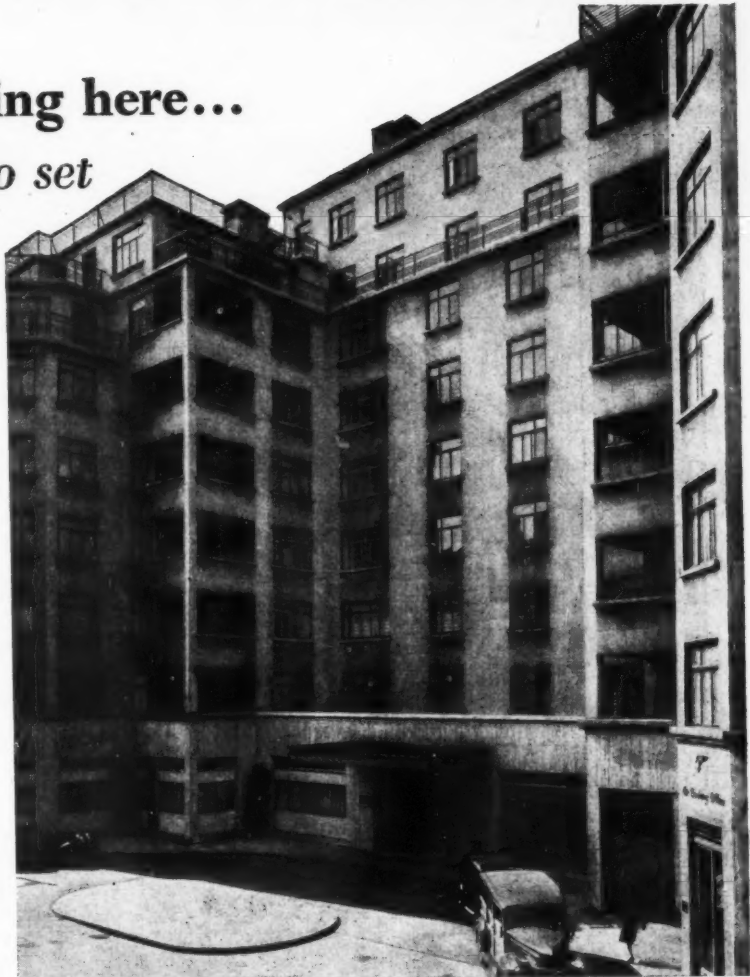
Architects who are interested in further details of this Rediffusion Service, should contact our London Office during the early stages of planning, to ensure the fullest co-operation of Rediffusion engineers.

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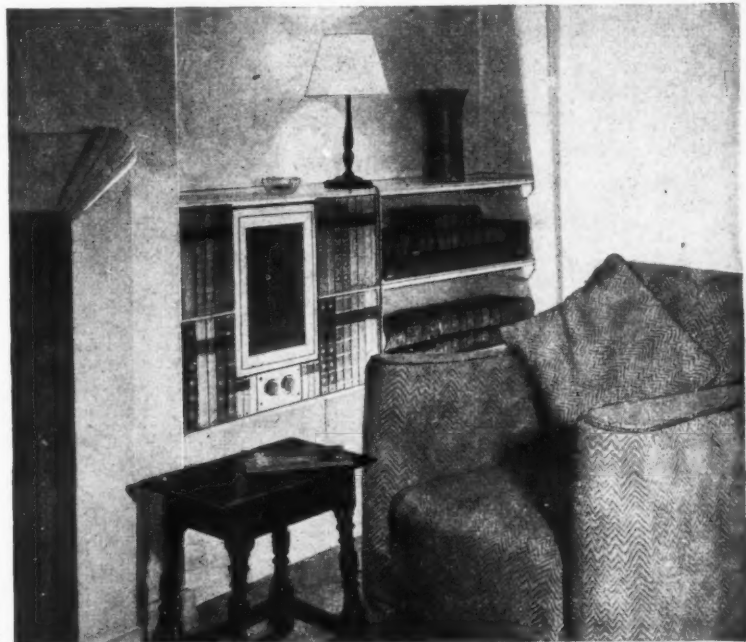
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Discussion of control arrangements for panel heating with particular attention to the importance of the thermal capacity of the building. Also stresses the increase in public interest in obtaining comfort as opposed to mere warmth.

23.48 heating and ventilation WARM AIR HEATING

Warm Air Heating in Canada. (Sanitary Engineer, Plumber and Steamfitter [Toronto], September 15, 1947, pp. 51-54.)

Brief historical review of warm air heating methods in Canada.

24.53 lighting INDUSTRIAL LIGHTING

New Fluorescent Lighting in Ford's Plant and Offices. (Illumination [USA], Vol. 6, No. 3, p. 28.)

Relighting of works; new hinged fittings; Useful, illustrated five photos.

This is a useful description of a re-lighting job in existing works. In general the object was to lift intensities from around 25 foot candles to about double. Fluorescent lighting is used mainly, except in foundries. Special hinged reflectors were made and installed to reduce wiring repairs, and an

extension ladder with crowsnest, mounted on a self-propelled electric truck, has been purchased to facilitate maintenance.

Some sample readings are quoted. Corridors now have 18 foot candles, clerical work has 38, laboratories about 40, and assembly work up to 45 foot candles. Accountants working in 29 foot candles said they had more light than was actually needed. New intensities in drawing offices are expected to remove the need for local lights.

26.14 services and equipment GAS INSTALLATION PIPES

Gas Installation Pipes. BS C. of P. 331.103: 1947. (British Standards Institution. 2s.)

Materials, sizes, and installation methods for internal gas piping.

This Code covers work for which the architect frequently relies upon the gas installation firms to overcome all difficulties. It refers, with specific advice, to such factors as the limits for cutting into timber joists and the limits on sharp bends in the pipes. There is also a necessary warning of possibility of corrosion if pipes are carried through certain types of floor finish and through contact with some types of calcium sulphate plaster. There is a table showing discharge rate through pipes of varying sizes according to the length of pipe run together with the effect of elbows, tees and 90° bends.

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

2924 COST OF HOUSES

Q Can you provide me with the following information regarding the maximum cost of private dwelling houses:—

1. Is the £1,300 maximum inclusive or exclusive of
 - (a) cost of land,
 - (b) cost of fencing, etc.
 - (c) cost of services (whether at the site or some distance from it).
 - (d) cost of sewage disposal (where no main drainage exists).
 - (e) cost of abnormal works owing to the nature of the site (dead walling, deep excavation, filling, piling, rafting, etc.).
 - (f) amount of architectural and other technical fees.
 - (g) cost of garden layout, paths, terraces, retaining walls.
2. What basis is normally employed for assessing the value of any of the above which are outside the maximum? Are proposals ever turned down because site works are likely to be excessive?
3. What basis is employed for determining the fair cost of a dwelling under 1,000 sq. ft. area? Is this done on a maximum price per sq. ft.? If so, what allowance, if any, is made for the fact that the smaller the house the more expensive per sq. ft. it becomes?

These questions are prompted by the fact that the local controls are quite different to those in England and the information is required to compare conditions with a view to obtaining improvements.

A The £1,300 is the permitted selling price of a new house outside the London area. Within the London area the permitted selling price is £1,400. These amounts are for two-storey houses of 800 to 1,000 feet super, measured on both floors, and 730 to 930 feet super, in the case of a single storey house or a flat. These selling prices are reduced proportionately according to the area.

The selling price includes the cost of the land, roads, sewers and other services, and the word "services" includes any architect's fees. The selling price is the price of the freehold. The permitted selling price may be increased if the cost of the land is abnormal for the average cost of land in the area.

The amount granted by a building licence depends on the particular circumstances of each case having regard to the difficulty of foundations and other matters, but the permitted selling price remains as above stated. The selling price is controlled by Act of Parliament until December, 1949, unless this period is extended.

The cost of a house is the amount of a builder's estimate and the fair cost would be determined by the obtaining of competitive estimates.

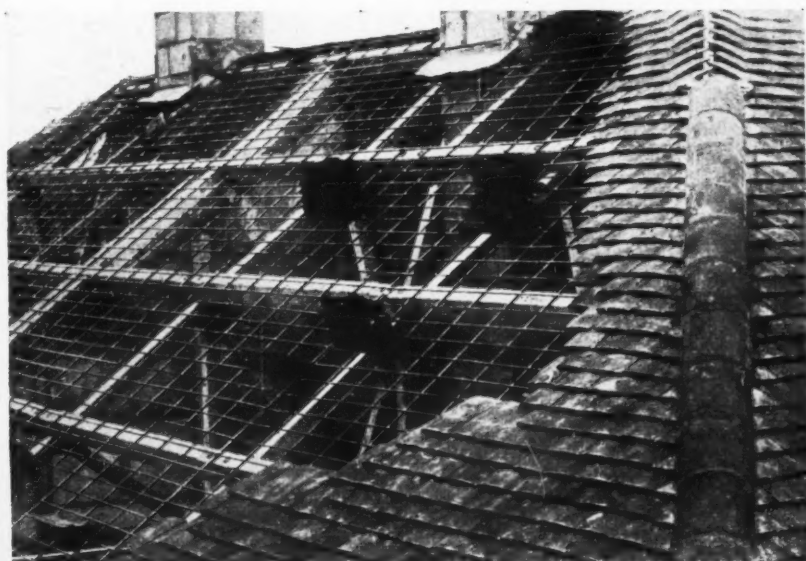
In measuring the permitted area of a house, outbuildings such as tool sheds, wood or bicycle sheds are excluded, as are also garages, whether or not within the containing walls of the house. Outbuildings such as a coal house, scullery or w.c. are included in the permitted area.

CURRENT TECHNIQUE

ROOF CONSTRUCTION

This system illustrates an interesting use of steel grillages for the support of traditional or other tiles or slates, eliminating rafters and battens.

The grillages are mass-produced at the factory and delivered to the welding site in large panels. The intersections are electrically welded and the slates or tiles secured by non-corrodible stainless steel clips. The supporting structure may make use of steel, concrete or timber purlins and insulation may be fixed to the underside of the grillage. Some degree of accuracy is required of the building contractor in setting out the roof, but allowance for slight variations is provided. (Patent No. 561882. Precision Roofs Ltd., Templeborough, Sheffield.)



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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

STEEL ROOF DECKING

Messrs. D. Anderson, who should be well enough known as manufacturers, among other things, of roofing felt, have now produced a steel roof decking which they market under the name Thermosteel. The decking units are of channel section 10½ inches wide and 2 in. deep, with projecting base flanges, the coverage of each unit being 1 ft. 2½ in. Flanges at each side have corrugations which interlock with and are also bolted to adjacent units, and thus form a supporting rib. Each rib is reinforced by fitting an inverted channel filler section which makes in effect a small box girder, and the deck plates themselves are reinforced and stiffened by transverse flutings for extra strength.

So far as deflection and loading are concerned, the units are supplied in 22 gauge (for spans up to 8 ft. on pitched roofs), 20 and 18 gauge, the latter for 9 to 10 foot spans on flat roofs. A full table of loadings would take up more space than is available here, but with deflections not exceeding 1/250th of the span the 18 gauge decking will carry 38 lb. per foot super on a span of 10 feet, and the 22 gauge will take 53 lb. over 8 feet. Units are made in standard lengths which are multiples of even feet to be used with supporting steelwork up to 10 foot centres, but intermediate lengths to suit uneven support spacings are also made. The end to end joints of the units are made with a 4-inch joggled lap, and each unit is thus made 4 inches longer than the support spacing to allow for this.

Normal finish for the decking is two layers of Rok roofing laid with a bituminous compound applied hot. The manufacturers strongly recommend a half inch insulating layer of fibre board between deck and waterproofing; with this the U figure is 0.36 and the weight 6 lb. per foot super in the heaviest gauge. Fire resistance complies with Standard V of the Fire Offices Committee.

For finishes at eaves, verges, walls, gutters and at other points, special sections are made, and fixing is in general, quite easy, and can often be completed without the use of scaffolding. (D. Anderson & Son, Ltd., Stretford, Manchester.)

PLYWOOD USES

Two new booklets issued by Venesta deal with X-ray insulation and the construction of wc and other compartments for schools and other types of building.

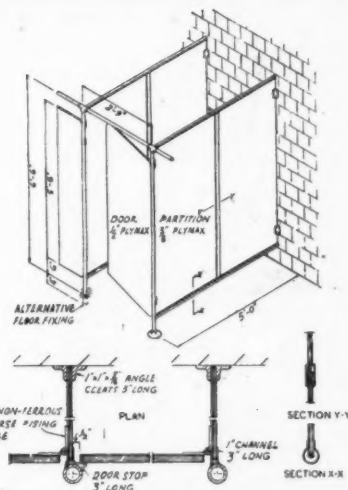
Protection against X-rays is becoming of greater importance now that so many manufacturers use equipment of this kind for the examination of castings, welds and other details. For some years Venesta have been producing a ply-lead-ply sandwich for insulation purposes. This is used as a wall lining, or for doors, the lead thickness depending on the type of X-ray apparatus installed, though 4 millimetres is generally the greatest thickness likely to be needed. Wall covering panels are made in a standard width of 2 ft., and up to 12 feet in length. Fixing is by means of plywood battens used as grounds, the battens being of ½ in. plywood with lead of the appropriate thickness cemented to one face, and drilled for screw fixing to wall plugs. To give proper screening at the meeting ends of the battens a saw cut is made at the end of each to take a small piece of sheet lead which rests immediately behind the facing.

For fixing the wall panels to the battens wood screws with a loose domed top are used, the detachable head being either chromium plated hard lead, or hard metal shells with a lead filling and the same finish. Lead covered screws of this kind are essential for proper screening at the fixing points.

Doors are made by cementing lead sheet between ½ inch plywood or blockboard, and for pairs of doors the meeting stiles are supplied rebated.

The booklet contains a number of constructional sketches showing typical fixings at ceiling, floor and corners, with two useful door details.

The other booklet deals with the use of Plymax for making wc compartments, shower or bath cubicles and dressing boxes for schools, factories and similar buildings. The sketch on this page shows a typical school wc compartment, and others give similar dimensions and information for nursery and infants' schools. The dimensions, incidentally, are based on the joint British Standards Institution—Ministry of Education specifications published in August of last year.



A school wc compartment of Plymax. (Venesta Ltd.)

The metal facing of the Plymax is usually galvanized steel or aluminium, but other materials such as copper or zinc are available when necessary. The metal sheets are fixed to the plywood core with an insoluble cement which undergoes a chemical change on setting, so that the adhesion between the wood and the metal should be permanent. (Venesta Ltd., Vintry House, Queen Street Place, London, E.C.4.)

CONDUIT FITTINGS

The G.E.C. have just reissued section C of their full catalogue. This deals very exhaustively with conduit, fittings and accessories. Dimensioned drawings of all the principal fittings are included, and the 200 odd pages of this list are well worth careful study, as not everybody appreciates the really immense number of boxes, couplings and different switch mountings which are now standardized. A thorough piece of cataloguing with a very good index. (The General Electric Co., Ltd., Magnet House, Kingsway, London, W.C.2.)

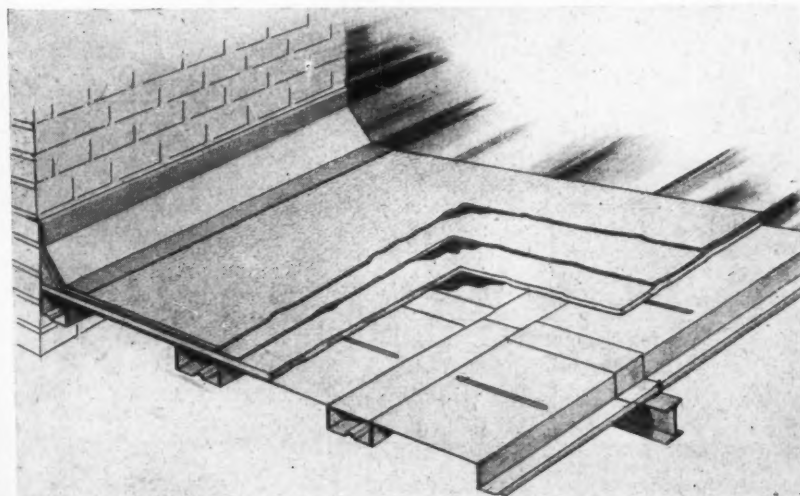
COPPER FOR ROOFING

Some interesting information about the recent repairs to the roof of the British Museum have been given by Mr. Carr, the CDA's building engineer. The oil bomb which landed on the dome of the Reading Room in the early months of 1941 did comparatively little damage, for only the casing went through the roof, while the oil poured flaming down the dome into the deep snow gallery, where it burnt itself out. That the roof itself was saved was largely due to the high melting point of the copper and its high thermal conductivity. The heat from the burning oil was conducted away so rapidly that the sheeting suffered no excessive local distortion, or buckling due to thermal stresses, and the inflammable material below the copper did not reach ignition point.

Mr. Carr adds that, although the copper on the roof has been exposed to the weather for 90 years, the amount of hardening which has taken place is comparatively slight, and that when the repairs were made it was found still to be soft enough for the seams and welds to the new pieces to be made without annealing the old metal.

CORRECTION

In the report of the Building Exhibition which appeared in the AJ for November 27, reference was made to Aro lathing, a system of brick crosses on a square wire mesh. The name of the manufacturers was given as Broad & Co. This firm in fact markets a lathing of this type, but the name of it is Bricklath. (Broad & Co., Ltd., 4, South Wharf, Paddington, London, W.2.)



Steel Roof Decking. (D. Anderson and Son Ltd.)

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.

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Announcements

The Riley Constructional Systems department of Messrs. Cawood Wharton & Company, Limited, is now operating from 1A, Cavendish Road, Leeds, 1, telephone number 22901. Enquiries and catalogues should be sent to this address.

The British Rubber Development Board has now moved to Market Buildings, Mark Lane, London, E.C.3. Telephone: Mansion House 9383.

Mr. J. Coulson Backhouse, late Architect with Hammonds United Breweries, has now joined Messrs. Vaux & Associated Breweries, Ltd., The Brewery, Sunderland, and would be pleased to receive trade catalogues, etc.

The National Joint Council for the Building Industry has issued a new pamphlet dealing with Registration of Apprentices in the Building Industries. It is entitled *The Advantages of Registration—Pamphlet No. 2*, and copies may be obtained free from the Council.

Mr. D. P. Hanly has been appointed Planning Officer and Housing Architect to the Borough of Dun Laoghaire, with offices at Harbour House, Dun Laoghaire, Co. Dublin, where he would be pleased to receive trade catalogues, etc. (Phone: 81700.)

At the request of the British Council, Mr. Anthony M. Chitty, M.A., F.R.I.B.A., A.M.T.P.I., opened the exhibition *Replanning Britain*, in Italy. The exhibition was on show at Milan before going to other European countries. Mr. Chitty lectured on the town planning and housing problems of Great Britain.

The Birmingham Local Joint Committee for the Building Industry has decided that the fixed week for the holiday to be taken in 1948 under the Holidays with Pay Scheme

shall be the normal working week commencing Monday, July 5, and terminating Saturday, July 10, 1948, both dates inclusive.

Individual import licences are now required for marble, rough or rough sawn, but not further prepared, consigned from Belgium, France and Italy. Import has hitherto been unrestricted. The Board of Trade point out that licences will not be granted for the import of carborundum sawn marble.

The second in the series of reports on pollution affecting rivers in England and Wales, prepared for the British Field Sports Society, 3, St. James's Square, S.W.1, by Mr. H. D. Turing, has been issued. It deals with the present condition of the rivers Taw and Torridge, Exe, Dart, Tees, Lee (Hertfordshire), and those of Somerset and of the West Riding of Yorkshire.

The Council of the Institute of Welding has awarded the Sir William J. Larke Medal and a Prize of £50 to Mr. J. Corston MacKain, A.M.I.STRUCT.E., A.M.INST.W., of Edinburgh, for a paper on the evolution of welded components in house construction and welded bunkers for power houses.

Pressed steel vitreous enamelled baths are now available for the general housing programme. Local authorities may specify pressed steel baths for their new houses, and are advised to consider doing so as an alternative to the cast iron vitreous enamelled types.

The United Steel Companies Limited announce that Mr. Gerald Steel has been appointed Joint Managing Director with the Chairman, Sir Walter Benton Jones, Bt.

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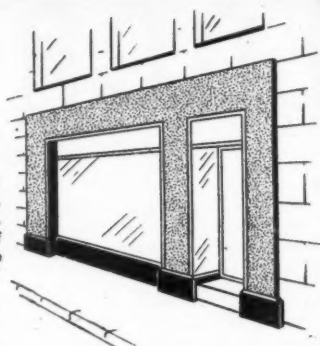
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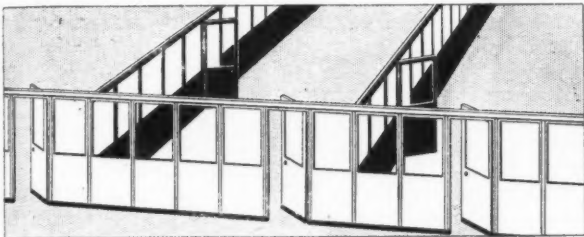
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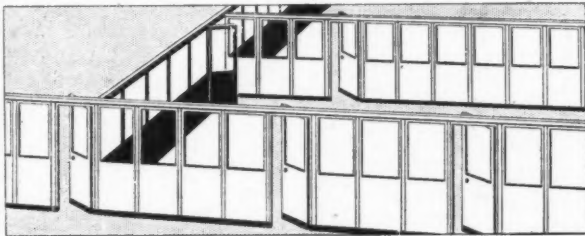
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January

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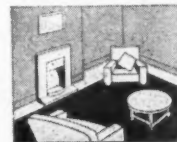
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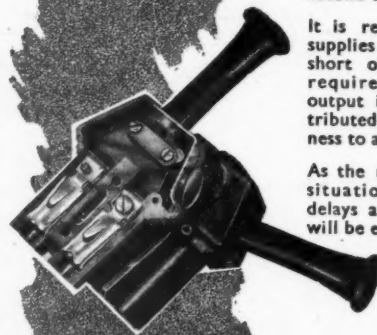


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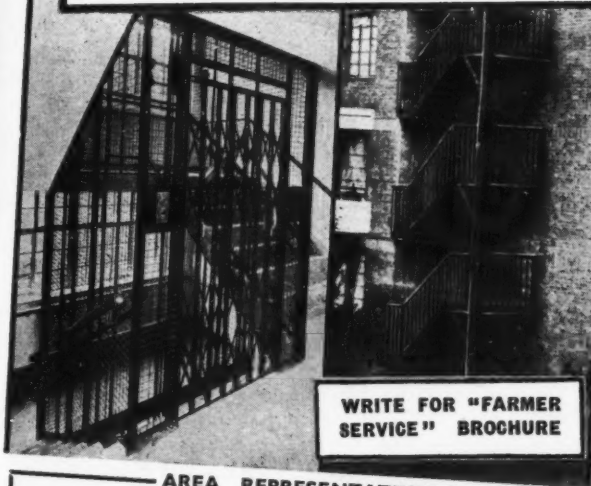
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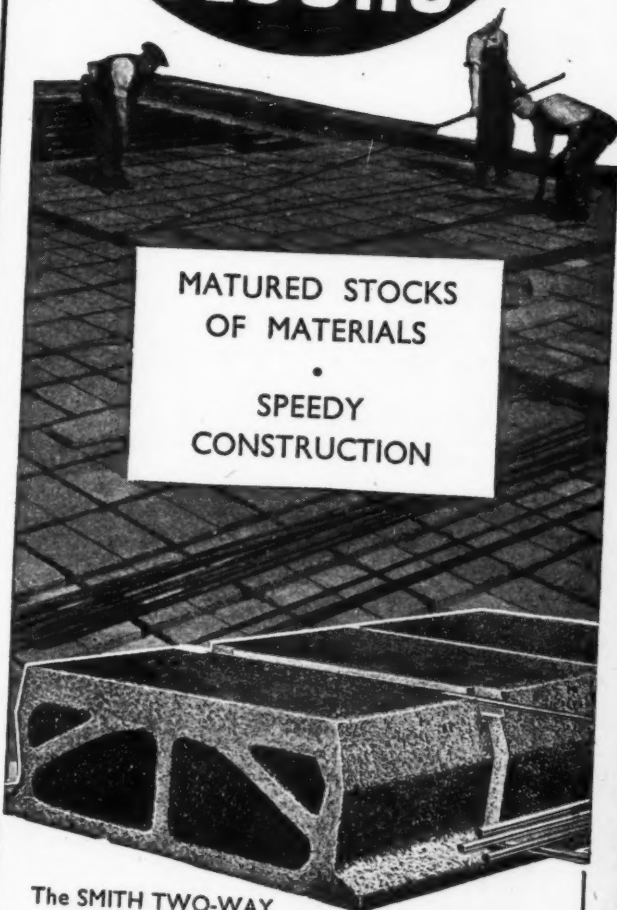
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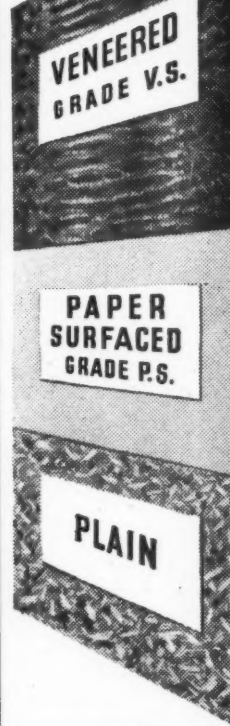
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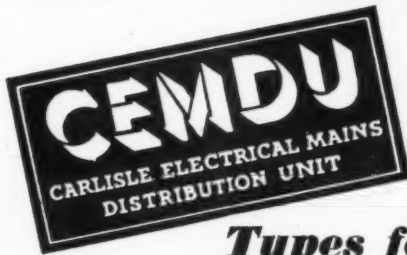
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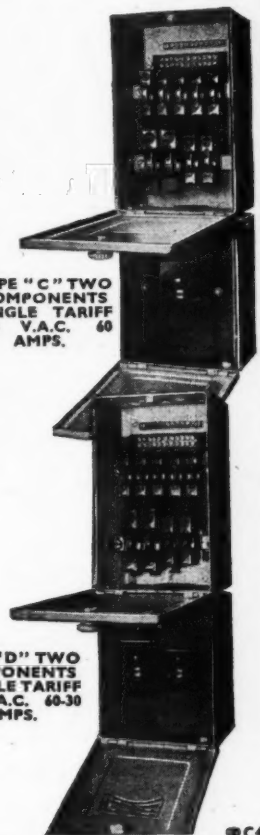
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Now that the 1947 Act is about to come into operation, and many Authorities have re-organised their planning staffs, we would remind you of the Refresher Courses that have been organised by this School with the sanction of the Ministry of Town and Country Planning. Courses are being run fortnightly from 2nd February, 1948, on different aspects of planning procedure under the new Act.

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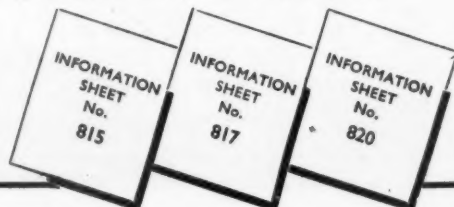
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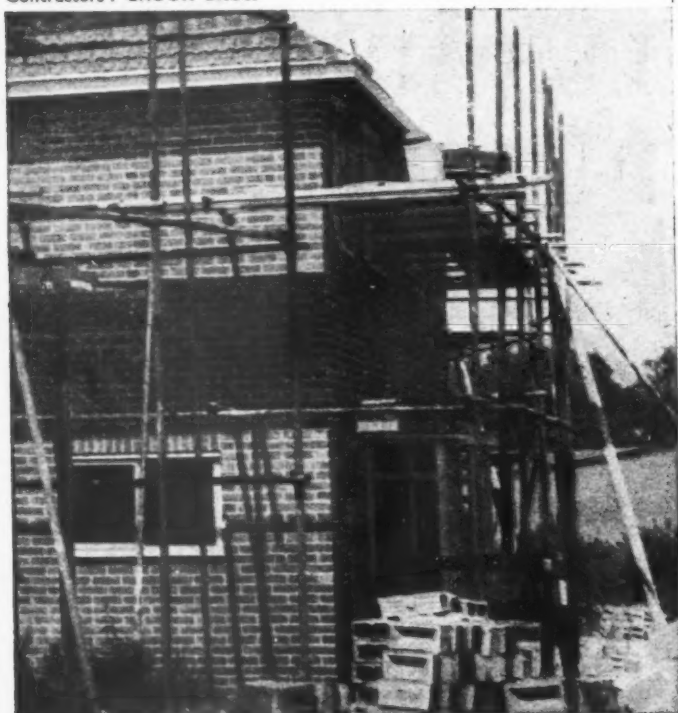
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THE ARCHITECTS' JOURNAL for January 1, 1948

HORN'S MILL HOUSING ESTATE, HERTFORD.

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20

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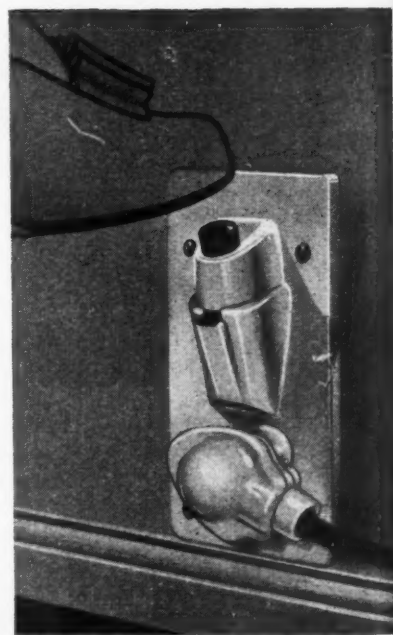


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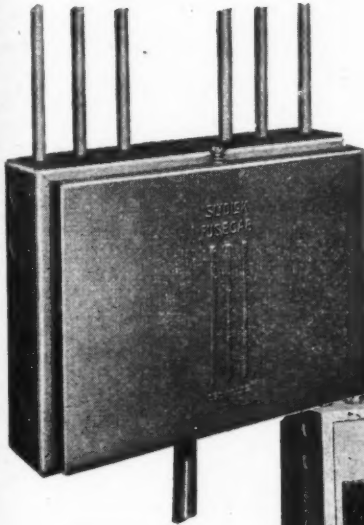
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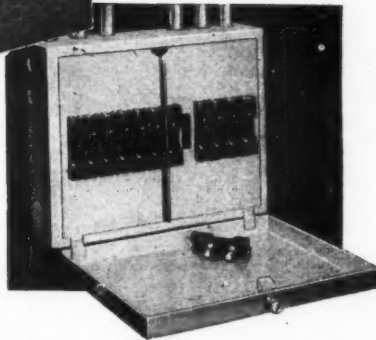
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TELL-TALE CLOCK GUARDS THE £1,000,000 TREASURE

LAST night in Room 6 of the Victoria and Albert Museum, London. The tapestry is one of the £1,000,000 "Lady of the Unicorn." It is in a collection from Paris for exhibition on Friday. Beside it a man pushes a button. . . .

He is one of 15 ex-Service guards who patrol at night. At points in the galleries he pushes these buttons which connect with a tell-tale clock in the control room, and for each push a cylinder.

If no dot appears when and where it is sounded. That is satisfactory.

The Gent's Tell-Tale Clock System, as described in this "Daily Express" story, gives a positive check on the movements of night patrols in such places as hospitals, banks, public buildings, stores, warehouses and industrial establishments.

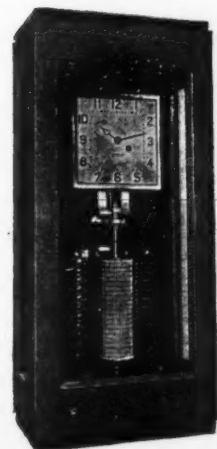
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CLASSIFIED ADVERTISEMENTS

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

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

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 Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

Public and Official Announcements

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

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Address: 75, Batson Place, London, S.W.1. Tel. Sloane 5615. 991

LONDON COUNTY COUNCIL COUNTY OF LONDON PLAN-VACANCIES FOR PLANNING STAFF.

Applications are invited for positions in the following grade:
PLANNING OFFICER, Grade III, up to £200 a year.

TECHNICAL ASSISTANT, up to £280 a year. Commencing rate according to qualifications and experience. Opportunities for competing for permanent appointment and promotion. Successful candidates will be superannuable.

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

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

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

Canvassing disqualifies. (1580) 635

BUCKS COUNTY COUNCIL APPOINTMENT OF QUANTITY SURVEYOR.

Applications are invited for the above appointment, on Grade VIII (£265-£700), plus cost-of-living bonus, at present £29 15s. p.a.

Form of application, together with full particulars, may be obtained from F. A. C. Maundrell, County Architect, County Office, Aylesbury, and must be returned to him by 19th January, 1948.

GUY R. CROUCH,
Clerk of the County Council.

County Hall, Aylesbury.
16th December, 1947. 642

KENT COUNTY COUNCIL.

Applications are invited for three appointments as **SENIOR ASSISTANT ARCHITECTS**, each at a basic salary within the range £535-£600 a year, plus war addition, at present £29 15s. 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 17th January, 1948.

W. L. PLATTS,
Clerk of the County Council.

County Hall, Maidstone.
12th December, 1947. 643

CORPORATION OF LONDON. APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the above appointments in the City Surveyor's Department, at a salary according to age, qualification and experience up to a consolidated amount of £475 p.a.

Applicants should be trained as Architects, with good practical experience in design and construction of all types of buildings, and should preferably have passed the intermediate examination R.I.B.A. and intending shortly to take the final examination.

The appointments are for the present on a temporary basis, and in the event of establishment to the permanent staff, temporary service will count for the purposes of superannuation.

The appointments will be subject to the provisions of the Corporation's Superannuation Scheme, and candidates will be required to pass a medical examination. The appointments are subject to one month's notice on either side.

Applications, endorsed "Technical Staff," to be made to George Holliday, F.R.I.C.S., City Surveyor, 65-61, Moorgate, E.C.2, giving the following particulars: Age, training and experience, past and present appointments, service with Armed Forces, and date when available to commence duties if selected, together with a copy of a recent testimonial. 662

LONDON COUNTY COUNCIL. QUANTITY SURVEYORS.

Vacancies exist for Quantity Surveyors, in the Housing and Valuation Department, for work in connection with the development of cottage estates and the construction of multi-storey dwellings, at consolidated salaries of up to £580 a year, the commencing salary in each case being determined according to qualifications and experience. Successful candidates will be required to contribute to the Council's Superannuation and Provident Fund, and will be eligible for appointment to the Council's permanent staff and for advancement on the occurrence of vacancies.

Duties will include:—

(a) Measurement of work in construction of houses, roads and sewers, preparation of interim and final bills; measurement and adjustment of sub-contracts; preparation of cost statistics, estimates, etc.

(b) Management of housing contracts of considerable value; interim valuations for payments; measurements of variations and settlement of final accounts.

Forms of application may be obtained from the Director of Housing and Valuer, The County Hall, Westminster Bridge, S.E.1 (a stamped addressed foolscap envelope required). Completed forms must be returned not later than seven days after the appearance of this notice. Canvassing disqualifies. (632) 997

COUNTY BOROUGH OF EAST HAM EDUCATION COMMITTEE. SCHOOL OF BUILDING.

Applications are invited for the post of Full-time LECTURER IN BUILDING CONSTRUCTION and Allied Subjects, mainly for duties with full-time and part-time senior students. Ability to instruct in Quantity Surveying or Reinforced Concrete and Steelwork will be an advantage. An appropriate professional qualification is desirable.

Salary in accordance with the Burnham (Technical) Scale, London area.

Form of application, which may be obtained from the undersigned on receipt of a stamped addressed envelope, should be returned as soon as possible.

L. JOHN DYFR,
Chief Education Officer.

Education Office, Town Hall Annex, Barking Road, East Ham, E.6.
12th December, 1947. 630

HERTFORDSHIRE COUNTY COUNCIL. ARCHITECTS AND QUANTITY SURVEYORS.

Applications are invited from Members of the appropriate Institutions for the following appointments:—

CHIEF ASSISTANT ARCHITECTS. Salary £750-£850, plus cost-of-living bonus, at present £59 15s. p.a.

SENIOR ASSISTANT ARCHITECTS (Grade VII). Salary £575-£650, plus cost-of-living bonus, at present £59 15s. p.a.

ASSISTANT ARCHITECTS (Grade V). Salary £460-£510, plus cost-of-living bonus, at present £59 15s. p.a.

ASSISTANT ARCHITECTS (Grade II). Salary £360-£405, plus cost-of-living bonus, at present £59 15s. p.a.

FIVE QUANTITY SURVEYORS (Grade VI). Salary £575-£600, plus cost-of-living bonus, at present £59 15s. p.a.

FOUR QUANTITY SURVEYORS (Grade V). Salary £460-£510, plus cost-of-living bonus, at present £59 15s. p.a.

ONE QUANTITY SURVEYOR (Grade IV). Salary £420-£465, plus cost-of-living bonus, at present £59 15s. p.a.

Applicants need not have had previous Local Government experience.

Applications, together with three references, should be addressed to the Clerk of the County Council, County Hall, Hertford, to be received not later than first post on 24th January, 1948. 650

BOROUGH OF ALTRINCHAM. APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the above permanent appointment in the Borough Surveyor's Department, at a salary in accordance with the General Division Scale of the National Joint Council's Conditions of Service (£265-£300 per annum, according to age), plus cost-of-living bonus (at present £59 15s. per annum).

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

Applicants should have passed the Intermediate examination of the R.I.B.A. and be used to preparing working and detail drawings and be good draughtsmen.

Applications, stating age, qualifications and experience, together with the names of two persons to whom reference may be made, should be delivered to the undersigned in an envelope endorsed "Junior Architectural Assistant," not later than 7th January, 1948.

Candidates are required to disclose in writing whether to their knowledge they are related to any members of the Council or holder of any senior office under the Council.

Canvassing, either directly or indirectly, will disqualify.

A. GLOSSOP,
Town Clerk.

12th December, 1947. 651

BOROUGH OF WIMBLEDON. ARCHITECTURAL ASSISTANTS. ENGINEERING ASSISTANTS.

Applications are invited for the following appointments, on the established staff of the Borough Engineer and Surveyor's Department:—

(a) **ONE SENIOR ARCHITECTURAL ASSISTANT**, on Grade A.P.T. VI, at a commencing salary of £555 per annum, rising by two annual increments of £20 and one of £25 to a maximum of £620. Applicants must have had considerable experience in Municipal architectural, housing, and town planning work, and must be Associate Members of the Royal Institute of British Architects.

(b) **TWO GENERAL ARCHITECTURAL ASSISTANTS**, on Grade A.P.T. IV, at a commencing salary of £440 per annum, rising by three annual increments of £15 to a maximum of £485. Applicants must have had experience in Municipal architectural and housing work, and should be L.R.I.B.A. or have reached a similar standard.

(c) **ONE SENIOR ENGINEERING ASSISTANT**, on Grade A.P.T. IV, at a commencing salary of £440 per annum, rising by three annual increments of £15 to a maximum of £485. Applicants must be A.M.I.Mun.E. or have similar qualifications, and have had experience in the design and execution of Municipal Engineering Works.

(d) **ONE SENIOR ENGINEERING ASSISTANT** (Town Planning), on Grade A.P.T. IV, at a commencing salary of £440 per annum, rising by three annual increments to a maximum of £485. Applicants must be A.M.T.P.I. or have a similar qualification, and have had good experience in Town Planning.

(e) **ONE GENERAL ENGINEERING ASSISTANT**, on Grade A.P.T. II, at a commencing salary of £330 per annum, rising by three annual increments of £15 to a maximum of £425. Applicants should have passed Sections A and B of the Associate Membership Examination of the Inst.C.E. or equivalent qualifications, and must have had Municipal engineering experience, including levelling and field work.

GENERALLY:
A cost-of-living bonus, at present £59 15s. a year, is paid in addition to the above salaries.

The appointments are in accordance with the National Conditions of Service, and are subject to the provisions of the Local Government Superannuation Acts and to satisfactory medical examination.

Applications, endorsed "(a) or (b) Architectural Assistants," and "(c), (d) or (e), Engineering Assistants," stating age, qualifications, past and present experience in detail, all former Local Government service, present appointment, length of notice required to terminate present appointment, and the names and addresses of three persons as referees, must be forwarded to the Borough Engineer and Surveyor, Town Hall, Wimbledon, S.W.19, by 19th January, 1948.

Candidates must disclose in writing to the undersigned whether to their knowledge they are related to any member or senior officer of the Council.

EDWIN M. NEAVE,
Town Clerk.

Town Hall, Wimbledon, S.W.19. 665

COUNTY BOROUGH OF WEST HARTLEPOOL. APPOINTMENT OF BOROUGH ARCHITECT.

Applications are invited for the appointment of Borough Architect, at a salary of £900 per annum, rising by annual increments of £50 to £1,100, plus such cost-of-living bonus as is from time to time paid by the Council. At the present time the Council pays a car allowance of £50 p.a. to the holder of the post.

Applicants must be members of the Royal Institute of British Architects.

The person appointed will be responsible for the following duties:—

The designing of new buildings.
The supervision of the erection of all new buildings.

The maintenance of all Corporation buildings. He will not be permitted to engage directly or indirectly in private practice or in any other business or profession.

The appointment will be subject to the successful candidate satisfactorily passing a medical examination, and will be terminable by one month's notice in writing on either side.

Applications, endorsed "Borough Architect," stating age, qualifications and experience, accompanied by not more than three recent testimonials, must reach the undersigned not later than Thursday, the 15th January, 1948.

Canvassing, directly or indirectly, will be a disqualification.

ERIC J. WAGGOTT,
Town Clerk.

Municipal Buildings, West Hartlepool. 616

BOROUGH OF SURBITON.

TWO ARCHITECTURAL ASSISTANTS.
Grade A.P.T. IV (£440-£485 per annum), plus bonus, £59 15s. per annum.

Applications are invited for these permanent posts. Housing accommodation will be provided, if necessary, at an economic rent. Conditions of appointment and forms of application may be obtained from the undersigned, to whom applications should be delivered by 19th January, 1948.

R. H. WRIGHT,
Town Clerk.

Council Office, Surbiton. 608

CROWN AGENTS FOR THE COLONIES.

Applications from qualified candidates are invited for the following post:—
DRAUGHTSMAN (Architectural) required by Nigerian Government Railway for 18 to 24 months, with prospect of permanency. Commencing salary according to experience, in scale £600-£970, including expatriation pay. Outfit allowance £60. Free passages. Candidates should be experienced in the preparation of sketch plans, working drawings and details, and in the preparation of bills of quantities and specifications, for general industrial work and housing. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/17418 on both letter and envelope. 672

**COUNTY BOROUGH OF OLDHAM.
 BOROUGH ENGINEER AND SURVEYOR'S
 DEPARTMENT.**

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the following appointment in my department. Housing accommodation will be provided if necessary.

SENIOR ARCHITECTURAL ASSISTANT.
 A.P.T. Grade V, £460-£510 per annum, plus cost-of-living bonus, at present £59 16s. per annum. Candidates should hold a recognised Architectural qualification and a Town Planning qualification would be an advantage. They should also have had comprehensive experience in design and construction.

The appointment will be subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Conditions relating to the appointments can be obtained from the undersigned.

Applications, stating age and previous appointments, in addition to qualifications and experience, and copies of three recent testimonials, must reach the undersigned not later than Saturday, the 17th January, 1948, in envelopes endorsed "Senior Architectural Assistant."

A. L. HOBSON,

Borough Engineer and Surveyor.
 Municipal Buildings, 75, Union Street,
 Oldham.

22nd December, 1947. 669

KENT EDUCATION COMMITTEE.**TECHNICAL INSTITUTE, GRAVESEND.****HEAD OF BUILDING DEPARTMENT.**

Required at the beginning of the Summer Term, 1948, a Head of Building Department, Grade I (Salary, £600 x £25 to £750 a year; increase of salary scale now under consideration). Applicants should hold a degree or its equivalent, and have had both teaching and industrial experience. Application forms and further particulars of the post can be obtained from the Principal, Technical Institute, Darnley Road, Gravesend, to whom applications should be sent.

Closing date for application, Saturday, 17th January, 1948. 667

SKIPTON URBAN DISTRICT COUNCIL.**ARCHITECTURAL ASSISTANT.**

Applications are invited for the above appointment, at a salary in accordance with Grade III of the National Scales (£390-£435), plus bonus, at present £59 16s.

Although the appointment is not within the permanent establishment, it is anticipated that its duration will not be less than two years.

Applications, on a form to be obtained from the undersigned, and giving the names and addresses of three persons to whom reference can be made, should be sent, in an envelope endorsed "Architectural Assistant," so as to be received by the undersigned not later than 14 days after the first appearance of this advertisement.

K. B. ROBINSON, B.Sc.(Eng.).

A.M.Inst.C.E.,

Engineer and Surveyor.

Town Hall, Skipton.
 20th December, 1947. 661

BOROUGH OF STRATFORD-ON-AVON.**APPOINTMENT OF TEMPORARY ARCHITECTURAL AND PLANNING ASSISTANT.**

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department, at a salary in accordance with Grades IV and V of the A.P.T. Division of the National Scale of Salaries (£420-£510 per annum), plus cost-of-living bonus (at present £59 16s. per annum); the commencing salary will be determined according to qualifications and experience.

Candidates must be Registered Architects, and preference will be given to those who are Associates of the R.I.B.A. and/or who have a Town Planning qualification. They should also have had experience in the design of Council houses, the planning of housing estates, and the preparation of Estimates, Specifications, etc.

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

Forms of application may be obtained from the undersigned, to whom they should be returned, together with copies of three recent testimonials, not later than Tuesday, 27th January, 1948. Canvassing in any form, either directly or indirectly, will be disallowed.

P. C. SMART, A.M.I.C.E.,

Borough Engineer and Surveyor.

Municipal Offices, Stratford-on-Avon.
 19th December, 1947. 659

CARDIGANSHIRE COUNTY COUNCIL—**COUNTY ARCHITECT'S DEPARTMENT.****APPOINTMENT OF QUANTITY SURVEYOR.**

Applications are invited for the appointment on the permanent staff of a Quantity Surveyor, for the Architect's Department. Salary A.P.T./V of the National Scheme of Conditions of Service, namely £460-£510, plus cost-of-living bonus (at present £59 16s. per annum).

Applicants, who should have passed the Final Examination of the Royal Institutes of Chartered Surveyors (Quantities Section), must be experienced in all branches of the work, and able to prepare estimates, bills of quantities, specification, contract documents, and cost statistics, and to measure-up for interim and final certificates and settle final accounts.

The appointment will be subject to:—
 (a) The National Scheme of Conditions of Service;

(b) The provisions of the Local Government Superannuation Act, 1937, and

(c) A satisfactory medical examination.

The successful candidate will be required to produce a certificate of birth and devote the whole of his time to the duties of his office.

Applications, stating age, qualifications and experience, present and previous appointments and salary, together with copies of three recent testimonials, should be delivered to the undersigned in an envelope marked "Appointment of Quantity Surveyor," not later than Saturday, the 24th day of January, 1948.

IVOR EVANS,

Clerk of the Council.

County Council Offices, Aberystwyth.
 18th December, 1947. 671

COUNTY BOROUGH OF DARLINGTON.**BOROUGH ARCHITECT'S DEPARTMENT.**

Applications are invited for the following permanent appointments:—

(a) CHIEF ASSISTANT ARCHITECT (Grade VII), £575-£650.

(b) ASSISTANT ARCHITECT (Grade V), £460-£510.

(c) ASSISTANT QUANTITY SURVEYOR (Grade VI), £460-£510, plus cost-of-living bonus of £59 19s. 3d. in each case.

Candidates for (a) and (b) should have had previous experience on Housing and Education work, and preference will be given to applicants who are Members of the Royal Institute of British Architects.

Candidates for (c) should be experienced in the preparation of Bills of Quantities, the checking of interim valuations, and the setting up of Final Accounts. Preference will be given to Fellows or Professional Associates of the Royal Institute of Chartered Surveyors (Quantities Division).

It will be a condition of all the above appointments that the persons appointed shall give an undertaking to stay in the employment of the Council for a period of not less than two years.

Applications, stating age, qualifications, present appointment and salary, and previous experience, accompanied by copies of three recent testimonials, and endorsed "Chief Assistant Architect," "Assistant Architect," or "Assistant Quantity Surveyor," should be delivered to E. A. TORBOLLM, A.R.I.B.A., A.M.T.P.I., Borough Architect, Central Buildings, Darlington, not later than the 16th January, 1948. 664

MONMOUTHSHIRE COUNTY COUNCIL.

Applications are invited for the following post, in the County Architect's Department:—

PERMANENT PRINCIPAL ARCHITECTURAL ASSISTANT, at a salary in accordance with Grade VIII of the Administrative, Professional and Technical Division of the National Joint Council's Scheme, viz., £625 per annum, rising by annual increments of £25 to a maximum of £700 per annum, plus cost-of-living bonus, at present £59 6s. per annum.

Candidates must have a knowledge of design and construction, particularly in relation to schools, public buildings, police stations, etc., and must be Associate Members of the Royal Institute of British Architects.

The appointment will be subject to the Local Government Superannuation Act, 1937, and to the Regulations of the Council in force from time to time governing their Administrative, Technical and Clerical Staff. The successful candidate will be required to pass a medical examination. Canvassing, directly or indirectly, will be a disqualification, and applicants must disclose in writing any relationship within their knowledge to a member of the Authority or to a holder of any senior office under the Authority. Forms of application, and conditions of service, can be obtained from the undersigned. Applications, together with copies of three recent testimonials, must be delivered to Mr. Colin L. Jones, F.R.I.B.A., County Architect, Queen's Hill, Newport, Mon., not later than Monday, 8th January, 1948.

VERNON LAWRENCE,

Clerk of the Council.
 County Hall, Newport, Mon. 663

CITY OF NOTTINGHAM.**HOUSING ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments:—

(1) ASSISTANT ARCHITECT (Grade IV, A.P.T., £420-£465 per annum). Candidates must be Registered Architects, with experience in the design and planning of large housing estates.

(2) ASSISTANT ARCHITECT (Grade I, A.P.T., £330-£375 per annum).

(3) ASSISTANT QUANTITY SURVEYOR (Grade II, A.P.T., £360-£405 per annum).

The above appointments are in accordance with the National Joint Council's Scheme of Conditions of Service, and in addition to the salaries stated, a cost-of-living bonus (at present £59 16s. per annum) will be paid.

The appointments will be subject to the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination.

Applications, accompanied by copies of not more than three recent testimonials, should reach me not later than Thursday, 15th January, 1948.

Canvassing in any form, either directly or indirectly, will be a disqualification.

J. E. RICHARDS,

Town Clerk.
 The Guildhall, Nottingham. 666

EAST RIDING COUNTY COUNCIL.**COUNTY ARCHITECT'S DEPARTMENT.**

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

(a) ONE PRINCIPAL ASSISTANT ARCHITECT (Grade VIII), £625-£700 per annum, plus cost-of-living bonus, which at present stands at £59 16s.

Applicants must have had extensive experience in the supervision of Drawing Office Staff and a contemporary outlook on Architectural Design and Construction, particularly in relation to modern educational buildings. This appointment offers considerable scope to a suitable applicant.

(b) ASSISTANT ARCHITECTS (Grades IV to VI). The salary range is £420-£600 per annum, plus cost-of-living bonus, at present £59 16s., and each suitable applicant will be appointed to the grade appropriate to his qualifications and experience. Provision is made for progress between grades within the groups, dependent upon satisfactory service.

Applicants should have had satisfactory experience in the design and construction of modern buildings generally and of schools in particular.

(c) TWO QUANTITY SURVEYORS (Grade VI). Salary £535-£600 per annum, plus cost-of-living bonus, at present £59 16s.

Applicants should have had suitable experience in the preparation of Estimates, Bills of Quantities, Site Measurement, and Settlement of Final Accounts.

In each of the above appointments preference will be given to applicants who have appropriate professional qualifications.

The appointments, which are terminable by one month's notice on either side, are subject to the provisions of the Local Government Superannuation Act, 1937, in connection with which the successful candidate will be required to pass a medical examination.

Applications, stating age, training, qualifications, experience and details of past and present appointments, with salary, accompanied by copies of three recent testimonials, are to reach the County Architect, County Hall, Beverley, not later than Monday, the 12th January, 1948.

T. STEPHENSON,

Clerk of the Council.
 County Hall, Beverley.
 December, 1947. 653

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ANGLESEY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following permanent appointment, in the County Architect's Department:—

ONE CHIEF ASSISTANT ARCHITECT (SCHOOLS). Salary Grade VII, commencing at £575 per annum and rising to £650 per annum. Applicants should be Registered Architects and members of the Royal Institute of British Architects, with considerable experience in the design of educational buildings, preparation of working drawings, and the supervision of technical staff.

Cost-of-living bonus, at present £59 16s. per annum, is payable in addition to the salary scale given above.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination. The appointment will be subject to three months' notice on either side.

Applications, stating age, training, qualifications, experience, and present and past appointments, and giving the names of two referees, and accompanied by copy of one testimonial, should be sent to the undersigned not later than Monday, 19th January, 1948.

WILLIAM JONES,
Clerk of the County Council.
Shire Hall, Llangefni, Anglesey.
23rd December, 1947. 679

COUNTY BOROUGH OF TYNEMOUTH.
BOROUGH SURVEYOR'S DEPARTMENT.
APPOINTMENT OF QUANTITY SURVEYOR.
Applications are invited for the appointment of Quantity Surveyor, at a salary in accordance with Grade V (£460-£510), A.P.T. Division National Scales.

Preference will be given to applicants who are members of the Royal Institute of Chartered Surveyors, and have had experience in "taking off" quantities for all trades, measuring up, and preparing final accounts.

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 not later than 24th January, 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 24th day of December, 1947.
FRED G. EGNER, Clerk.
14, Northumberland Square, North Shields. 678

COUNTY BOROUGH OF HALIFAX.
APPOINTMENT OF ASSISTANT ARCHITECTS (EDUCATION).
Applications are invited for the following appointments, in the A.P.T. Division of the National Scale:—

(1) SENIOR ASSISTANT ARCHITECT, Grade V (£460, rising to £510 per annum).
(2) ASSISTANT ARCHITECT, Grade III (£390, rising to £435 per annum).

Cost-of-living bonus, at present £59 16s. per annum, will be payable in respect of each appointment.

The successful candidates will be engaged both on the long-term development plan under the 1944 Education Act, and on projects which have already received Ministerial approval, and which include the erection of two Primary Schools, one Secondary School, and Technical College Extensions. Previous experience in Local Government is not essential, but preference will be given to candidates with appropriate qualifications.

The Corporation have decided that in the letting of requisitioned houses, consideration will be given to the requirements of newly appointed members of the staffs of Corporation Departments.

The appointments are subject to the conditions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to undergo a medical examination.

Applications, stating age, qualifications, present position and salary and experience, and accompanied by copies of recent testimonials and appropriately endorsed, should be delivered to the undersigned not later than Saturday, 10th January, 1948.

W. USHER, Town Clerk.
Town Hall, Halifax.
18th December, 1947. 682

CITY OF LEEDS.
CITY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:—

(a) ASSISTANT ARCHITECTS. Commencing salary £535 p.a., rising subject to satisfactory service to £600 p.a.

(b) ASSISTANT ARCHITECTS. Commencing salary £420 p.a., rising subject to satisfactory service to £465 p.a.

(c) ASSISTANT ARCHITECTS. Commencing salary £390 p.a., rising subject to satisfactory service to £435 p.a.

Candidates must be Registered Architects, and must have had experience in carrying out Architectural Works and be familiar with statutory modern building requirements and regulations in connection with Schools or Public Buildings.

(d) ASSISTANT QUANTITY SURVEYORS. Commencing salary £460 p.a., rising subject to satisfactory service to £500 p.a.

Candidates should be suitably qualified, and have had pre-war experience in "taking off" for large contracts and site measurements.

(e) ASSISTANT QUANTITY SURVEYORS. Commencing salary £390 p.a., rising subject to satisfactory service to £435 p.a.

Candidates should have had experience, preferably pre-war, in abstracting and billing of works of some magnitude.

(f) ASSISTANT QUANTITY SURVEYORS. Commencing salary £315 p.a., rising subject to satisfactory service to £360 p.a.

(g) HEATING AND VENTILATING ENGINEER. Commencing salary £460 p.a., rising subject to satisfactory service to £510 p.a.

Candidates must have had experience in the design and supervision of heating, hot water, and ventilating systems in all classes of buildings.

(h) TRACER (Male or Female). Commencing salary will be according to age, rising subject to satisfactory service to a maximum of £300 p.a. in the case of Male officers and £240 p.a. in the case of Female officers.

Candidates should have had experience in an Architect's office.

Cost-of-living bonus, which is additional to the above salary scales, is payable as follows:—Male officers, £59 16s. per annum; female officers, £48 2s. per annum (over 21 years of age).

The appointments are subject to the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination.

Applications, on forms to be obtained from the undersigned, accompanied by copies of not more than three recent testimonials (not returnable), must be received by me in the envelope supplied therefor, not later than 10 a.m. on Friday, 16th January, 1948.

Canvassing in any form, either directly or indirectly, will be a disqualification.

R. A. H. LIVETT, O.B.E., A.R.I.B.A., City Architect.
Priestley House, Quarry Hill, Leeds, 9.
December, 1947. 677

CITY OF COVENTRY.
Applications are invited for the following whole-time appointments on the permanent staff of the City Architectural Department:—

(a) TWO ASSISTANT ARCHITECTS.
Salary grade A.P.T. Va, commencing at £490 per annum, and rising by three annual increments of £20 to £550 per annum.

Candidates should be Associate Members of the Royal Institute of British Architects, or hold equivalent qualifications. It is likely that one assistant would be involved in the re-arrangement of the scheme, and planning experience would be an advantage.

(b) ONE ASSISTANT ARCHITECT.
Salary grade A.P.T. III, commencing at £390 per annum, and rising by three annual increments of £20 to £450 per annum.

(c) ONE ASSISTANT QUANTITY SURVEYOR.
Salary grade A.P.T. (as above).

Candidates should be Professional Associates of the Royal Institution of Chartered Surveyors (Quantities Division).

Salary increments are subject to satisfactory service. The above salaries are exclusive of the Council's cost-of-living bonus, which may vary, but which at present amounts to 23s. per week.

In certain circumstances housing accommodation may be made available for the successful candidates for the Grade Va posts.

The posts are subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Act, as amended in regard to annuities to widows by the Coventry Corporation Act, 1936, and a satisfactory certificate will be requisite from the Council's medical referee. The successful male applicants will be required to contribute to the Coventry Municipal Officers', Widows' and Orphans' Pension Fund.

Applications must be made on the forms obtainable from the undersigned, and should be returned completed, together with copies of not more than two recent testimonials, or names of two persons to whom reference may be made, not later than Monday, the 19th January, 1948.

Canvassing, directly or indirectly, will be a disqualification.

D. E. E. GIBSON, City Architect.
1a, Warwick Row, Coventry.
1st January, 1948. 675

UNIVERSITY COLLEGE, NOTTINGHAM.
ASSISTANT SURVEYOR AND LECTURER IN BUILDING CONSTRUCTION.

Applications are invited for the appointment of Assistant Surveyor and Lecturer in Building Construction, at the School of Agriculture, Sutton Bonington. Initial salary according to qualifications and experience, but not less than £500 per annum. Candidates should hold a professional qualification in surveying or in architecture.

The conditions of the appointment and form of application may be obtained from the undersigned.

H. PICKBOURNE, Registrar.
686

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CITY OF PORTSMOUTH.
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Tenders are invited for a Sub-Contract for Heating, Hot and Cold Water Services and servery equipment, in connection with the reconstruction of Nurses' Home No. 1, at St. Mary's Hospital, Portsmouth.

Plans, specification and general conditions may be inspected at the City Architect's Office, Municipal Offices, 1, Western Parade, Southsea, Portsmouth, or at the Offices of the Consulting Engineers, Messrs. J. Roger Preston & Partners, Dilke House, Malet Street, London, W.C.1.

Applications to tender, which must be accompanied by a cheque for 5 guineas, payable to the City Treasurer, must be made to the City Council Chambers, 1, Clarence Parade, Southsea, not later than Monday, 12th January, 1948. The deposit of 5 guineas will be returned on receipt of a bona fide tender and/or return of all the documents within seven days.

Tenders must be enclosed in a plain sealed envelope not bearing any name or mark indicating the sender, endorsed "Tender for Heating Nurses' Home No. 1 at St. Mary's Hospital," and must be delivered to the Town Clerk, City Council Chambers, 1, Clarence Parade, Southsea, not later than 10 a.m. on 8th March, 1948.

The Corporation do not bind themselves to recommend for acceptance the lowest or any Tender. Acceptance will be subject to the consent of the Ministry of Health being received to the main contract.

V. BLANCHARD, Town Clerk.
City Council Chambers, 1, Clarence Parade, Southsea.
19th December, 1947. 676

Architectural Appointments Vacant
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ARCHITECTURAL ASSISTANT required: R.I.B.A.; Intermediate standard; good draughtsman. Apply stating age, experience, and salary required, to Farmer & Dark, Chartered Architects, Terminal House, Grosvenor Gardens, London, S.W.1. 682

LONDON PASSENGER TRANSPORT
BOARDS.—Applications are invited for appointments on the temporary staff of the Architect as follows: Assistant Architects, Architectural Assistants, Structural Engineering Designers; commencing salary from £300 to £600 per annum, according to ability, qualifications and experience. Applications, which should give a brief outline of training and experience, to be sent to the Staff Officer, ER/E451, London Passenger Transport Board, 55, Broadway, S.W.1. 683

INTERNATIONAL CORRESPONDENCE
SCHOOLS require for immediate full-time employment an ARCHITECT (Male), A.R.I.B.A. Also a JUNIOR ARCHITECTURAL ASSISTANT qualified by examination. Write or call, stating age, experience, and salary required, to Director of Instruction, International Correspondence Schools, Kingsway, W.C.2. 684

SENIOR ARCHITECTURAL ASSISTANT required, having sound general office experience in responsible position, with good knowledge of building construction, supervision, etc., on large scale high-class work; appropriate salary; give full particulars. Herbert J. Rowse, F.R.I.B.A., Martins Bank Buildings, Liverpool, 2. 657

JUNIOR ASSISTANT required for W.C.2 office; must be neat and accurate draughtsman in ink or pencil, and capable of measuring up. Apply, giving full particulars and salary required. Box 666.

SENIOR QUANTITY SURVEYING ASSISTANTS are required to fill vacancies for permanent and pensionable positions in the Head Office of the Premises Department, Ind Coope & Allsopp, Ltd., Burton-on-Trent. Applicants should be either Associates of the Royal Institute of Chartered Surveyors or other recognised Association, but consideration will be given to students nearing the required standard for the final examination; they should have a good general experience in taking off, abstracting, billing, specifications, writing, and checking accounts. Experience in connection with licensed premises and breweries would be an added asset, but is not insisted upon. They will also be required to pass a medical examination and contribute to the generous Staff Superannuation Scheme in force. A five-day working week is in operation, and amenities offered include excellent canteen facilities and sportsground. Commencing salaries will be up to £500 p.a., plus a cost-of-living bonus (at present £57 10s. on £500), according to qualifications and experience. Particulars of training, experience, past and present appointments, and qualifications, together with testimonials, and stating age, date available, and whether married or single, to be sent to the Manager, Premises Department, Ind Coope & Allsopp, Ltd., 148, Station Street, Burton-on-Trent. While no housing accommodation can be immediately offered to successful applicants, the Company will assist as far as possible. 655

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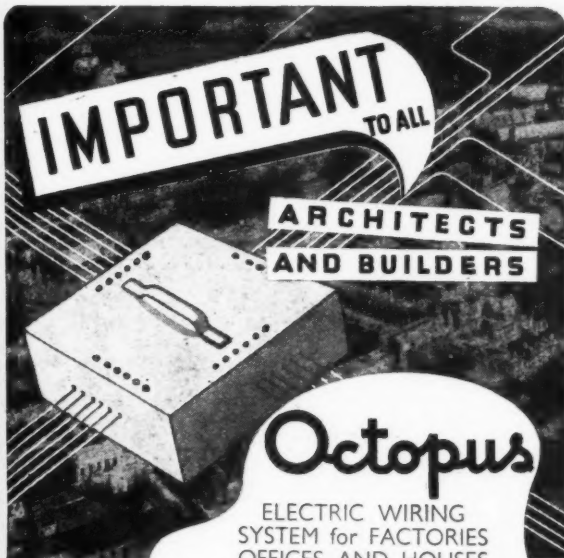
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