THE ARCHITECTS'



standard

contents

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

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Architectural Appointments Wanted and Vacant

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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their fall address and telephene 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.

Architectural Association 34/6 Redford Square W C 1

AAI	Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley,"
	Castle Hill Avenue, Berkhampstead, 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

ArchSA
Architectural Students' Association. School of Architects, Municipal School of Art, All Saints, Manchester, 15.
Ardwick 3480
Architects' Registration Council. 68, Portland Place, W.1.
Welbeck 9738
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.

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.

BC Building Centre. 9, Conduit Street, W.1.

BC British Colour Council. 28, Sackville Street, W.1.

BC British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.

BCIRA British Cast Iron Research Association. Alvechurch, Birmingham.

BDA British Door Association. 25, Victoria Street, S.W.1.

Reliance 7611, Ext. 1706

Mayfair 8641/6

Regent 3613

Perivale 6869

Redditch 716

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.

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 RID 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 RRS 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.
CIAD Central Institute of Art and Design. 41, 42, Dover Street, W.1.

CIAM Congrès Internationaux d'Architecture Moderne. Doldertal, 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.

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.

FASSC Federation of Association of Specialists and Sub Contractors.

21, Tothill Street, S.W.1.

Federation of British Industries. 21, Tothill Street, S.W.1.

Sloane 2837
Whitehall 9606
Whitehall 6711

FC Forestry Commission. 25, Savile Row, W.1.

FCMI Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.

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

FILD Friends of the Lake District. Viverston 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

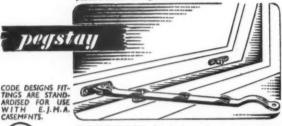
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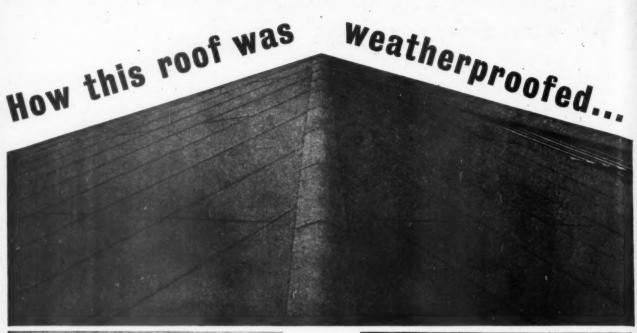
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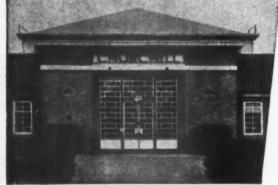
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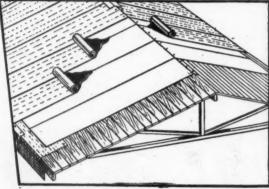
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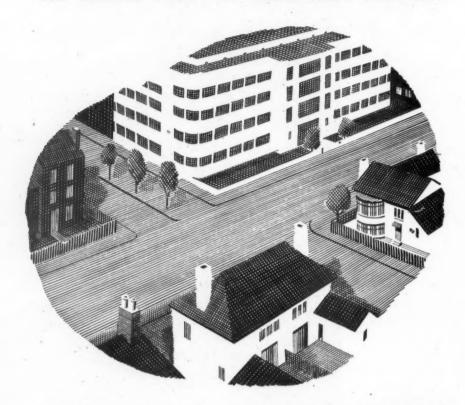
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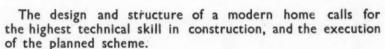
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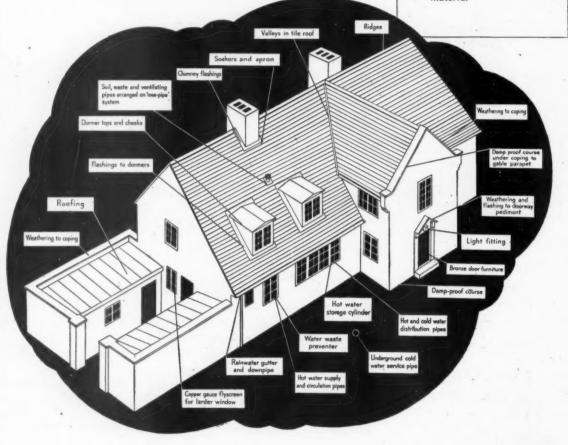
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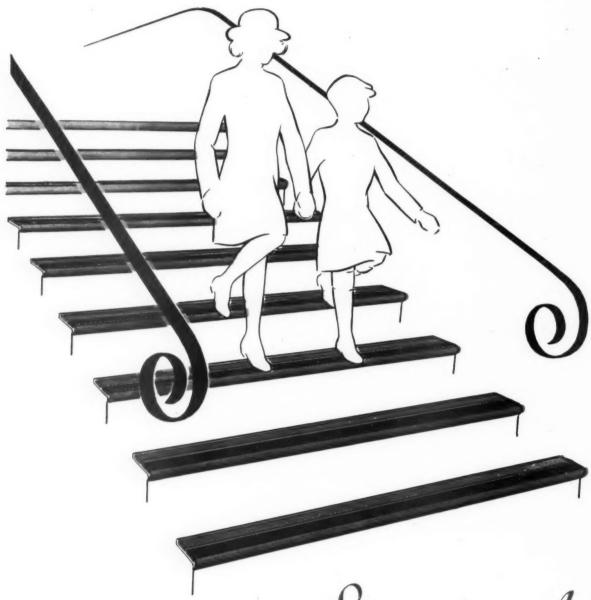
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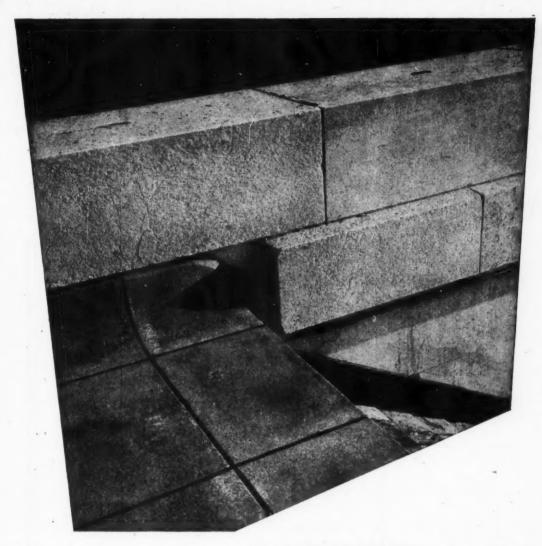
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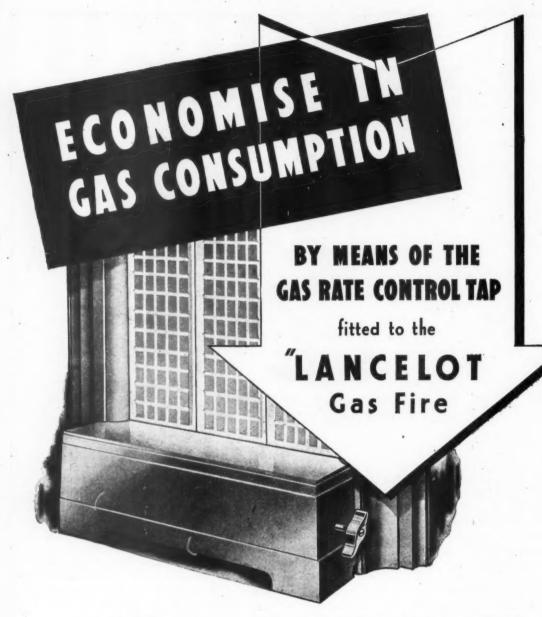


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. . . might today be more correctly described as "Chemical research applied with elbow grease." We feel better if we know we look well. The self-respecting citizen sees that his boots are polished, just as the good soldier looks to the lustre of his badges and buttons. For the same reason we use polish at almost every turn in our home life — on fire-grate and furniture, bathroom taps and table silver, motor car or push-bike. Polish is the preparation of a surface so that it reflects light evenly. Each surface, each material, needs a different type of polishing agent. Many of us remember when boots had to be polished with that sticky preparation known as "blacking," reputed to have consisted of lamp or bone black, molasses, sulphuric acid and stale beer! A shine was obtained only after much energy, assisted by more spit! The research chemist has helped to remove such drudgery. Now, the modern boot polish — made of natural and synthetic

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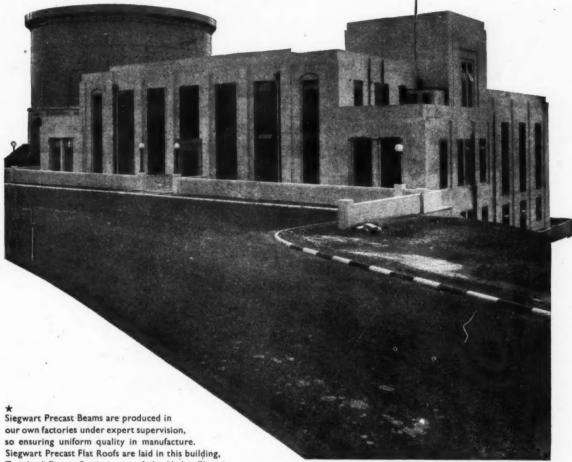
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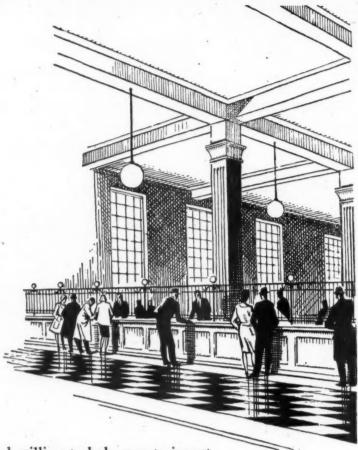
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The secrets of certain Sung glazestheir colours varying from the tint of hoary lichen on old thorn trees to the rainbow tints of a soap-bubble, glowing with coloured fire-baffled European potters for generations until rediscovered by the Royal Doulton Potteries. The crackled surface effect of some types of Sung ware was first, no doubt, the accidental result of unequal shrinkage of body and glaze; later it was controlled to produce deliberate patterns.

During the Sung and subsequent Dynasties, pottery was exported to the Near East, Egypt, India, Japan, Korea and Siam, influencing the work of native potters. Persian and Syrian pottery in their turn gave new ideas to Chinese artists and craftsmen.

The Ming Dynasty (1368 to 1644 A.D.) is another famous period of Chinese ceramic history. Before earlier wares became well-known in Western Europe, Ming porcelains were considered the finest expression of the art of the Chinese potter; many collectors, indeed, hold the same opinion today. Painted designs, sometimes copied from old paintings on silk and paper, are characteristic of many Ming wares. Painting in cobaltor "Mohammedan blue" as the Chinese called it-was introduced, probably from the Near East, in the 14th century and, although Ming potters used a wide range of glazes and enamels, the "underglaze blue" remained most consistently popular, especially for export. It was widely copied in later times by Delft and other European potters. A fine yellow enamel was introduced about 1500 and the dark tomato and chestnut reds of later Ming wares are very famous.

Unlike the more reposeful and sometimes even austere Sung wares, the Ming were usually more expressive of movement and energy and their emphasis was on painted decoration rather than on shapes, textures and glazes.



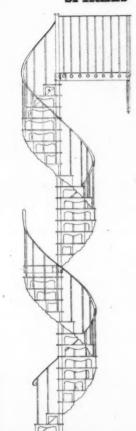
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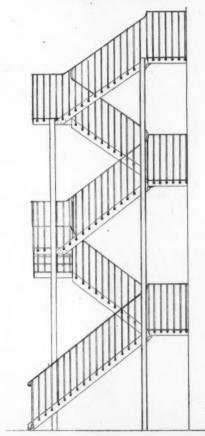
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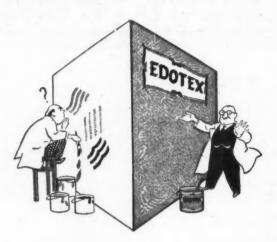
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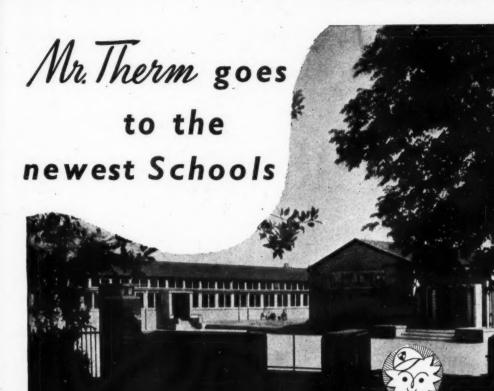


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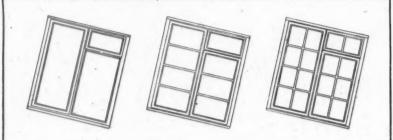
St. Audrey's School, Hatfield, Herts., exemplifies a system of construction recommended in the report of the R.I.B.A. School Design & Construction Committee. It was completed in just over 20 weeks, the first of the permanent post-war school buildings incorporating many time and labour saving features which have gained the interest of visiting authorities from other towns. Heating, for example is by an accelerated low pressure hot water system, served by gas-fired boilers and fitted with time, temperature and flame failure controls. The time control switches the gas on at 7.30 a.m. and off at 3 p.m., omitting Saturdays and Sundays. Conditions are comfortably warm within one hour of starting up. Hot water for cloakroom use is also provided by gas-fired boilers.

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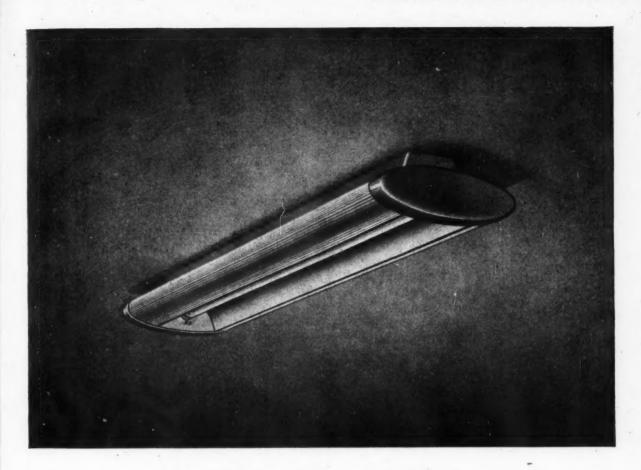
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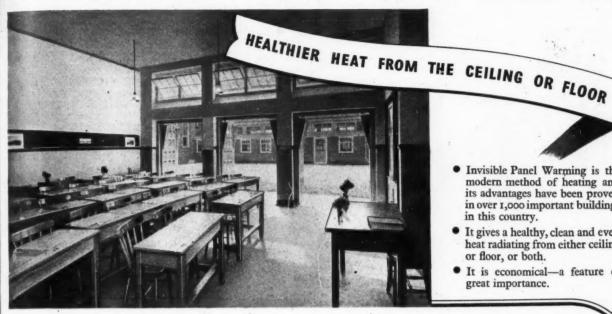
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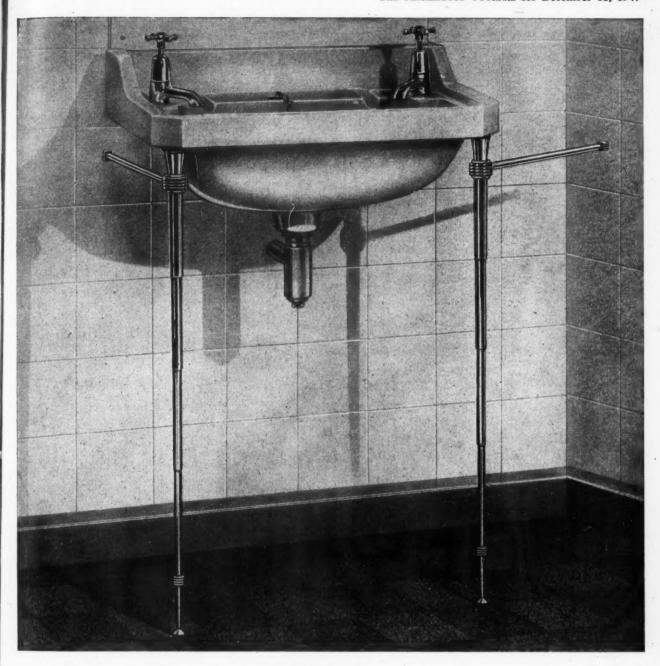
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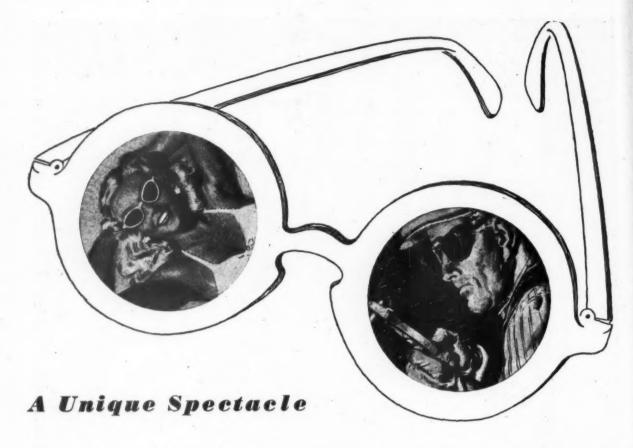
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It appears that Industry is to get less timber in 1948 than the Government had originally hoped to be able to supply. While deploring the consequent limitation of business expansion, the T.D.A. feels that the interests of the country as a whole, and wood-users in particular, are best served by a realistic attitude.

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In common with every other periodical this Journal is rationed to a small part of its prewar 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



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 DECEMBER JANUARY AND FEBRUARY

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

BRUSSELS. National Exhibition of Labour in the Pottery Industries. The three main sections are: Artistic and domestic ware; ceramics in history; ceramics in building. The exhibition will include lectures and film shows, and there will also be demonstration workshops. At 58, Rue Belliard. (Sponsors, Belgian Ministry of Labour and the Federation of Ceramic Industries in Belgium.) UNTIL DEC. 21

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

L ONDON. Publicity Parade. An exhibition depicting the publicity services of the British Gas Council. At Gas Industry House, 1, Grosvenor Place, S.W.1. 10 a.m. to 5 p.m. Saturdays 10 a.m. to 1 p.m.

UNTIL DEC. 31

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

Professor J. S. Allen. The Education of the Planner. At Livingstone Hall, Broadway, S.W.1. (Sponsor, TPL) 5.30 p.m. DEC. 18

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.

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

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). The course is intended primarily for general foremen and others in supervisory positions in the building industry. Admission fee, 10s. 6d. Applications, giving details of age, firm by which employed, precise nature of duties, and previous technical education and qualifications obtained, should be submitted to the Secretary by Friday, December 19. No remittances should be forwarded in the first instance. At the LCC Brixton School of Building, Ferndale Road, S.W.4. 7.0 p.m. Wednesday evenings. Jan. 21-March 10

TORONTO. First Canadian International Trade Fair. In the Coliseum. (Sponsor Canadian Government Exhibition Commission.)

MAY 31-JUNE 12

COMPETITIONS

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

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.

NEWS

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

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

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

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

The Road Maintenance Committee of the British Road Federation has sent a letter to Sir Stafford Cripps embodying a resolution passed against the REDUCTION IN ROAD MAINTENANCE involved in the cuts in national capital expenditure. The resolution declares that—"This Committee, having carefully considered the evidence placed before the Federation by highway authorities throughout the country, believes that the Government has failed entirely to realise the implications of its present highway policy. The Federation urges that H.M. Government reconsiders its decision in the light of the evidence now submitted, which shows that the proposed cuts in labour and maintenance work will have disastrous effects on agriculture and industry. In view of the warnings given by Ministers of a possible railway transport crisis, the roads will have to bear exceptionally heavy traffic, and the evidence collected by the Federation on the state of the roads shows that expert opinion throughout the country is being ignored."

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From AN ARCHITECT'S Commonplace Book

SEASIDE IN THE MAKING. [From The English Seaside, by H. G. Stokes (Sylvan Press).] The "inventor" of Southport was a Mr. Sutton, who observed the discomfort of visitors carried from Church Town to the sea (at what was then South Hawes) in a vehicle known as a shandrydan. His building of the aforesaid hotel for their convenience was considered a "very romantic speculation and was treated by many as truly ridiculous"; but not only "marine cottages continued to multiply: various respectable persons opened Repositories and hotels and lodging houses," so that by 1830 there were at least 300 houses and "a spacious main street 88 yards in width, besides two back streets which were rapidly forming." Then work began on "an extremely unique building" of two stories with a portico in front. Upstairs was a ballroom, 20 yards long by 8 yards wide; on the ground floor was a newsroom. There were baths, bathing and sailing were popular—except on Sundays, for the Sabbath was now strictly observed—and better roads enabled coaches to augment the "canal packets" which brought visitors to the waiting hotel carriages at Scarisbrook bridge.

**

The Minister of Works has appointed an ADVISORY COUNCIL on Building and Civil Engineering Research and Development. The Government has recently had under consideration the arrangements for building research and has decided that the Ministry of Works should bear the main responsibility for reviewing the whole field of building research, identifying gaps and problems requiring further research, determining their relative priorities, and bringing them to the notice of the appropriate research organisation. The Ministry of Works will continue to keep the technical development of the building industry under review, to promote the final stages of technical development, and to encourage within the industry the use of the results of research and of technical development generally. The Department of Scientific and Industrial Research will continue to be responsible for carrying out scientific research within its field including initial development in building, and to be free to undertake investigations at the direct proposal of industry. The Ministry of Works will, for the time being, retain the primary responsibility for sociological and economic research in the building industry. Close contact will be maintained between the two departments. To advise in the carrying out of these responsibilities, an Advisory Council on Building and Civil Engineering Research and Development has been appointed, including persons engaged in the building and civil engineering industries, in the professions, and in scientific work, together with assessors appointed by the Government departments concerned. The council will take the place of the Ministry of Works.

The WHITE PAPER ON THE LAND REQUIREMENTS of the armed forces and the Ministry of Supply estimates more than a million acres as necessary for these purposes. Of the total acreage of 1,027,200, 702,000 acres are required by the forces for training purposes, including RAF airfields (140,000 acres), accommodation and storage (100,000), Ministry of Supply activities (36,000), Admiralty airfields (22,700), and anti-aircraft sites and coastal artillery (20,000). During the war 11,547,000 acres of land in Great Britain were held by the Services, of which over 10m. acres have already been released. Of the area required for training 512,000 acres are in England, 107,000 acres in Wales, and 83,000 acres in Scotland. The public have hitherto had partial or complete access to

about 60 per cent. of the 700,000 acres required for training, that is, about 420,000 acres. They will retain unfettered right of access to some 40 per cent. of this latter area, and substantial access to a further 40 per cent. The public will, therefore, be completely excluded from about 20 per cent. of the area to which they previously had access. Local authorities and amenity societies will be given full opportunity to make representations on individual proposals by service departments, and the procedure for this has been laid down. It includes consultations by the Ministry of Town and Country Planning, consideration of proposals and objections of Civil departments by an inter-departmental committee, and public local inquiries (subject to security considerations) on objections on grounds of public interest. The Government has agreed so far to hold about 40 local public inquiries into objections made to Service proposals for the acquisition of land, and it may take from 18 months to two years before final decisions are reached on all the schemes. Inquiries have been already held into the proposals affecting Dartmoor and Ashdown Forest, and the Government's decisions on these schemes will be announced soon.

Mr. Bevan, Minister of Health, described in the House of Commons

proposals for OLD PEOPLE'S ACCO M MODATION under the National Assistance Bill. Old people's homes, he said, should be small—with not more than 25 or 30 persons in each—because "bigness is the enemy of humanity," and there must be nothing institutional about them. The essence of the scheme was that those who occupied the homes should be of mixed income groups. The new homes, or "hotels" as he called them, could not spring up overnight. Their erection would depend on the development of the building programme, but equally they would be a contribution to the housing problem itself.

The Ministry of Supply has issued an Order requiring the STANDARD-IZATION of HEAVY ELECTRICAL PLANT for the Central Electricity Board's grid system. The effect of the new regulation will be to shorten the delivery dates of equipment by six to nine months. It standardizes the production of steam-driven turbo-alternators of more than 10,000 kW, at 30,000 kW, and 60,000 kW. These will become the standard plant for large generating stations after 1949.



A centenary week af visits in a general investigation of How London Works—the theme of the AA students' centenary arrangements—included a visit to the offices of the Architectural Press. Students were shown the mechanics of book publishing and the method and organisation behind the production of the Architectural Review and The Journal. Afterwards the party was entertained at the bar in the basement of 9, Queen Anne's Gate. Left, in the rear Nikolaus Pevsner and Ian McCullam are seen talking with some of the students; right, students inspecting an advance copy of the AA Centenary issue of The Journal.



Photo Album: 1-New Light on Old Walls.

In these days of visual austerity, when, as Mr. John Summerson has pointed out, architecture has become virtually an illegal profession, we can at least satisfy our aesthetic cravings, as we calm a grumbling and contracting stomach with a cigarette, by looking at good photographs of fine buildings and architectural details of the near and distant past. And so we begin on this page a series of architects' photographs that may help to keep our souls alive during the stark years. This first picture is filled with the dramatic clarity of a Scandinavian summer and shows a street in Stockholm's old Town-Between-the-Bridges, where Swedish history is recorded in architecture. Few cities have succeeded as Stockholm has in using historic monuments as foils for contemporary building, or in using contemporary street furniture to set off the grace

or grandeur of the past. The austere but elegant modern lamp standards in the picture, by contrasting with the heavy chain posts and the rich details of the buildings, by no means detract from the beauty of the scene. On the right is Tessin's Royal Palace, while in the distance is Storkyrkan, Stockholm's oldest church, founded by Birger Jarl in 1260 and rebuilt in 1743 to harmonize with the Palace. In front of the church is the obelisk raised by order of Gustaf III in thanksgiving for Stockholm's patriotism during the war against Russia of 1788 to 1790. Grand Baroque certainly, but a picture not without a touch of Sharawaggi in the slope of the street and in the general layout, which help to merge the pomp of the Palace precinct with the spontaneity of the neighbouring mediæval labyrinth. (Photo: Eric de Maré, A.R.I.B.A.)

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The Minister of Town and Country Planning has appointed a committee to advise on the proposed N E W T O W N A T EASINGTON, Co. Durham. Members of the Committee are: Monica Felton, Ph.D. (Chairman); Mrs. J. W. Gray; Councillor H. Lee; J. M. MacKay; Councillor H. O. Neil; Alderman E. Robinson.

Speaking at Newcastle, Mr. Tomlinson, Minister of Education, outlined progress in the SCHOOL BUILDING PROGRAMME. The programme for this year and next, he said, fell into two parts—an operational programme, estimated to cost £24m., which deals with the alterations made necessary by the raising of the school age and the provision of schools in new housing areas, and a short-term programme, costing £25m., for permanent building that has already been agreed. By the end of September over £7m. worth of this work had been started. The programme will run as intended until June, and the only question remaining is whether it will be possible to expand the programme then. There is no question of interfering with it. Labour made available for the programme is at present 14,000 and in June it will be at its ceiling of about 20000.

Major-General A, C. Duff, C.B., O.B.E., M.C. has been appointed GENERAL MANAGER OF THE STEVENAGE DEVE-LOPMENT CORPORATION. General Duff retired from the Army early in December and has already assumed duty. For the last seven years he has held in succession senior appointments on the Administrative Staff of the Army, including those of Deputy Quartermaster-General of the War Office and of Chief Administrative Officer to Field-Marshal Alexander in Italy. He was born at Cambridge in 1896, the eldest son of the late Mr. J. D. Duff, Fellow and Tutor of Trinity College. He was educated at Wellington College and the Royal Military Academy, Woolwich, and was commissioned into the Royal Engineers in February, 1915.



Major-General A. C. Duff who has been appointed General Manager of the Stevenage Development Corporation.

CAPITAL INVESTMENT IN 1948

A T the beginning of the summer holidays the Prime programme for 1948. After a period of months, devoted to departmental and political struggles behind the scenes, technically known as "democratic planning," the new programme has appeared. More strictly, a statement has appeared; and it is tempting to stoop to parody-"this is the way the world ends-not with a bang but a White Paper." For anticlimax is the essence of the White Paper now before the country. The threatened slashing of housing has most fortunately been avoided. More surprising, the reduction in other building work, is on balance not more than a small percentage. The only surprising item is the heavy cut in the Central Electricity Board's programme. The Government's justification for this was the acute shortage of steel; no other argument would have carried weight against the overriding need of this country for rapid power development. If this decision could be in practice reversed or over-ruled, most of us would rejoice. But this "cut"—like others—may represent recognition of plain facts rather than a real change

The White Paper runs to 32 pages and contains much detailed information. Nevertheless, it lies open to the charge that it conceals vital facts. Government planners grow more Delphic with every publication. The actual numbers (and value) of houses to be built next year is wrapt in obscurity, though a series of facts on the labour force to be employed on housing (525,000), the number of new houses to be under construction by mid-year, etc., are offered to a justifiably mystified public. All this face-saving circumlocution is apparently devised in the vain hope that it will obviate criticism of the plan; Government planners have yet to learn that criticism will come (from the quarters that want to cut capital, etc.) whatever

the information that is made available.

In plain and non-statistical language the White Paper makes just one point. Up to the present, the Government has planned for a constantly increasing annual amount of investment from year to year, both for its own housing and building schemes and for the production of additional plant and machinery for the factories of private industry. Two things have occurred to check this steady increase: a shortage of materials and a rise of purchasing power above the level at which production can satisfy it. The shortage of materials is evidently regarded by the Government as the more serious of the two difficulties. Therefore the Government is trying to damp down capital developments to the level at which they are practicable; this means substantially leaving them at their present level, with some reductions to be made in the second half of 1948, and with some shifts as between their allocation to different uses. All the calculations add up to this one basic point; that the

rate of capital investment as a whole is to be levelled off, and

then slightly reduced.

It is far from clear, however, how any such policy is to be implemented outside the constructional industries, since these are the only industries that are effectively controlled. A failure of the rest of private industry to "play" might cause further shortages of building materials (especially of steel) and more cuts. Nor is it clear that sufficient provision is being made for materials production to supply the levelling off, and ultimately reducing, labour force.

Obscure as the programme sometimes is, builders and architects can for the moment only be thankful that more violent councils of economy have not prevailed and hope that private industry will cut its own capital expenditure for plant and machinery sufficiently to leave over materials for such building work as is still allowed to proceed. The White Paper's details might have been clearer; its policy might have been

much worse.



The Architects' Journal
9, 12 and 23, Queen Anne's Gate, Westminster, S.W.1

Phone: Whitehall of11

 \mathcal{N} O \mathcal{T} \mathcal{E} \mathcal{S}

TOPICS

PREFABS UNDER FIRE

The discussion in the House of Commons on November 26 about the Housing (Temporary Accommodation) Bill seems to have started quite a number of important hares. For instance, one now hears such phrases as "a death-blow to prefabrication" bandied about a great deal too much. As Mr. Braddock (who, as an architect, should certainly know something about such things) said, the idea "that the more prefabrication there is the greater the cost . . . is just nonsense, in view of experience in all other types of production." Obviously, the full report on the costs of the £1,610 prefabricated aluminium type and the £1,400 traditional house promised by Mr. Durbin is much overdue and should make very interesting reading.

Another suggestion, which seems equally important to refute as soon as possible, is that high costs are somehow due to architectural fees. Having myself earned the appropriate five shillings per house, or whatever it was, in connection with an earlier prefab programme. I would be very surprised if an architect could grow very fat on his income from prefabs unless he drove a very hard bargain with the manufacturers.



Statuette of a dancer in limestone from Harappa, W. India, in the Indian Exhibition at the R.A. See Astragal.

THE INDIAN EXHIBITION

Whoever can unravel the fabulous tangle of India's creeds and peoples and the intricate complexities of its history and art must be not only a voracious student but a very old man. Astragal, being neither, made no attempt to absorb any larger particle of knowledge than that provided in the introduction to a catalogue. sighed, "Oh, do not ask what is it. Let us go and make our visit," and went to Burlington House to enjoy a purely sensuous feast of significant form, unirked by any load of learning. Refusing even to ask that irritating question which has no answer, "Significant of what? ", he came away well satisfied. He thinks that you will, too.

But you will need plenty of time to gaze at the endless, but for ever enchanting, rows of Mughal and Rajput paintings. Take your time, too, in Gallery 1, where finds are shown from the ancient Indus Valley culture of 2000 B.C., which have a vigorous, primitive character quite unlike anything else in the exhibition. Special praise here is due to an unnamed artist of the Western Punjab. May his Harrapan soul have been resting in Nirvana these last forty centuries for having once upon a time carved "No. 6. Statuette of Dancer," a superb limestone torso.

As you emerge into Piccadilly, eyes smarting in the fog, your Weltschmerz may return. You will try to cheer yourself with the postcard you bought in the foyer called "Love Scene in a Tent: Rajasthani, 18th century." But stop a moment for better consolation and look through the show window at that red and furbished MG sports—even if it is for export only. At least, no other culture since time began has produced a little beauty quite like that.

COLLECTORS NOTE

The note on the facing page is from Mr. D. Devlin, of Hoddesdon, who gets this week's credit for spotting the Journal's not-so-deliberate mistake. He refers to an incorrect dimension on Information Sheet 29.D1, for it seems that, in spite of all the sifting and safeguarding that goes on at Queen Anne's Gate, the editorial poltergeist does get by sometimes. Mr. Devlin was

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apparently the first of many, since I hear from the Information Sheets' Editor that numerous letters and telephone calls have been received drawing attention to this inaccuracy. An amendment note appears this week in the Technical Section.

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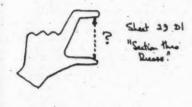
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Yours faithfully.

The note received from Mr. Devlin. See Astragals' note above.

BORN 1797 . . .

Which is the oldest firm in the building industry? One hundred and fifty vears is a respectable figure and it seems even more impressive when you make a fairly simple mathematical calculation and find it means that the firm was founded only 10 years after the French Revolution, in the thunder of Napoleon's victorious guns.

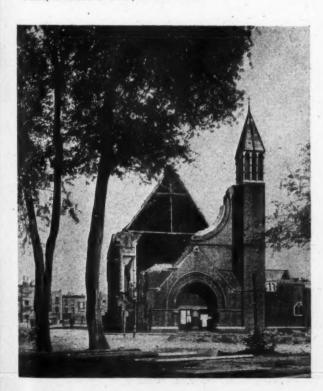
Thus, Boulton & Paul, at whose cele-

bration party were no less than six Cabinet Ministers. Though starting as simple ironmongers in Norwich, the firm has since spread its wings (literally-remember the Defiants in the Battle of Britain?) to cover almost anything in constructional steel or wood. latest effort is a break away into domestic refrigerators. Quantity production is likely to start in a few weeks' time. which is good news, seeing that the normal delivery time of refrigerators for other than priority customers is now about two years, if you can persuade any firm to accept your order.

THE WONDER BOOK OF BOMBING

The dramatic photograph reproduced below is of St. Faith's, Stoke Newington, built in 1872 by William Burges and James Brooks, and wrecked in 1944 by a flying bomb, and it is taken from The Bombed Buildings of Britain, by John Summerson and J. M. Richards [Architectural Press. 25s. net.]. The first edition, you will covered the 1940-41 remember, blitz. This new volume includes all the important casualties up to 1945, and, with witty and informative obituaries by John Summerson, the photographs have an even sharper visual romance now that ruins have become a less familiar feature of our daily life.

ASTRAGAL



The Church of St. Faith, Stoke Newington, as left by German bombers, from the Bombed Buildings of Britain.
The chancel and most of the nave was built by William Burges in 1872-3 while James Brooks completed the west front later. See Astragal's note above.



LETTERS

G. Robson, F.R.I.B.A., A.M.T.P.I.

Official Housing

SIR,-With reference to your comment on the Exhibition at Olympia of exhibits entitled The Builder and the State, I feel that the comments you make would be amusing

the comments you make would be amusing if they were not serious and somewhat exasperating.

Your title This or That to the photograph appearing on page 466 suggests that the buildings shown in the upper picture are contrary to anything that either the Ministry of Works or the Ministry of Health would suggest. On the contrary, I have found that the Ministry of Health, in approving elevations and materials, very often ignore the character of the district wherein the buildings are situated, and when approached with requests that certain features may be with requests that certain features may be altered, very often state that this cannot be done because of cost.

In your observations you remark that the lower photograph shows pre-fabricated houses sited to maintain the harmony of an existing village. However well sited, unless the roofs and walls are treated in sympathy with their surroundings, nothing is more

the roofs and walls are treated in sympathy with their surroundings, nothing is more incongruous than some of the work approved by the Ministry of Health—often in the face of objections by the architects and borough engineers, whom you infershould learn from the Ministry of Health "object lesson" which you illustrate.

I wish to be perfectly just with regard to the Ministry of Health officials. I have found them helpful and courteous, but they appear to be most rigidly ruled by the Treasury, and little elasticity is allowed in endeavouring to obtain the best materials for each particular area. Again, I am aware that there is some elasticity, but this is certainly unequal to providing satisfactory development in rural areas. A comment I must make is that with regard to architectural design, the standard of the Ministry's architects administering this is most variable. In this case the elasticity which is lacking in the choice of materials and in building costs is evident in too great an abundance, as some officers appear to take the line of least resistance, while others are conscientious and most painstaking and achieve some results, despite the difficulties of their position.

I fully agree with the last sentence in

difficulties of their position.

I fully agree with the last sentence in your leading article which states that "it is hoped that the Ministry will discover that there is no need for every terrace house to be one of these types, nor for the standard solution to be regarded as anything more than a stimulus to the inventiveness of officials."

officials."

If this is taken to heart and a regard for "good manners in architecture" maintained, and an intelligent selection of materials made to ensure the keeping of character, it will be possible to visit rural areas without having to turn one's back on much of the official housing.

OR ROBSON

Newcastle-on-Tyne G. ROBSON In the first article the general arguments for and against export of building materials were considered; this second article by Prof. Bowen examines the problem from a quantitative angle.

THE EXPORT OF BUILDING MATERIALS—II

[by Ian Bowen]

PRINCIPAL EXPORTS OF BUILD-ING MATERIALS IN 1946

The following table gives the values and, where available, the quantities of building materials exported in 1946. The figures have been extracted from the Trade and Navigation Accounts of the United Kingdom, and relate to produce or manufactures of the United Kingdom, and to such identifiable classes of building materials as can be found. For comparison corresponding figures are given for 1938.

TABLE I .- Exports of Building Materials (Manufactured

Material		1938	1946	%price
TARGET NOT		2750		increase*
Cement	£	1,204,332	3,930,381	114
est.	tons	724,007	1,104,758	90
Glass	£	797,575	2,656,922	89
	cwt.	673,805	1,188,771	93
Sanitary ware	£	643,888	1,511,082	
	cwi.	424,745	515,553	
Iron and steel:				
Stoves, grates,		826 226	939,114	154
ranges, etc.	£	536,326		
Carteria	tons	9,150	6,307	
Sanitary	£	104,003	83,796	124
cisterns			1,013	
Door and	tons	2,812	1,010	
window				
frames and				
casements	£	337,960	493,440	64
Casements	tons	5,429	4.843	0-4
Nails, tacks	LUMB	0,300	2,020	
and staples	£	136,019	512,951	66
and arabica	tons	3,806	8,655	
Tiles (glazed, wal		0,000	0,000	
and hearth)	£	200,906	757,738	116
and meason)	cwf.	131,462	229,227	
Other tiles	£	37,210	53,831	
Other thes	cwt.	76,855	42,774	
Builders' wood-	CHA	10,000	. 200,000	
work	£	86,332	149,238	
Wood and	-	00,002	2 40 ,200	
timber	£	71,266	474,027	76
Million	tons	4,991	18,855	
Stones and slates		41004		
(wholly or mai				
manufactured)	£	26,884	22,180	11
	tons	846	622	
		£4,182,701	£11,584,700	1

Value has been divided by quantity of exports, to give an average price per unit.

The table reveals that the largest value of materials exported in 1946, as in 1938, was cement; the very high figure of 1,105,000 tons was exported in 1946. This is surprising, particularly in view of the rise in domestic demand in 1947. Glass and sanitary ware were the next biggest exchange-earners of the listed building materials. The total value of the exported materials shown in Table I was £11.6 millions, not by any means a negligible contribution to the balance of payments. (Some of the items, such as "nails. tacks and staples," included groups that were not building materials; on materials exported in 1946, as in 1938, was

groups that were not building materials; on the other hand, many groups containing building materials cannot be analysed, and have been omitted.) In most cases the quantity of materials exported in 1946 considerably exceeded the quantity exported in

1938, reflecting the specially high demand for materials, not only in Europe, but in the capital-starved regions of Africa, Malaya

and the West Indies.

Not only the amount, but the very nature, of some of the exports in 1946 seems to be unexpected. It is surprising that British exports of (home-produced) wood and timber rose from 4,991 tons in 1938 to 18,885 tons in 1946; unfortunately the description in the returns does not suffice to show what kinds of wood and timber were covered by this item. The large exports of steel door and window frames and casements might also seem inconsistent with domestic housing policy; and the similarly large exports of sanitary ware and glass. But these figures want to be considered in perspective; the export of metal windows and doors represented about six weeks' average production in 1946, it is true, but at the same time stocks of this commodity were being increased at home.

No easy explanation of the items of wood and timber and builder's woodwork are forthcoming, but it is possible that they represented particular items that were not in unduly short supply at home.

THE OUTLOOK IN 1947
The position in 1947 has in any case altered considerably. Table II shows for the same list of materials as Table I the exports in the first 9 months of 1947, and comparable figures for 1946

The quantities of cement and sanitary ware exported have notably dropped. Glass and stoves, grates, etc., show a notable rise; and so do door and window frames and tiles. The dubious items "wood and timber" and "builder's woodwork" sharply declined. "builder's woodwork" sharply declined, (If the high exports of these items in 1946 meant that someone had blundered, the mistake now seems to have been

Prices, moreover, have continued to rise. In the last column of both Tables I and II a price index is shown. It is obtained by a price index is shown. It is obtained by dividing the total value of exports by the quantity exported, in each case where such a division is practicable. The percentage shown is thus not a price-index, since it may reflect changes in the composition of the group of commodity exported, as well as changes in price. But it suffices to show which commodities gained most in "price per ton" (or other unit) as a result of (a) increases in export prices, (b) the sale of relatively more expensive items within each group. The highest increases in 1946 compared with 1938 were recorded for tiles, stoves and grates, sanitary cisterns and cement, in that order. cement, in that order.

TABLE II.—Exports of Building Materials 1947 compared with 1946.

W	un 1940.		0/
Material -			
, managerina	Jan Sent	JanSept	
	1946		over 1946
Cement£	2,797,927	2.234,282	
tows	794,342	608,171	
Glass£	1,911,469	2,225,037	+11
cwt.	875,602	908,432	
Sanitary ware£	1,096,430	1,372,213	+33
cwt.	401,385	380,705	+ 8 + 11
Iron and steel-			
Stoves, grates,		7.3	
ranges, etc £	536,569	624,327	- 3
tons	8,775	4,532	
Sanitary cisterns £	62,850	67,021	
Tons tons	785	632	
Door and window frames and			
casements£	349,389	660,603	1.14
tons	3,513	5.832	
Nails, tacks and	0,010	0,000	
staples£	361,712	329,737	- 6
tons	6,074	5,907	
Tiles (glazed, wall	0,018	0,000	
and hearth)£	550,301	868,550	+17
cwt.	168,625	222,721	
Other tiles £	41,790	39,781	
cwt.	30,919	33,256	
Builders' woodwork£	99,328	161,536	
Wood and timber £	348,110	212,196	
tons	15,385	6,146	
Stones and slates			
(wholly or mainly	. 26 904	00 100	1.62
manufactured) £	26,884	22,180 622	
tons	846	622	+12
	ER 180.759	£8,817,463	
	-0,.00,102	mujul / 1405	

Such big rises in themselves provide a strong argument for continuing or expand-

ing the export of these commodities.

In 1947 there were also marked increases in price over 1946, although some groups show a decline.

FUEL AND EXPORTS

But other considerations than price affect the question of the desirability of exporting building materials on an expanding scale. The belief has become quite widespread that one main point is whether or not a com-modity is a "finished" commodity or not; the more finishing processes any article has been subjected to, the more suitable it is for export. The nearer it is in the line of production to being a raw material the less valuable its export possibilities. The basis of this dogma is that raw materials are peculiarly scarce in Great Britain, and that

peculiarly scarce in Great Britain, and that the higher the prices that we can secure for our exports the greater their effectiveness in earning foreign exchange. But it is doubtful whether the dogma is sufficiently justified by these considerations.

It is true that the fuel shortage makes it important to conserve (over the short period)—or even to prohibit the export of coal. Similarly it is not wise to indulge in excessive exports—in the short run—of commodities the value (at cost) of which is largely made up of burning coal. The is largely made up of burning coal. The building materials' export programme must necessarily be reviewed from time to time, to make sure that the policy of increased production for export is not in conflict with the coal production programme. Each in-dustry might be given some "coal factor" to indicate how it stood relatively in this classification.

classification.

It is specially important, in this connection, that the drive for exports should not lead to the opening up of coal-heavy producers in e.g., the brick industry, who otherwise might be rationalised out of existence in a competitive world—if there is a sound economic case for such rationalisation. isation.

The second argument mentioned above, that we should try to secure as high prices as possible for our exports is not only true; it is a truism. But it is not by any means it is a truism. But it is not by any means certain that those commodities furthest removed from raw materials secure the highest prices. They may do so, or may not do so, according to the relative state of demand for the different items. Tables I and II suggest that high prices for such relatively "raw material" products as cement have been ruling; the dogma that we should always aim at more finished types of export is thus not wholly supported by the facts.

EXPORTS IN 1948
It would not be appropriate here to outline an export policy in any detail. But certain facts seem of importance, whatever policy is ultimately adopted.

First, as mentioned in my first article, one consideration is the advantage of the

one consideration is the advantage of the "going concern." There will be an immense economic loss if the building materials' industries, built up painfully to a certain level from 1945-1947, were now to be allowed to relapse.

be allowed to relapse.
Secondly, there is the fuel argument. This situation must be watched, but does not provide more than a very short-term argument for restricting exports.
Thirdly, there is the importance of securing greater rationalisation of all the building materials' industries. If this policy is seen to be necessary, then the next year or two may provide a great opportunity.
Rationalisation is easier on a falling than on a rising market. The ruthless drive for efficiency which this country may create, will result in some elimination of high-cost

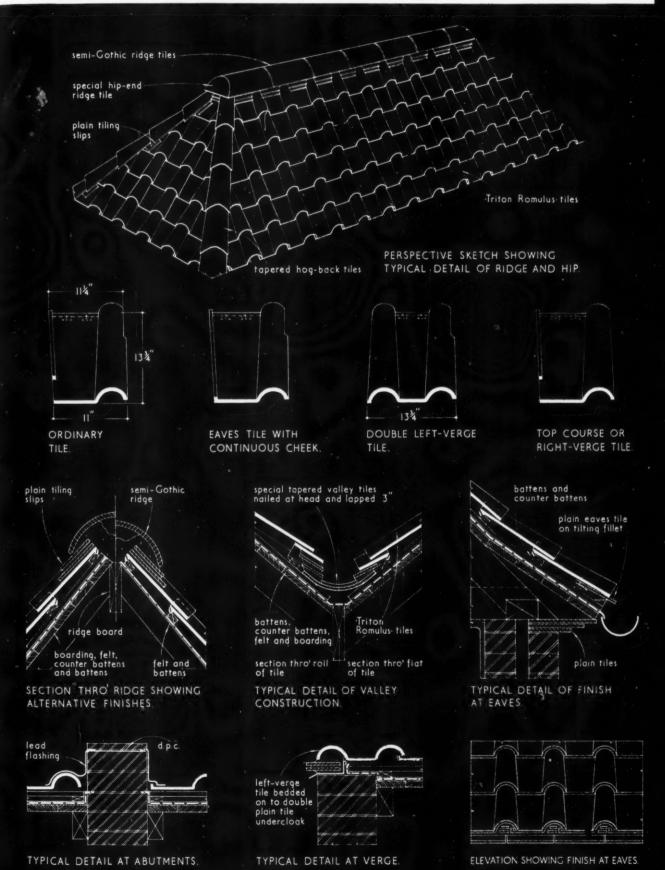
efficiency which this country may create, will result in some elimination of high-cost units, with the result that the long-term average costs of many industries are reduced. What has been successfully done for metal windows and plasterboard may be applied in wider spheres, with very beneficial results.





PITCHED ROOF TILES | CLAY | GENERAL DATA

The Architects' Journal Library of Information Sheets 23. Editor: Cotterell Butler. A.R.I.B.A.



ROOF TILING TRITON ROMULUS CLAY TILES.

Manufacturer: Wheatly and Co., Ltd.

17.B1 ·TRITON ROMULUS· CLAY TILES

This Sheet describes Triton Romulus hand-made sand-faced clay tiles. The drawings and text matter on this Sheet have been prepared in accordance with the draft British Standard Code of Practice, C.P. (B) 586: 1946. The tiles are of the Roman type measuring 13½ in. by 11½ in. overall combining flat channel and roll cover tile all in one piece. The minimum pitch recommended is 35 degrees, the gauge is 10½ in. and the lap 3½ in.

Colour: Tiles are supplied in natural fired colourslight, medium and dark brindled, blue and grey—and in stained colours—red, green, variegated lichen, black, brown and dun.

Covering capacity: The covering capacity is approximately 150 tiles per square (100 sq. ft.) which equals approximately 13½ tiles per square yard.

Weight: The weight per square is approximately 102 cwt. and the weight per 1,000 tiles approximately 3 tons 12 cwt.

Romulus tiles should be fixed on battens not less than 1½ in. wide by ½ in. thick. The battens should not be set out until the tiles have been delivered to the site and have been checked for size. The normal type of roof construction is to lay untearable felt directly over the rafters and fix the battens through it. The tiles are then laid dry. In better class work the roof may be boarded, felted, battened and counterbattened in the usual way.

Nalling

Except where specified below, the tiles should normally be nailed with at least one nail to each tile in every alternate course, and on more exposed sites, in every course. On roofs at pitches of 45 degrees or over, each tile should be nailed with two nails. At pitches of 55 degrees and over, additional precautions should be taken to secure the lower edge of the tile. At verges, at each side of valleys and hips and where a roof meets an abutment along an inclined line, each end tile in every course should be nailed. At eaves and top edges, two courses of tiles should be nailed. Nails should be of the larger and heavier variety and should have substantial heads, and be of yellow metal, copper, zinc, galvanised iron or steel. It is important to ensure that the nails used are durable under the proposed conditions of exposure, e.g., in chemical factories it has often been necessary to use lead nails. To avoid the risk of percolation of water the nail holes in the Triton Romulus tiles are placed at the top end of the tile, through the nibs.

Bedding Mortar

It is recommended that a cement gauged lime mortar be used in preference to cement mortar, a suitable mix (all by volume) being :-

part Portland cement.

1 part slaked lime or lime putty

5-6 parts clean sand.

Such a mix has adequate strength and adhesion for the work and is less likely to develop shrinkage cracks than the denser cement mixtures.

Ridge: A semi-Gothic ridge tile suitable for roofs pitched between 60 degrees and 35 degrees is made for use with Triton Romulus tiles, the hollows in the top course being filled with slips of plain tiles bedded in cement gauged lime mortar. Special hip-end ridge tiles are made for the junction between ridges and hips as shown on the face of this Sheet.

Hips: A tapered hog-back tile, 18 in. long, tapering from 11 in. to 97 in. is used for the hips, head nailed, with a lap of 3 in. and the hollows between the rolls of the roof tiles are filled as for the ridge.

Valleys: The valleys are formed with tapered inverted hog-back valley tiles, lapped 3 in., and laid on the counter-battens or on the roofing felt and nailed, two nails to each tile. A strip of stout waterproof felt, not less than 2 ft. wide, should be laid down the full length of the valley and turned into the gutter in order to carry off any water that may percolate through with this form of valley construction. The voids formed by the cut ends of the tiles may be filled with slips of plain tile as shown on the face of this Sheet.

Eaves: The last course of the Romulus tiles may be bedded on a course of plain creasing tiles 10½ in. by 6½ in. laid sideways and fixed through two nail holes drilled in the long side. The eaves tile should have a slight tilting fillet and the voids in the ends of the Romulus tiles should be filled solid with mortar and slips of plain tile.

The roofing felt should lap over the roof gutter. An alternative finish at the eaves is obtained by stopping the main roof some distance up the slope and continuing to the eaves with three or four courses of plain tiles. In addition to altering the appearance of the roof, this method also helps to spread the water from the hollows of the tiles more evenly during heavy rain.

Abutments: The details illustrated on the face of this Sheet give the method of flashing the joint between the roof and a wall or the side of a chimney. Metal flashings are recommended in every case.

Verges: The detail of the finish at a verge shows a

metal flashing bedded under the tile creasing.

The information given on this Sheet fully covers the fixing practice recommended for Triton Romulus Tiles. It is strongly recommended, however, that experienced roofing contractors should be employed for this work wherever possible.

Compiled from information supplied by:

Wheatly & Co. Ltd.

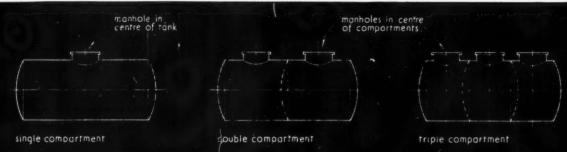
Address: Springfield Tileries, Trent Vale, Stoke-on-Trent.
Telephone: 66251 Newcastle, Staffs.





TANKS PETROLEUM STORAGE

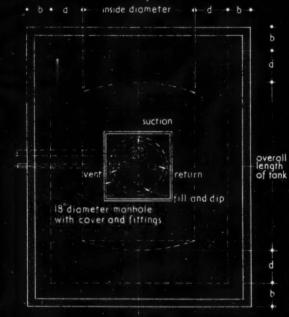
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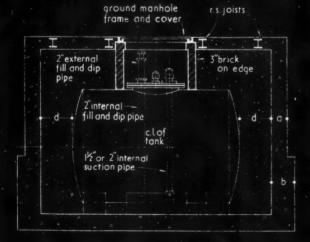
DIAGRAMS SHOWING POSITIONS OF MANHOLES ON STANDARD TANKS.

capacity	inside	nside overail		dimensions of concrete vaults				
gallons	diam.	length	G	5	5	c	e	
200	3'-2"	4-6	0"	9"	6"	12"	5	
250	3'-2"	5'-7"	6"	.9"	6"	12"	5"	
300	3'-5"	5'-7"	5"	9"	5	12"	5"	
400	3'-6"	7'-3'2"	6"	9"	6"	12"	5"	
500	4'-6"	5-9"	6	9"	6"	12"	5"	
600	4'-6"	5-9"	6"	C"	6"	12"	5"	
750	4'-6"	8'-6"	6"	9"	6"	12"	5"	
1000	4'-6"	11'-O"	6"	9"	6"	12"	5"	
1250	5'-C"	11'-3"	9"	12"	Ò,i	12"	5	
1500	6-0	0 6,	9"	12"	9"	!2"	6"	
2000	6-6	10,-0,	9"	12"	9"	12"	6"	
2500	6'-6"	13'-3"	9"	12"	9"	2"	6"	
3000	7'-0"	3'-0"	9"	12"	2"	12"	8"	
3500	7'-0"	15'-8'	ð"	12"	12"	12"	8"	
4000	7'-6"	15'-7"	9"	12"	12"	12"	8"	
4500	7'-6"	17-5"	9"	12"	12"	12"	8"	
5000	7'-6"	19'-6"	9"	12"	12"	!2"	8"	

TABLE OF CAPACITIES AND DIMENSIONS.

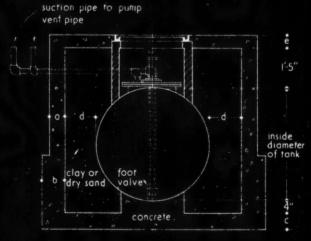


PLAN.



LONGITUDINAL SECTION.

TYPICAL DETAILS OF A STORAGE TANK IN A CONCRETE VAULT.



CROSS SECTION.

42.B1 WELDED STEEL STORAGE TANKS FOR PETROL AND OIL

This Sheet deals with welded steel storage tanks for petrol and oil storage; they are cylindrical in shape and may be divided into any number of compartments.

Sizes

The table on the face of this Sheet lists the capacities and dimensions of tanks available. It should be read in conjunction with the drawings to determine the dimensions of the concrete casing applicable to each size.

Construction

The tanks are electrically welded throughout and are tested to withstand 10 lb. per square inch air pressure and are gauged for capacity. They may be obtained shot-blast cleaned at an extra cost. Test certificates are supplied with each tank if required.

Fittings

Standard tanks are supplied with calibrated gauge rods and these may also be obtained for any special tanks. The tanks are fitted with 18-in. dia. manholes; unbreakable steel chequer plate ground manhole covers with frames are obtainable. The tank covers can be bushed to suit any specified make of petrol pump. The position of the manholes may be varied from the standard positions shown on the face of this Sheet to suit purchaser's requirements.

Placing in Position: The tank should be set level in each direction, the level being checked on the face of the manhole joint face. Should the tank be out of level, the dip stick or calibrating rod which is provided with the tank will not register accurately

Building in: The top of the chamber is generally kept level with the ground but may be sunk lower and the manhole built up to ground level. drawing assumes average conditions, but if heavy traffic is to be carried over the top of the tank the chamber must be strengthened accordingly. If the soil is damp or soft the thickness of the concrete should be increased and precautions taken to ensure that the chamber is waterproof.

When the tanks are to be used for the storage of petroleum spirit as defined in the Petroleum (Consolidation) Act, 1928, a licence under this Act is necessary to cover the keeping of the spirit. Application for a licence should be made to the appropriate local authority.

Regulations

The following are extracts from a summary of regulations issued by the London County Council and indicate the principal conditions imposed by that authority in connection with petroleum spirit storage, but each case is considered on its merits and additional conditions are imposed where neces-

Petroleum should be stored in one of the following

Petroleum should be stored in one of the following ways:—

(a) In a strong steel or iron tank sunk in the ground and encased in fine concrete of approved thickness (in no case less than 9 ins.) at an approved position in the open air. As an alternative to embedding the tank in concrete, it may be sunk in a chamber slightly larger than the tank, constructed entirely of fine concrete or with walls of 9-in. brickwork faced with cement and with a concrete floor not less than 9 ins. in thickness: all spaces in the chamber not occupied by the tank to be filled up either with puddled clay or dry sand. In all cases, the tank with the exception of the manhole must be covered with concrete. The concrete over the tank or that part of the tank containing the manhole and pipe connections should be raised 4 ins. above the surrounding ground level. Where vehicular traffic passes over the tank or over pipe-lines, the concrete must be adequately reinforced. All pipes connected to a storage tank with the exception of the ventilating pipe should be carried down below the level of the inlet of the suction pipe; such pipes to contain no holes unless the holes are protected with fine wire gauze in an approved manner. (It is necessary that adequate facilities should be afforded for the examination of the concrete, tank and fittings, and also for the testing of the tank and fittings for soundness.)

(b) In approved vessels in a brick store with concrete roof and locked iron door, at an approved position in the open air, the lower part of the store so constructed as to form a well capable of receiving at least 75 per cent. of the quantity of Petroleum Spirit or Petroleum Mixture authorised to be kept in the store. The well must not be more than 2 ft. deep, and the floor area of the store should be arranged accordingly. The store must be ventilated sufficiently, at high and low levels, and the ventilating openings must be protected by strong copper gauze, mesh about 28 to the linear inch (see diagram on page 5).

(c) In approved vessels

provided the method of storage and precautions for safety pro-posed are considered satisfactory.

In connection with bulk storages at garages, attention is drawn to the following Regulation of the Council:—

(a) In any case in which Petroleum Spirit is stored in sunk tanks at garages in the County of London, the tanks shall, save in exceptional circumstances, be situated either in an open yard of adequate size or in an open space separated by fire-resisting partitions from the remainder of the premises, such open space being sufficiently large to contain easily a tank waggon when being sufficiently large to contain easily a tank waggon when Petroleum is being unloaded therefrom into a storage tank, and be so situated or so protected by surrounding walls as not to expose adjoining property to risk of danger from fire. (b) Save in exceptional circumstances, any filling point shall be not less than 20 ft. from any opening on to a public highway.

Compiled from information supplied by:

Robert Jenkins & Co., Ltd.

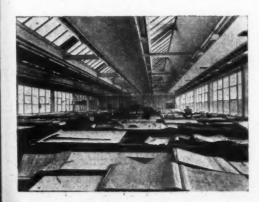
Head Office: Ivanhoe Works, Rotherham.
Telephone: Rotherham 4201-6 (6 lines).

London Office: 149, Abbey House, Victoria Street, S.W.1.

Telephone: Abbey 6327.



DRAWING OFFICE BY CLIFFORD TEE AND GALE



GENERAL.—New Drawing Office for the Metropolitan-Cammell Carriage and Wagon Co., Ltd., Birmingham, replaces on the same site the drawing office accommodation demolished by enemy action. The clients specially requested that the top floor be completed first. This was achieved in ten months, and the two lower floors were finished while the top

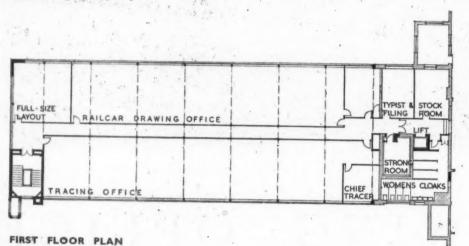
Top, view from south-west. Left, main drawing office, top floor.

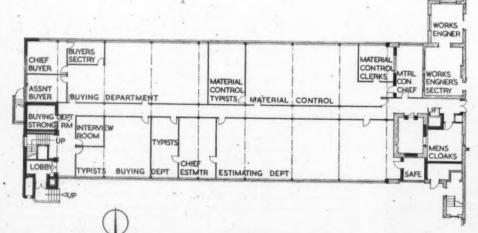
floor was occupied. The contract was carried out in 1946 and the early part of 1947 under the present building restrictions. The main access had to be from the existing offices with which the demolished building was formerly connected.

PLAN.—The plan shape was fixed .
by the existing foundations and
basement, and was of a width to
allow well-lit rooms on each side
of a central corridor. The upper
floor, one large drawing office, is



Above, tracing office, first floor.





GROUND FLOOR PLAN

DRAWING
OFFICE: BY
CLIFFORD TEE

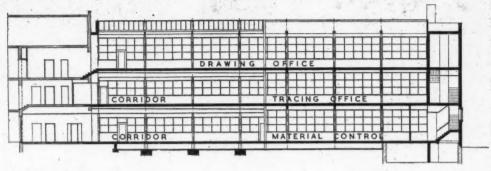
[Scale: h"=1'0"] A N D G A L E

Botto with duct.

lengt duct para mun by t the s build latio warı boile one nal poss ried stair also exist

con surn ren walls of pralum below and tions

adju shap upri with ridor iumBottom, left, stair well, with glazed ventilation duct. Right, entrance.



LONGITUDINAL SECTION

(Scale: 1 "=1'0"]

lit by three north lights running lengthways, allowing ventilation ducts to be run in the roof space parallel with the lights. A maximum of daylighting was asked for by the clients. To achieve this—the site is hemmed in by existing buildings—the escape stair, ventilation intake, the duct feeding warmed air to each floor, and the boiler flue are grouped together in one corner, leaving as much external wall space for windows as possible. The warmed air is carried up a glazed duct forming the stair well; lighting to the stair is also concealed in this duct. The existing basement is adapted to house new boiler and ventilation plant.

CONSTRUCTION.—Steel framed, surmounted by north-lighted warren girder trusses; 11 in. cavity walls, steel deck roof; and floors of precast joists. Partitions are of aluminium window sections, filled below 3 ft. 6 in. with steel sheets and glazed above. These partitions are easily movable for adjustment in room sizes, and shaped to fit direct to window uprights at 3 ft. 6 in. centres without filling pieces. In the corridors, the false ceilings of aluminium-faced ply form the ventilation



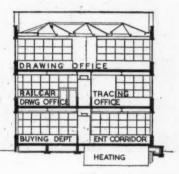
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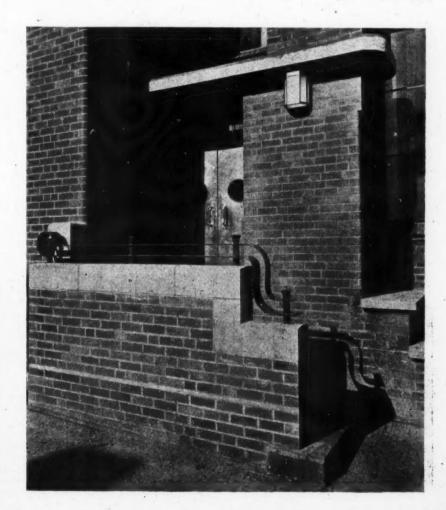
EE

ducts. The only timber used in the building is for flush doors.

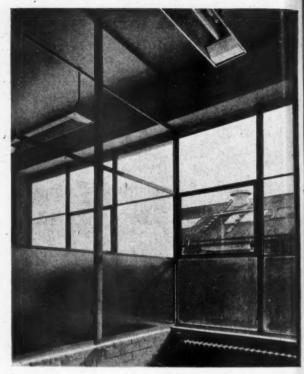
ELEVATION TREATMENT.—Where exposed, the concrete is left untouched after steel shutter struck. Windows, galvanised steel; stanchions cased in galvanised pressed steel mullions between all window head and cill lines; entrance doors copper faced; grille over, and balustrade to steps wrought iron; ventilation intake grilles, glass louvres in metal frames.



CROSS SECTION









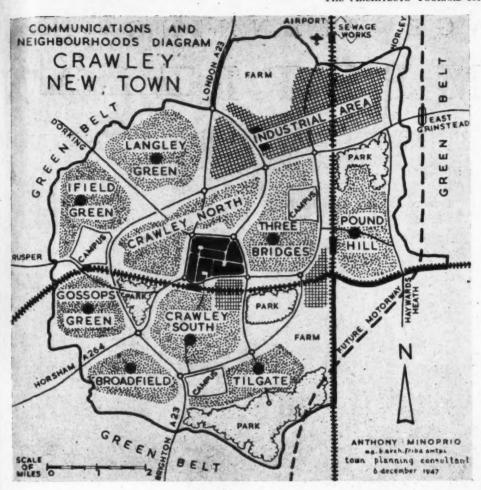
INTERNAL FINISH. — Floor finish, coloured asphalt; walls, brickwork painted; stanchions internally cased in metal lathing and plastered; underside of precast joists plastered; doors flush (form the only woodwork in the building); ceiling to top floor, metal lathing and plaster; staircase in situ concrete grano finish.

SERVICES.—There is a six-person passenger lift, with full automatic push-button control, the doors being automatically opened and closed. Background heating is by low-pressure hot water, serving radiators. The ventilation plant provides four warmed and filtered air inlet changes and three extract changes per hour, so creating a slight pressure in rooms to keep out dust and prevent draughts. Lighting is fluorescent.

The general contractors were Messrs. W. J. Whittall and Son, Ltd. For names of sub-contractors, see page 550.

Top, left, view into main drawing office; above, detail of screen and window junction; left, north elevation.

D R A W I N G
OFFICE BY
CLIFFORD TEE
AND GALE



PRELIMINARY OUTLINE PLAN FOR CRAWLEY

The Preliminary Outline Plan for Crawley New Town has been designed for a self-contained, socially and economically balanced town of 50,000 inhabitants. The purpose of the outline plan is to provide a broad framework of roads and zones which can be adopted as a basis for the future development of the town.

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Briefly the plan has been conceived as a double ring of residential neighbourhood units grouped around the town centre with the main industrial zone at the north. The road plan, on the ring and radial system, has an inner ring road around the central area to enable cross-town traffic to avoid the main shopping streets. An outer ring road, formed by extending the present bypass at both

ends, will link the residential neighbourhoods with the main industrial zone, the town airport and the motorway.

Nine 'residential neighbourhoods are proposed, each containing about the same population as Crawley. In the heart of each it is suggested there should be a green, some shops, a church, a hall and an inn, a primary school and a small area for services. Every neighbourhood would contain dwellings of many types and there would be no large areas of one-class housing.

Educational facilities are proposed in accordance with the new standards of the Ministry of Education, primary schools being placed within the neighbourhoods they serve, while secondary schools are proposed in three large groups on "campus" sites. Each "campus" would serve several neighbourhoods and contain two modern schools, a grammar or technical school and buildings for adult education, health and social purposes such as a county college, community centre, health centre, library, cinema and open-air swimming bath. The technical college would be placed near the centre of the town so that it would be easily accessible from the bus and railway stations.

Crawley and District Cottage Hospital will be retained and in addition it is probable that a general hospital and three health centres will be required. Eight hundred and fifty acres are proposed for parks and playing fields.

VILLAGE PLANNING

COMPETITION

FOR THE CENTRAL LANDOWNERS' ASSOCIATION

FIRST PRIZE: Godman & Kay, and R. H. James

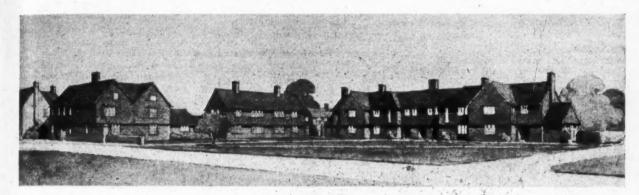


First Prize lay-out plan for Godstone.

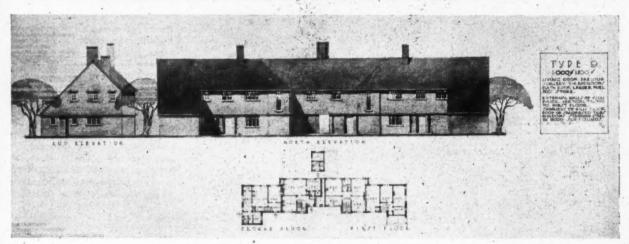
FIRST PRIZE: Godman & Kay, and R. H. James

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The Central Landowners' Association announces the following prizewinners in its competition for planning extensions to the villages of Godstone, Helmsley, Shiptonunder-Wychwood and Condover:

First Prize (£250) GODSTONE—Godman and Kay, FF.R.I.B.A. and R. H. James, P.A.S.I., A.M.T.P.I., Horsham.

Second Prize (£200) SHIPTON-UNDER-WYCHWOOD — J. V. Worsnip, B.Arch., A.R.I.B.A., A.M.T.P.I., Gloucester.

Third Prize (£150) SHIPTON-UNDER - WYCHWOOD — J. Cunningham, A. R. I. B. A., A.M.T.P.I., A.I.Struct.E, Reading. Consolation Prize (£100) CON-DOVER — J. B. Forrest, A.R.I.B.A., and Maureen H. Forrest, A.R.I.B.A., Eccles.

Consolation Prize (£100) HELMS-LEY-I. Burke, B.A., A.R.I.B.A., A.M.T.P.I, Dundee.

The competition was designed to bring out the principles of development which should be applied in general to village planning problems. It was not intended to bear any relation to the actual or projected schemes of the planning authorities in the areas concerned.

Here are some notes by the assessors on the prize-winning designs.

FIRST PRIZE. (Godstone.)—The design and presentation of this scheme are of outstanding merit. It is notable for a happy marriage of planning and architectural work—a combination conspicuously lacking in most of the other entries. The authors' careful and comprehensive study of the manifold factors involved in adding 120 new houses to the existing village of Godstone has been combined with a masterly handling of

Top, approach to village from the south. Centre, shopping centre from village green. Bottom, end elevation, north elevation and plan for house types for north aspect.

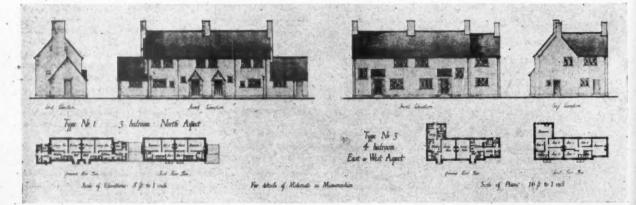
SECOND PRIZE: J. V. Worsnip

SHIPTON-UNDER-WYCHWOOD

the planning problem. Groups of houses interspersed with open spaces for recreation, and an easily accessible social centre, are interesting features of the plan. The architecture of the proposed new buildings is simple and harmonious, and preserves the Surrey character. SECOND PRIZE. (Shipton-under-Wychwood.)—The strong point of this plan is the creation of an entity for what is now a straggling village by the addition of a hundred new houses. Interesting proposals are the creation of a "ring" village causing the minimum of interference with farm units, and the planning of the new housing development in the north-west corner as a pleasant group of buildings linked by footpath with a community centre which forms the focus of the "nodal" village. Traffic problems are well met by the provision of a by-pass, and provision is made for the introduction of light industries to supplement the main occupation of agriculture. New housing is to be of the traditional Cotswold type, using local stone as far as possible.

THIRD PRIZE. (Shipton-under-Wychwood.)—The author of this design has spread his proposed new building development over five areas, without upsetting the balance of the existing village. This welding of the old and new is skilfully accomplished, and a social centre has been established as the core of the village. Provision is made for by-pass roads, and for improved shopping and educational facilities. In designing his new buildings, the author has borne in mind the character of the present village nucleus, and proposes the use of local material.

Top, second prize lay-out plan for Shipton-under-Wychwood. Bottom, plans and elevations, three-bedroom and four-bedroom houses.



THIRD PRIZE: J. Cunningham

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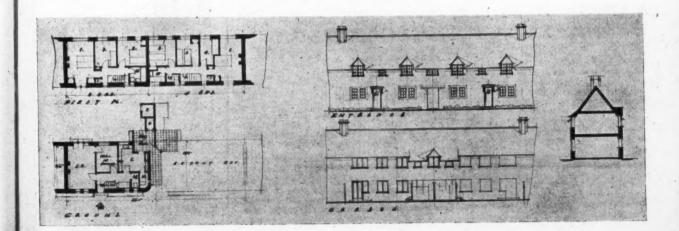


Right, third prize lay-out plan for Shipton-under-Wychwood. Bottom, plans and elevations for three- and four-bedroom units.

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TECHNICAL SECTION

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

INFORMATION CENTRE

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

1 SOCIOLOGY. 2 PLANNING: General. 3 PLANNING: Regional and National. 4 PLANNING: Urban anc 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: General. 12 MATERIALS: Metal. 13 MATERIALS: Homber. 14 MATERIALS: Concrete. 15 MATERIALS: Miscellaneous. 17 CONSTRUCTION: General. 18 CONSTRUCTION: Theory. 19 CONSTRUCTION: Details. 29 CONSTRUCTION: Miscellaneous. 21 CONSTRUCTION: Miscellaneous. 22 SOUND INSULATION, ACOUSTICS. 23 HEATING, VENTILATION, 26 SERVICES, EQUIPMENT: Miscellaneous. 27 FURNITURE, FITTINGS. 28 MISCELLANEOUS.

2.22 planning: general SURVEYS: AERIAL PHOTOGRAPHY

The Use of Aerial Survey in Forestry and Agriculture. J. W. B. Sisam. (Imperial Forestry, Bureau, Oxford, and Imperial Bureau of Pastures and Field Crops, Aberystwyth, 1947, 7s. 6d.)

Important summary of recent advances in regard to economic and technical possibilities of aerial photography in making landuse and vegetational surveys. Fully illustrated. Valuable list of bibliographical references.

It is stated that in land and vegetational surveys of any size the use of aerial photography, usually in combination with ground work, has certain definite advantages over ground methods used alone. A concise and most informative list of these advantages is most informative list of these advantages is given, together with some notes describing certain limitations of aerial photography. The report draws attention to a statement by the US Department of Agriculture in connection with survey work undertaken for the T.V.A.: "The work of geographers in the Tennessee Valley Authority ... shows conclusively that their [aerial photographs] use speeds up the attainment of objectives and lowers the costs very materially ... Geographic work in the Authority also illustrates how the availability of aerial mosaics trates how the availability of aerial mosaics has given rise to the rapid development of new land classification technics, new methods of application, and a greater variety of applications."

Chapters providing detailed information on factors affecting the efficiency and cost of aerial photography, on the interpretation and application of the air photographs, and on their use in land use and vegetational surveys contain a wealth of useful data for the planer. the planner.

10.23 design: building types AIRPORT BUILDING: USA

Airport Buildings. US Department of Commerce, Civil Aeronautics Administration. (US Government Printing Office, Washington, D.C. [USA], 1946, 20 cents.)

Official American publication on planning and design of airport buildings based on information obtained from airport managers, airlines personnel, architects, engineers, and various administrative officers. Many diagrammatic plans and illustrations.

This very instructive booklet is not intended as an exhaustive treatment of building con-struction, but as an outline of airport build-ing requirements. In view of the anticipated large expansion of civil aviation and the necessity to design for future needs no attempt has been made to give actual dimen-sions regarding most spaces. The design principles whereby a structure may be ex-panded are discussed, based on "determinate factors" which influence immediate construc-tion and on "indeterminate factors" which influence future construction. Recommendaas an exhaustive treatment of building coninfluence future construction. Recommendations put forward take into account not only the efficient functioning of an airport but also the need to produce the greatest amount

of revenue possible.

Airport buildings are considered under two heads, namely, those which serve the needs of terminal airports, i.e., scheduled air trans-portation, and those which serve the personal needs of the owners of small aircraft.

The following design aspects are examined: The following design aspects are examined: the airport plan in relation to circulation within the building area; the apron which "is the area of transition from landing to administrative area"; the administrative area which houses all buildings other than the maintenance buildings; the terminal group of buildings which includes those facilities which have to do with the actual handling of passengers, baggage and mail; and the maintenance area which "contains buildings for maintenance of the airport and hangars for maintenance of planes." A special chapter is devoted to storage facilities for private planes. for private planes.

17.18 construction: seneral USA CODE FOR RC

Building Code Requirements for Reinforced Concrete (ACI 318-47). Reported by ACI Committee (Journal of the American Concrete Institute, September, 1947, pp. 1-64).

Design and construction of buildings of reinforced concrete.

This code covers the use of reinforced concrete in any structure. It deals with the quality of materials, site work, principles of design, permissible stresses, and special types of construction such as flat slabs, columns,

walls, footings. It contains several revisions as against earlier editions, but is not up to date in so far as it still adheres to a variable modular ratio, which is an unnecessary complication of the design.

Important differences as against the British Draft Code of 1946 (see No. 2726.19.9.46)

(1) In certain cases a tensile stress in the reinforcement of 30,000 lb./sq. in. is permissible (ceiling in British Draft Code, 27,000 lb./sq. in.).

(2) The compression stress in column reinforcement may be as high as 30,000 lb./sq. in. (maximum in British Draft Code, 20,000

lb./sq, in.).
(3) For a given quality of concrete, the permissible stress in columns is only half of that in members subjected to bending, where-as, according to the British Draft Code, the ratio is 0.76 to 1.

(4) Provision is made for the use of composite columns, consisting of a structural steel or cast-iron column thoroughly encased in concrete reinforced with both longitu-dinal and spiral reinforcement and also for the use of combination columns in which a structural steel member designed to carry the principal part of the load is wrapped with wire and encased in concrete of such quality that some additional load may be allowed thereon. In columns of similar construction the load bearing capacity of the concrete must be ignored in this country.

(5) The permissible bond stresses for de-formed bars are 25 per cent. higher than

for plain bars.

18.10 construction: theory TIMBER TRUSSES: TESTS

Full-size Timber Trusses Tested under Long-Time Loads. R. H. Gloss. (Engineering News-Record [USA], September 18, 1947,

Full scale tests on two types of timber truss reveal valuable information on connector strengths and on relative performances of the two designs.

The trusses tested were of the flat-Pratt The trusses tested were of the flat-Pratt and Lank-Teco type, both of 48 ft. span, consisting of 6 panels of 8 ft. The flat-Pratt truss was fabricated green and exposed to the weather during testing, the Lank-Teco truss was fabricated of dry material and protected from the weather. Both were designed for an assumed load of 40 lb./sq. ft, on trusses spaced at 16 ft. With allowance for seasoning after fabrication and for long duration of loading, the corrected design



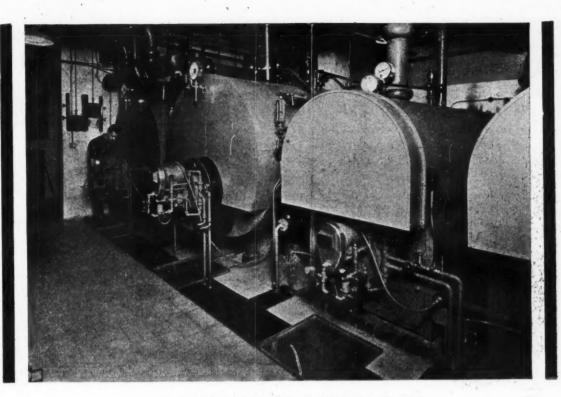
THE LIBRARY OF INFORMATION SHEETS

14.M1 and 29.D1 REFERENCE BACK

Readers are asked to note the following amendments, and to correct their copies of the Information Sheets in question.

14.M1. The first column heading in each table should read "Sight Size Height" instead of "Sight Size Width."

29.D1. The 1 ft. $6\frac{3}{8}$ in. dimension to the "section thro' recess" shown on the bottom right-hand drawing should read 1 ft. 101 in.



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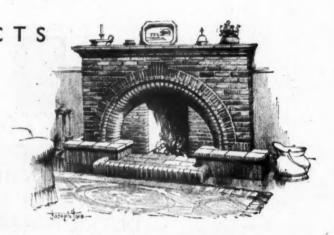
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Claygate OLD ENGLISH FIREPLACES

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load for the Pratt truss was 29.7 lb./sq. ft., that for the Lank-Teco truss 38.5 lb./sq. ft. The test results are tabulated. The Lank-Teco truss requires only one half of the material and labour for the flat-Pratt truss, yet its performance was better both regarding deflection and ultimate load.

24,49 lighting NEW LIGHT SOURCES

Progress—Lamps and Illumination. Journal, Vol. 14, No. 3, 1947.) (G.E.C.

Advances in lighting for fluorescent and tungsten types, railway carriages, airfields, hospitals and streets. General interest, illustrated.

Brief descriptions of recent developments in lighting. A fluorescent unit for operating theatres is interesting, and fluorescent fittings for street lights. The author is Director of the Lighting Laboratories of the General Electric Co. of America.

25.45 water supply and sanitation DOMESTIC DRAINAGE

Domestic Drainage, Post-War Building Studies No. 26. The Plumbing Committee of the Building Research Board. 1947. 6d.)

Aims at making recommendations of direct service to post-war housing. Valuable comment on present methods and faults which frequently occur. Constructive suggestions on house drainage illustrated by a typical drain layout for a small group of houses.

This report continues the good work commenced in No. 4 of the P.W. Series which dealt with Plumbing. The Committee commence this report by stating that they have aimed at making recommendations of immediate service to post-war housing and that this restriction means that it is in no

sense a comprehensive review of drainage problems. Special attention has been paid to the need for economy where it was felt that this could be obtained while still maintainsafety and efficiency. The report is divided into three main sections. The first gives a long list of defects which commonly gives a long list of defects which commonly occur in domestic drainage. The second section deals with the layout and planning of domestic drainage and the third, with materials and construction. There is a fourth section which briefly lists those matters on which the Committee feels that more research and investigation is needed. There is also an illustration showing the planning and layout suggested in Section II. planning and layout suggested in Section II. In the introduction it is pointed out that one of the drawbacks to present by-law administration is the difficulty which local authority officers have in obtaining an authoritative opinion on the merits of new materials or opinion on the ments of the magnetic opinion on the ments of the ments of the present lo-year statutory period for by-law revision be reduced to 5 years and that facilities for local authorities to obtain independent information on the suitability or durability of new materials should be ex-

Part I of the report gives a long list of defects commonly occurring in current prac-tice. Architects might well note that many of these fall within the sphere of planning. Part II deals with the general design of domestic drainage systems. It should be domestic drainage systems. It should be read in full, for a number of valuable suggestions are made. Among some of the points dealt with is that of the correct gradient-often a source of concern to the architect who is trying to plan a drain with a minimum fall. The Committee recom-mends for the present a continuance of the old rule of 1 in 40 for 4 inch drains, 1:60 for 6 inch and 1:90 for 9 inch, but says that experience seems to justify 1 in 50 for 4 inch and 1 in 75 for 6 inch, and asks for further research on this important question. It is pointed out that if a 1 in 40 fall makes the drain planning difficult, it is not a satis-factory solution to change the 4 inch drain to a 6 inch one and then to flatten the gradient.

By far the most radical change suggested in this part of the report is the idea that fewer manholes should be used. Clearly this would be valuable as an economy, but the Committee comes down heavily in favour of the idea on the grounds of efficiency as well. Their arguments should be read carefully. Their arguments should be read carefully. It will be very interesting to see whether in view of the urgency for economy the Ministry of Health will accept this recommendation and notify Local Authorities accordingly. A less novel suggestion is that, with certain exceptions, the intercepting trap between sewer and house drain should be omitted. This was suggested by an authoritative committee many years ago and is perfectly the suggestion of tative committee many years ago and is permitted in many areas, but some local authorities are still insistent upon the provision of this trap which, as the committee says, is the most frequent source of block-

TECHNICAL SECTION

age in house drainage systems. In the section on materials, reference is made to two current British. Standards for stoneware pipes, and attention is drawn to the confusion existing with present nomenclature. Asbestos cement pipes are men-tioned with approval, and the impregnated

compressed paper pipe, now fairly common in USA and Canada, is noted.

It is interesting to find that rendering of manholes is not favoured because of the troubles which arise if the rendering breaks away. A 9 inch brick wall, of suitable bricks in cement mortar is preferred.

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.I.

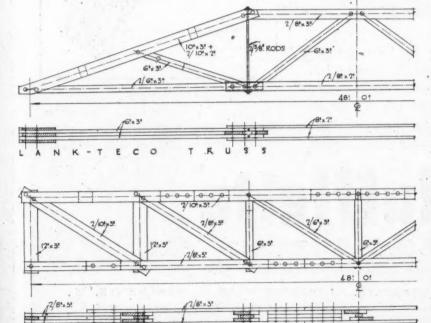
OUESTIONS AND ANSWERS

2922 STOP COCK: REPAIRS

A client of mine has been notified by the Borough Council that the stop cock and box outside her premises needs repair or renewal. She is requested to complete a form which makes her liable to pay whatever costs are incurred by the Borough in this matter. I have maintained that since the stop cock and box are upon the public footpath—and therefore outside her control of the paint footpath—and therefore outside her control
—she cannot be held liable. In point of
fact the apparatus has been damaged by
hooligans who have removed the iron cover.
In my negotiations with the Borough I
have offered to pay for providing a new
stop cock and box within my client's
boundary, and in an easily accessible place,
but this proposition has been met by a refusal. I cannot see why my client should
have to pay for damage done by the public
upon a public footway.

A. The technical legal position is a setated.

A The technical legal position is as stated by the Borough Council, namely, that the stop cock and box are repairable by owner of the property served thereby. We agree with your comments on the atti-tude of the Council in regard to resiting the box and stop cock, and recommend that you press this suggestion, and invite the Borough Council at any rate to furnish you with the reason for their refusal to accede to your most reasonable suggestion.



Two types of timber truss tested under load over long period. See 18.10.

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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

[by Philip Scholberg]

HOT WATER SUPPLIES

Ewarts have just published an informative handbook on instantaneous hot water supply by gas. This firm was, of course, making water heaters before any of us were born, having started in 1834 with a "gas bath" which had "powerful atmospheric burners" underneath it, a system which was no doubt fairly efficient but which may have had somewhat surprising effects on any user unwary enough to bathe without turning off the gas. The first Geyser (Ewarts invented the name) was produced as long ago as 1870, and has led to the simple and neat multipoint models of the present day.

Apart from a brief historical introduction the breadback is a drivingly for constant of the control of the service of the simple and the control of the service of t

Apart from a brief historical introduction the handbook is admirably factual. In analysing the pros and cons of various systems of hot water supply there is naturally something of a bias towards gas, but there are also useful sections on flue design materials and connections, notes on fitting from the point of view of both water and gas supply, and some suggestions for the use of geysers as auxiliaries to a solid fuel system. A further useful feature is the inclusion of many of the appropriate by-laws and regulations. (Ewart & Son, Ltd., 169, Regent Street, London, W.1.)



GEC speed regulator for propeller fans giving a downward speed regulation of 30 or 40 per cent. with either 4 or 5 running speeds, and "off" lo ated by means of a snap action switch.

SPEED CONTROL FOR FANS

The use of fans of the type originally popularised by Vent-Axia seems to be on the increase, particularly in restaurants. A model recently introduced by the GEC was described in these notes a few weeks ago, and the same firm has now produced a small and neat speed regulating device for use with AC fans. Two types are made, series-choke for smaller fans and auto transformer for the larger units; each gives a downward speed regulation of 30 or 40 per cent. with four or five running speeds and an off position. The design gives only a small heat loss compared with resistance type regulators, and this has allowed the size to be kept small. The regulators are made by a GEC subsidiary, Woods of Colchester. (The General Electric Co. Ltd., Magnet House, Kingsway, London, W.C. 2.)

FIBRE BUILDING BOARDS

The Building Boards Joint Committee have just published a most useful book on the technical aspects of the use of fibre building boards. The book is unusual in that all the firms in the industry have pooled their knowledge and experience in an attempt to provide complete and accurate information, and the result seems to be a most excelent piece of work, which was well worth doing.

ient piece of work, which was well world doing.

The book started as a technical report prepared during the war for the Post-War Building Directorate of MOW, and it is now made available in a permanent form after being brought up to date with the results of more recent research. It starts by setting out agreed names and definitions of the various classes and types of fibre building board, and continues with the construction of walls, floors and roofs, methods of fixing, and the treatment of joints, while there are special references to heat insulation and sound control. A series of appendices deal mainly with the thermal transmittance through a wide variety of typical constructions, with and without insulation.

The book also contains some information on fire resistance which does not seem to have been published elsewhere. Research was undertaken jointly by BRS and the Building Boards Joint Committee into the fire resistance of intermediate floors having

The book also contains some information on fire resistance which does not seem to have been published elsewhere. Research was undertaken jointly by BRS and the Building Boards Joint Committee into the fire resistance of intermediate floors having insulating board ceilings, and into the rate of flame spread on the surface of various types of board. Specifications are given for floor and ceiling constructions satisfying Grade E of BS 476, and others conforming to the standards set up by the Code of Functional Requirements, Chapter 4, "Precautions against Fire," for houses and flats of not more than two storeys. It seems clear that, properly used, insulating boards can give adequate fire resistance in domestic buildings with normal occupancy and fire hazard.

The book has a supplement of 50 or more photographs to give some idea of the versatility of wallboards, but these are perhaps of less importance than the very valuable technical data. Copies of the book (5s.) can be obtained from the Committee at Melbourne House, Aldwych, London, W.C.2.

DDT IN PAINT

In the first instalment of the Building Exhibition report (AJ, November 27) reference was made to Permacon, a paint incorporating DDT. The manufacturers state that tests carried out over a period of 8 months show that the DDT does not lose its properties to any appreciable extent. Apparently about half the flies alighting on the painted surface are dead in under an hour, 90 per cent. within 80 minutes, and the whole lot within about 3½ hours. (The Permacem Paint Co., Ltd., 40, Broadway, Westminster, London, S.W.1.)

FIBREGLASS

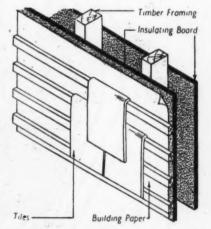
In order to amplify their comparatively small display at the Building Exhibition, Fibreglass Ltd held a reception to demonstrate further uses of their material. Started as long ago as 1930 by Chances. Fibreglass entered the textile field in 1938 and developed under licence various Owens-Corning processes, at the same time making arrangements by which Pilkingtons took an active interest. The textile side of the business is still mainly confined to electrical insulation products, such as yarn, tapes and cloths, and the demand has already outrun capacity. Curtains and other hangings which must be completely fireproof are another obvious use, but supplies are not yet available in any quantity.

yet available in any quantity.

Most architects think of Fibreglass mainly as an insulator, both for heat and sound, though it also makes an admirable filtering medium for use in air conditioning plants. For this latter purpose the fibres in the filtering panel are graded both in diameter and in density of packing, coarse and loose on the inlet side and fine and closely packed at the outlet, so that the larger particles are trapped near the ingoing face while the finer particles penetrate further. This prevents the filter from becoming quickly choked and decreases its resistance to air flow. There are, in fact, a number of important points in the use of this material which are not immediately apparent, but the manufacturers, issue a number of useful leaflets setting out the types of Fibreglass available and the uses to which the different grades should be put. (Fibreglass Ltd., Firhill, Glasgow, N.W.)

VENEERED ALUMINIUM

Venesta have just produced a veneered aluminium sheet which should be useful for furniture manufacture or for display work, Walnut, oak; sycamore and mahogany finishes have been produced so far, and the veneer can be cemented to one or both sides of the sheet. The furniture which Mr. Clive Lattimer designed for Heal was faced with similar material, and it was found that the aluminium conducts heat so quickly that the veneer was proof against cigarette burns. Bending with the grain is quite simple down to about a two-inch radius. (Venesta Ltd., Vintry House, Queen Street Place, London, E.C.4.)



Walls exposed to weather as used in timber framed buildings. The insulating board is cement rendered or hung with shingles or tiles. Where the board is not liable to superficial damage it may be painted. Where standard or super hardboard is used it should be painted or varnished.

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

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Buildings Announcements Illustrated

New Drawing Office at Saltley Works, Saltley, Birmingham, 8, for the Metro-politan-Cammell Carriage and Wagon Co., Ltd. (page 537). Architects, Clifford Tee and Gale. General Contractor, W. J. politan-Cammell Carriage and Wagon Co., Ltd. (page 537). Architects, Clifford Tee and Gale. General Contractor, W. J. Whittall & Son, Ltd., who were responsible for the excavation, foundations, damp-courses, reinforced concrete, and joinery. Consulting engineer, T. Bedford, A.M.I.C.E.. A.M.I.MECH.E., A.M.I.STRUCT.E. General foremen, L. Langston and E. Gough. Quantity surveyors, Reynolds & Young. Sub-contractors: Bramwell and Gateley, Ltd., demolition; Ragusa Asphalt Paving Co., Ltd., asphalt; Tarmac, Ltd., precast floor and artificial stone; Aldridge Brick, Tile and Coal Co., Ltd., S.F. facing bricks, 9 × 4½ × 2½ in.; Rubery Owen & Co., Ltd., structural steel; Ruberoid Co., Ltd., steel decking, special roofings and roofing felt; James Gibbons, Ltd., partitions, door furniture, casements, window furniture and metalwork; George Greenstone & Sons, glaziers; Haywards, Ltd., patent glazing; Lion Foundry Co., Ltd., R.W. heads; Limmer & Trinidad Lake Asphalt Co., Ltd., colourphalt; Rosser & Russell, Ltd., central heating and ventilation; Metropolitan-Vickers Electrical Co., Ltd. (B. French, Ltd.) heating and ventilation; Metropolitan-Vickers Electrical Co., Ltd. (B. French, Ltd., 79, Broad Street, Birmingham, sub-contrac-79, Broad Street, Birmingham, sub-contractors), electric wiring; Metropolitan-Vickers, Ltd., electric light fixtures; E. J. Sands, Ltd., plumbing; A. D. Foulkes, Ltd., sanitary fittings; Dreadnought Fireproof Doors, Ltd., fireproof doors; Flexo Plywood Industries, Ltd., entrance doors; C. W. Trumper, Ltd., plaster; Express Lift Co., Ltd., lifts; Smiths, clocks. The Council of the RIBA is sending forward the name of Mr. Auguste Perret for the Royal Gold Medal.

ward the name of Mr. Auguste Perret for the Royal Gold Medal.
The following changes in the Board of Boulton & Paul, Ltd., of Norwich and London, have been announced:—Mr. Richard Jewson, J.P., has relinquished the position of Chairman of the Company and has been succeeded by Mr. J. H. Tresfon. The Rt. Hon. John Wilmot, J.P., M.P., has rejoined the Board and has been appointed Deputy Chairman. Mr. R. Taylor has been appointed a Managing Director.

Messrs. Braven & Cubitt, A./L.R.I.B.A., Chartered Architects, of 430. Strand, W.C.2, having dissolved partnership, Mr. Frederick Cubitt, L.R.I.B.A., wishes to announce that he is continuing to practise from 430, Strand, W.C.2. Telephone: Temple Bar 4953-4, and has also opened a South Wales Office at 67, High Street, Merthyr Tydfil, Telephone Merthyr Tydfil 709.

The Edifice Golfing Society of Sussex held a successful meeting at Ifield Golf Club, and the Harris Pearson Challenge Cup was won by P. G. Massey with a score of 75. Fixtures for 1948 have been arranged for Eastbourne, Brighton and Worthing. Details can be obtained from the Hon. Secretary, Mr. A. E. Hudson, 59, Carlisle Road, Eastbourne, The Spanish Cabinet has authorised the expenditure of £15,000,000 on improving and building sanatoria.

The RIBA Council has approved the re-

and building sanatoria.

The RIBA Council has approved the re-

duction of subscriptions of members resident overseas in areas where no Allied Society is available to the following amounts to conform to the subscriptions payable to the Royal Institute in areas where an Allied Society is available:—Fellow, £4 4s.; Associate or Licentiate, £3 3s. This reduction will take effect from January 1, 1948.



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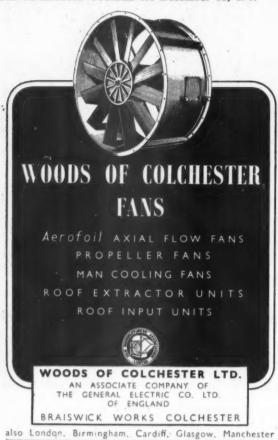
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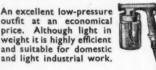
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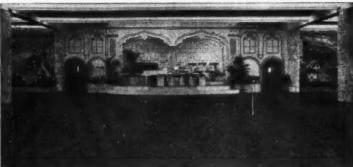


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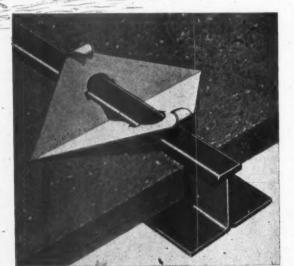
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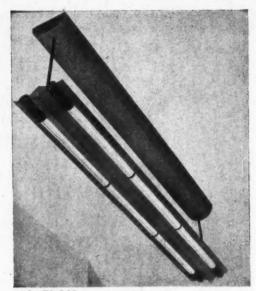
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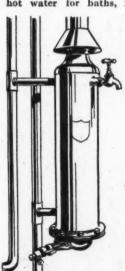
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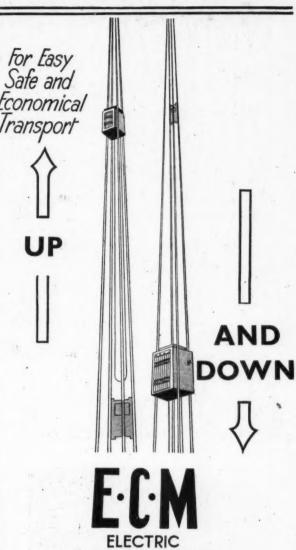
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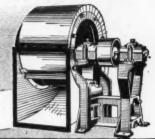
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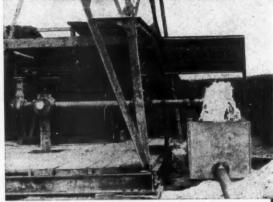
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3, Gt. Charles Street, Birmingham, 3.

GLASGOW
221, St. Vincent Street, Glasgow.



LS.W.1

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CLASSIFIED ADVERTISEMENTS

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

uper.
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 None of the vacancies in these countries reases 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, 10s.; each additional line, 1s. 6d.

THE INCORPORATED ASSOCIATION OF ABCHITECTS AND SURVIVORS 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, Baron Place, LONDON, S.W.I. Tel. SLOAMS 5615. 951

LONDON COUNTY COUNCIL.
COUNTY OF LONDON PLAN-VACANCIBS
FOR PLANNING STAFF.
Applications are invited for positions in the
following grades:
PLANNING OFFICER, Grade III, up to £700

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

TECHNICAL ASSISTANT, up to £580 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 soning plans.

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

Capvassing disqualifies. (1680) \$35

than 10 days from this date.

Carvassing disqualifies. (1680)

NORTH RIDING OF YORKSHIRE COUNTY
COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of PRINCIPAL ASSISTANT ARCHITECT.

A.P.T. Division, Grade VIII, of the National Scales (£625-£700), plus cost-of-living bonus (at present £59 lés. per annum).

Applicants must be Members of the Royal Institute of British Architects, qualified by examination, and must have had experience in the control of staff, organisation of work, and in the design and construction of Police and other general County-buildings.

Appointment terminable by two calendar months' notice on either side, and subject to the Local Government Superannustion Act, 1937, and a satisfactory medical examination.

Forms of application are not being issued, but if further information is required it may be obtained from J. Catchpole, A.R.I.B.A., County Architect, County Hall, Northallerton. Applications, stating age, qualifications and experience, together with particulars of present and previous appointments, and the names and addresses of three persons to whom reference can be made, must be delivered to the undersigned not later than Thursday, the 1st January, 1948.

Canvassing will disqualify, and a candidate who is related to a member of, or a senior officer under, the Council must disclose the fact in his application.

HUBERT G. THORNLEY.

Clerk of the County Council.

HUBERT G. THORNLEY,
Clerk of the County Council.
County Hall, Northallerton.
21st November, 1947 550

County Hall, Northallerton.

21st November, 1947

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 2475 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.

The appointments are for the present on a temporary hasis, 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, 57-51. Moorgale, 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.

CITY OF CANTERBURY.
ARCHITECTURAL ASSISTANT.
Applications are invited for the appointment of Temporary Architectural Assistant, in the City Architect's Department.
Salary, A.P.T. Division, Grade I, £330-£375, plus cost-of-living bonus, at present £59 l6s. per annum.

cost of living bonus, at present £59 108. per annum.

Preference will be given to candidates who have passed examinations for membership of the Royal Institute of British Architects.

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

Applications, endorsed "Architectural Assistant." stating age, particulars of experience and qualifications, and with not more than three copies of recent testimonials, should be received by L. Hugh Wilson, A.R.I.B.A. A.M.T.P.I., and later than Monday, 29th December, 1947.

J. BOYLE,

Town Clerk.

Municipal Buildings, Canterbury. 3rd December, 1947.

SURREY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments:
ASSISTANT ARCHITECT, Grade VI.
Commencing salary £535, rising by annual increments of £20,£25 to a maximum of £600, plus bonus, at present at the rate of £59 16s, per annum. and London allowance of £20.
Applicants must be Associate Members of the Royal Institute of British Architects, and should have had a good training and an adequate experience in the design and construction of modern buildings

perience in the design and buildings.

It is desirable that applications should accompanied by a small example of the applications.

cant's work.

ARCHITECTURAL ASSISTANT, Grade I.

Commencing salary £230, rising by annual increments of £15 to £375 per annum, plus bonus, at present at the rate of £9 16s. per annum, and London allowance of £20.

Applicants should be of good general training and experience.

Applicants should be of good general training and experience. Applications, stating age, qualifications and experience. Applications, should be sent to the County Architect. Surrey County Council. County Hall. Kingston-upon-Thames, not later than the 3lst December. 1947.

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

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

DUDLEY AUKLAND.

Cierk of the Council.

County Hall. Kingston-upon-Thames.

792

County Hall. Kingston-upon-Thames. 592

LEICESTERSHIRE COUNTY COUNCIL.
EDUCATION ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT, salary in accordance with Grade V of the National Scale, viz., £460-£510 per annum, plus war bonus, at present £50 16s. per annum, applicants must be Associate Members of the Royal Institute of British Architects. The appointment is subject to the provisions of the Local Government Superannuation Act. 1937. The successful candidate will be required to pass a medical examination.
Applications, stating ago, qualifications, experience, the names of two persons to whom reference may be made, and endorsed "Architectural Assistant." should be addressed to the Director Education. County Offices. Grey Friars, Leicester, not later than Wednesday, the 31st Derember, 1947. Canvassing, either directly or indirectly, will be a disqualification.

JOHN A. CHATTERTON.
County Offices, Grey Priars, Leicester. 587

THE MUNICIPAL COMMISSIONERS OF

County Offices, Grey Friars, Leicester.

THE MUNICIPAL COMMISSIONERS OF THE TOWN OF SINGAPORE invite applications for two posts of ASSISTANT ARCHITECT and BUILDING SURVEYOR. for the permanent staff of the Department of the Municipal Architect and Building Surveyor.

Applicants must be Associated of the R.I.B.A., between the ages of 25 and 30, and have had previous experience in Municipal government or other official service, and be familiar with L.C.C. Buildine Bylaws. Salary offered is \$550 a month (£770 a year), \$575. and \$600 for the first three years, but a higher commencing salary may be granted if qualifications and experience warrant. The maximum salary of the posts is \$800 p.m. by annual increments of \$40 a month after \$600 p.m. A cost-of-living allowance. at present \$197.50 a month for a married man or \$115 for a single man, is payable on a salary of \$850 a month. Partly furnished quarters are provided on a present basis of 4 per cent. of the officer's salary. An allowance for dux transport would be granted. Candidates would be appointed on a three years' agreement and would be required to pass a medical examination and to join the Municipal Provident Fund. Free passages, with half-pay during voyage, would be granted for the officer and his wife and family.

Applications, stating are, place of birth, details of education, qualifications, training and experience, accompanied by copies of three recent testimonials, must be lodged with the Commissioners' Agents, Messrs. Peirce & Williams, 1. Victoria Street. Westminster. S.W.1. not later than Monday, 12th January, 1948. Box 507.

CITY AND COUNTY OF KINGSTON-UPON.
HULL.
CITY ARCHITECT'S DEPARTMENT.
Applications are invited for the following appointments in the Quantity Surveyor'
(a) ASSISTANT ON ANGREY SURVEYOR'

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Applications are the Quantity Surveyor's Surveyor's Section:—

(a) ASSISTANT QUANTITY SURVEYOR A.P.T., Grade V, at a commencing salary of £462 rising by annual increments of £15/£20 to £59 per annum, plus cost-of-living bonus (at present £59 16s. per annum).

(b) ASSISTANT QUANTITY SURVEYOR A.P.T., Grade III, at a commencing salary of £390, rising by annual increments of £15 to £435 (plus £59 16s. cost-of-living bonus).

(c) MEASURING ASSISTANT. Miscellaneous Division, Grade II, at a commencing salary of £315, rising by annual increments of £15 to £436 per annum (plus £59 16s. cost-of-living bonus). Applicants should not be over 40 years of age (except in the case of applicants who are serving or have served in the Forces).

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

all trades, measuring up, and preparing interactions.

Applicants for (c) must have had experience in measuring work in progress, and checking interim and final statements.

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

Application forms, which can be obtained from the undersigned, should be returned complete on or before 9th January, 1948.

ANDREW RANKINE, A.B.I.B.A..

City Architet.

Guildhall, Kingston-upon-Hull.

Guildhail, Kingston-upon-Hull.

BOROUGH OF LUTON.

BOROUGH ENGINEER'S DEPARTMENT.

TECHNICAL STAFF.

Applications are invited for the following appointments:—

(a) SENIOR ARCHITECTURAL ASSISTANTS.

Salaries 2535 × 220 × 226 – 2600.

(b) ARCHITECTURAL ASSISTANT. Salary 2420 × 225 – 2465.

Salaries £535×£20×£20×£25-£500.

(b) ARCHITECTURAL ASSISTANT. Salary £420×£25-£465.

A temporary cost-of-living bonus at present at the rate of £59 fbs. per annum, will be paid in addition to basic salaries.

Applicants must be A.R.I.B.A. and have had extensive experience in the design and construction of public buildings, schools and houses, and in particular have had recent experience in the design and development of housing scommodation within a reasonable time.

In the case of appointment (a) every endeavour will be made to provide housing accommodation within a reasonable time.

Appointments will be subject to the Local Government Superannuation Act, 1937, to the conditions of service as laid down by the Council to a satisfactory medical examination, and to one month's notice.

Applications, suitably endorsed, giving paticulars of age, qualifications, experience, and present appointment and salary, together with copies of not more than three recent testimonials, should be delivered to the Borough Engineer, Town Hall, Luton, not later than Monday, the 5th January, 1948.

Town Hall, Luton.

511

Town Hall, Luton. 9th December, 1947.

Town Hall, Luton.
9th December, 1947.

CROWN AGENTS FOR THE COLONIES.
Applications from qualified candidates are invited for the following post:

QUANTITY SURVEYOR required by Government of Nigeria Public Works Department for two tours each 18-24 months in first instance. Salary and exparitation pay up to £970, according to qualifications and experience, in scale rising to £1.170 a year. Outfit allowance £68. Free passages. Candidates must be Chartered Quantity Surveyors and have had good experience of practical quantity surveying. Apply at once by letter, stating age, whether married or single, and full particulars and qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1. quoting M/N/17564 on both letter and envelope.

OXFORDSHIRE COUNTY COUNCIL.
APPOINTMENT OF ASSISTANT
ARCHITECTS.
Applications are invited for the following appointments:

(a) ASSISTANT ARCHITECT. Grade V, £456

(b) ASSISTANT ARCHITECT. Grade III.

(b) ASSISTANT ARCHITECT. Grade III. 2399-2435.

A cost-of-living bonus, at £59 16s. per annumis in addition to the above.
Candidates for (a) to have had previous experience on Education, Police and Public Assistance works, and preference will be given to members of the R.I.B.A.
Candidates for (b) to have had general experience in an Architectural Department, and preference will be given to members of the R.I.B.A.
Applications, stating age, qualifications and experience, accompanied by copies of three recess testimonials, and endorsed "Assistant Architect," should be forwarded to the County Architect, and December, 1947.

F. G. SCOTT.

F. G. SCOTT.
Clerk of the Council

BOROUGH OF SWINDON.

BOROUGH ARCHITECT'S DEPARTMENT.
APPOINTMENT OF QUANTITY SURVEYOR.
Applications are invited for the appointment of
a Quantity Surveyor, in the Borough Architect's
Department, at a salary in accordance with Grade
VI of the National Scales, £535 to £600, plus
such cost-of-living benus as may from time to time
be paid by the Corporation (at present £59 l6s.
per annum).

Applicants, who should have passed the final
examination of the Royal Institute of Chartered
Surveyors (Quantities Section), must be experienced in all branches of the work as applied to
Local Authorities, and competent to prepare
Estimates, Bills of Quantities, Specifications, etc.,
and to measure up for and prepare interim and
final accounts.
Applicants should also have had experience in
the preparation of valuations, schedules of dilapidiations, estimates, and the control of the work of
construction and maintenance carried out by
direct labour. A knowledge of building licensing
procedure as it affects Local Authorities is
sesential.

Forms of application may be obtained from the
undersigned, and applications must be delivered
to me not later than 23rd December, 1947.
Canvassing in any form will be deemed a disqualification.

D. MURRAY JOHN,
Town Clerk.

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Council

CIL. following V, £460ade III

D. MURRAY JOHN, Town Clerk.

Civic Offices, Swindon. 2nd December, 1947.

COUNTY BOROUGH OF BURNLEY.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.
Applications are invited for the appointment of
ARCHITECTURAL ASSISTANT, at a salary in
accordance with Grade II of the National Scales,
vis., 2500 to £405, plus bonus, at present £59 16s.
ner annum.

per annum
Applicants should have had good general training and experience, and preference will be given to candidates having passed the Intermediate examination of the Royal Institute of British

Architects.
Conditions of service are those formulated by the National Joint Council, and the appointment is on the established staff and subject to the provisions of the Local Government Superannuation Act, 1937. The successful applicant will be required to pass a medical examination.
Forms of application may be obtained from the Borough Engineer and Surveyor. Town Hall, Burnley, to whom applications should be returned in the envelope provided, not later than noon on Monday, the 29th December, 1947.

C. V. THORNLEY,
Town Hall, Burnley.

Town Hall, Burnley. 1st December, 1947.

WEST SUFFOLK COUNTY COUNCIL.
Applications are invited for the under-mentioned appointments, in the County Architect's Department. Salaries as indicated, in accordance with the National Joint Council salary scales, plus war bonus (at present £60 per annum); position on scales according to qualifications. viz.:—

(a) QUANTITY SURVEYOR. A.P.T., Grade V. (2463-£510).

(b) ASSISTANT ARCHITECT. A.F.T., Grade V (2465-5510).

(c) ARCHITECTURAL ASSISTANT. A.P.T., Grade I.-II (£330-£405).

Travelling allowance in accordance with County Scale.

Gandidates in respect of (a) should be Associates of the Royal Institute of Chartered Surveyors (Quantities Division), and have experience in the preparation of Bills of Quantities. Estimates, Valuations, and Settlement of Accounts.

Estimates, Valuations, and Settlement of Accounts.

Candidates in respect of (b) must be Registered Architects, preferably Associates of the Royal Institute of British Architects. They must be thoroughly experienced in Architectural Design and capable of preparing preliminary sketch plans, complete working drawings, and specifications.

With regard to (c), preference will be shown to candidates in possession of the Intermediate Examination of the Royal Institute of British Architects.

Examination of the Royal Institute of British Architects.

The appointments will be terminable by one month's notice in writing on either side, and will be subject to the provisions of the Local Government Superannuation Art, 1937. The successful candidates will be required to pass a medical examination.

Forms of application may be obtained from the undersigned, by whom applications, accompanied by three recent testimonials, should be received not later than Friday, 9th January, 1948.

L. G. MUNERY, 1948.

Shire Hall, Bury St. Edmund's. 500

Shire Hall, Bury St. Edmund's. 600

METROPOLITAN BOROUGH OF POPLAR.
Applications are invited for the permanent
appointments of:
(a) CHIEF ARCHITECTURAL ASSISTANT
(Grade A.P.T., VI).
(b) ARCHITECTURAL ASSISTANT (Grade
A.P.T., V).
A statement of the conditions attaching to

A.P.T., V).
A statement of the conditions attaching to and the method of applying for the above-mentioned appointments, may be obtained from the Borough Bugineer and Surveyor, Poplar Town Hall, Bow Road, E.S.
Closing date for the receipt of applications will be Monday, 29th December, 1947.

NEATH AND AFAN VALLEYS JOINT
PLANNING COMMITTEE.
PLANNING OFFICER'S DEPARTMENT.
Applications are invited for the following appointments:—
(a) ONE JUNIOR PLANNING ASSISTANT.
Salary A.P.T. Division, Grade II, £360-£405.
(b) ONE JUNIOR PLANNING ASSISTANT.
Salary A.P.T. Division, Grade I, £330-£375.
These appointments carry in addition a cost-of-living bonus, which at present amounts to approximately £60 per annum for females for persons over 21 years of age.
The appointments may be terminated by one

living bonus, which at present amounts to approximately £60 per annum for males and £48 per annum for females for persons over 21 years of age.

The appointments may be terminated by one month's notice on either side, and will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the Scheme of Conditions of Service laid down by the National Joint Council for Local Authorities Administrative Professional, Technical and Clerical Service, and applicants will be required to pass a medical examination.

Applicants for appointments (a) and (b) must have passed the Intermediate Examination of the Town Planning Institute or allied Professional Institution or hold a University degree, and in addition applicants for appointment (a) must have has a test two years' practical experience in a Planning Office.

Applications, giving full particulars of age, training, qualifications and experience, together with the names of three referees, must be sent to the undersigned, endorsed with the title and grade of appointment applied for, not later than 31st December, 1947.

T. D. WINDSOR WILLIAMS,

Clerk to the Neath and Alan Valleys Joint Planning Committee.

8. New Street, Neath.

Clounty ROROUGH OF WEST HARTLEPOOL, APPOINTMENT OF BOROUGH ARCHITECT.

Applications are invited for the appointment of Borough Architect, at a salary of £90 per annum, rising by annual increments of £50 to £1.100, plus such cost of-living bonus as is from 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 maintenance of all Corporation 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 notirectly 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.

disqualification.

ERIC J. WAGGOTT,

Town Clerk.

Municipal Buildings, West Hartlepool.



MINISTRY OF EDUCATION.

The Civil Service Commission invite applications from suitably qualified candidates for the post of CHIEF ARCHITECT in charge of the Architects' Branch at the Ministry of Education. The post, which will be an established one, will be open to both men and women, and will carry an inclusive salary of:

Men: £1.600×£50-£1.800.

Women: £1.452×£50-£1.625.

Candidates should normally be at least 35 on the 1st January, 1948, but applications will be considered from exceptionally well qualified candidates below this age.

Full particulars regarding the post, together with a form of application, may oe obtained from the Secretary, Civil Service Commission, 6, Burlington Gardens, Loudon, W.1, quoting No. 2080, to whom completed applications should be sent not later than 15th January, 1948.

BOROUGH OF ST. MARYLEBONE.

APPOINTMENT OF HOUSING DIRECTOR.

Applications are invited for the position of Housing Director to the Council. The Director will be a Chief Officer and be responsible for the work of the Housing Department. The work includes the selection of sites for permanent housing, and the survey of houses for requisitioning and adaptation; responsibility for work of adaptation to requisitioned premises; execution of war damage repairs by contract; receipt and grading of housing applications; lettings; rent assessments; collection of rents (subject to financial supervision by Borough Treasurer); management of estates; welfare of tenants; and other housing activities of the Council. The Housing Director will also be required to ensure maximum progress in the carrying out of present and future housing schemes executed under the supervision of outside architects or otherwise. The primary qualification for the position is a wide knowledge and experience of housing management and good administrative ability. Applicants must not be more than 45 years of age. Salary £1.250 per annum, plus cost-of-living bonus (at present £5) 16s.) per annum.

The appointment will be subject to satisfactory Adviser, to

FIFE COUNTY COUNCIL.

PROPERTY & WORKS DEPT. KIRKCALDY.
ARCHITECTURAL ASSISTANT required.
Salary, £370 × £20 to £480, plus war increase, at present £60 per annum. Applicants must be under 45 years of age, preferably with previous experience of Local Authority Schemes, such as Schools. Hospitals, etc. Medical examination under Superannuation Scheme. Applications, with copies of testimonials, to be lodged with the undersigned not later than 26th December, 1947. No canvassing.

J. M. MITCHELL, County Clerk. County Buildings, Cupar-Fife. 9th December, 1947.

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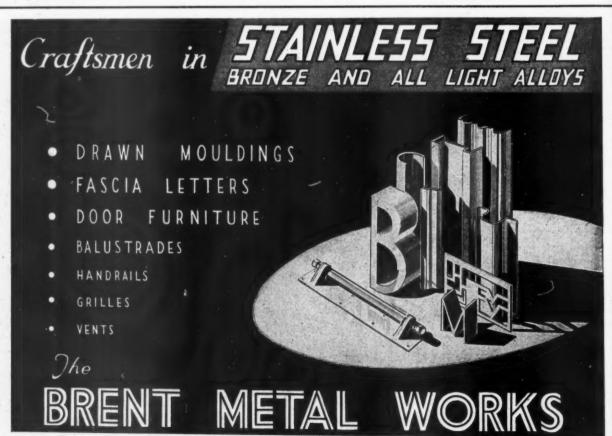
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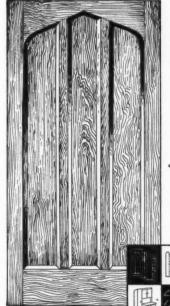
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