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RESIDENCE

- Fire retardant.
- Gale proof.
- Permanent and Rot proof.
- Vermin proof.
- Beauty in colour and appearance.
- Perfect insulation.
- One tenth the weight of tiles. Saves 40% roof timber.

1" Cedar equals 11 in. concrete in resistance to heat or cold. Economical in cost and fixing. Long trouble-free life.

We quote for supply and fixing if required.

Colt Shingles are now being specified more widely than ever for their beauty, long life, high insulation value and weatherproof qualities.

Copies of our Shingle Handbook containing 110 photographs and full technical information on request. Write to:

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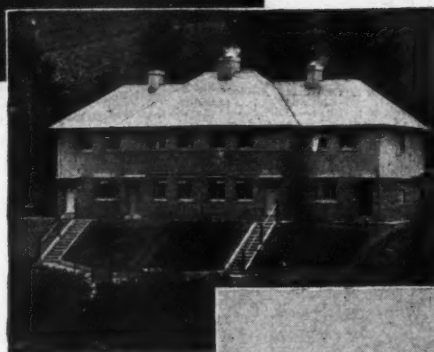
Telephone: ELMBRIDGE 6511 (4 lines)

COLT SHINGLES ARE SELECTED FROM
NO. 1 GRADE XXXXX SHINGLES

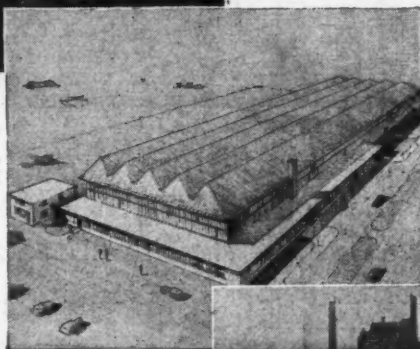
COLT *Canadian Cedar Wood* **SHINGLES**
(CEDAR WOOD TILES)

**ATTRACTIVE
PERMANENT
TROUBLE-FREE**

Colt Shingles proved themselves during the war to be superior to other roof covering in their remarkable resistance to blast, more than justifying our claims for the permanent security of a Colt Shingled roof. Our Technical Department is at the service of all Architects.



COUNCIL HOUSE

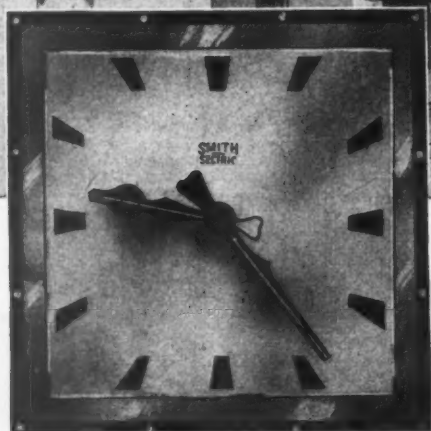


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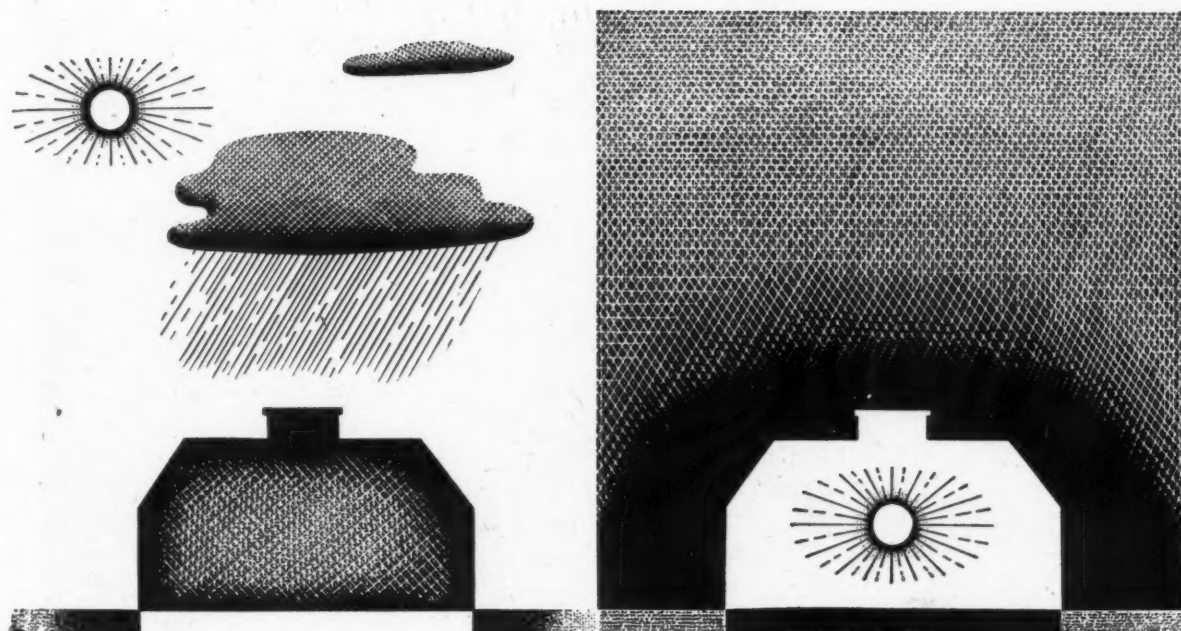
This advertisement is a reproduction of one of a series of Data Sheets prepared for the convenience of architects. These will illustrate the complete range of Smith Special Clocks. Please write for your copies.



ISSUED IN THE INTERESTS OF EFFICIENT TIMEKEEPING BY SMITH'S ENGLISH CLOCKS LTD.
The Clock and Watch Division of S. Smith & Sons (England) Ltd.



Scientific S.M.A.B.



THE CONTROL OF WEATHER 1946

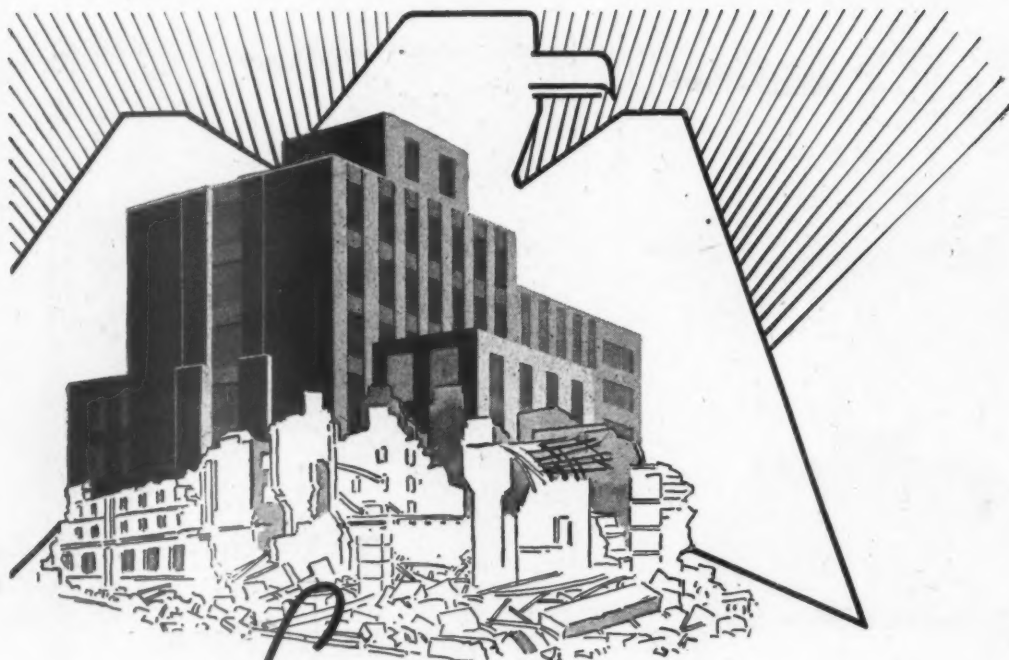
Weather control, like charity, begins at home. It began indeed many centuries ago with four walls to stop the wind and a roof to hold back the rain.

The introduction of a fire brought with it the problem of even distribution of its warmth—a problem which has been progressively reduced as new methods of heating were invented. In recent years modern scientific knowledge has been brought to bear on this and allied problems and, as might be expected from a firm with their record of achievement, Bratt Colbran Limited are well to the fore in the new developments of room heating. Their forthcoming post-war models will show remarkable technical advances associated with great distinction in design.

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IT is said that the Phoenix—a bird of great beauty—destroyed itself and later, from its own ashes, sprang into new life.

To-day we see on all sides the planning of the "New Britain" which will arise from the ashes of war. Churches, Schools, Factories, Public Buildings and many thousands of houses are but a few of the future monuments of this age of planned reconstruction which Architects, Engineers and Builders are being called upon to design and erect.

Amongst the many great British Manufacturers who served the country well in war and who now stand ready to fulfil the material requirements of re-building and re-housing, The Ruberoid Co. Ltd. occupies a proud position. The Ruberoid Built-up Roof with its varying specifications is designed to meet the most exacting standards of modern roof construction.

RUBEROID CONTRACT DEPARTMENTS located in London, Birmingham, Manchester, Newcastle, Edinburgh and Belfast, promptly undertake work on any scale and in any part of the country. Estimates sent on receipt of particulars.

ARCHITECTS, ENGINEERS AND BUILDERS are invited to write for Ruberoid Publication No. 326 entitled "Standard specifications for Ruberoid Roofs".

RUBEROID *Roofing*

THE RUBEROID COMPANY LTD., 1, COMMONWEALTH HOUSE, NEW OXFORD STREET, LONDON, W.C.1



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The entire structure is of reinforced concrete

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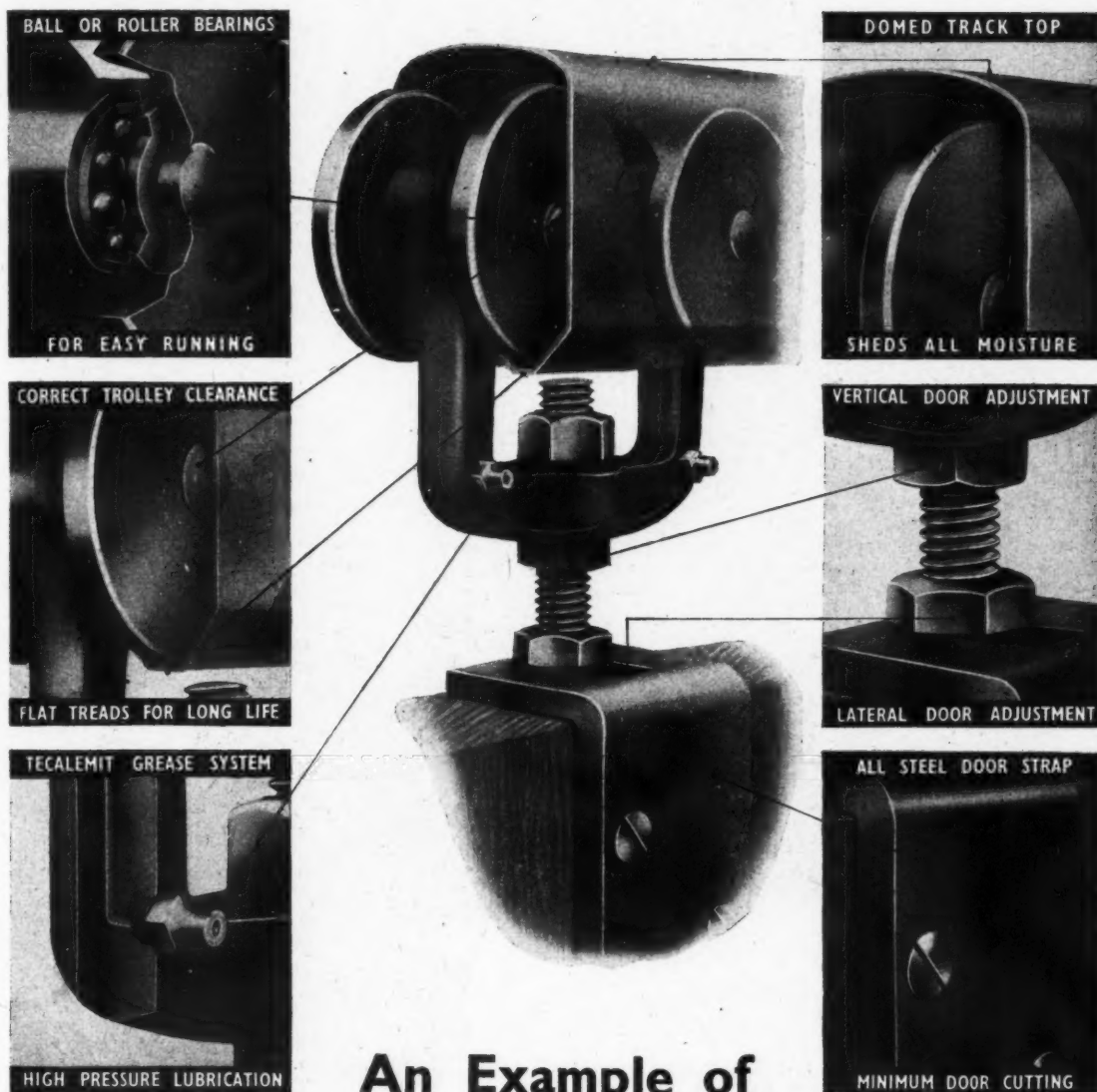
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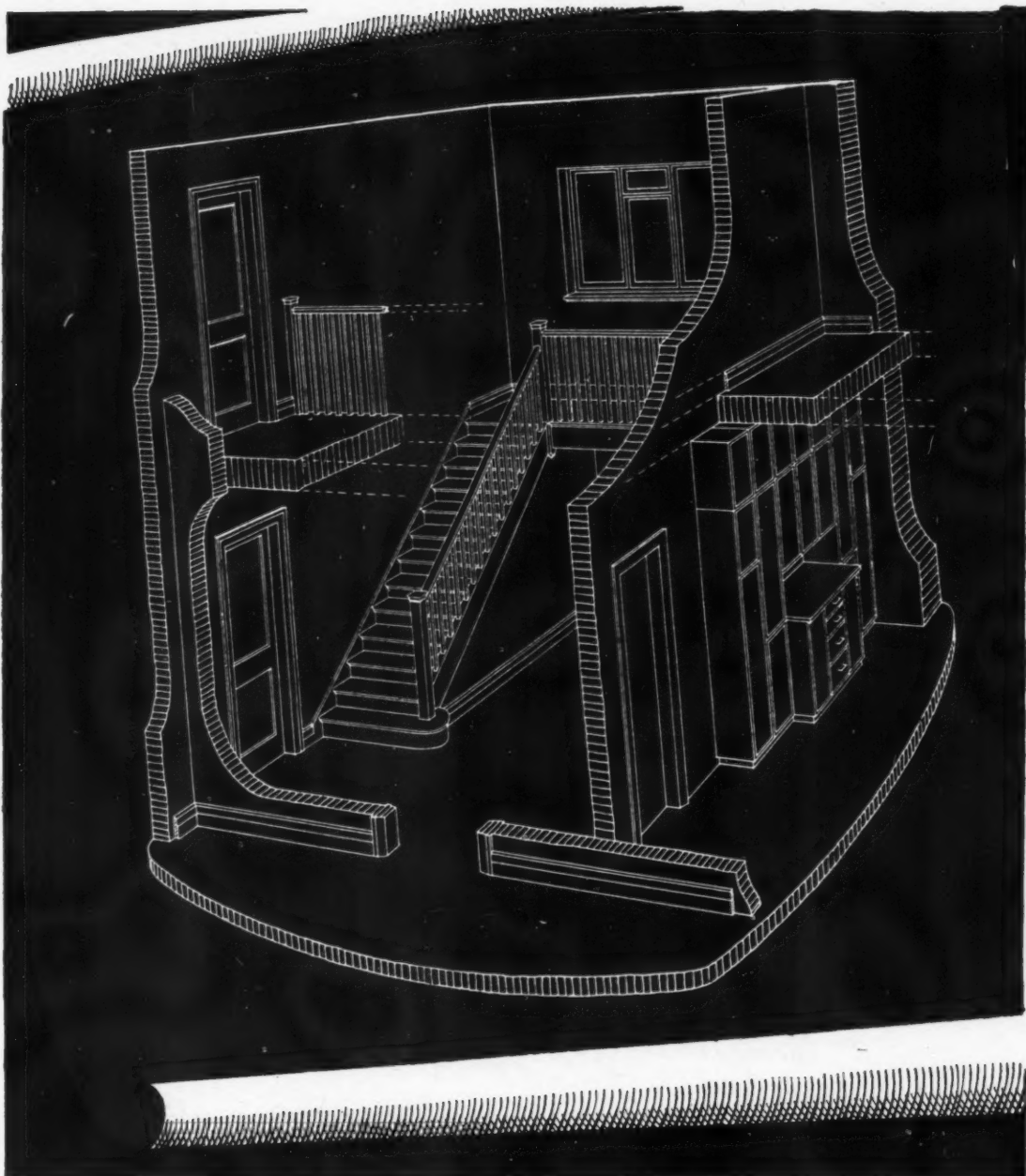
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That is aluminium in Ships . . . what of your product? Have you analysed it? Would it be better rust-free? Would Aluminium's ease of fabrication be of help? Does it have to operate in polluted atmospheres? Would its non-magnetic properties be of value? Would lightness with strength benefit your customers? Aluminium may be cast, die-cast, drawn, spun, pressed or machined from solid.

The Aluminium Development Association exists to answer these questions. Reports have been prepared, films have been made, technical data are available at your request.

ALUMINIUM DEVELOPMENT ASSOCIATION

67 BROOK STREET · LONDON · W.1



POTTERY THROUGH THE AGES · NO. 4



MINOAN WARES OF ANCIENT CRETE

By 3,000 B.C., great strides had also been made in shaping and painting pottery in the Indus valley, in Persia and in Asia Minor. The glorious days of Persian—as of Chinese—pottery were, however, to come much later.

In Europe, the first great centre of ceramic art was probably Crete where, from about 3,000 to 1,200 B.C., the Minoan civilisation produced architecture, stone-carving, wall-painting, metalwork and pottery of high artistic merit.

The earliest Neolithic wares do not differ greatly from those found elsewhere. In the first Minoan period proper, when Stone Age began to give place to Bronze Age culture, brown pigments were used for painting on a natural buff earthenware surface. Then came the application of a lustrous black "slip"—or coating of clay

mixed with water to a cream-like consistency—on which designs were painted with white pigment.

In the Middle Minoan period, the potter's wheel was introduced—probably from Asia—giving a great impetus to the making of vases, beakers, jugs, large store jars and other vessels. These show a wonderful sense of form and many are decorated with charming designs, based on stylised tulips, palm-trees, stars and other natural objects. The range of colours embraced black, brown, red, buff and white. The use of siliceous glazes, coloured blue and purple with copper and manganese, perhaps introduced from Egypt, lasted but a short time and had no enduring influence.

In the late Minoan period, dark on light decoration took the place of light on dark, and flowers, grasses and marine

life were reproduced in a more naturalistic way. The Minoans were a sea-faring people and many of their designs were inspired by seaweeds, fishes, and molluscs—the octopus motif being especially characteristic.

Minoan wares were exported to other Aegean islands, the mainland of Greece, Egypt, and even further afield. It is believed that master potters and artists from Crete settled in Greece and had a great influence on the subsequent development of Greek pottery.

In Crete also, at Knossos, has been discovered evidence of a scientific system of sewage disposal, including well-fitted earthenware subsoil drainpipes, tapered pottery baths, and the first known example of a water closet, showing indications of a wooden seat and flushing arrangement.

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Makers of Fine China and Earthenware, Porcelain Insulators, Laboratory Porcelain, Chemical Stoneware, Sanitary Earthenware and Fireclay, Stoneware Pipes and Conduits, etc.

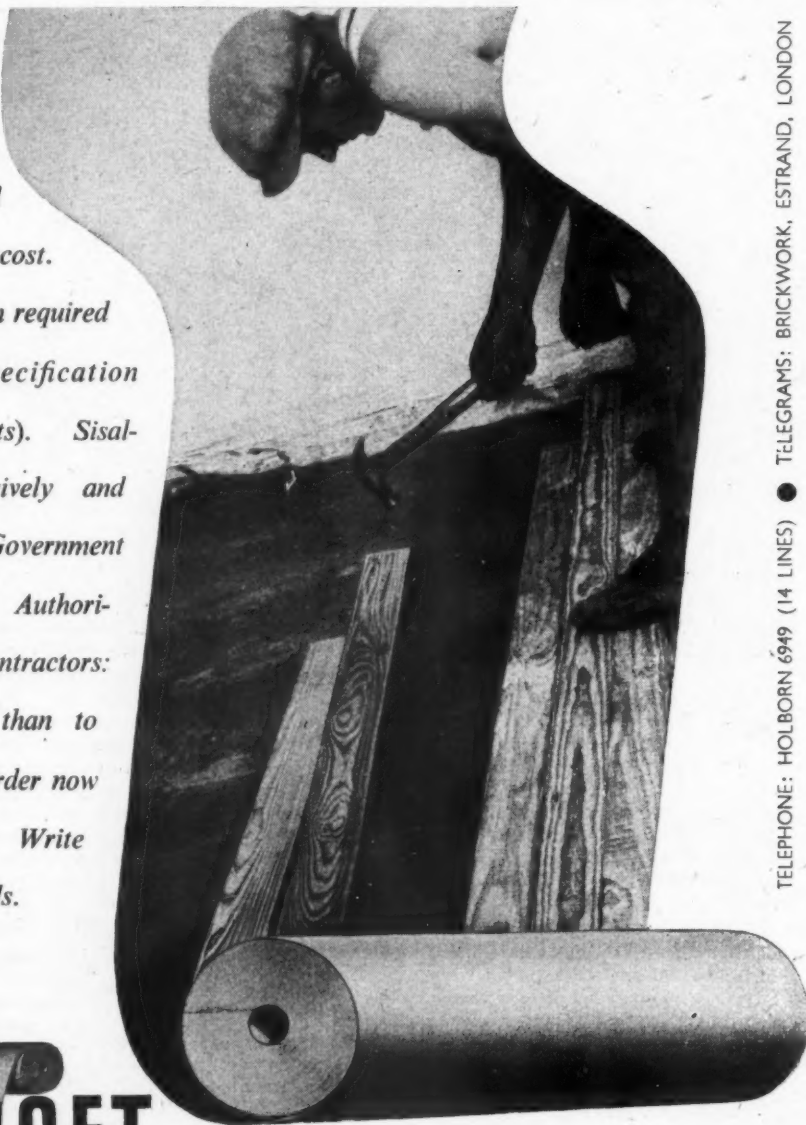
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Sisalkraft is stronger than required by any standard specification (proved by Official Tests). Sisalkraft is being extensively and consistently used by Government Departments, Municipal Authorities, and Public Works Contractors: you cannot do better than to follow their example. Order now for prompt delivery. Write to-day for technical details.



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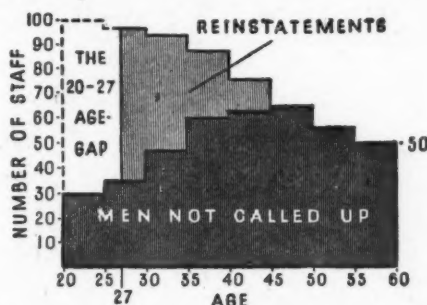
TELEPHONE: HOLBORN 6949 (14 LINES) • TELEGRAMS: BRICKWORK, ESTRAND, LONDON

A SEVEN-YEAR GAP TO FILL

Why business needs "new blood"

SEVEN years of carrying on, with ageing staffs, have left a serious gap in the executive ranks of most businesses: they are without the promising young men and women whom they would normally have recruited to train for responsible posts.

Some firms do not feel the lack — yet. The reinstatement of pre-war employees appears to leave few vacancies. But, as the diagram shows, a gap remains in their staff, in the 20-27 age-group, which neither older nor younger men can fill.



In this chart, the whole area represents the male administrative, executive and managerial staff of a typical engineering firm before the war, analysed by age-groups. The white portion is the present 20-27 gap which must be filled to restore proper balance.

Unfilled, this gap threatens the future efficiency of any business. It means, in ten years' time, a lack of responsible men between 30 and 37; in twenty years, between 40 and 47.

The young men of 20-27 who alone can fill it are now leaving the Forces. To help the most promising find posts that offer proper scope, and to secure for business and industry talents that should not be wasted in blind-alley jobs, the Government has established a free, nationwide appointments service.

A REGISTER OF ABILITIES

Fourteen Regional Appointments Offices register and classify the abilities of men and women of promise in different fields, building up a great national index from which employers' demands are met. As the 20-27's leave the Forces, all of the requisite standard who apply are interviewed, their qualifications recorded. Those who need help in choosing a career are "screened" by modern methods, to reveal special aptitudes. And selected candidates are eligible for assisted training under the Business Training Scheme — a 3-months' general course, which may be followed by up to two years' practical training in a particular firm.

Thus men are matched with the jobs they will do best. In seeking the right men to fill the 20-27 gap, employers can draw on the whole country if need be — and without wasting time in useless interviews, since *only* likely candidates are put forward for their selection.

EMPLOYERS' THANKS

Since VE-day, more than 35,000 responsible posts have been successfully filled, and hundreds of appreciative letters have been received from employers and applicants. For instance, a London firm of Industrial Management Consultants writes: "May I take this opportunity to express my grateful thanks to you and your Department for the prompt way in which you have dealt with our requirements from time to time, and the great care which you must have exercised in selecting candidates for our consideration. It is most refreshing to find someone who is so ready to help with one's staff problems in these difficult times."

To learn full details of the service offered, and to get the widest choice of the most promising men as they become available, employers are invited to get in touch as soon as possible with their nearest Regional Appointments Office, in one of the following towns:—

LONDON: 1-6 Tavistock Square, W.C.1

CAMBRIDGE: 5 Salisbury Villas, Station Road

READING: 23 Valpy Street

WINCHESTER: Christchurch Road

BRISTOL: Lyndale Hotel, Berkeley Square

BIRMINGHAM: 239 Broad Street

NOTTINGHAM: Commerce Chambers, Upper Parliament Street

LEEDS: Greek Street Chambers, Greek Street

MANCHESTER: Commercial Chambers, 47 Corporation Street

LIVERPOOL: Cotton Exchange, Bixteth Street

NEWCASTLE-ON-TYNE: 153 Barras Bridge

EDINBURGH: 5 Rothesay Terrace

GLASGOW: 450 Sauchiehall Street

CARDIFF: 8 Cathedral Road

TWO TRAINING SCHEMES

Financial assistance is available, where necessary, to help selected men and women from the Forces or other war service to make up for lost time in acquiring professional or business skills. Two training schemes of direct interest to employers are in operation:

Business Training Scheme: A 3-months' course in the general structure, practice and administration of business, followed by practical training in a particular firm.

Further Education and Training Scheme: Financial assistance in completing higher professional or technical studies interrupted by war service.

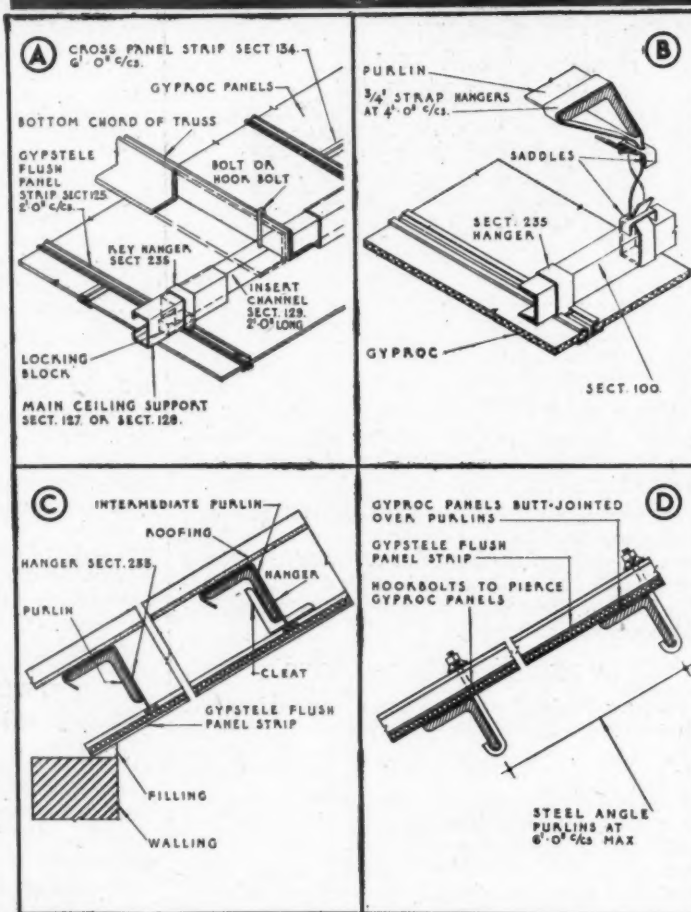
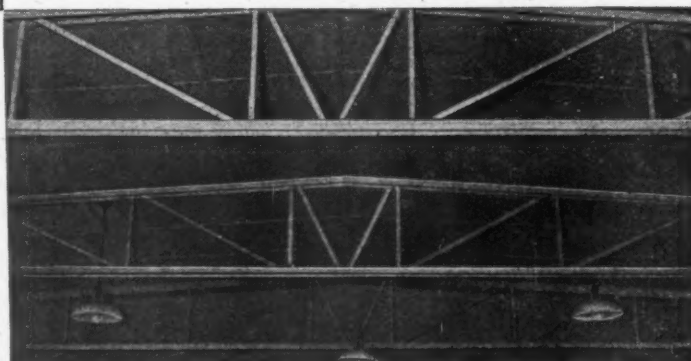
GYPSTELE APPLICATIONS

GYPSTELE ceilings combine the use of Gyproc fire-resisting plasterboard as panels with patented flush panel strips of metal, fittings and hangers, forming light-weight, structurally strong linings, adaptable to both flat and sloping roof construction. The weight of this type of ceiling construction is under 2-lbs. per square foot. For normal construction, panel sizes are limited to 6' 0" x 2' 0". Where abnormal conditions of moisture occur, such as bath houses, laundries, cook-houses, etc., it is recommended that showerproofed Gyproc board be used. The protective finish of the metal flush panel strips allows the use of the same paint or distemper as for the panels. The systems of suspension are as follows:—

- A. Using secondary structural supporting members slung from bottom chord of roof trusses.
- B. Secondary supports hung from purlins.
- C. Fixed direct to the underside of purlins.
- D. Fixed over purlins in conjunction with roof sheeting.

This system of ceiling construction can be suspended from any type of overhead construction, and is ready for decoration as soon as erected.

The Gypstele system of unit construction applied to ceilings



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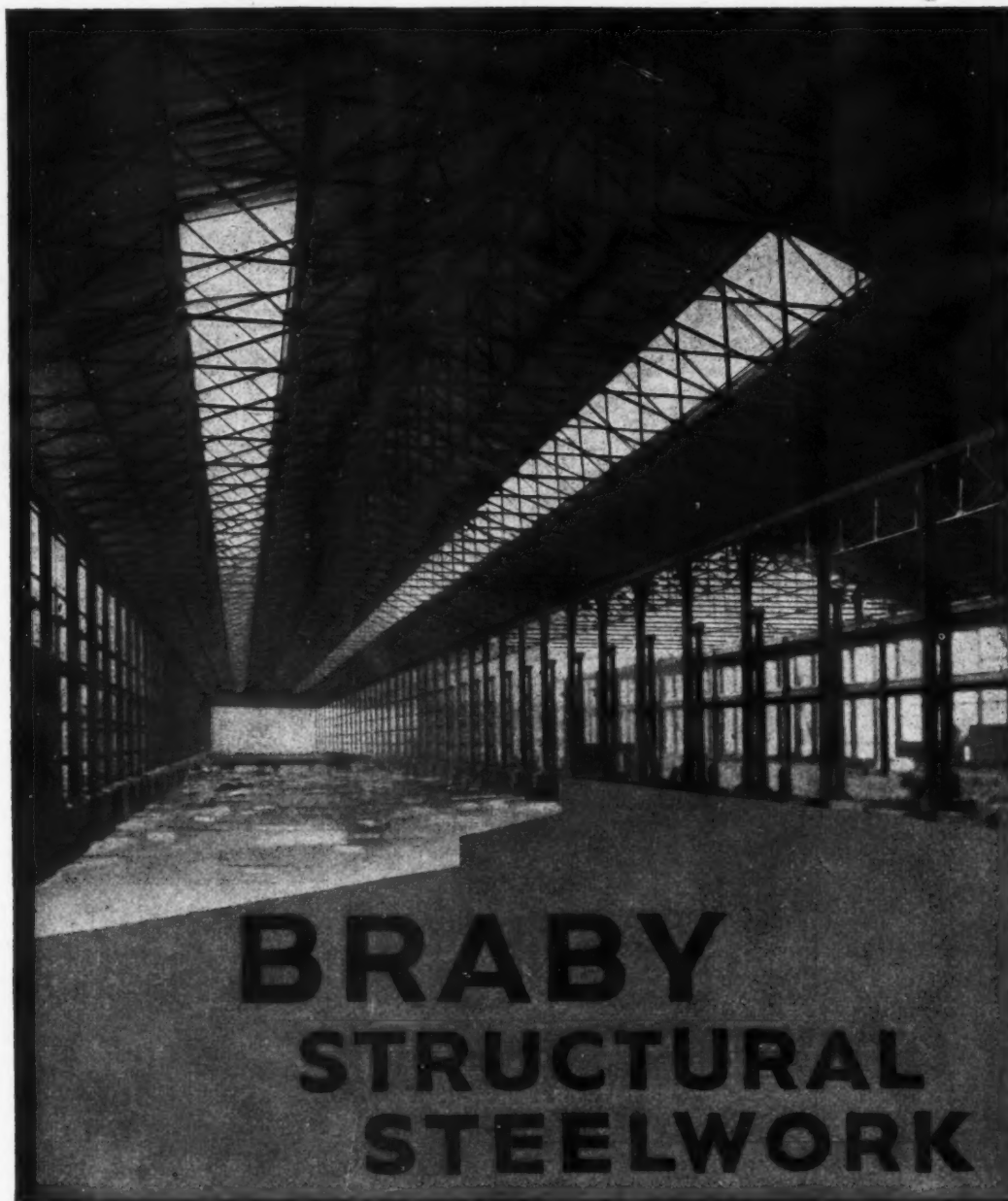
Glasgow Office: Gyproc Wharf, Shieldhall, Glasgow, S.W.I.
London Office: 21 St. James's Square, London, S.W.I.

"WESTFIELD," UPPER SINGLEWELL ROAD, GRAVESEND, KENT.
PHONE: GRAVESEND 4251-4. GRAMS: GYPROC, GRAVESEND.

Telephone: Govan 614. Telegrams: Gyproc, Glasgow.

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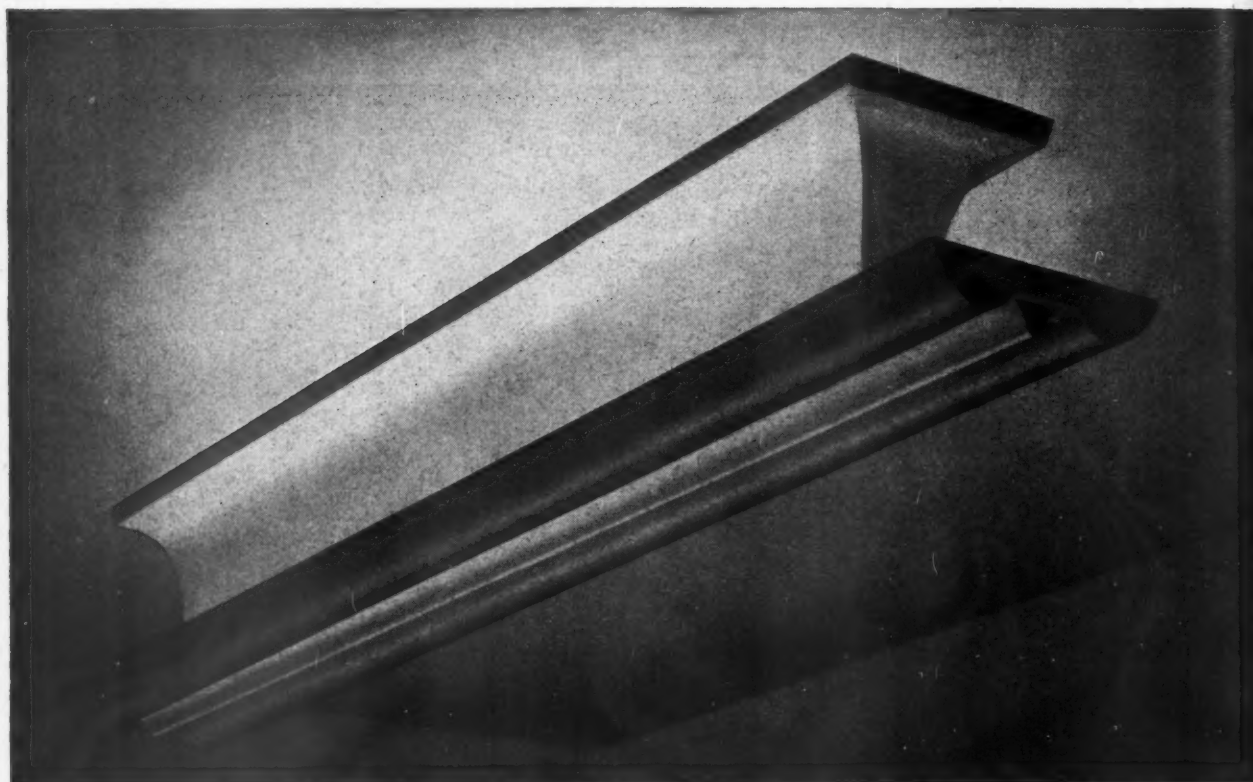
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bring imagination to

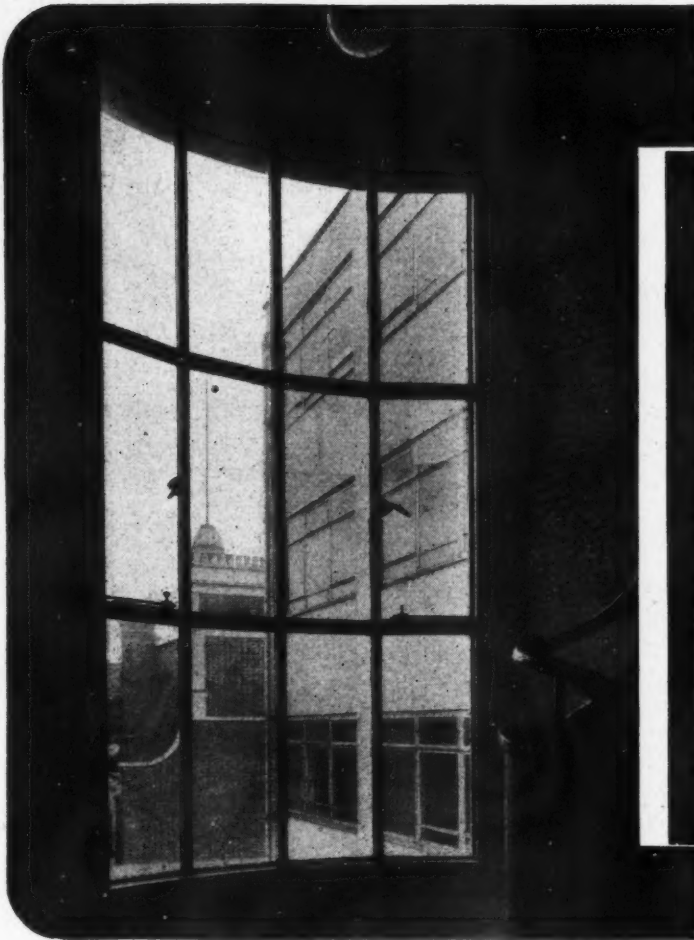
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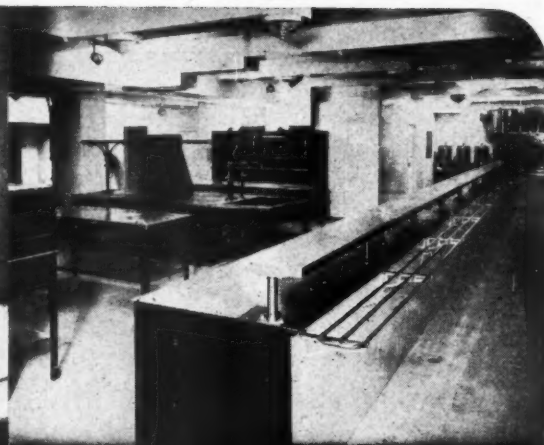
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The 'Purpose Made' Metal Window provides for individuality. The metal bars are capable of satisfying the constructional demands of the most exacting design. Architects can thus give full play to their art with the confidence that strength will be embodied when Metal Windows are employed.

For full information on all
Metal Windows you are invited
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**METAL WINDOW INFORMATION BUREAU,
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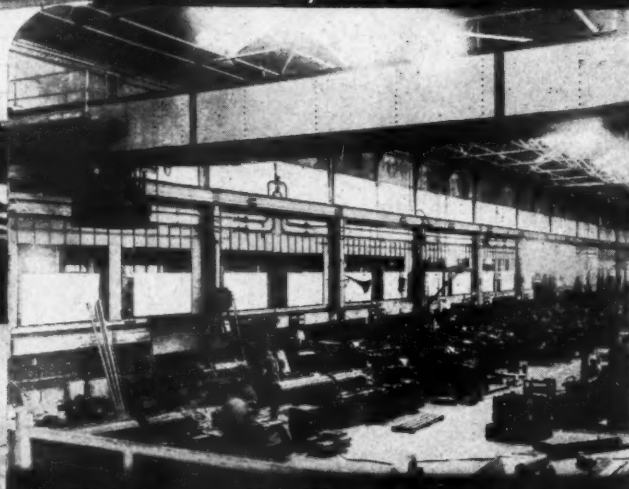
RICHARD CRITTALL *Installations*



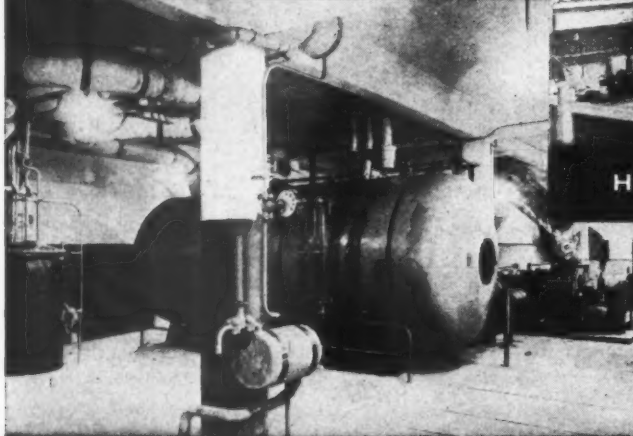
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with Stylovent Diffusers



SUNZWAY Radiators,
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High Pressure Hot Water Radiant Heating



High Pressure Hot Water Storage Cylinders
for large area heating

To obtain the most efficient and economical heating, ventilating, and other engineering services, consideration must be given to a wide range of factors, each of which must be related to the conditions which will prevail in the individual building. Richard Crittall's long experience of widely differing types of installations, places them in a unique position to carry out work of this kind.



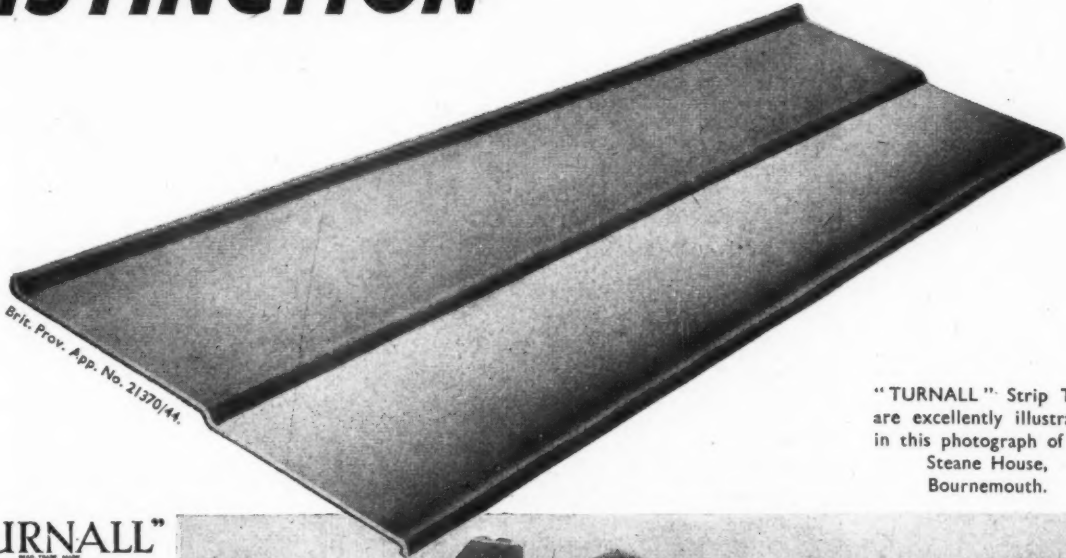
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CONSIDER THESE FACTS:—

Overall Length 6 ft. 0 in.
Overall Width 2 ft. 0 in.
Weight per square 552 lbs.

FIXED DIRECT TO
WIDELY SPACED
RAFTERS

NO BATTENS OR
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HERE AT LAST IS THE
ROOFING TILE WHICH
EMBODIES SPEED AND
ECONOMY IN APPLI-
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WRITE FOR DESCRIPTIVE
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TURNERS ASBESTOS CEMENT CO. LTD.
TRAFFORD PARK

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On the Farm

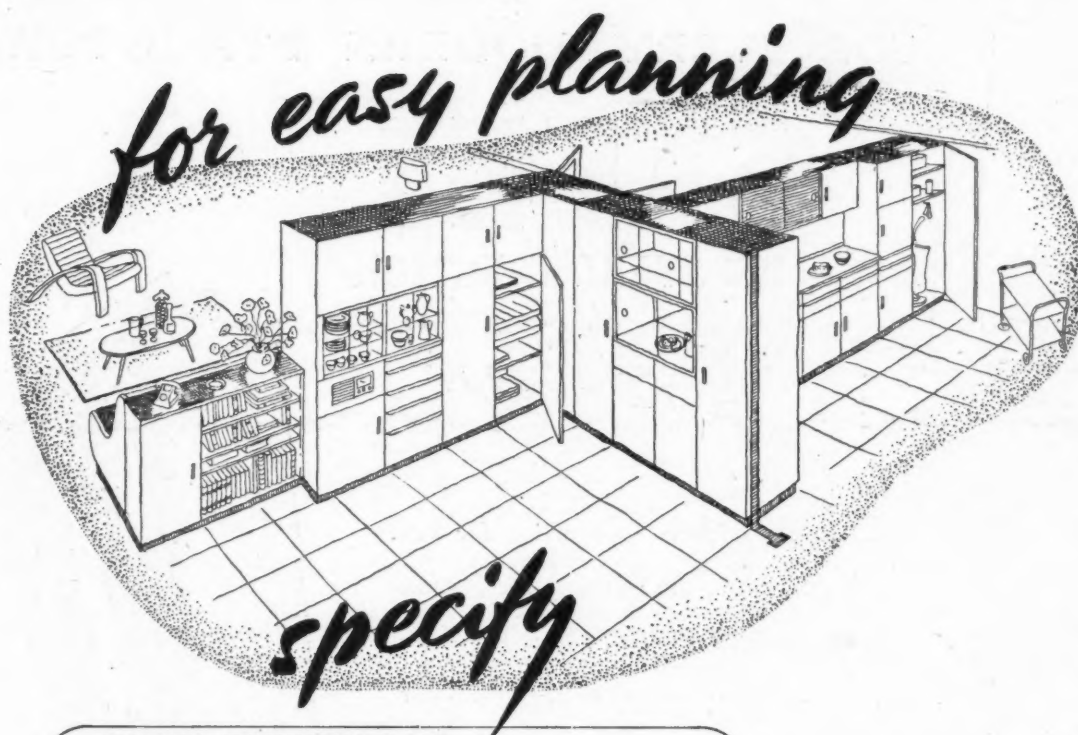


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Callender's
**FARM WIRING
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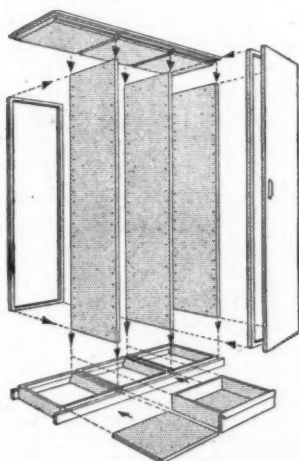
48,000 British farms over five acres are now using electrical equipment to lighten hard work. That means 48,000 farms are being run more efficiently with this aid to good farming. Whatever your type of farm, whether dairy, mixed, poultry, pig or market garden, the B.I. Callender's Farm Wiring System will meet your requirements and give absolute satisfaction. Send for publication No. 133U "Electro-Farming."

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★ SELECTION FITMENTS



The assemblies are supplied in four heights and two depths, and an infinite variety of models can be obtained by using the standard precision-made parts.

Patents pending.

SELECTION FITMENTS consist of 95 basic component parts from which may be built up an infinite variety of fitments for all storage purposes.

All drawers, internal shelves, sliding trays, etc., are adjustable, interchangeable and easily replaced, or increased in number. Fixing and adjusting of such internal parts can be done without the use of tools.

SELECTION fitments can be stored and transported flat, in parts, thus saving storage and transport space, and at the same time ensuring against damage in transit.

SELECTION fitments come in multiples of 21" widths and are interchangeable with British Standard Specification kitchen fitments.

Due to the present restrictions, we regret we are not able to sell the above fitments to the U.K. retail trade, but we are in a position to supply fitments for:—

1. Export.
2. Permanent Housing.
3. Ships.
4. Hotels.
5. Conversion of old houses into flats.

★ See the range of SELECTION fitments on show at "Britain Can Make It" Exhibition. (Cupboards in Furnished Rooms Section 7. Exhibit RR 445/452).

Trade and export inquiries should be addressed to:

UNI-SECO LIMITED

25 UPPER BROOK STREET, LONDON, W.1

Telephone Mayfair 9080

FOR EVERY MODERN STRUCTURE

STEEL

AND STEEL ERECTION

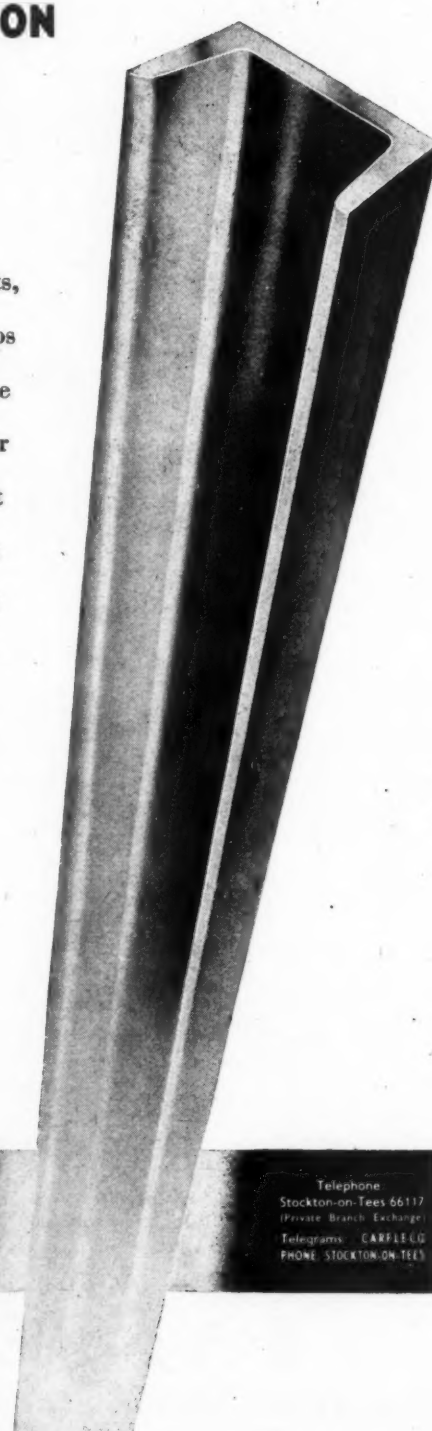
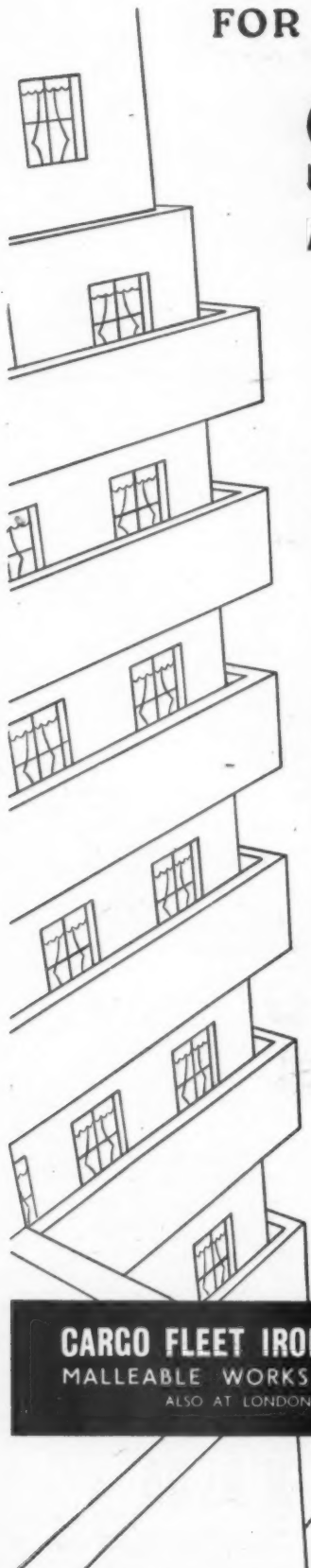
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Cargo Fleet

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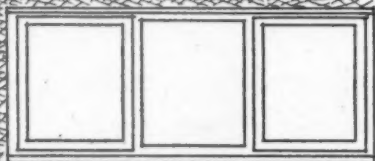
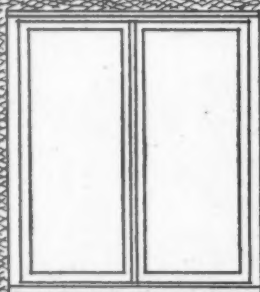
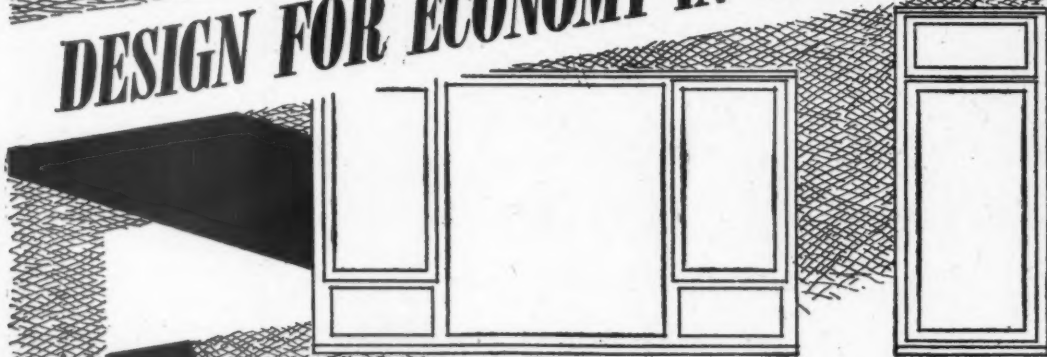
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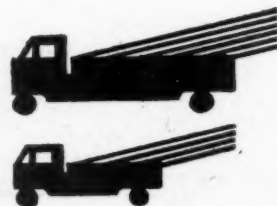
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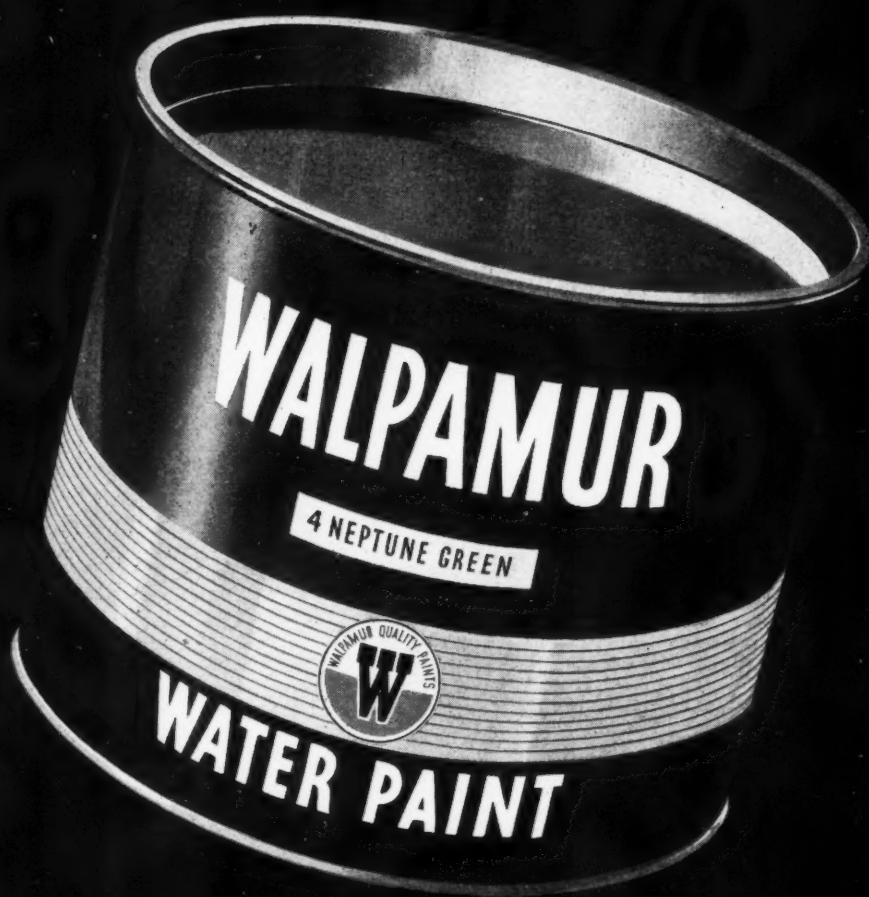
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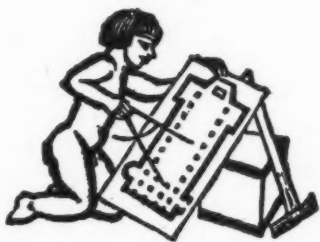
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In common with every other periodical this JOURNAL is rationed to a small part of its pre-war needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order."

Subscription rates: by post in the U.K. or abroad, £1 15s. od. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the JOURNAL and made of raw material now in short supply, are not necessarily available for export.



DIARY FOR NOVEMBER DECEMBER AND JANUARY

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.

BIRMINGHAM. Ralph Poole. *Industrial Ventilation Research.* At the Imperial Hotel, Birmingham, 6.30 p.m. (Sponsor, IHVE, Birmingham and District Branch.) Nov. 14

LONDON. *New Homes for Old.* Exhibition of House Conversion at the Tea Centre, 22, Lower Regent Street, S.W.1. 10.30 a.m.-5.30 p.m. Saturdays, 10.30 a.m.-4.30 p.m. Admission 1s. (Sponsor, HC.) Until Nov. 28

British Export Exhibition. At the London Exhibition Centre, New Coventry Street, W.1. (Sponsor, Leon Goodman Displays, Ltd., managers of the Exhibition Centre.) Until Nov. 23

A. W. Kenyon. *Building in Sweden.* At 28, King Street, Covent Garden, W.C.2. Buffet lunch, 12.45 p.m. Talk and discussion, 1.15 p.m. (Sponsor, TCPA.) Nov. 14

Architecture & Planning Group, Society for Cultural Relations with the USSR. Meeting at 98, Gower Street, W.C.1. 6.15 p.m. Nov. 14

Furnishing To-day Exhibition. At the Good Housekeeping Furnishing Studio, 28-30, Grosvenor Gardens, S.W.1. The first of a varied series of small exhibitions to be held in the studio. Its purpose is to show how the ordinary householder can contrive attractive and practical equipment for the home from materials now available, and at very low cost. Until Nov. 15

Association of Building Technicians, London District. *Conference on Immediate Policy for Council Housing and Re-development.* At the London School of Hygiene, Keppel Street, W.C.1. Chairman: Gordon Schaffer, Assistant Editor *Reynolds News*. Speakers: Ronald Chamberlain, M.P., Parliamentary Private Secretary to Minister of Town and Country Planning; Tom Braddock, M.P., Councillor Irene Marcoussé, L.C.C., Chairman, Holborn Housing Committee; T. E. North, Borough Architect and Planning Officer, West Ham; C. N. Craig, London District ABT. Admission free. Tea, 4.30. 1s. 6d. (Sponsor, ABT.) Nov. 16

Arthur G. Ling. *The Reconstruction Scheme for Stepney and Poplar.* At the Royal Institution of Chartered Surveyors, 12, Great George Street, S.W.1. Chairman: Viscount Esher. 3 p.m. Nov. 19

L. E. White; Warden, the Honour Oak Settlement. *Planning for Community.* At the Housing Centre, 13, Suffolk Street, Haymarket, S.W.1. Buffet lunch, 12.45 p.m. Talk, 1.15 p.m. (Sponsor, HC.) Nov. 19

BINC Third Building Congress. At Central Hall, Westminster, S.W.1. The object of the congress will be to enable those in both official and private positions to meet and discuss the many problems facing the building group of professions and industries. Tuesday, November 19. 10 a.m. Opening of congress by the Minister of Works (the Rt. Hon. George Tomlinson, M.P.). First Session: Discussion on the General Problems of the Immediate Position with regard to materials supply and its effect on productivity. 2.15 p.m. Second Session. Discussion on the Place of Traditional and New Forms of Construction. Wednesday, November 20. 10 a.m. Opening on the Second Day by the Minister of Health (the Rt. Hon. Aneurin Bevan, M.P.). Third Session: Discussion on the Long Term Availability of Building Materials for the National Building Programme. 2.15 p.m. Fourth Session: The Parliamentary Secretary to the Ministry of Works (Mr. Harold Wilson, O.B.E., M.P.) will make commentary reference to the previous discussions and open a discussion on the future relations of the Government with the Building Industries. (Sponsor, BINC.) Nov. 19-20

G. D. Walford. *The Principles of the Trade by Trade System of Taking off Bills of Quantities.* At the Royal Institution of Chartered Surveyors, 12, Great George Street, S.W.1. 5.30 p.m. (Sponsor, RICS.) Nov. 20

S. B. Hamilton, of the Building Research Station. *Standards of Efficiency for Houses.* At the Royal Sanitary Institute, 90, Buckingham Palace Road, S.W.1. 2.30 p.m. (Sponsor, RSI.) Nov. 20

AA Exhibition of Members' Sketches. At the AA, 34-36, Bedford Square, W.C.1. (Sponsor, AA.) Until Nov. 23

Exhibition of the King's Pictures. At the Royal Academy, Piccadilly, W. About 500 paintings in the Royal Collection, selected from all the Palaces in which the collection is permanently kept. Includes a large number of works not normally accessible to the public. Weekdays, 10 a.m. to 7 p.m. Sundays, 2 p.m. to 7 p.m. Admission 1s. 6d. Until MAR. 16

NUNEATON. D. H. Harrison, Legal and Town Planning Assistant, Nuneaton, *Housing in Relation to Health.* F. W. Mortimer, Chief Sanitary Inspector, Nuneaton. *Environmental Hygiene and Some Problems of the Future.* At the Royal Sanitary Institute Sessional Meeting in the Council House, Nuneaton. 10 a.m. (Sponsor, RSI.) Nov. 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 features marked with more than two stars is very big building news indeed.

Increases in the authorised maximum selling PRICES OF ROOFING SLATES produced in Wales and at a Westmorland Quarry are announced by the Ministry of Works. *Welsh Slates.*—The Minister of Works has authorised an increase of 2½ per cent. in the current selling prices of Welsh slates. The increase has been authorised in view of increases in operational costs and became effective as from November 5. *Westmorland Slates.*—The Minister of Works has authorised an increase of 2½ per cent. in the current selling prices of the Burlington Slate Quarries, one of the firms incorporated in the Westmorland Regional Slate Committee. This increase, which became effective as from November 5, has been authorised in view of increases in operational costs and brings the firm's prices into line with those of other firms in the Westmorland region.

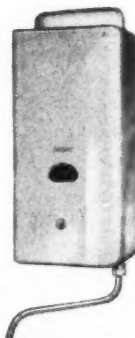
The main line railway companies and London Transport suggest Osterley Park as a site for THE 1951 EXHIBITION.

So far about 20 sites have been considered by the Board of Trade, but no official decision has yet been reached. Osterley Park, west of Brentford, and 13 miles from London by rail, lies between the Great West-road and the Uxbridge-road. London Airport and Heston and Northolt are within easy distance.



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From AN ARCHITECT'S Commonplace Book

THE NEW LIVING SPACE. (*From Revolution of Environment, by E. A. Gutkind (Kegan Paul, Trench, Trubner).*) What should the new living space look like? This depends first of all on what we want to get out of life, what use we want to make of the possibilities which technology and science offer us in the practical field, and whether we understand how to free our personal life from the tangle in which it has been caught through the overvaluation of our functional life. Certain traits seem to have assumed a predominant significance in this process. Separation of the place of work from the home is a fact in a spatial sense. But it is not a fact in an ideal sense. The atmosphere of the place of work permeates our homes and sets the rhythm of our whole life. Our interests centre round our work; and this one-sidedness makes us narrow-minded and lop-sided. . . . Most of us do not even realise that we are fractional men and that we do not live a personal life at all. What we expect of life is in essence that it should resemble a smoothly running train stopping at the familiar stations where we can get out for work, for meals, for conferences, for sleep, and for what we call leisure, without bothering why it all goes on like this and why we are gentle robots. . . . Work is only one expression of our functional life; it is not the whole of it. Our goal should be the creation of environmental conditions where the personal life is the dominant factor. In brief, our aim should be the leisured community—not a leisured class—and an environment which offers ample scope for man's manifold gifts as an individual and as a social being. Leisure in this sense is identical with creativeness and self-development. It is not to be thought of as mere relaxation after work, nor as a kind of reward for having done the work properly. It should be the very opposite of this, and to those who affirm that this is impossible we answer that it is not only possible but imperative if we are ever to hope to rid ourselves of the disintegrating influences of economic dictatorship and professionalism.

★
The Council of Industrial Design announces that with the generous permission of the Advisory Council of the Victoria and Albert Museum, the BRITAIN CAN MAKE IT Exhibition will remain open until December 31 next and will then be dismantled.

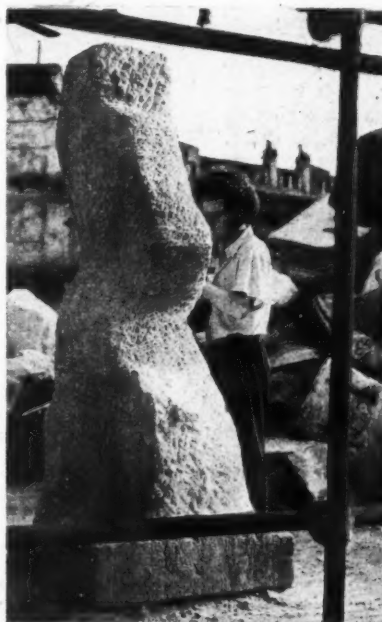
No further extension of time can be contemplated in London, because of the Museum's other commitments. Regarding the future of the exhibition the Council states: The Council has given close and careful consideration to the many suggestions which have been received for sending the exhibition on tour. In particular the claims of Scotland were strongly pressed by the Council's own Scottish Committee, and it was only reluctantly and with great regret that the Council advised the President of the Board of Trade that the proposal should not be accepted. The latest suitable date for a showing in Scotland is the month of March and, to go to Glasgow, the exhibition would have to close in London on November 24 since dismantling and re-erection would require more than three months. The cost of moving and administering the exhibition for a month might well reach £150,000 and very substantial amounts of timber and fabric would be needed for renewals. Moreover, large numbers of people from the capital itself and many parts of the country still wish, and are able, to see it where it is. Similar considerations affect any proposal to move the exhibition to a provincial centre in England or Wales. Remaining open in London until the end of 1946, the exhibition could not open elsewhere until towards the end of April, nine months after the date when most goods were submitted, and a few weeks before the opening of the British Industries Fair, when the exhibition would have lost its interest for manufacturers, and home and overseas buyers. The desirability of letting the exhibition be seen by as many people as possible outside London has been very much in the Council's mind. Even if Londoners themselves are not counted, the present site is accessible to a larger number of people than any other centre in the country with suitable premises. Visitors to the Victoria and Albert Museum include a high proportion from the provinces. It is hoped to make arrangements later on with the

railways for the running of special excursions from Scotland and provincial centres, thus adding still further to the body of people within effective reach of the present site. It has also been decided that the technical and other difficulties will be too great to justify the Government in sending the exhibition overseas.

★★

Housing authorities and county councils have been sent two reports on DISTRICT HEATING by the Ministry of Health. One is an interim memorandum on District Heating by the District Heating Sub-Com-

mittee of the Heating and Ventilation (Reconstruction) Committee of the Building Research Board; the second is a memorandum on *District Heating as Applied to Small Housing Estates* by the Ministry of Fuel and Power and Ministry of Works. District heating involves the generation of heat at a central plant and its distribution as steam or hot water for domestic, commercial or industrial use. That this system of heat distribution may have a great part to play in economising coal while providing improved standards of heating was mentioned in the final report of the New Towns Committee (Cmd. 6876). The Interim Report of the District Heating Sub-Committee gives a general review of the development of district heating abroad and the main technical and social considerations which its development in this country would raise. The main report, which will be a comprehensive technical survey of the subject, is in course of preparation. The Report by the Ministry of Fuel and Power and Ministry of Works illustrates practical and typical proposals for district heating on small housing estates. A committee consisting of representatives of the departments concerned has been set up to consider schemes of district heating put forward by local authorities and others. This committee has prepared a questionnaire summarising the points it will wish to examine in connection with any district heating proposals submitted to it. Any local authority considering district heating should apply to the Ministry of Health for a copy.



Students of sculpture from Sir John Cass Technical Institute are carving salvaged masonry on a blitzed site in the City of London. Here is a student at work.

Architect of the Enham village centre in Hampshire for disabled ex-service men MR. WILLIAM HARDING THOMPSON, DIED AT OXFORD on November 3, at the age of 58.

His work at the Enham village centre continued for seven years until 1927 and concurrently with it he practised privately as an architect and town planning consultant. In 1939 he was president of the Town Planning Institute and in 1940 technical consultant to the regional planning committees in Hertfordshire, Oxfordshire, and Dorset. He served in the H.A.C. and Royal Artillery from 1914 until 1919, and in the R.A.F.V.R. from 1941 to 1943.



Hostel for Single Persons

The Housing Committee has agreed to the provision of multi-storey blocks of dwellings in various parts of Glasgow and the first of these to be erected is a single persons' hostel at Crathie Drive, Partick. Working drawings for the proposal are well in hand and a start on the building will be made not later than the New Year. This building is, therefore, of public interest since it marks the beginning of a new developmental phase in the city's housing drive. The hostel, which will be for the accommodation of single women, contains eighty-eight flats, each of which has a living room, bed alcove, kitchen and bathroom. The bed alcove is spacious, is lit by a window, and has a built-in wardrobe. The bathrooms and kitchens of all the flats are grouped adjacent to service ducts which will accommodate all the piping and drains, thus avoiding unsightly pipes on the exterior of the building. Each flat is entered individually from access balconies running the full length

of the building. In addition to the flats themselves, spacious entrance halls are included on the ground floor, with three automatically controlled lifts, by means of which access is obtained to the various floors. In addition, a large common room with a small kitchen for service at social functions is also included in the ground floor accommodation. This room faces south and is provided with a sun parlour facing south. Coal fires will be eliminated from the building and constant hot water, as well as central heating, will be supplied to each flat from a central boiler house in the basement of the building. The main structure will be of reinforced concrete with exterior panel walls of foam slag and terrazzo pebble-faced blocks. The building has been designed by the Director of Housing and the Chief Architect of the Housing Department. The consulting structural engineers are Messrs. F. A. Macdonald & Partners, of Glasgow.

★ *Criticisms of some features of the interim report of the joint consultants, Dr. C. H. Holden and Professor W. G. Holford, for the RECONSTRUCTION OF THE CITY OF LONDON are made in a memorandum submitted by the Auctioneers' and Estate Agents' Institute to the Town Planning Committee of the City Corporation.*

The institute views with grave apprehension the effect of a prolonged period of uncertainty about the precise incidence of the programme of reconstruction. The memorandum states: Already there is a feeling in the City of frustration and stagnation. To deal with possible vehicular congestion at Billingsgate Market the Institute hopes that through traffic which has no destination in the City will, as far as possible, be diverted either north from Gardiner's Corner by the "A" ring route beyond the City, or south to the Thames Tunnel and the south bank. Concerning the proposed viaduct route over Farringdon Street and the Central Market area, the Institute attaches im-

portance to the segregation of market from general traffic, and deprecates the suggestion that the viaduct construction might be used to support runways. The institute is not convinced of the soundness of the proposed new route from Cannon Street and Eastcheap across Mark Lane and Mincing Lane to Hart Street and thence to Aldgate, [from a traffic point of view, because it would throw an additional burden on the already heavily over-loaded junction at Adelaide Place. The Institute deprecates the transformation of the entire river front from Blackfriars to London Bridge by the provision of a pedestrian terrace.

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★ *W. Ellis and Sons, Ltd., of 234, Goldhawk Road, Shepherd's Bush, W.12, were PROSECUTED AT WEST LONDON POLICE COURT on October 31 at the instance of the Architects Registration Council, for carrying on business under the title of Architects not being registered persons within the meaning of the Architects Registration Acts.*

The defendants had displayed a board upon a house which they were repairing, on which the words "Architects and Builders" appeared after the name of the company. The defendants were fined £2 with 3 guineas costs. The defendants pleaded that as the company had taken power in their Memorandum of Association to carry on business as architects they mistakenly assumed that they were entitled to the style of architects although not registered.

Major C. H. Nettleton, a Yorkshireman, just released from the RE's to become Government Architect in Fiji, is to draw up final plans for a NEW FIJIAN HOSPITAL AND MEDICAL CENTRE.

A young Yorkshireman who recently arrived in Fiji to take up an appointment as Government Architect found that his first assignment was to draw up final plans for a new Hospital and Medical Centre, which is to be named after Mr. Winston Churchill. The man who is to design this building—it may cost in the vicinity of £750,000—is Major C. H. Nettleton, whose home town is Hull. Major Nettleton served with the Royal Engineers until he was released to take up his new Colonial post. His headquarters will be at Suva, Fiji's capital, which before the war was well known to tourists as one of the loveliest ports of call in the South Seas.



Some of the thousands of bricks imported from Belgium for Britain's housing drive being unloaded at Milford Docks, South Wales.

HOUSE HEATING IN THE USA

ALTHOUGH we have given a considerable amount of space in recent issues to the subject of domestic heating, we make no apology for returning again to this matter for, apart from the attempts at factory production methods of construction, there is probably no other feature in housing where such a definite advance is both needed and recognized. It is particularly interesting at a time when our own ideas are under drastic revision to review the methods of other people and for this reason we welcome the publication of a report on Domestic Heating in America.*

This report is the result of the visit of a small party representing jointly the Ministry of Fuel and Power and the Department of Scientific and Industrial Research. It is a long document giving a very full description not only of heating appliances and systems but also the background picture of climate and fuel conditions which lead to the results described, as well as other aspects such as research and development work. This makes it possible to see American methods in a proper perspective and to judge to what extent the ideas might be adapted to our own conditions. Of particular interest to architects are the chapters on *The Relation of Heating to House Planning*, and those on *Heat Insulation and Chimneys*.

The report is valuable, too, in its description of a number of unusual systems of heating which are being tried out in an experimental or small scale way. Developments of panel heating by warm air and by skirting board heating are particularly interesting. From the report it seems that the principle of panel heating has been taken from England, its place of origin, and is now being developed in a number of interesting ways. Are our manufacturers alive to the need for progress and are our architects alive to their responsibility for encouraging the manufacturers by making themselves familiar with new ideas and then asking for them to be made available in this country?

It seems abundantly clear that, whether or not we like the high temperatures obtained in American houses, we have a good deal to learn from them on questions of efficiency, both in heating methods and in house construction related to heating, and we are in wholehearted support of one of the main conclusions of the report—that advantage should be taken of the present building programme to try out some of the American methods in houses built for occupation. In this connection we also agree with one of the recommendations of the recent Fuel Conference, that a survey should be made during the coming winter among G.I. brides to find the reactions of a large body of Englishwomen now experiencing American heating systems.

We recollect the visit of an eminent American Heating Engineer, Mr. R. K. Thulman, to this country last winter and the valuable comments he made on our methods, and feel that the more missions and visits of this kind we exchange

with other countries the better. We notice that District Heating was excluded from the terms of reference of the party visiting America but that they did in fact see enough to make as one of their recommendations a suggestion that a further party should go out specifically to study American examples of Group and District Heating. In view of the number of such schemes now under consideration in this country it is to be hoped that this recommendation will not be ignored. We congratulate the officials who had the foresight to send this mission.



The Architects' Journal

23 Queen Anne's Gate, Westminster, S.W.1
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N O T E S & T O P I C S

TENEMENT TOWN

Nothing, perhaps, arouses such panic in the heart of the side-line critic as to have his advice accepted, or that he be asked to take action upon it himself. For years now planners and sociologists have been, rightly or wrongly, prescribing the community centre as one of the remedies for the social disintegration of modern urban life. In those days they felt safe. Planning was an academic exercise like crossword puzzles ["What's a word of ten letters meaning road-crossing? . . . oh, yes . . . clover-leaf! . . . put it down . . ."]. It passed the time and nobody expected you to *do* anything.

How different to-day. The experts, faced with the task of prescribing their own medicine are, naturally enough, nervous. Perhaps, say the faint-

hearted, people don't *want* community centres. The doubts lead to retreat. Disown the medicine, cry the faintest-hearted, before it is proved a failure, and we are blamed for it.

This, as Mr. Giedion pointed out in the discussion after his RIBA paper, is a craven policy. "For goodness sake," he said, "have a little confidence"—and, he might have added, read every night before you go to bed ten pages of *Tenement Town*, by L. E. White [2s. 6d.; Jason Press].

This remarkable little book is the story of an attempt by a Pacifist Service Unit to create a living community in an estate of tenement flats. It is short, practical and completely honest, and, as the introduction says, it should be read by everyone who talks either for or against community centres.

The problem was a typical one. The estate consists of 27 four-storey blocks, housing 5,000 persons. The site is bounded on all sides by railway lines and a cemetery. It was built *only ten years ago*, but has no church, community centre, cinema, or pub. At first there was no school and there are still no playing-fields, gardens or allotments. There are only six shops. The flats are not particularly ill-planned, but have no pram sheds, and the only shelf in the kitchen [this is 1937] is seven feet from the floor.

The tenants come mostly from the poorest classes. Tenement Town is socially, as well as physically, an island. Most people moved there tried to move again as soon as possible. Mobility in 1937 reached 33 per cent. "Re-housing?" said one, "Bloody warehousing, I call it." "A dump," said another, "with nowhere to go and

nothing to do." In his slum he had belonged to a darts club, his wife to a mother's meeting, his children went to a Sunday school.

The spirit of the place was lifeless. Attempts from outside to start community associations or church clubs failed. The blitz—bang goes another popular cliché—brought no new sense of neighbourliness. In some ways it made things socially even worse than before.

The Pacifist Service Unit—whose religious faiths vary from Catholic to Quaker—decided to have a try, and the last half of the book is a record of their success. For success it must be called, although they do not use the word. They wasted no time raising eyebrows over an architect's incompetence or a housing committee's stupidity and negligence. A children's club, a youth club, a church club were started, and began to flourish. Local authorities were pestered successfully for grants and equipment and playing space. The future of Tenement Town begins to look more cheerful, though the battle is by no means completely won.

What is the recipe of success? With some of the ingredients we are already familiar—that one-class estates are a criminal mistake, that communal facilities such as schools, shops and playgrounds are as essential as houses, that flats are not suitable for families with children. But the PSU add valuable comments to these. First, let your clubs, they say, be *clubs*, and not just clinics for problem and delinquent children. Second, avoid, if you can, using the school as premises. It has unsatisfactory associations for many club members, it is unsuitably furnished, and, above all, it isn't *yours*. Third, and most important of all, go and live in the district *yourself*. Do not try and run the club from outside.

This little book describes how they practise what they preach. It will teach architects and planners as much as a whole bookshelf of so-called social surveys packed with statistics on the cinema-going habits of teen-agers and the number of times that cold-water taps in an industrial suburb are re-washed. It is a salutary thing to be

reminded that, while scientists build laboratories to research into the optimum height for sinks, while planners fiddle with their "rond points," and sociologists count their taps and teenagers, while politicians exchange housing figures in prep-school backchat, and architects scramble for key positions and forget the pram sheds, that real creative social work is daily done by a few devoted enthusiasts in hundreds of nameless areas.

I do not know where Tenement Town is—though I have my suspicions. I do not know who Mr. White is, nor, to my shame, had I ever heard until now of the Pacifist Service Unit. But they all deserve congratulations on a corporate triumph over fearful odds—and I am sure they would prefer this to congratulations—may the lesson they teach be taken to heart by all of us.

HOW TO DRAW HOUSES

Mr. Sydney Jones—artist-author of the latest Studio publication *How to Draw Houses* [2s. 6d.]—is described in the Blurb [presumably on the strength of his well-known books on London] as a modern Hollar. Whether you think this an accurate estimate of his stature as a topographical draughtsman—or just a Hollar mockery—you will, I think, agree that, as the drawing reproduced below indicates, his skill with the soft pencil is considerable and his eye for romantic compositions and textures is unerring.

Both are given full play in this little volume, which shows that Mr. Jones's architectural tastes are, like his technique, cosy rather than modish. Outside he favours the leaded light and the picturesque silhouette; inside, the ingle-nook and the gate-legged table. Briefly



From *How to Draw Houses* reviewed by Astragal this week.

and clearly he explains, with the help of admirably reproduced sketches, how to draw such features, and though he has his failures—among them trees, flowers and that drapery he substitutes for tiles when drawing roofs—his hints on proportion, perspective and shadow-projection are sound and to the point, and every page is infused with a homely Edwardian charm which in its gruesome way is rather pleasant.

Those children of yours who were whipping out pretty creditable Pipers by the age of seven might well take a course of Sydney Jones to remind them that architectural drawing is sometimes more than black skies and ghostly windowless façades.

PLASTICS EXHIBITION

Astragal's beauty prize at the *Daily Sketch* Plastics exhibition at Dorland Hall goes unhesitatingly to the medical instruments. Thus that unself-conscious lady Fitness for Purpose, with her natural complexion and purity of mind, wins again in spite of the grey streaks in her hair.

Otherwise, the exhibition does not provide a very rich aesthetic display. However, it is a very useful show, being the first post-war exhibition devoted entirely to plastics. Among other things, it is good to learn that plastic surfaces are not inevitably hard and lifeless, and can be used as transparent skins to cover and protect fabrics of any texture or pattern and even wood veneers. In fact, as one exhibit shows, you will soon be able to cover your bathroom walls with veneers without worrying about the steam's effect on them.

ASTRAGAL



LETTERS

Two Architects

Gerald Cooper,
Principal, Wimbledon School of Art

Richard Lonsdale-Hands

Two Architects' Experiences with an Urban District Council

SIR.—As two architects, of what may be called the younger school, having no professional connection with each other, but who have suffered virtually the same experience at the hands of the same urban district council of a small country town, we feel that this experience deserves publicity.

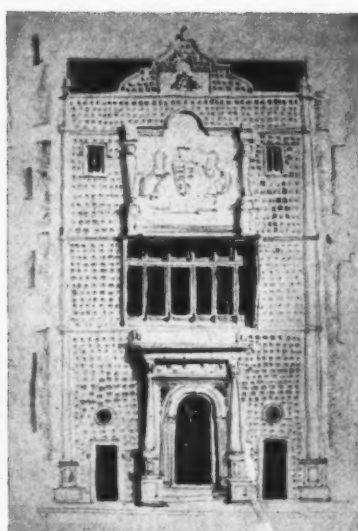
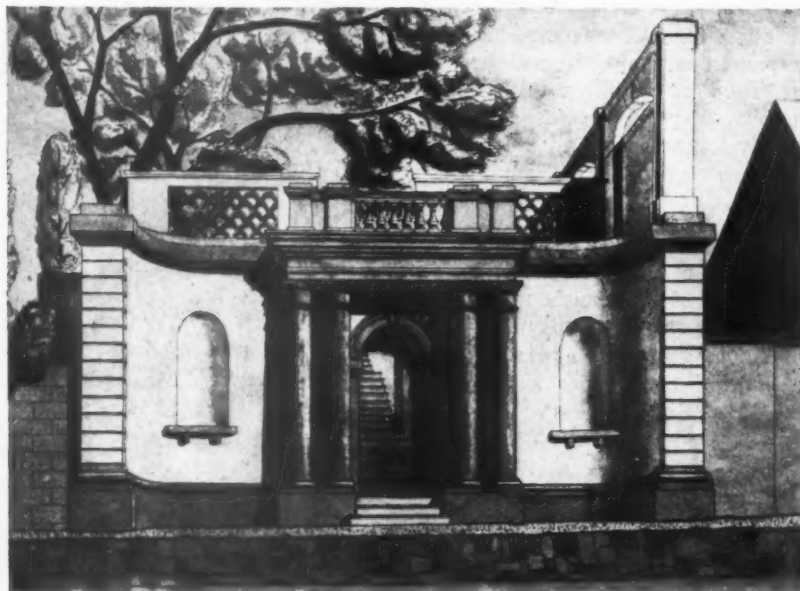
We both submitted designs for small houses to the local authority for approval under their bye-laws, in one case in 1939, in the other a few weeks ago. Both houses were of a modern, though by no means revolutionary, design. The first was a two-storey building with pitched roof and gable ends; brick walls to the ground floor and weather-boarded above. The second was a bungalow with low pitched roofs, partly one-directional. Both had fair-sized windows. The first was very exposed to the road, the second completely hidden.

Both applications were refused because "the elevations, in the opinion of the committee, were very unsatisfactory and the building, if erected as shown, was likely to interfere with the amenities of the district." It was the Council's Engineer and Surveyor, whose recommendation is invariably acted upon, who was responsible for this verdict.

In such a responsible position one would expect to find at least a person capable of understanding the appearance of a building from a study of the working drawings, if not possessed of a trained aesthetic judgment. It appeared that he was neither.

In the course of talks with the Surveyor after the refusal in each case, we discovered that his objections were based almost entirely on the appearance of the roofs, and in the case of the bungalow, on its elevation to the road from which it was invisible.

AT 'THE ANNUAL EXHIBITION OF AA MEMBERS' SKETCHES



As his inability to read the elevations became evident during these talks, it was decided that a perspective be submitted. Pretty watercolour sketches, accurately set up, were prepared; in the first case with the building exactly as shown on the working drawings; in the second with some minor alterations such as a completely flat roof, a small chimney projection and shutters on both sides of a window. Each was shown with a wealth of roses around the door and plenty of Character and Charm. At the council meeting following the submission of the perspective the design was approved in each case.

What are the conclusions to be drawn, and what is the solution? Perhaps the simplest suggestion is that all designs, except perhaps those with the bye-pass hipped roofs which seem to be universally accepted, be submitted with perspectives as a matter of course. But this, apart from the extra work borne by the architect, would merely serve to condone the Surveyor's shortcomings. It seems that questions of aesthetic taste are to be left in the hands of unqualified men, at any rate in the case of the lesser local authorities, unless qualified architects be appointed as advisers on these questions. It appears unlikely, however, judging by the salaries offered even by borough councils, that qualified architects would be tempted to take such a post. In view of the big housing programmes which local authorities now have to undertake, the aesthetic future looks pretty bleak, especially when one considers the majority of the recent housing designed or approved by the council of which we write.

TWO ARCHITECTS

Prospective Students

SIR,—Mr. Lionel Hemmings states that a considerable number of prospective students cannot get schools.

There are schools not yet recognised, however, with fully qualified staffs, who can and do give training quite equal to that of the recognised schools for a full course, the students qualifying in the usual manner at the end of the course.

Most local education authorities are making such instruction available, and I suggest that enquiries directed to them might yield helpful results.

GERALD COOPER,
Principal,
Wimbledon School of Art

Design in Air Transport

SIR,—Much as I appreciate the compliment of being referred to in your Notes and Topics as the head of the team of designers responsible for the exhibits at the BOAC *Design in Air* display, I hasten to assure you that such is not the case.

Together with my associate designer, Mr. John Tandy, I carried out the interior styling of the Tudor II, and I was also responsible for one or two items such as the inter-station coach and seaplane launch. Mr. Tandy designed the Tudor II curtains and the waiting room chair and table.

Credit for the mass of the exhibits should go to BOAC's own Design Committee and its permanent consultant, Mr. Kenneth Holmes.

London

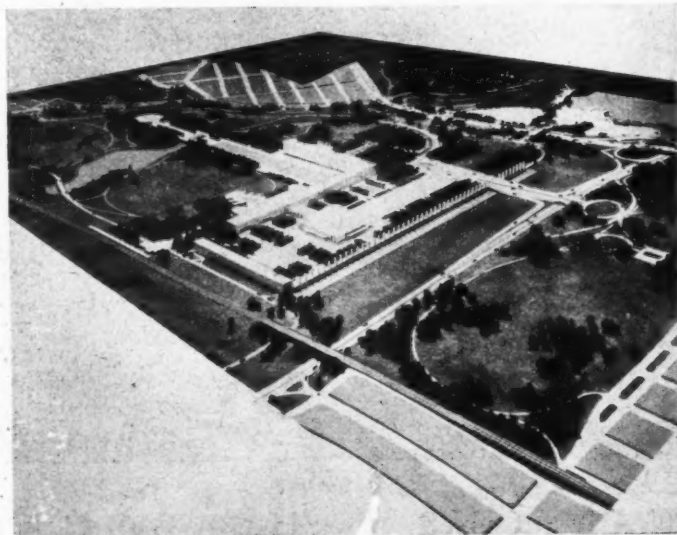
RICHARD LONSDALE-HANDS

At the annual exhibition of sketches and photographs of Architectural Association members at Bedford Square. Top, entrance to Northwood Park, Isle of Wight, by T. O'Toole. Centre, sketch by Hugh Casson. Bottom left, Figurehead, H.M.S. Dockyard, Bermuda, by Fello Atkinson. Bottom right, King's Lynn by I. C. Baker.

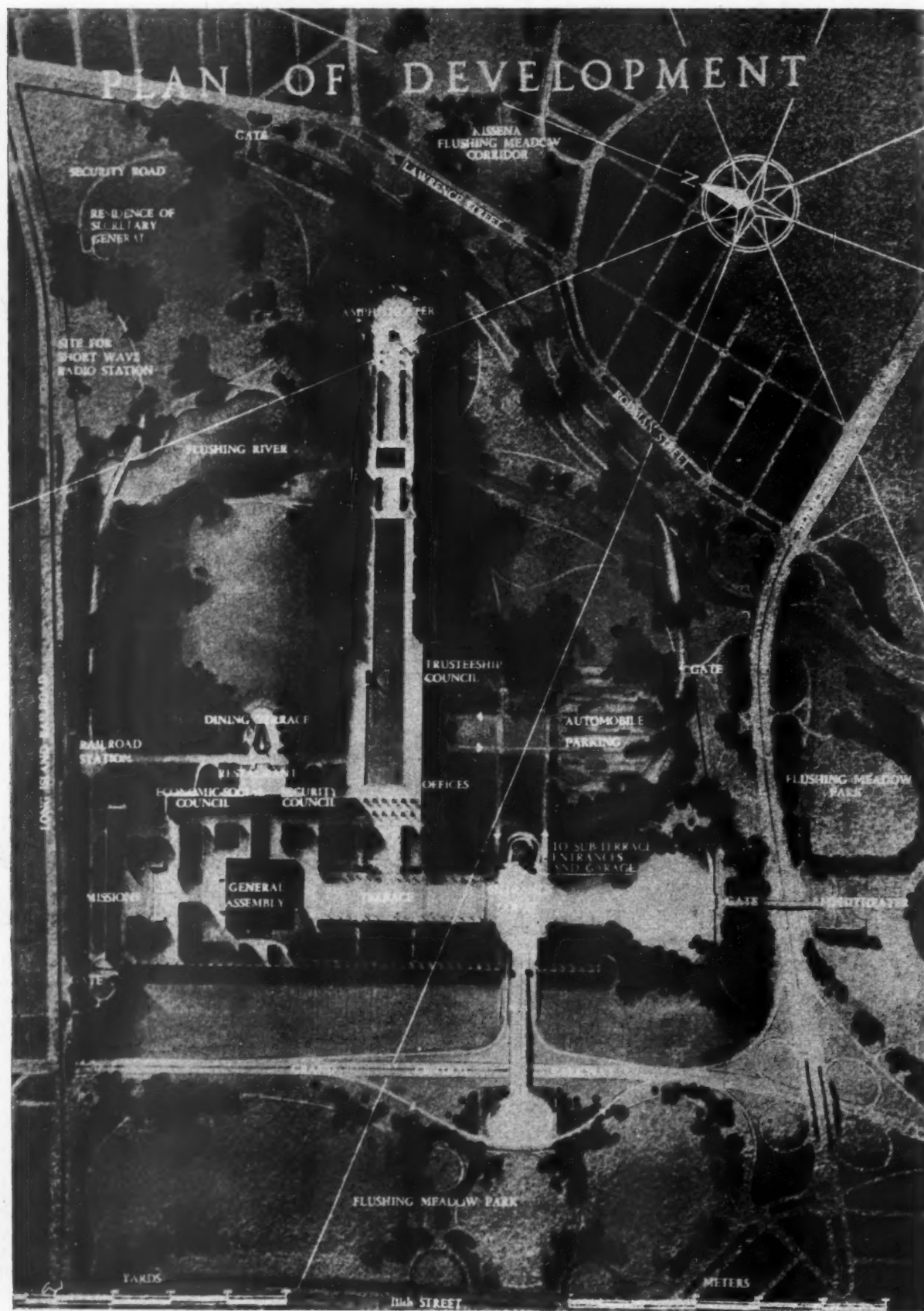


UNITED NATIONS HEADQUARTERS

NEW YORK SITE SUGGESTED



The Mayor of New York with the full approval of the Board of Estimates has offered a section of Flushing Meadow Park, Queens, N.Y., for the proposed permanent home of the United Nations. The site, and present improvements, if accepted, will be transferred to the United Nations without cost. Architects and engineers have prepared a comprehensive plan to show how the various divisions of the United Nations could be accommodated in park-like surroundings at the site. Provision is made for parking space, under cover for 1,000 cars and an open air car park for 1,200 cars. It is estimated that the project can be built on the land for \$65,000,000. If accepted the site will be made free of all tax which is normally levied on privately owned real estates.



UNITED NATIONS HEADQUARTERS

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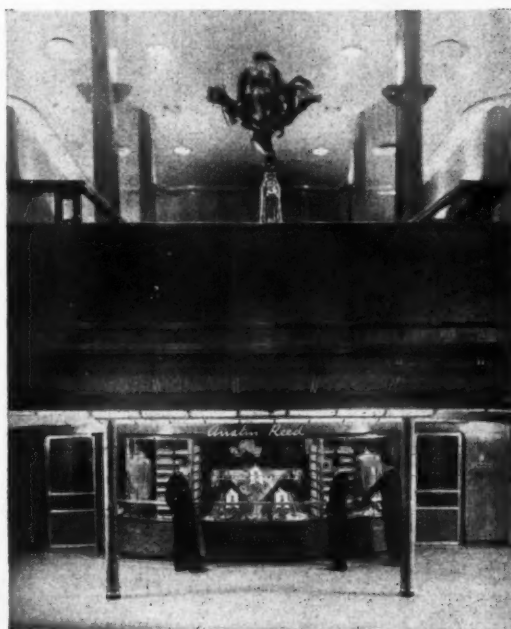
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AUSTIN REED SHOPS ON THE S S QUEEN ELIZABETH DESIGNED BY P. J. WESTWOOD AND SONS

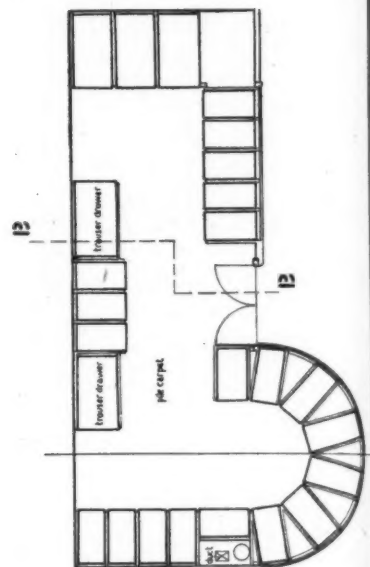
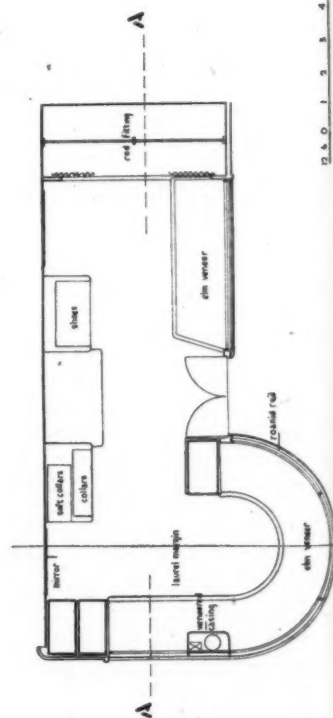
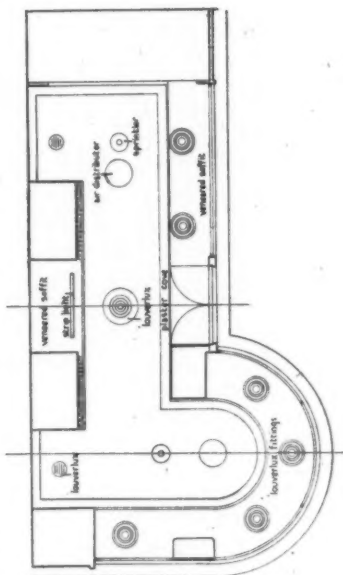
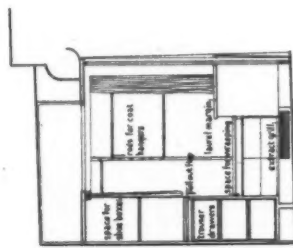
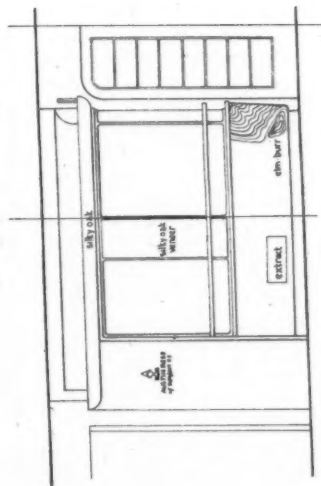
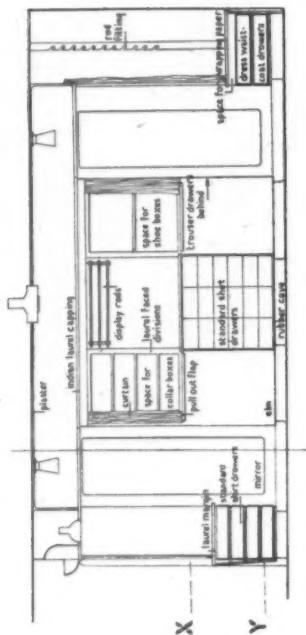
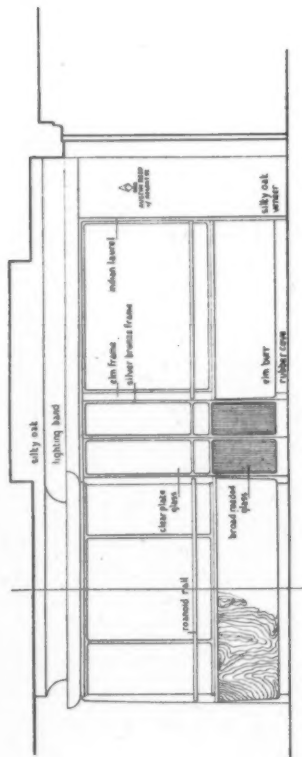
Two shops are provided; one on the main deck and one on the promenade deck. In designing the shops the biggest problem was to accommodate a serviceable number of drawers and fixtures and still leave room to move inside. Not only must there be physical room but a feeling of space must be attained so that these small shops do not look like mere kiosks. The bowed shapes of the main deck shop give a spaciousness which was lacking in earlier rectilinear designs. The shops are fitted with trays and drawers in standardized sizes to take flannel trousers, shirts, collars, etc., and fitted cabinets to take coats on hangers. These fittings had to be carefully worked out to fit between ventilating trunks and the multiplicity of services of all kinds which are invariably encountered in working on board ship. Trays on small metal runners are placed in the windows and carry a great deal of stock without spoiling the view of the interior from the outside. A stockroom is provided

in the hold from whence the two shops are supplied. The use of English elm veneers with mahogany surrounds gives the masculine character to the design required by the firm. In the main, straight grained veneers were used, but on the curved bow and the doors of the main deck shop, elm burr was used to give extra richness, and tones well with the lighter veneers used in the adjoining parts of the ship. The general lines of the exterior of the main deck shop were designed to conform with the treatment of the main staircase for which Mr. Grey Wornum was the architect. As a matter of detail, it is interesting to note requirements peculiar to ships:—All drawers and trays are fitted with special ball catches to prevent their sliding out when the ship rolls. Sliding doors can only be used safely running fore and aft, grab rails have to be provided inside and out, and electric-light fittings must be of robust construction to withstand vibration.



Top and bottom, two views of the shop on the Main Deck.

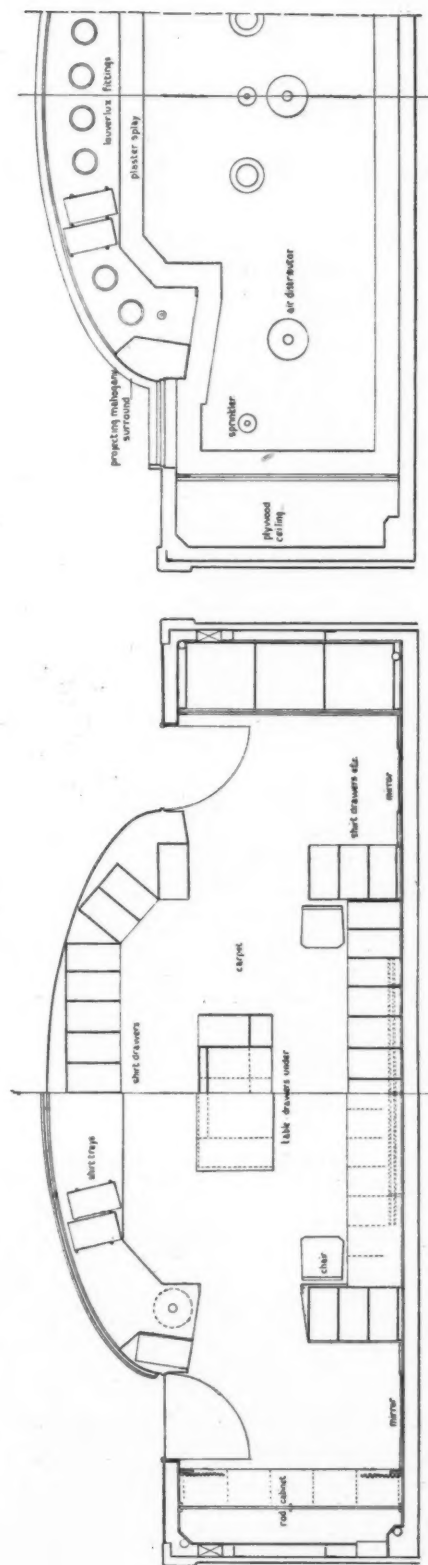
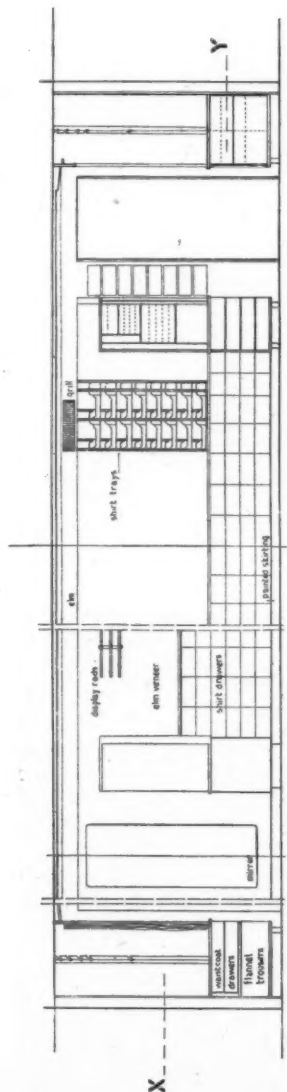
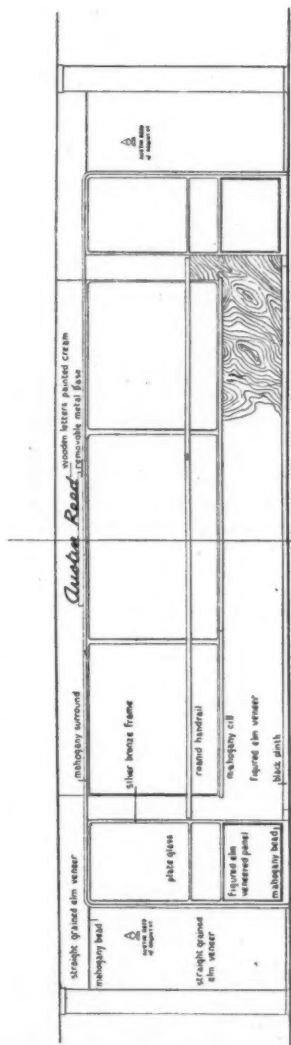
Shop on Promenade Deck



Year	1	2	3	4	5 ft.
1940	1	2	3	4	5 ft.

Shen on Main Deck

Shop on Main Deck



AUSTIN REED SHOPS: SS QUEEN ELIZABETH



Top, shop on Promenade Deck. Left, interior of shop on Main Deck.

AUSTIN REED
SHOPS: SS QUEEN
ELIZABETH



CINEMA

AT FREETOWN, SIERRA LEONE

BY GORDON MARRIOTT
AND J. A. HADDY

GENERAL—Freetown itself, with a population of 100,000 people, up till now has not had a cinema in the true sense, though it does possess a hall which was used for film shows. The seats provided were the ordinary chairs, off which the native occupants invariably fell during a gangster chase or a hold up, and it was thought that the provision of proper spring tilting cushioned seats in the new cinema might at first dampen the fun. However, the educated Creole native undoubtedly appreciates the new form of reclination, for the natives visiting this country take home with them glorious descriptions of Heaven's Seats. The adjoining property owned by the promoter of the cinema, includes a cold store having modern refrigerating plant with which it is proposed to link the air conditioning equipment of the cinema.

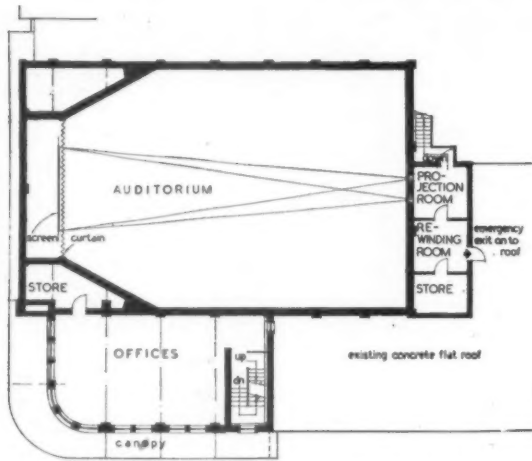
CONSTRUCTION—Walls of pre-

cast concrete blocks were chosen; finished externally in a coloured cement using the fine white textured local sand. The roof is of steel lattice trusses, freighted in small pieces, bolted together and then hoisted in position on the job with a covering of asbestos to angle iron purlins. The interior is simple, and the suspended ceiling runs from the rear auditorium wall right into the proscenium arch, and is of a patent expanded metal secured to straps hung from the lattice trusses.

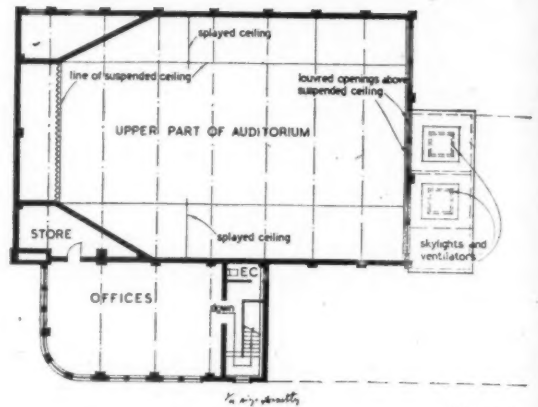
FINISH—Walls and ceilings are finished in a patent fibrous plaster with the rear wall in an acoustic fibreboard. All surfaces are gun

paint sprayed. All doors, door frames and windows are in sherardised steel. The interior is in three colours: pink walls and ceiling, with low black wall dado, aluminium stars on the ceiling, aluminium coloured curtains, and pink and black upholstery; rust pink carpet.

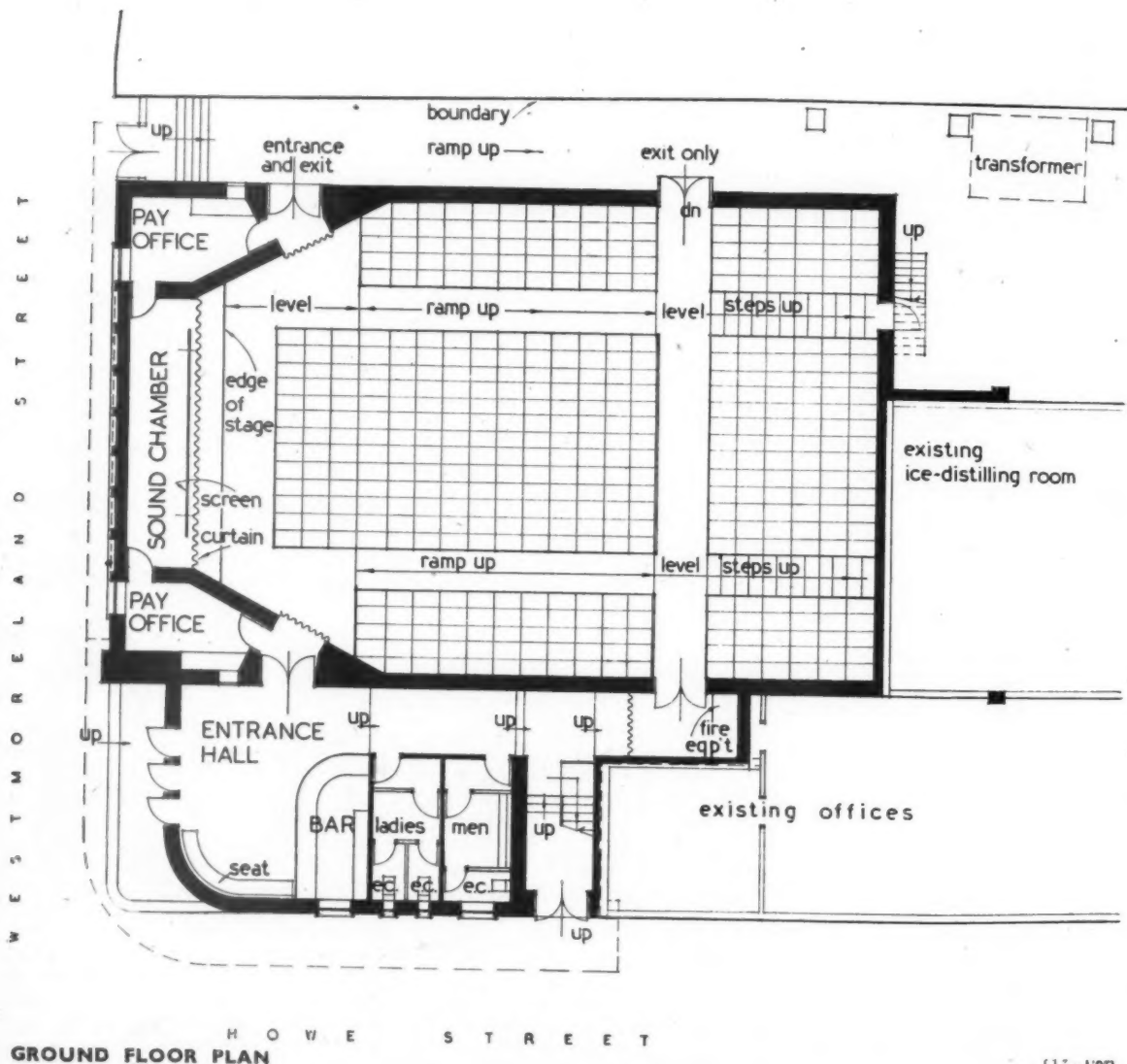
ORGANIZATION—The building organization consisted of a European foreman and local native labour. Drawings and material orders were executed by the architect's United Kingdom office, with correspondence by Air Mail and cable. Almost all materials and fittings except timber had to be sent from this country.



FIRST FLOOR PLAN



SECOND FLOOR PLAN



GROUND FLOOR PLAN

CINEMA AT FREETOWN, SIERRA LEONE

INFORMATION CENTRE

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

PHYSICAL PLANNING

2813

New Towns

FACTORS INFLUENCING THE LAYOUT OF NEW TOWNS. *Association for Planning and Regional Reconstruction. (APRR, 1946.)* Paper submitted by British Committee to International Technical Congress, Paris, September 16-21, 1946. Introduction. Lessons of inter-war housing estates. Growth of new towns. Selection of industry and population. Transport. Diagrams. Very clear and informative statement of planning policy.

New towns should not be mere satellites, but their location should be such that they have convenient access to and adequate communications with a larger urban centre. It is desirable that a new town should have its own cultural and social life from the outset which can only be achieved if it is located outside the immediate sphere of influence of the big city, and if it possesses its proper equipment of industry, public and social services and amenities at an early stage. Location and design of a new town should express its potential function as a service centre for the surrounding villages and countryside, and as a stimulant for the expansion of the rural economy of the area. Its siting should be related to the landscape background taking into account considerations of shelter, values of contours, grouping of forest trees, and preservation and development of available water frontages and streams.

The shortcomings and deficiencies of inter-war housing estates as far as they are relevant to the planning of new towns provide a list of mistakes to be avoided in future, namely: the unbalanced structure of dwellings in relation to size of households; the provision of mere dormitories unrelated to workplaces; the conspicuous lack of services and amenities; and the administrative difficulties encountered because the estates were not units of Local Government.

The paper suggests the development of a new town in three distinct stages. During the first stage all essential buildings and amenities as well as provisions for all statutory services should be completed throughout the town. The population should reach the size provided for. During the second stage the life of the new town should become integrated with that of the surrounding countryside, and an exchange of services and labour should take place. During the third stage (which should ideally be reached about 5 to 10 years after the first settlement has taken place), voluntary and spontaneous social activities, which will have grown up in the meantime, should be organized more definitely and new buildings and sites should be developed for that purpose.

With regard to the selection of industry and population, a policy of full employment should be combined with scope for

individual initiative. The new town should have an industrial structure that is balanced both in respect of the quantity and quality of its employment. An endeavour should be made to ensure that no one industry should dominate the life of the town, but that the main types of industrial activity are each represented, such as extractive industries (including quarrying and gravel working); manufacturing industries, wholesale distribution; and service industries (including building, retail trades and transport). The paper suggests an industrial policy based on the following points:

(a) Opportunities for work for all sex and age-groups.
(b) Opportunities for varying skills and aptitudes.

(c) The employment of a reasonable proportion of population in industries that are not subject to marked trade fluctuations.

(d) The establishment on the other hand, from a national point of view, of some industry which is subject periodically to severe seasonal fluctuations to lessen the risk implied by such industry by means of geographical dispersal. This type of industry should best be brought in during the second stage of the town's development.

(e) The encouragement of industries ancillary to the principal industries once the latter have been established.

The selection of industry will determine the selection of population. In the early stages control of population settlement will be essential to assure a diversity of household types and of types of skill and train-

ing. Experience of inter-war housing estates has shown that it would be an advantage if a considerable proportion of new town immigrants came from districts which are neither widely dispersed nor socially differentiated.

With regard to industrial layout it is suggested that a new town should have two or three industrial areas each provided with adequate road access, water and power, and with scope for considerable flexibility in layout. Sites should also be available for industries likely to cause nuisances. Provisions should be made for certain small service industries within residential areas, including lock-up workshops, sheds and yards. Ancillary requirements of industry should be located either within the industrial area or, more economically, in a business district between industrial areas. Such ancillary requirements include banks, restaurants, a labour exchange, post office, police station, fire station, ambulance, hostels and laundries.

Transport facilities for a new town should take into consideration the reception of raw materials; the distribution of finished products; and the "pull" of the nearest big city. It is, therefore, assumed that a new town should be on a good through road or, better still, a focal point in the transport system. Special allowance should be made for through traffic. The relationship between the size of a town and the traffic volume entering it (but not passing through) should be carefully studied in regard to existing towns. In this way the design of roads for new towns could be undertaken with a reasonable idea of the amount of local and semi-local traffic to be placed upon them. Interchange facilities between one form of transport and another should be provided.

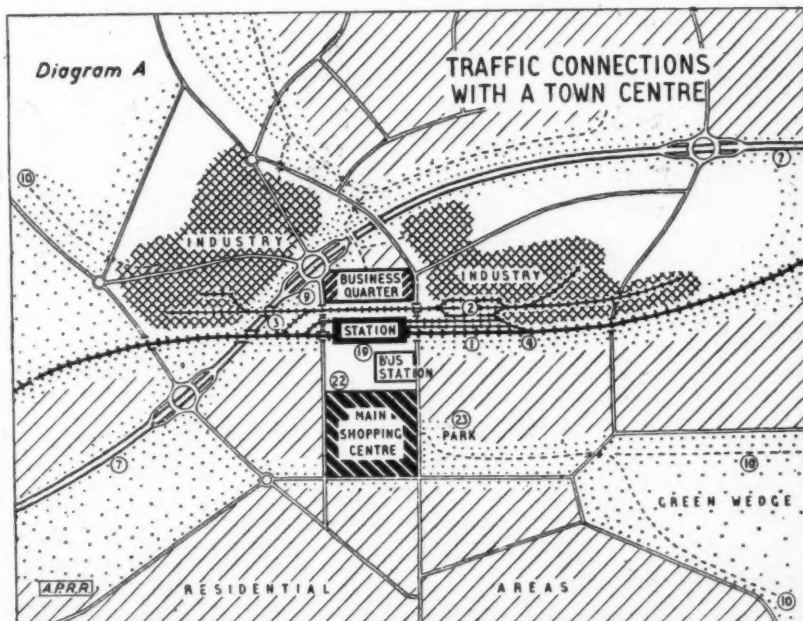
The two diagrams accompanying the paper illustrate very clearly the following points regarding siting and layout of a new town in so far as they affect transport and the main shopping centre:

The importance of a through line and the siting of a new town at a junction.

The grouping and accessibility of goods sidings.

The allocation of space for future railway expansion.

The necessity for reasonably direct road access from other towns.



From the APRR paper on Factors Influencing the Layout of New Towns. Diagram illustrating traffic connections. See No. 2813.



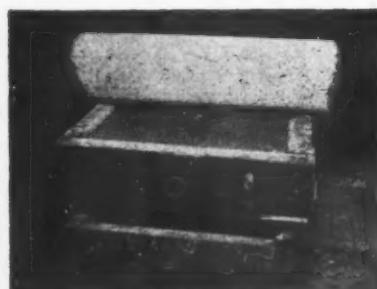
1. Laying brickettes for a wall unit in a steel mould.



2. Grouting in the brickettes in their steel mould.



3. Filling the mould with lightweight concrete.



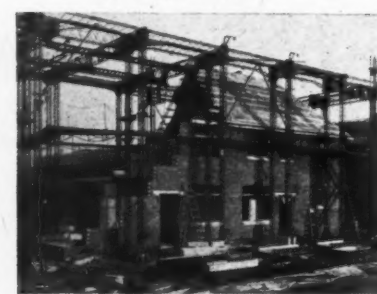
4. Rolling the surface for one coat of plastering in situ.



5. The unit, steam cured for speed of setting, is rolled on to the site on a conveyor.



6. The prefabricated wall unit being laid in a prototype house.



7. The prototype house during construction showing the steel gantries in position.



8. A completed pair of prototype houses at West Bromwich.

CURRENT TECHNIQUE

This Section refers briefly to technical aspects of current work of interest. The subject will usually be dealt with later in greater detail.

BRICK UNIT SYSTEM

Smiths' Building System involves the production in moulds and erection by gantries of 6 ft. x 2 ft. brick-faced wall units. These units are produced by factory line methods and relatively little skilled labour is required. The information given here is based on the Ministry of Works housing contract now being carried out at West Bromwich, but the system is applicable to structures other than dwellings.

The principal stages in the production of the wall units are shown clearly in the photographs. After making up, the units are cured in steam ovens at a temperature of 190° F., and then returned to the conveyor line for stripping. The moulds are finally restored to the main circulation and the completed wall unit is ready to go on to the job. The majority of the units required for housing are of the maximum size (6 ft. x 2 ft.) and weigh approximately 6 cwt. The slabs are 6 in. and 8 in. thick for external walls, representing a backing of 4 in. and 6 in. foamed slag concrete. Internal walls are 4 in. thick for load-bearing partitions and 3 in. for others (being without the brick facing). All the wall units are cast in the same moulds, the latter being blocked off as required. There are special moulds for certain components such as lintols, chimneys, etc. In each pair of houses of the MOW pattern there are approximately 400 slabs.

On the site, units are loaded from lorries on to roller conveyors arranged at appropriate points which convey the units on to the gantry. Each slab is slung from the gantry in such a way that it may be lowered into final position, only slight guidance being necessary.

The erection of the shells, including internal walls, first floor and roof carcase, is divided into six 6-hour stages, the initial stage being the erection of the gantry. The erection sequence is designed around the use of 4 gantries. Working on this basis an average of 4 house shells a week have been completed at West Bromwich (a shell is by no means a finished house, of course). Floors and roofs are of normal conventional construction. It is, however, possible to pre-cut, and to some extent pre-assemble all carcase work to a jig as the system allows of a considerable degree of precision.

The system is economical in the use of skilled labour. For the 4-gantry unit 4 bricklayers and their mates and 8 carpenters and their mates are needed, the remainder of the gang being labourers.

The gantries themselves are of welded $\frac{1}{2}$ in. lattice, made to a jig by unskilled labour and with adequate maintenance have an estimated life of 4 years.

The unimportance of a geometrical arrangement of the general road layout.

The provision of through roads designed to be clear of frontages and parking by their function in the plan.

The provision of local roads designed to be clear of through traffic by making them unattractive as through roads.

The advantages of a road for through traffic passing through the centre of the town, thus providing a possibility of link roads to nearby premises.

The location of cycle tracks not alongside roads but in open spaces and green wedges.

The design of shopping streets dis-

couraging through traffic but allowing for bus traffic.

The comparative vicinity of the shopping centre to the through roads.

The location of shopping ways for pedestrians on through pedestrian routes and not in cul-de-sac arcades, for instance.

The provision of shops on both sides of streets.

The limitation in width of shopping streets so as to make them cosy.

The allocation of parking space near the shops, either in the street or in the nearby reservation.

Good secondary access for goods delivery

to shops.

Easy interchange between one transport system and another.

The design of railway and bus stations as single units.

The siting of the bus station near both shops and railways.

The continuity of shops unbroken by other buildings or open spaces.

The location of the shopping centre near, but not on railway and bus stations, and near to open spaces.

The provision of a site for a covered market near the railway and bus station and the main shopping centre.

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"VITROLITE"



"Vitrolite" is a coloured opaque glass wall lining, with a hard, brilliant, fire-finished surface, for use in interiors or for exterior facing of buildings. It is easily fixed.

The surface of "Vitrolite" is unaffected by water, soap, grease, damp, steam, all ordinary stains and acids except hydrofluoric. It is not only decorative, but very hygienic and easily kept clean. "Vitrolite" is particularly suitable for hotels, schools, restaurants, bathrooms, lavatories, operating theatres, hairdressing saloons, kitchens and for corridor linings, shop fronts, facias, counters, bars, table-tops, and for all kinds of display purposes.

The production of "Vitrolite" is being gradually restored. Black and white "Vitrolite" are already available, and a range of colours will follow in the autumn.

"Vitrolite" is manufactured by Pilkington Brothers Limited, of St. Helens, Lancashire, whose Technical Department is always available for consultation regarding the properties and uses of glass in building.

Supplies are available through the usual trade channels.

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MATERIALS

2814

Plastic Bonding

PLASTIC BONDING OF LIGHT METALS. E. Preiswerk and A. von Zeerleder. (*Plastics*, July, 1946, p. 357.) The physical properties and the making of joints in light alloys with Araldit CIBA. Photographs of typical applications.

This plastic bond, the chemical composition of which is not given, produces joints with the application of heat only; no pressure is needed except to keep the parts in position. The bond becomes liquid at 100 deg. C., and may be brushed or sprinkled on to the parts, which should be preheated to the same temperature. No treatment of the surfaces to be joined is necessary other than dusting and degreasing. For small parts, curing is carried out in a few minutes with a modified plumber's torch. Strength of joint falls off at temperatures over 100 deg. C.; water and organic solvents show negligible shear strength losses after 10 days. Strength of joint approximates to that of soft solder.

2815

High Alumina Cement

HIGH ALUMINA CEMENT IN HOT COUNTRIES. (*Concrete and Construction Engineering*, p. 210, August, 1946.) Construction of railway tunnel in Iraqi desert. Low strengths obtained with concrete made with high alumina cement. Decrease in strength of high alumina cement with increase of air temperature within range of 60 to 100 deg. F. Short article.

High alumina cement was used in the concrete because of the presence of calcium sulphate in the soil, but it was observed that as the work proceeded throughout the year, the strength of the concrete varied according to the air temperature, and it was thought that the strength might also be affected by constant dampness and humidity in conjunction with a hot climate. The author concludes that there is nothing to warrant a higher working stress than 600 lb./sq. in. for high alumina concrete in compression at shade temperatures higher than 85 deg. F., and that there is normally no advantage in using high alumina cement compared with Portland cement when work is carried out at high temperatures. The article is not long enough to give very complete data.

2816

Timber

WORLD TIMBERS. Vol. II. (*Timber Development Association*.) A further 10 leaflets, see No. 1807:22.2.45.

PLUMBING and Sanitation

2817

Site Investigation

SITE INVESTIGATION APPLIED TO SANITARY ENGINEERING. S. J. Button. (*Journal of the Institution of Sanitary Engineers*, July, 1946, Vol. XLV p. 394.) Elementary principles of soil mechanics. Indication of site investigation methods. Geophysical exploration by electrical methods. Paper summarises principles and methods in non-technical language. Diagrams.

For those needing a non-technical summary of some of the principles of soil

mechanics and of the technique of site exploration this paper may be of value. The limitations of geophysical exploration are stressed.

2818

Intercepting Trap

THE INTERCEPTING TRAP AND DRAINAGE COSTS. John Wilton. (*The House Builder*, July, 1946, p. 132.) Cost of providing interceptors. Described as obsolete in modern practice. Summary of findings of Departmental Committee of 1912. Circumstances in which interceptors may be necessary. Argument for their omission in other cases. Not illustrated.

In 1912 a Departmental Committee of the then Local Government Board, after long investigation, reported decisively against the use of interceptors. This article points out that in spite of this such traps are still frequently installed, and may even be insisted upon by the local authority. The arguments for and against intercepting traps are shortly summarized, and the suggestion made that they should finally be regarded as obsolete.

2819

Manholes

MEANS OF ACCESS TO THE DOMESTIC DRAIN. John Wilton. (*Architects' Journal*, August 29, 1946, p. 151.) Necessity for manholes to domestic drains questioned. Improved drain design and execution makes need for access infrequent. Majority of manholes built redundant. Cost of manholes on traditional scale may exceed cost of drains. Lessons of American practice. Need for statistical investigation into frequency of stoppage and use of manholes. Possibility of reducing housing costs by rational approach.

The argument here presented is that the traditional method of providing manholes on domestic drains is a survival of days when drains were ill-designed and constructed, and stoppages therefore frequent. Modern methods and precautions reduce the occurrence of stoppages almost entirely to cases of misuse of drains. As the cost of manholes can be as much as £50 per house, a reduction in their number might effect substantial savings over the whole housing programme. A case is made for statistical investigation of the occurrence of stoppages in drains, and for the reduction of manhole provision to a normal of one manhole per dwelling of standard size.

2820

Water Treatment

WATER TREATMENT AND FILTRATION. W. Mackrell. (*Journal of the Institution of Sanitary Engineers*, July, 1946, Vol. XLV, p. 416.) Principles of filtration by gravity and pressure. Chemical treatment. pH values. Sterilization. Water Softening. Useful as elementary introduction to subject.

Most books on water treatment and filtration are highly technical, and it is difficult to get a quick grasp of the principles upon which processes are based. The author may have realized this fact in attempting this elementary introduction to the subject. He has not avoided all the pit-falls involved.

2821

Copper Pipe-Line Services

COPPER PIPE-LINE SERVICES IN BUILDING. (*Copper Development Associa-*

tion. Publication No. 25. 1945.) Compendium of information on uses of copper pipe for plumbing, sanitation, gas services, and electrical conduit. Workmanship details, jointing, bending, and fitting. Pipe sizing. Design of installations. Comprehensive and practical. Extensively illustrated.

After describing the accepted techniques of bending, jointing, welding, and general fitting which are common to all uses of copper tubes, there follow chapters on cold water plumbing, hot water supply, heating installations, sanitation, gas fitting, and electric conduits. There are many tables of data, and the processes and uses are clearly illustrated. The chapter on sanitation is of particular interest in view of the adaptability of the material for use in prefabricated units. Much care has evidently gone into the preparation of the work, and it can claim to be a standard handbook on the subject.

QUESTIONS and Answers

THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential, and in no case is the identity of an enquirer disclosed to a third party. Questions should be sent to: THE ARCHITECTS' JOURNAL, 13, Queen Anne's Gate, Westminster, S.W.1.

2822

Building Licences

Q I have several clients for whom I have applied for licences to build small dwellings for their own occupation. The local council has refused to grant these licences "in view of instructions received from the Ministry..." The builders concerned are in each case ready and willing to undertake the jobs and have had to stand men off as work is not forthcoming. I should therefore like your opinion on the following points:—

(a) Does the Ministry of Works or the Local Authority have the last say in issuing licences?

(b) Can they legally refuse to grant a licence? If so, for what reason?

(c) Can the builders sue the Ministry or Local Authority who refuse to grant the licence on the grounds of "obstruction of their lawful occupation," and what do you consider would be the outcome of such a case?

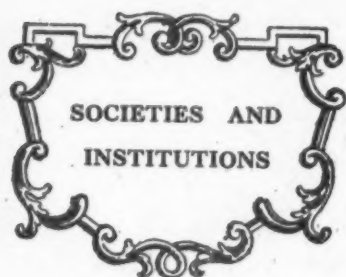
A The position at the moment is that in each area a small percentage of the houses that are to receive licences is allocated to private building. When this number has been reached no further licences can be issued.

The answers to your questions, therefore, are:—

(a) The Ministry of Works has the last say in issuing licences.

(b) It can legally refuse to grant a licence for the reason stated above, the cause of this being the lack of labour and materials generally throughout the country.

(c) We do not think that there would be a case against the Ministry of Works as its reply would be that there is enough work on housing to occupy all building operatives available.



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

AA

E. Maxwell Fry and Jane Drew

October 30, at 36, Bedford Square, W.C. Talk on PLANNING AND HOUSING IN WEST AFRICA, by E. Maxwell Fry and Jane B. Drew, F.F.R.I.B.A. Chairman: Ralph Tubbs, Vice-President.

E. Maxwell Fry: The people with whom we were concerned on the West Coast of Africa were principally the people of the Gold Coast, who number about five million, and those of Nigeria, who number from twenty to twenty-two million. Their real contact with Europeans is of comparatively recent origin, dating from about the middle of the last century and growing in intensity as trade increased.

Our appointment as Town Planning Advisers came to us quite suddenly. I was expecting, as a soldier, to come back for a short leave in England and then to be sent to Burma, but instead of that I was appointed a Town Planning Adviser, and Miss Drew and I, with a staff of five Europeans and one African, a fully trained architect, started the work of town planning where there had previously been nothing of the kind. Our terms of reference were extremely wide. Roughly speaking, we were allowed to do anything we could to help town planning, architecture and housing in any of the colonies concerned, and all that was hoped was that we would work hard and do as much as we could. Miss Benson, who has since died, went to Gambia, Mr. Farms went to Freetown, Mr. Tetlow stayed in the Gold Coast, and Miss Drew and Mr. Harry Ford went to Nigeria. They collected all the information they could, and in Africa that means doing a great deal of talking.

In the case of Freetown we pieced together

about five maps on various scales in order to get one map which could be read with a sufficient degree of accuracy to be made the basis for a town plan. In some places such maps did not exist at all.

The members of our party concentrated on their various places for some months and then they came back to our headquarters at Accra, in the Gold Coast, where we had a very pleasant airy office. We talked and argued about our various problems and finally we got some plans on to paper. None of them was particularly daring or new. They were, to a very large extent, just the best we could do with a problem which had to be solved out of hand, with what information we could get and with what resources we had.

In some places, especially in Nigeria, the growth of population is so rapid and the expansion over the land so great that we had to do a kind of first aid planning, which consisted of making a pattern out of the various local ideas. We had to piece together various plans presented by local people to the District Commissioner and to make out of them some kind of pattern that might last for, say, fifty years, providing for parks, main roads, the railway, industry, and so on. We put that on paper and sent it to the District Commissioner's office, and after that anyone who brought in a plan was merely told, probably a little curtly, that this was the plan and he could follow it. People very gladly did that, because no one had been so kind as to help them in this way before. Therefore no plan was forced upon these people, but, rather than that, they were intensely grateful that the District Commissioner took so much interest in their problems as to provide a plan, and the District Commissioner in his turn was very grateful to us for getting him out of a jam which was growing worse and worse. The particular case I have in mind is north of the city of Lagos, which is growing at such a pace that it will become a political problem of some magnitude in a country where everything is not as happy as it should be.

Our problems varied enormously along the coast and in Gambia they were concentrated upon the outcome of building a great new transoceanic air port, which never materialised, so a great deal of the advice that we felt called upon to give the Gambians was of little use. We did tell them, incidentally, to tidy up their own little capital, Bathurst, and they are still engaged, I understand, in doing that.

With regard to Freetown, a very old centre, we realized that it was useless to do any planning until the people had got a decent water supply. The place has a rainfall of anything up to 250 inches, which falls in a remarkably short space of time, and the reservoirs are nearly empty two or three months later. Nearly everything in the place appears to go wrong. The climate is really desperate. When the rain is not falling the sun is shining too much. The town is rather overcrowded. Its connection with the hinterland is not a very direct one, and in peace time the harbour arrangements are so poor that the masters of ships will not trouble to call there. Before we could do any planning we had to make certain that the people got, first, a water supply, and, secondly, a deep-water quay for their harbour. Before we left, both these things were well under way. We then concentrated on the effects of moving the wharf from its present position to a new site further up the river and on making new roads in and out of the town, so that traffic could move freely, and we then dealt with the questions of slum clearance, new housing and the protection of the coast line. It will strain the resources of the colony to carry out these things, and it would be useless to propose more.

The Gold Coast is in a very different situation, because it is a comparatively rich

colony. There are towns there, such as Takoradi, Accra, which has a population of about one hundred thousand people and is the capital of the country, and Kumasi in the north, which are fairly well laid out and are capable of providing a sufficient income through the rates to carry out drainage and other things associated with European cities. In those towns we could provide a much more thoroughgoing plan, based on the different situations. In Kumasi, for instance, the centre of the town is threaded by a low valley that used to be a marsh; the marsh was drained and a railway put into the valley, which cut the place in two. We made two proposals. The first was to move the railway out altogether, but that would have cost a million or a million and a half pounds. We put it down as Scheme A, and that shocked the people so much that when they turned to Scheme B, which would cost only a quarter of a million pounds, it seemed to them to be a quite possible thing and, so far as we know, it is being put in the forefront of the town's policy. The towns of Accra and Kumasi have an African majority on their councils for the first time, so the Africans are meeting for the first time all the pains and tribulations of running a town and paying for it, and town planning has come at a very early moment in their education in council work, when it can really save them a great deal of money. The West Coast of Africa is an agricultural district and not, at any rate at the moment, an industrial one. The villages were mainly the care of Miss Drew, so I will ask her now to take up the story.

Jane Drew: At the present time in more than half of the West Coast of Africa the people are living in a tribal fashion. The West Africans are largely polygamists, and children are an asset. We were struck by the fact that the lives of the West Africans are exceedingly happy, although the people suffer from a very great number of diseases.

King Prempeh is the King of Ashanti, which constitutes one-third of the Gold Coast. We had a great deal to do with him and he made our town planning work very much easier. All the chiefs are under him. Our town planning was a co-operative effort, carried out with the good will of King Prempeh, the good will of the Africans and the good will of the British.

A typical African scene is a village street with its market. It is said in England that if you get two Englishmen together you get a club, and it is quite certain that if you get two Africans together you will get a market. The market goes on at night as well as by day; one can get along the streets at night and see the little lamps burning and selling still going on.

The indigenous architecture of Northern Nigeria is very beautiful. The houses are of two or three storeys and are made of mud. They need a great deal of repair and they are repaired every year with slime which forms at the bottom of the ponds. The medical people are now trying to put a stop to this, because the ponds breed mosquitoes. Thus Western life comes in and starts upsetting the existing tribal economy.

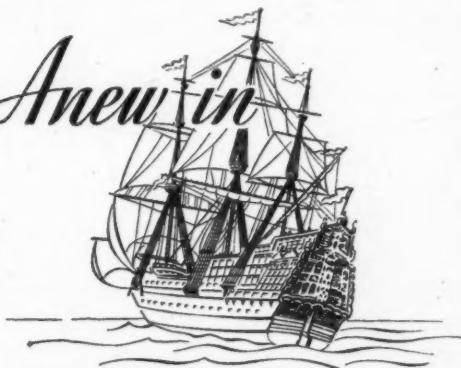
In some of the village streets a great deal of westernisation has taken place, one indication of that being the advertisements which are displayed. While we were in Africa we got laws passed to prohibit advertisements except on shops that were selling the products advertised.

We found there was a typical town plan which the Public Works Department had used everywhere. As the roads go across the contours, a great deal of erosion has been caused. In the case of almost all the towns we visited which were built on this plan, the roads behind the houses had become ditches owing to erosion. In some cases a man could walk along them and be below the houses.

One of the things that we learned in

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All you have to do is to fill in the names of the manufacturers in whose products you are interested and post the form to "The Architects' Journal"—we will do the rest.

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

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A.J. 14.11.46

Africa was that there could be no such thing as a standard model plan. All that one can have is principles, which have to be applied in different ways according to the nature of the land, the people, and their habits. We learned more and more the value of paying attention to individuality. We produced a model plan not as a standard but to show how roads should follow contours and that there should be as few roads as possible in a land which is very poor and cannot afford roads. We tried to bring in the idea of the community centre, and such things as the lorry park, the market and the shops off the main road, with a way in and out, and a children's playground.

The villagers everywhere asked us to help them. We held town planning exhibitions, the first one being in our headquarters at Accra. We showed models and drawings, and we had the offices decorated with beautiful tropical flowers. The chiefs came, in their lovely glittering robes, and were infinitely polite to us. They looked at the plans; first they looked to see whether their own houses had been touched and then they looked at the general plans, and they begged us to come and plan their towns and villages. It was quite impossible for us to meet the demand for that, so we have produced a book which we hope will help them. The chiefs did not mind it if they found that their own houses and compounds were affected by the plans; they were quite good-tempered about it. In this new village planning we tried to give the people the necessary amount of ventilation and yet to preserve the old compound idea.

The engineer in Ashanti to whom I referred has done a great deal to improve methods of construction in Africa by the use of stabilised earth and cement, and I am very pleased to know that two members of the audience this evening, Mr. Pott and his colleague Mr. Nurse, are going to West Africa in a fortnight's time to extend building research activities there.

ABT**C o n f e r e n c e**

The following is a summary of the Memorandum of Recommendations submitted by the London District Committee of the Association of Building Technicians for consideration at its Conference on Saturday, Nov. 16, on the IMMEDIATE POLICY FOR COUNCIL HOUSING AND REDEVELOPMENT.

Planning and Design: That all Councils should: (1) Create a self-contained Planning and Design Department to handle all technical and administrative work in connection with Housing and Redevelopment, under the control of an Architect/Town Planner of Chief Officer status. (2) Set up Housing Advisory Committees composed of technicians from the Planning and Design Department and representatives of the various interested local organisations. (3) Reconsider salaries and technical conditions as an essential pre-requisite to the obtaining of good technical staffs.

Execution of Building Work: (1) That all Councils should set up (or expand if existing) a Direct Labour Organisation, under the control of a Building Manager, with adequate labour, stocks of materials and plant. (2) That all Councils should call on the local Building Unions for assistance in the creation of a Direct Labour organisation and that Joint Production Committees should be a recognised part of such an organisation. (3) That this Conference should endorse the NFBTO claim of 3s. per hour for craftsmen as just in itself and as a necessary step towards the obtaining of adequate labour for Council work. (4) That this Conference should urge MOH to give every encouragement to the setting up of Direct Labour organisations by Councils.

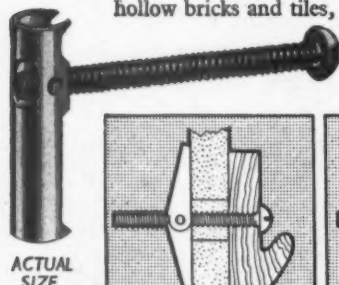
PERMANENT FIXINGS

Can now be made to Wallboards, Plaster Boards, Insulating and Laminated Boards, Hollow Bricks and Tiles

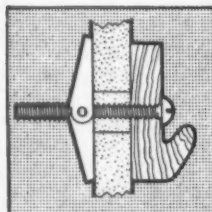
TOGGLE BOLTS

Rawlplug Toggle Bolts provide a simple means of making fixings to hollow partition walls or ceilings, asbestos board, hollow bricks and tiles, etc. They are ideal

because they distribute the strain over a wide area.

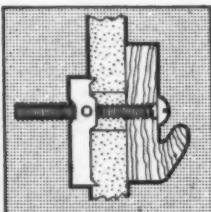


ACTUAL SIZE



SPRING TYPE

The wings of the toggle spring open at right angles to the screw when pushed through the hole.

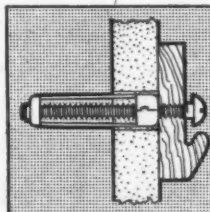


GRAVITY TYPE

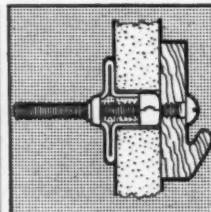
The toggle has a long end which falls into position when pushed through the hole.

RAWL-ANCHORS

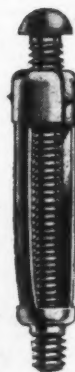
An extremely ingenious device. When the screw is tightened the Rawl-Anchor collapses as shown in the illustration. In certain materials this makes a permanent tapped fitting from which the screw can be removed and replaced at will.



RAWL-ANCHORS are manufactured from ductile steel and ensure very firm fixings. Fixing is simplicity itself—just a 1/2" diam. hole



into which the Rawl-Anchor is placed and then the screw is tightened. Millions have been used on housing contracts.



ACTUAL SIZE

Samples of any or all of these fixing devices will be gladly supplied to the trade for testing purposes. Also the advice of our Technical Service Department is available for free unbiased assistance in overcoming any peculiar fixing problems.

8323

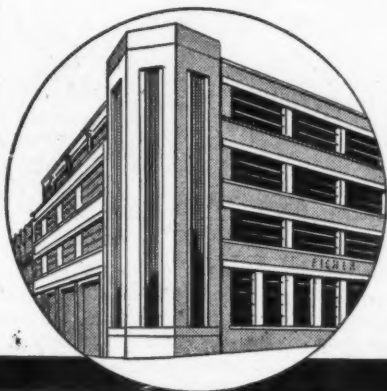
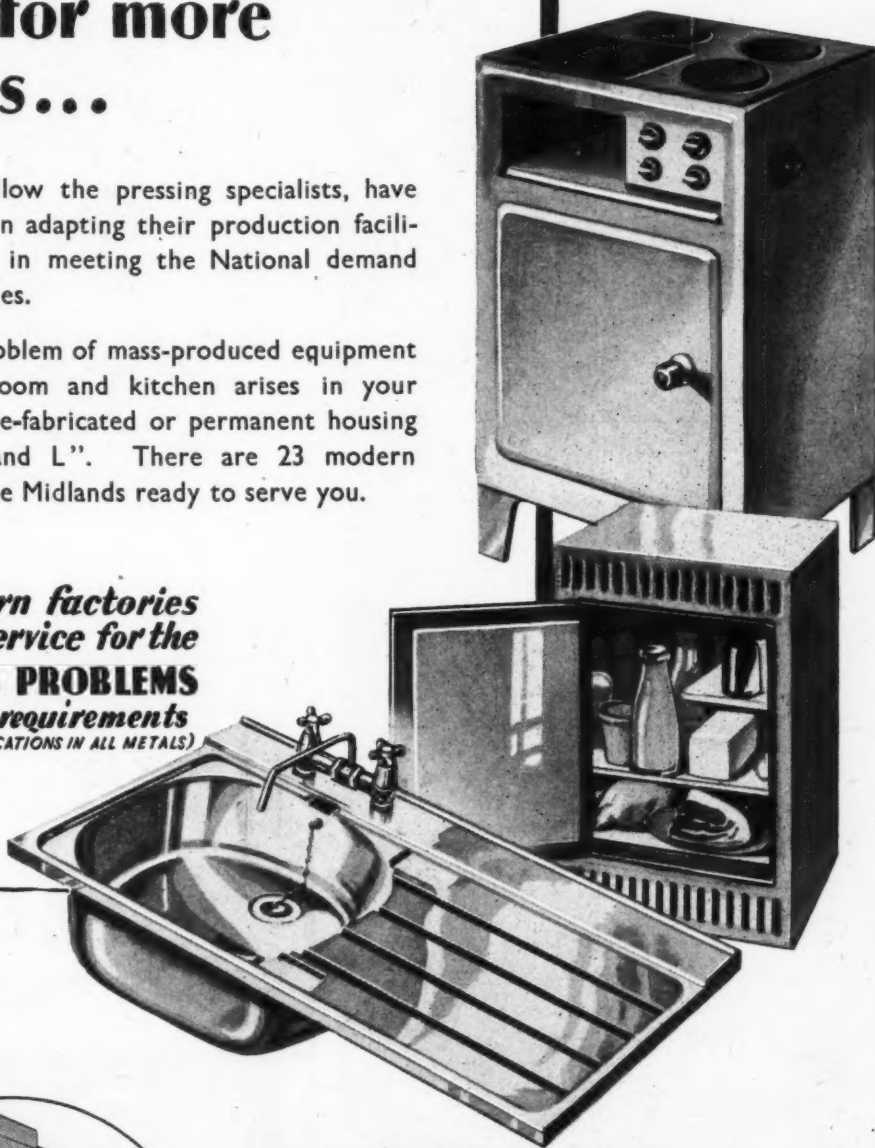
THE RAWLPLUG Co., Ltd., CROMWELL ROAD, LONDON, S.W.7

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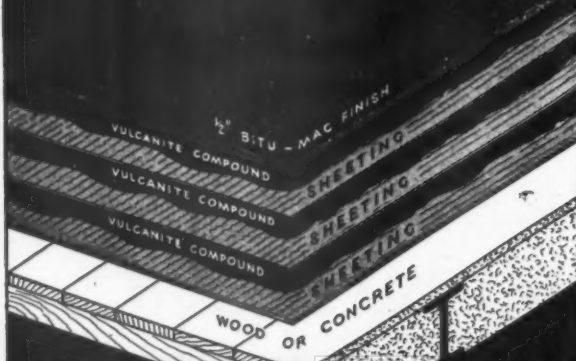
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Ensures more equable temperatures in the rooms beneath, and offers facilities for open-air treatment. Provides a first class fire-resisting roof, and is unaffected by time or weather conditions.



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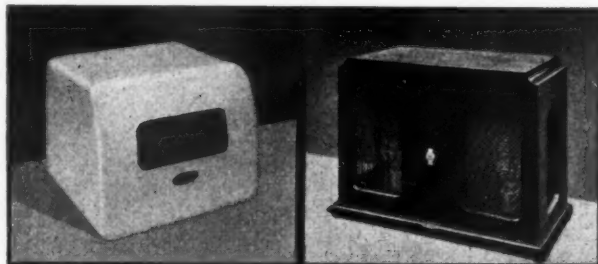
'CLEAR
THE
COURT!'



The ancient custom of presenting the Judge at Assizes with a sweet-smelling posy was originally intended as some slight protection against the foul atmosphere of the courts in earlier times. Although the atmosphere in public buildings can still become 'thick,' science has progressed to better methods of dealing with the problem. The Ozono unit for maintaining clean fresh air in public rooms destroys the unpleasantness instead of merely masking it. The causes of foul, fuggy or vitiated air are swiftly destroyed by the pure active ozone liberated by the generator for a negligible expenditure of electricity.

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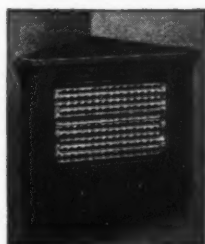


Two popular Ozono Units—that on the right is suitable for large public rooms; the smaller unit, left, for private offices, w.c.s, or domestic use. The complete range of models provides for air-conditioning in Public Rooms and Lavatories, Hotels and Restaurants, Ships' Holds, Cold Rooms and Refrigerators and for a number of Industrial and Domestic purposes. Units can be supplied to work on any voltage and from any source of supply.

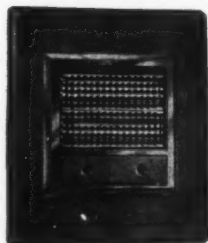
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As leading manufacturers of Electric Fires, Cookers and other Home Electrical Appliances, we offer over thirty years' intensive and specialised experience to all concerned in planning and building post-war homes.



New Corner Fireplace



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The two fires illustrated are styled to modern tastes; they combine radiant and convected heat in a scientifically balanced output.

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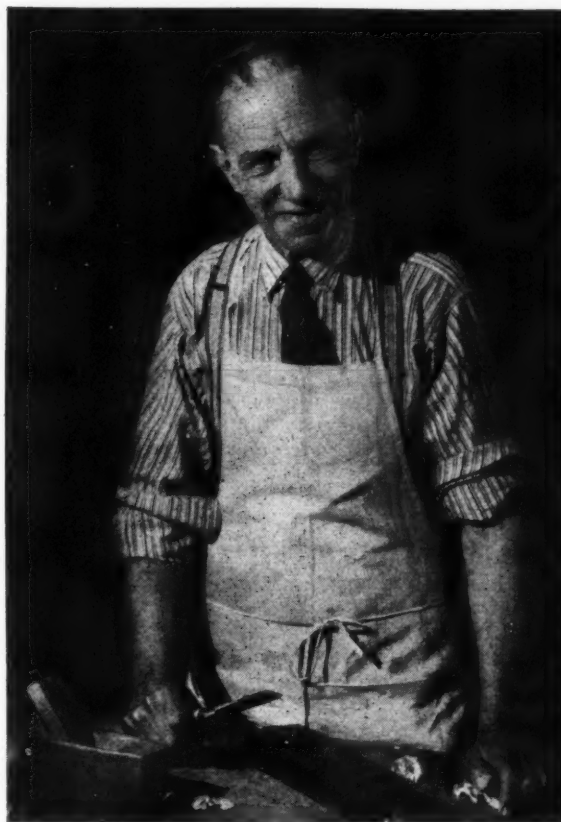
Although our present production is largely absorbed by urgent Government orders for Housing requirements, all enquiries will receive our keen and enthusiastic co-operation.

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with wood, sir"*

"SCIENCE and mechanisation are playing a big part these days in timber and joinery, sir—yet there's still a place for craftsmen in the trade. "I've been working in wood for forty years, and I'm still learning about timber . . . you have to live with it to know it, and then you don't know it all.

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TIMBER CONNECTORS

'Bulldog' Connectors have solved the basic problem of Timber Construction. They enable simple joints to be made, in which the load is spread over almost the entire cross section of the wood.

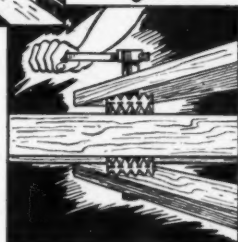
In the past much larger sections of timber were needed in order to make the joints strong enough to carry the load.

Now, Timber Construction can be placed on a sound engineering basis, the consequent increase in efficiency bringing outstanding advantages.

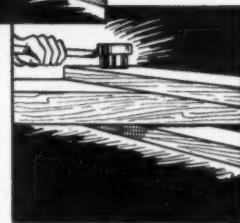
and Save

TIMBER TIME and MONEY

1 While the members are held temporarily in place by nails, a bolt hole is bored through the assembly.



2 The members are lifted apart and the toothed connectors are placed between the adjacent faces of the members to be connected.



3 The members are then drawn together by means of the bolt until the projecting teeth of the metal plates are completely embedded in each contacting timber surface.

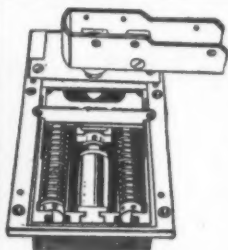
The 'Bulldog' Timber Connector consists of a steel plate with the edges turned off at right angles to form sharp triangular teeth projecting evenly from both sides of the plate.

'Bulldog' Timber Connectors are also made with teeth on one side only for timber to steel joints, or for portable and demountable timber buildings.

TECHNICAL ADVICE AND FULL DETAILS AVAILABLE ON REQUEST

"BULLDOG"
Timber Connectors

W. F. HOLLWAY & BROTHER, LIMITED,
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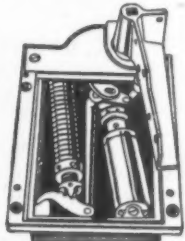


No. 21. "Sceptre Victor"

VICTOR

No. 21. "Sceptre Victor"

Patent double action Floor Door Spring. Self-contained hydraulic check action unit. For medium size doors. No. 22 for extra large or heavy doors.



No 31 "Gem Victor"

DOOR

No. 31. "Gem Victor"

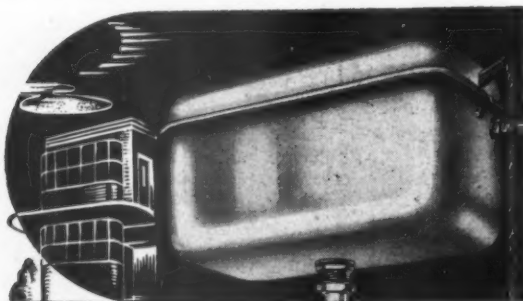
Patent single action Floor Door Spring. Medium size doors. No. 32 for extra large or heavy doors.

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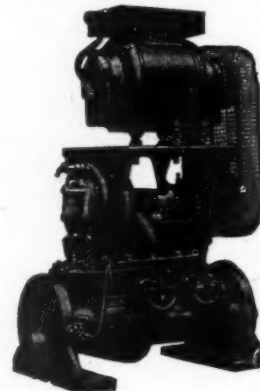
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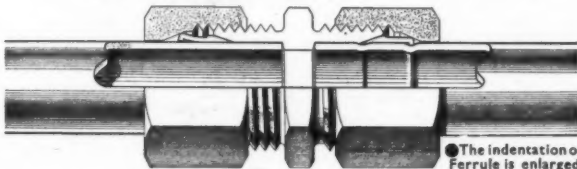
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FOR USE WITH LIGHT GAUGE COPPER TUBE
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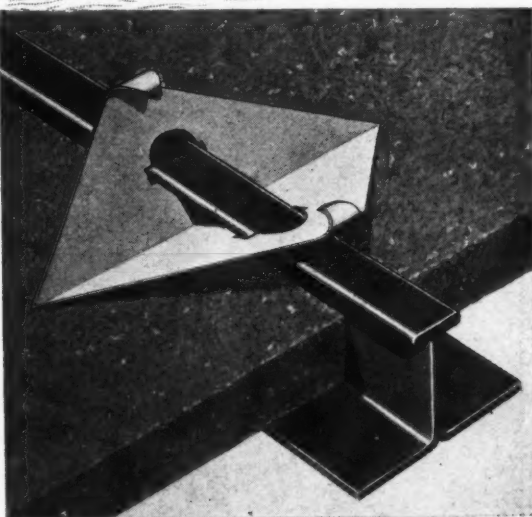
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METAL "V" CLIP



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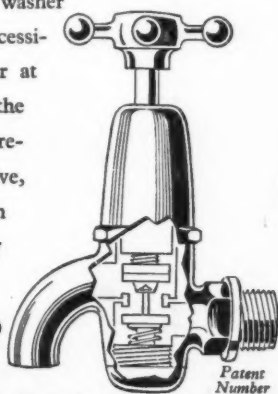
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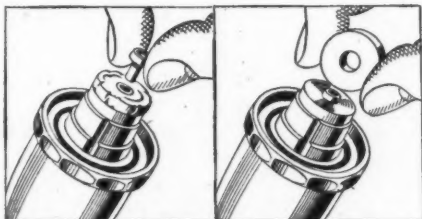
automatically turns off water while washer is being changed

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Approved by the Metropolitan and other Water Boards and manufactured under British Standards Spec. 1010.

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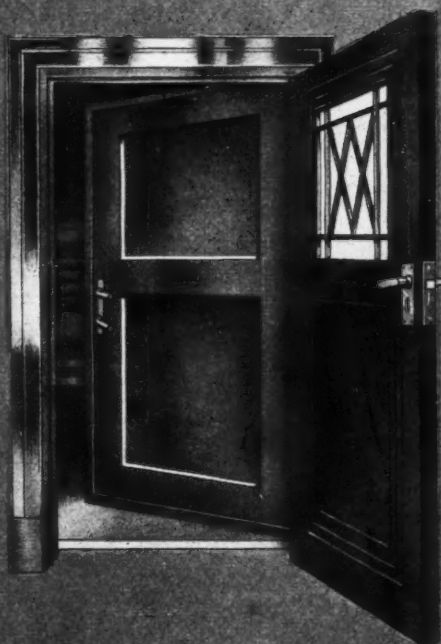
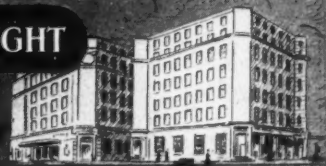
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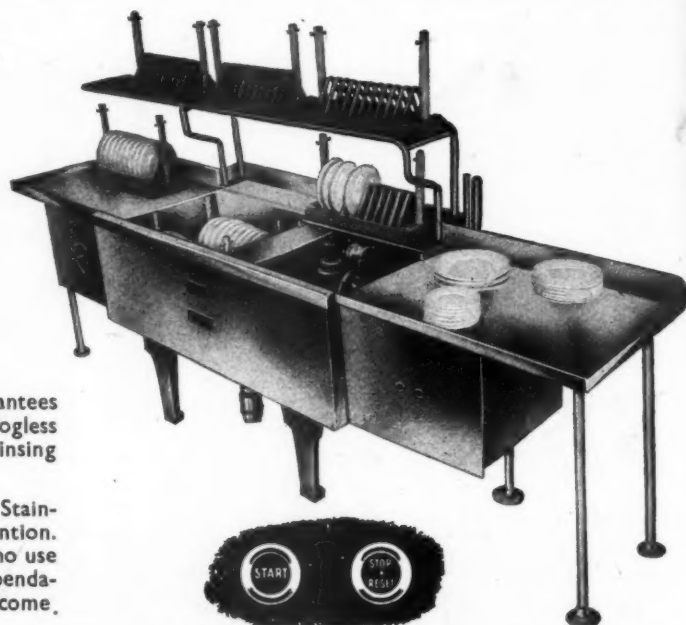
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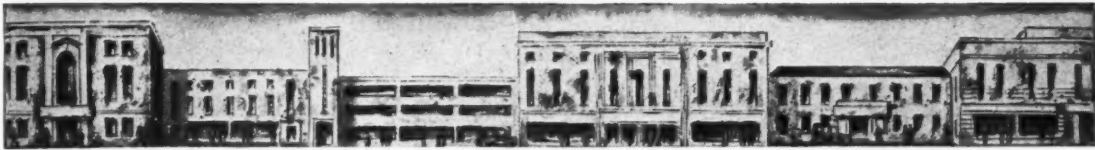
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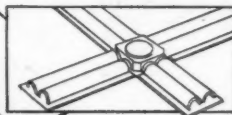
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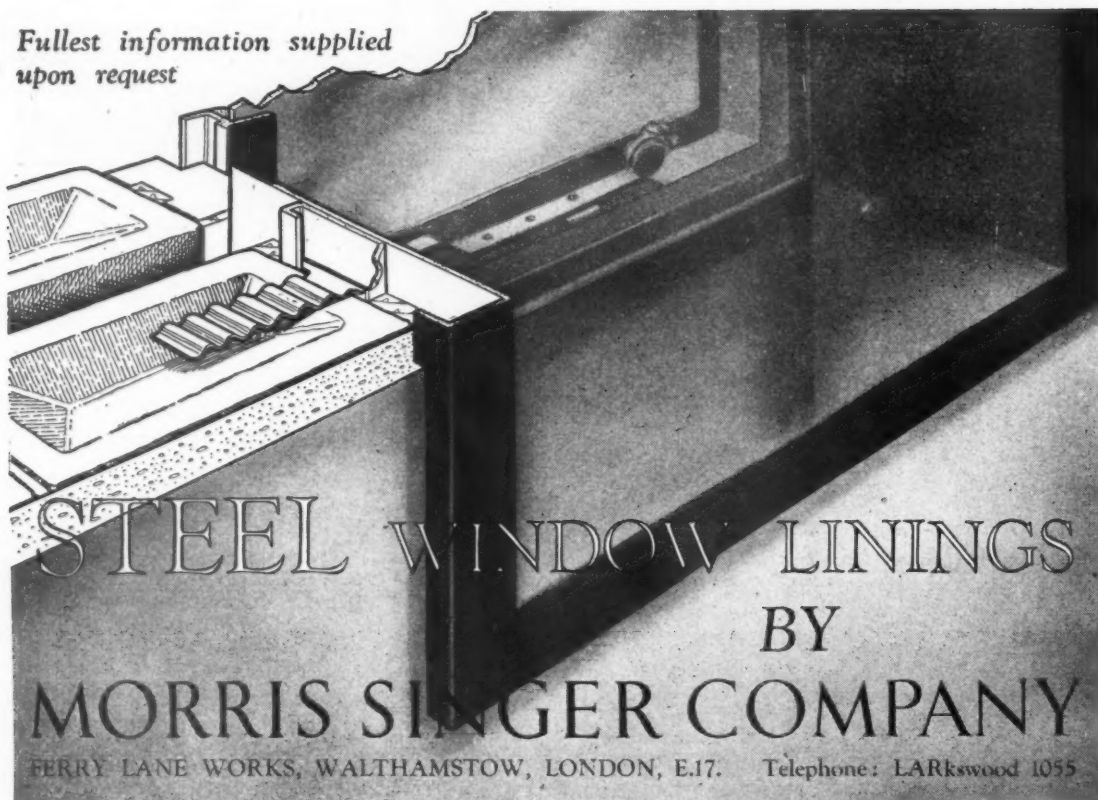
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Advertisements should be addressed to the Advt. Manager, "The Architects' Journal." War Address: 45 The Avenue, Cheam, Surrey, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

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

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

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. ADDRESS: 75, EATON PLACE, LONDON, S.W.1. TEL. SLOANE 5615. 991

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(a) "Taking-off" quantities, measuring, and adjusting variations under building contracts and preparing estimates.

(b) Preparing estimates and measuring repairs and minor works under schedule of prices (experience of London County Council, War Department or Office of Works Schedules).

(c) Working up, etc., in connection with domestic buildings and general working up (junior).

(d) Measurement of roads and sewers and housing work on cottage estates, preparation of interim and final bills on Schedules.

(2) ARCHITECTS, BUILDING SURVEYORS, TECHNICAL ASSISTANTS (ARCHITECTURAL), AND JUNIOR DRAWING OFFICE ASSISTANTS. Required for:

(a) Work in connection with the design and development of housing schemes for cottage estates and block dwellings (experience in domestic architecture preferred).

(b) Similar work in connection with schools and hospitals.

(c) The preparation of estimates and specifications for works of cleaning and painting, repairs and minor alterations at schools and hospitals.

(d) Assistants to district surveyors. A knowledge of the London Building Acts and by-laws is necessary for these positions.

(e) Junior drawing office assistants for general drawing office work. Should be able to finish plans from rough drawings, take dimensions and make sketches. Pay, according to age and experience, up to 65s. a week, plus cost-of-living addition.

(3) HEATING ENGINEERS AND HEATING AND VENTILATING ASSISTANTS. Good technical education required. Applicants must be experienced in the design of, and preparation of drawings, specifications and estimates for modern hot water heating, ventilating and hot water supply schemes.

Except as otherwise shown, salaries for the above positions will be determined by qualifications and experience up to a maximum of £420 a year, together with cost-of-living additions up to £90 a year, according to basic salary. Salary up to £500 for certain positions of heating engineer and building surveyor. Successful candidates will be engaged on a temporary basis, but will be eligible for appointment, according to merits, for permanent appointment on the occurrence of vacancies. Temporary staff are required to contribute to the Council's Superannuation and Provident Fund.

Ex-Service candidates with experience prior to their war service will be specially considered.

Application forms may be obtained from the Clerk of the Council, County Hall, Westminster Bridge, London, S.E.1, enclosing stamped addressed foolscap envelope.

Canvassing disqualifies. 947

ESSEX EDUCATION COMMITTEE.

SOUTH-WEST ESSEX TECHNICAL COLLEGE AND SCHOOL OF ART, FOREST ROAD, WALTHAMSTOW, E.17.

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(2) LECTURERS IN ARCHITECTURE.

Salary according to the Burnham Scale, with London allowance, and special recognition of professional or industrial experience up to a maximum of ten years.

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NOTTINGHAMSHIRE COUNTY COUNCIL.

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Applications are invited for the following appointments in the above Department, at salaries within the Administrative, Professional and Technical Division of the National Joint Council Scale, indicated namely:—

(a) QUANTITY SURVEYORS (2), at salaries within Grade VI, namely £535-£600 per annum;

(b) QUANTITY SURVEYORS (2), at a salary within Grade IV, namely £420-£465 per annum; and

(c) CLERK OF WORKS (1), at a salary within Grade II, namely £360-£405 per annum.

In addition to the salaries indicated above, there will be paid a cost-of-living bonus, at present £59 16s. per annum. Preference will be given to applicants who are Professional Associates of the R.I.C.S. in respect of (a) and Members of the R.I.C.S. in respect of (b) above.

The above appointments will be subject to the Local Government Superannuation Acts, and the successful candidates will be required to pass a medical examination. Canvassing of Members of the County Council, either directly or indirectly, will be regarded as a disqualification.

Application forms and conditions of appointment may be obtained from the County Architect, Shire Hall, Nottingham, to whom completed applications should be returned not later than 30th November, 1946.

K. TWEEDALE MEABY,

Clerk of the County Council, Shire Hall, Nottingham. 770

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Applicants for (a) should possess approved qualifications and experience, capable of undertaking all stages of the work for the preparation of bills of quantities, the preparation of final accounts, site measurements, and preparation of interim certificates.

Applicants for (b) should possess approved qualifications and experience, and be capable of undertaking working-up and general technical duties of a Quantity Surveyor's Office.

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

Applications, stating age, qualification and experience, stating the appointment applied for, and accompanied by copies of not more than three testimonials, should be sent to the Housing Architect, Architects' Department, Baldwin Road, Taunton, by not later than the 23rd November, 1946.

MAJOR A. G. JURY, A.R.I.B.A.,

Architect to the Council, Architects' Department, Taunton. 743

Amended Advertisement.

BOROUGH OF BEXLEY.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of Three Architectural Assistants, in the Architects' Section of the Borough Engineer and Surveyor's Department, at salaries in accordance with Grades III or IV of the A.P. and T. Division of the National Scale of Salaries, i.e., £390-£435 or £420-£465 per annum, according to qualifications and experience. There is in addition a weighting for the London area of £20 p.a., plus a cost-of-living bonus of £59 16s. per annum.

Candidates for the posts, which are permanent, should be Student members of the R.I.B.A., and have had experience in the preparation of working and detail drawings, specifications and reports on works in progress.

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

Applications, giving age, details of qualifications and experience, present and previous appointments, together with copies only of testimonials, must be received by the Borough Engineer and Surveyor, Council Offices, Bexleyheath, Kent, not later than Monday, 25th November, 1946.

Applicants must state in their applications whether to their knowledge they are related to any member of or the holder of any senior office under the Council. Failure to do so or canvassing in any way will disqualify.

ARTHUR GOLDFINCH,

Deputy Town Clerk, Council Offices, Bexleyheath. 813

LONDON COUNTY COUNCIL.

Required at Brixton School of Building, Fernside Road, S.W.4, as soon as possible:—

(1) Full-time TEACHER OF BUILDING DRAWING AND BUILDING-CONSTRUCTION, for work in the Secondary (Technical) School. Applicants should have good professional or industrial experience, and possess one of the following qualifications: A.R.I.B.A., A.M.I.Struct.E., Higher National Certificate or Diploma, City and Guilds Full Technological Certificate. Some teaching experience desirable.

(2) Full-time Temporary TEACHER AND STUDIO MASTER IN ARCHITECTURAL DESIGN, in the Architecture department. Applicants must be members of the Royal Institute of British Architects, and should possess the Degree or Diploma of a recognized School of Architecture, and have interest and ability in Architectural Design and Draughtsmanship. Members of the staff are normally afforded reasonable opportunities for practice and research. Burnham Scale salary, £300-£15 to £525 (men), plus London allowance (minimum £36) a year, and additions for training and qualifications as applicable. Commencing salary according to teaching and industrial experience. Other things being equal, preference will be given to registered disabled persons. Application forms from the Education Officer (T.1), County Hall, S.E.1 (stamped addressed foolscap envelope necessary), returnable by 9th December, 1946. H.M. Forces personnel abroad should apply by letter. 790

BOROUGH OF WREXHAM.

HOUSING ARCHITECTURAL DEPARTMENT.

Applications are invited for the following temporary appointments, in connection with a large Housing Scheme:—

(a) QUALIFIED QUANTITY SURVEYOR. £600 per annum.

(b) SENIOR ARCHITECTURAL ASSISTANT. £575 per annum.

(c) ARCHITECTURAL ASSISTANT. £510 per annum.

(d) ARCHITECTURAL DRAUGHTSMAN. £350 per annum.

The above salaries are inclusive of cost-of-living bonus, at present amounting to £59 19s. 3d. per annum.

Further particulars and conditions of appointment and forms of application may be obtained from the undersigned, to whom applications are to be delivered by not later than 22nd November, 1946.

PHILIP J. WALTERS,

Town Clerk.

Guildhall, Wrexham.

24th October, 1946.

748

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 cost-of-living bonus (at present £60 per annum); position on scales according to qualifications, viz.:—

(a) ASSISTANT ARCHITECT. A.P.T., Grade V (£460-£510).

(b) ENGINEERING ASSISTANT. A.P.T., Grade V (£460-£510).

(c) ASSISTANT ARCHITECT. A.P.T., Grade III (£390-£435).

(d) BUILDINGS INSPECTOR. A.P.T., Grade I and II (£330-£405).

Travelling allowance in accordance with County Scale.

Candidates in respect of (a) and (c) 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, without supervision.

Candidates in respect of (b) must be fully experienced in the design and supervision of modern heating, hot water and ventilation systems of all types for local authority buildings, and possess sound knowledge of all mechanical equipment connected therewith. Preference will be given to candidates who have also had experience in design of electric lighting and power installation.

Candidates in respect of (d) should have experience in the preparation of reports and specifications in respect of maintenance and repairs to all classes of buildings, and supervision of the work.

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 Act, 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 Wednesday, 27th November, 1946.

L. G. H. MUNSEY,

Clerk of the County Council, Shire Hall, Bury St. Edmunds.

4th November, 1946.

818

CITY OF PLYMOUTH.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent staff, which are subject to the Local Government Superannuation Act, 1937, a satisfactory medical examination, and one month's notice on either side for termination.

The salary scales are those of the A.P. & T. Division of the National Scheme of Conditions of Service, and are subject to the addition of cost-of-living bonus, at present £59 16s. per annum.

(a) PRINCIPAL ASSISTANT ARCHITECT (HOUSING). Grade VII. £575-£650.

(b) PRINCIPAL ASSISTANT ARCHITECT (EDUCATION). Grade VII. £575-£650.

(c) PRINCIPAL ASSISTANT ARCHITECT (GENERAL). Grade VII. £575-£650.

(d) SENIOR ASSISTANT ARCHITECTS. Grade VI. £535-£600.

(e) ASSISTANT ARCHITECTS. Grade V. £450-£510.

(f) ASSISTANT ARCHITECTS. Grade IV. £420-£465.

(g) ASSISTANT ARCHITECTS. Grade III. £390-£435.

(h) ASSISTANT ARCHITECTS. Grade II. £360-£405.

(i) CHIEF QUANTITY SURVEYOR. Grade VIII. £625-£700.

(j) SENIOR ASSISTANT QUANTITY SURVEYORS. Grade VI. £535-£600.

Applicants for Architectural Appointments should preferably be Associates of the R.I.B.A.

Applicants for Quantity Surveying Appointments should preferably be Members of the Royal Institution of Chartered Surveyors (Quantities Section).

Candidates must not be over 40 years of age, but this condition may be relaxed in the case of a person up to 45 years of age employed by another Local Authority.

Applications, on forms to be obtained from the undersigned, accompanied by copies of not more than three recent testimonials, must be returned to me not later than 30th November, 1946.

E. G. CATCHPOLE, A.R.I.B.A.,

City Architect.

Weston Lodge, Seymour Road, Mannamead, Plymouth. 785

COUNTY BOROUGH OF HUDDERSFIELD.

BOROUGH ARCHITECT'S DEPARTMENT.

APPOINTMENT OF TECHNICAL STAFF.

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

Houses now nearing completion are being reserved, and will be made available for renting by the successful candidates.

(a) SENIOR ASSISTANT ARCHITECT, at a salary of £535 per annum, rising by two annual increments of £20 and one of £25 to a maximum of £600 per annum, plus cost-of-living war bonus, at present £59 16s. per annum. Applicants should be Associates R.I.B.A., and be capable designers, able to take charge of contracts, and should have had considerable experience in Housing and General Architectural Work of a Local Authority.

(b) ASSISTANT ARCHITECT, at a salary of £460 per annum, rising by two annual increments of £15 and one of £20 to a maximum of £510 per annum, plus cost-of-living war bonus, at present £59 16s. Applicants should be Associates R.I.B.A., with experience in Housing and the General Architectural Work of a Local Authority.

(c) ARCHITECTURAL ASSISTANT, at a salary of £360 per annum, rising by three annual increments of £15 to a maximum of £405 per annum, plus cost-of-living war bonus, at present £59 16s. Applicants should be experienced in the preparation of working drawings and details, surveying and levelling.

(d) ASSISTANT QUANTITY SURVEYOR, at a salary of £390 per annum, rising by three annual increments of £15 to a maximum of £435 per annum, plus cost-of-living war bonus, at present £59 16s. Applicants should have experience in the preparation of Bills of Quantities, Specifications and Accounts, and previous municipal experience will be an advantage.

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

Applications, stating clearly which appointment is applied for, and giving full details of age, qualifications, experience, and earliest date on which applicants could take up duty, together with copies of not more than three recent testimonials, should reach the Borough Architect, High Street Buildings, Huddersfield, not later than Friday, 29th November, 1946.

Applicants in H.M. Forces may name persons to whom reference may be made in lieu of submitting testimonials.

HARRY BANN,

Town Clerk.

Town Hall, Huddersfield. 832

BOROUGH OF SWINDON.

BOROUGH ARCHITECT'S DEPARTMENT.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the following permanent appointments on the staff of the Borough Architect (Mr. G. Kenyon, Dip.Arch., A.R.I.B.A., Dip.T.P., A.M.T.P.I.):—

(1) One Architectural Assistant, at a salary in accordance with Grade V of the National Scales (£460-£510).

(2) One Architectural Assistant, at a salary in accordance with Grade IV of the National Scales (£420-£465).

Plus, in each case, such cost-of-living bonus as may from time to time be paid by the Corporation (at present £59 16s.).

Applicants must have had experience in housing and the general architectural work of a local authority, and in the case of (1) above extensive experience in the preparation of bills of quantities, specifications, and estimates for all classes of public buildings.

Preference will be given to candidates who are Associates of the Royal Institute of British Architects.

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

The Council will assist the successful candidates to secure housing accommodation if required.

Forms of application may be obtained from the undersigned, and applications appropriately endorsed must be delivered to me not later than Saturday, 30th November, 1946.

Canvassing in any form will be deemed a disqualification.

D. MURRAY JOHN,

Town Clerk.

Civic Offices, Swindon. 755
23rd October, 1946.

CITY OF MANCHESTER.

APPOINTMENT OF DEPUTY CITY ARCHITECT.

Applications are invited from persons, who have had a thorough training in architectural design and construction, preferably at a School of Architecture, and who should be Fellows or Associates of the Royal Institute of British Architects and Associate Members of the Town Planning Institute, for the position of Deputy City Architect, at a salary of £1,050, rising by biennial increments of £100 to £1,250 per annum, plus cost-of-living bonus, at present £60 per annum.

Particulars as to duties, terms, and conditions of the appointment and forms of application can be obtained from the undersigned.

Applications, endorsed "Deputy City Architect," are to be delivered not later than the 2nd December, 1946.

Candidates serving in H.M. Forces abroad need not complete the official form of application, but may submit direct applications within the date specified, giving particulars of age, education, qualifications, and experience, and three names as references. The number of the applicant's release group and probable date of release should also be stated.

Canvassing in any form, oral or written, direct or indirect, will be regarded as a disqualification, and applications and testimonials must be sent to the Town Clerk only and not to members of the Council.

PHILIP B. DINGLE,

Town Clerk.

CITY OF NOTTINGHAM.

CITY ENGINEER'S DEPARTMENT.

Applications are invited for TWO vacancies as:—

JUNIOR ARCHITECTURAL ASSISTANTS. To have had experience in architectural work either in a municipal office or with private architects, and preferably to be qualified or in process of studying for professional examinations.

The appointments will be within Grade I of the Administrative Professional and Technical Division of the National Scale of Salaries, £330-£15-£375, plus cost-of-living bonus, at present approximately £50 per annum, the commencing salary to be in accordance with experience.

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

Applications to be on forms to be obtained from the City Engineer, Mr. E. M. Finch, O.B.E., M.Inst.C.E., Guildhall, Nottingham, and are to be returned to him by 22nd November, 1946.

J. E. RICHARDS,

Town Clerk.

The Guildhall, Nottingham. 819
4th November, 1946.

COUNTY BOROUGH OF NEWPORT, MON.

BOROUGH ARCHITECT'S DEPARTMENT.

APPOINTMENT OF THREE CLERKS OF WORKS, ONE ON PERMANENT STAFF AND TWO ON TEMPORARY STAFF.

Applications are invited for the posts as above to supervise Contracts in connection with erection of houses, and various Maintenance works.

The salaries for each position will be in accordance with Grade V, A.P. & T. Division of the National Scheme for Local Government Officers, £460 to £510 per annum, plus current cost-of-living bonus, at present £59 16s.

The appointments will be subject to the Corporation's Conditions of Service and Superannuation Scheme, and the successful candidates will be required to pass a medical examination.

In accordance with the Town Council's resolution, the successful candidates (if married and residing outside Newport) will be offered if required the tenancy of a temporary bungalow in the Borough for the duration of service with the Newport Corporation.

Applications, accompanied by two recent testimonials, must reach me not later than Saturday, the 30th November, 1946.

JOHNSON BLACKETT, F.R.I.B.A.,

Borough Architect.

Town Hall, Newport, Mon. 858
7th November, 1946.

ST. ALBANS RURAL DISTRICT COUNCIL.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant, on the permanent staff, in accordance with the National Scale, A.P.T. Grade V, salary £460-£510-£20-£510. A cost-of-living bonus, at present £59 16s. per annum, is also payable, and the successful applicant will be required to pass a medical examination and be subject to the Local Government Superannuation Act, 1937, the appointment being terminable by one month's notice on either side. Candidates should be Registered Architects or Corporate Members of the R.I.B.A. Preference will be given to candidates also holding a town planning qualification, or having, in addition, town planning experience.

Applications, stating age, qualifications, experience, and whether married or single, together with copies of two recent testimonials, should reach the undersigned not later than 7th December, 1946.

FRANK FITCH,

Clerk to the Council.

Council Offices, 43, Upper Lattimore Road, St. Albans, Herts. 810

CITY OF LIVERPOOL.

ARCHITECTURAL AND HOUSING DEPARTMENT.

The Council of the City of Liverpool invite applications from members of the Royal Institute of British Architects for appointment to the post of CITY ARCHITECT, in the Department of the City Architect and Director of Housing, at the salary of £900 per annum, plus war bonus (at present £59 16s. 3d. per annum).

The duties of the appointment involve the supervision of a staff of architects employed in the general architectural work of the Corporation, i.e., schools, hospitals, and other public buildings, etc., but not Housing, which is carried on by a separate section of the architectural staff under a Chief Architect at the same salary as the post advertised.

Applicants, whose age must not exceed 45 years, must have had professional experience, preferably in local or central government service.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the Standing Orders of the City Council, which include requirements to pass a medical examination, to devote whole time to the duties of the appointment, and to reside within the City.

The appointment will be determinable by three calendar months' notice on either side.

Applications, on forms to be obtained from the City Architect and Director of Housing, Blackburn Chambers, Dale Street, Kingsway, Liverpool, 2, accompanied by copies of three recent testimonials, must be addressed to the City Architect and Director of Housing (endorsed "Chief Architect"), and should be received on or before the 2nd December, 1946.

Candidates serving in H.M. Forces abroad need not complete the official form of application, but may submit direct applications on or before the date specified, giving particulars of age, education, qualifications and experience, and three names as references. The number of the applicant's release group and probable date of release should also be stated.

Canvassing of members of the City Council, either directly or indirectly, will be a disqualification.

W. H. BAINES,

Town Clerk.

Municipal Buildings, Liverpool, 2. 800
October, 1946.

FIFE COUNTY COUNCIL.

PROPERTY AND WORKS DEPARTMENT,
KIRKCALDY.

ARCHITECTURAL ASSISTANT required for above Department. Salary £300 by £20 to £400, plus war increase, at present £76 to £90 per annum, with placing according to experience. 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 25th November, 1946. Canvassing will result in disqualification.

J. M. MITCHELL,

County Clerk.

County Buildings, Cupar-Fife.
2nd November, 1946.

811

COUNTY BOROUGH OF CROYDON—EDUCATION DEPARTMENT.

JUNIOR ARCHITECTURAL ASSISTANT.

Applications are invited for this appointment in the School Architect's Section, at a salary in accordance with the General Division of the National Joint Council Scales, rising from £180 per annum at 21 years of age by annual increments to £336 per annum at 30 years of age, plus cost-of-living bonus, at present £59 16s. per annum.

Applicants must not be less than 21 years of age, and have been employed in an Architect's Office, and preference will be given to candidates with experience in connection with school buildings. The appointment is permanent, and subject to the provisions of the Local Government Superannuation Act, 1937.

Form of application, giving terms and conditions of appointment, may be obtained (on sending a stamped addressed foolscap envelope) from the Education Officer, Katharine Street, Croydon, and must be returned to him, accompanied by copies of three recent testimonials, not later than the 29th November, 1946.

Canvassing will disqualify.

E. TABERNER,

Town Clerk.

Town Hall, Croydon.
November, 1946.

831

BOROUGH OF WALTHAMSTOW.

BOROUGH ARCHITECT'S DEPARTMENT.

PLANNING ASSISTANT.

Applications are invited for the appointment of Planning Assistant. Salary (Grade I) £350—£45—£395 per annum.

Cost-of-living bonus, at present £59 19s. 3d. per annum, will be payable in addition to the salary.

The appointment is on the permanent staff, and is subject to the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination.

The appointment will be in accordance with the National Joint Councils conditions of service, and will be terminable by one month's notice on either side.

Applications, stating age, qualifications and experience, accompanied by copies of three recent testimonials, must reach the undersigned, endorsed, not later than Thursday, 28th November, 1946.

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

G. A. BLAKELEY,

Town Clerk.

Town Hall, Walthamstow, E.17.
16th November, 1946.

850

EDINBURGH CORPORATION.

APPOINTMENT OF DEPUTY CITY ARCHITECT.

Applications are invited for the appointment of Deputy City Architect.

The appointment will be a whole time one, and will be subject to the Corporation's Superannuation Scheme.

Applicants must not be over the age of 46 years at 1st January, 1947, and must be Registered Architects; and Associate Members of the Royal Institute of British Architects or holders of an equivalent degree.

The salary scale is £800, rising to £1,100 per annum by annual increments of £50, plus war bonus (at present £92 to £120, according to placing on scale).

Further particulars and conditions may be obtained from the undersigned, with whom applications must be lodged not later than Saturday, 30th November, 1946.

A. G. FORGIE, A.R.I.B.A.,

Dip.Arch.(Edin.).

City Architect.

City Chambers, Edinburgh, 1.
November, 1946.

817

CITY OF STOKE-ON-TRENT.

Applications are invited for the following permanent appointments, in the Reconstruction Department. The appointments will be subject to satisfactory medical examination, to the provisions of the Local Government Superannuation Act, 1937, and will be terminable by one month's notice on either side. The salary for each position is as set out below, and in each case is exclusive of a cost-of-living bonus, which is at present £59 16s.

(a) PLANNING ASSISTANT. £535, rising by annual increments of £20 to £600.

Applicants should have had experience in planning, including Control of Interim Development, Basic Surveys, the Preparation of Schemes and Housing Layouts, and should have passed the final examination of the Town Planning Institute. Civil Engineering or Architectural qualifications will be an additional recommendation.

(b) PLANNING ASSISTANT. £390, rising by annual increments of £15 to £435.

Applicants should have had experience in the preparation of Schemes and Basic Surveys, and should have passed the final examination of the Town Planning Institute.

Applications, indicating the post applied for, and stating age, qualifications, experience, and present position, and enclosing copies of three recent testimonials, must reach the undersigned not later than Monday, 2nd December, 1946. Canvassing in any form, either directly or indirectly, will disqualify.

HARRY TAYLOR,

Town Clerk.
812

COUNTY BOROUGH OF DEWSBURY.

BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT.

APPOINTMENT OF TWO ASSISTANT ARCHITECTS.

Applications are invited for the appointment of two Permanent Assistant Architects, in the Education Section of the Borough Architect's Department, at a commencing salary in accordance with A.P.T. Grade V (£460-£510 per annum) of the National Scheme of Conditions of Service, plus cost-of-living bonus (at present £59 19s. 3d. per annum). Previous experience in the design and erection of Schools will be considered an advantage.

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

Applications, stating age, qualifications, full particulars of training and experience, together with copies of two recent testimonials, to be sent to the undersigned, not later than Friday, 22nd November, 1946, endorsed "Assistant Architects."

HOLLAND BOOTH,

Town Clerk.

Town Hall, Dewsbury.
4th November, 1946.

834

COUNTY BOROUGH OF IPSWICH.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the following appointments:

(1) SENIOR ARCHITECTURAL ASSISTANT. Salary in accordance with Grade V of the A.P.T. Division of the national scales (£460-£510 per annum), plus the current war bonus.

(2) GENERAL ARCHITECTURAL ASSISTANT. Salary in accordance with Grade I of the A.P.T. Division of the national scales (£330-£375 per annum), plus the current war bonus.

Applicants for appointment (1) must be Associates of the R.I.B.A., or possess similar qualifications.

Applicants for appointment (2) should have passed the Intermediate examination of the R.I.B.A. or P.A.S.I.

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

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

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

Applications must be received by E. McLauchlan, Borough Surveyor, Town Hall, Ipswich, not later than Monday, 25th November, 1946.

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

J. G. BARR,

Town Clerk.

Town Hall, Ipswich.
4th November, 1946.

833

COUNTY OF MONMOUTH.

EAST MONMOUTHSHIRE AND WEST MONMOUTHSHIRE JOINT PLANNING COMMITTEE.

Applications are invited for the following appointments, under the above Joint Planning Committee:

(a) TWO CHIEF PLANNING ASSISTANTS. Salary £575, rising by annual increments of £25 to £650 per annum (A.P.T., VII).

(b) FIVE GRADE III PLANNING ASSISTANTS. Salary £390, rising by annual increments of £15 to £435 per annum (A.P.T., III).

(c) THREE JUNIOR PLANNING ASSISTANTS (GRADE I). Salary £330, rising by annual increments of £15 to £375 per annum (A.P.T., I).

(d) THREE DRAUGHTSMEN or DRAUGHTSWOMEN. Salary according to age—£65 at 16 years of age, rising by annual increments to £240 at 30 years of age for females and £300 for men. (General Scale.)

In addition to the salaries stated for appointments (a), (b) and (c) above, a cost-of-living bonus (at present £59 16s. per annum) is paid by the Joint Committees. In the case of appointments (d) a sliding scale war bonus (at present from £20 3s. to £48 6s. per annum) is payable, dependent on the age of the appointed persons.

Applicants for appointments (a) should have had extensive practical experience in the preparation of Planning Schemes for Urban and Rural Areas, and must be Members of the Town Planning Institute. An additional qualification in Architecture, Surveying or Engineering will be an advantage.

Applicants for appointments (b) should have had a good practical experience in the preparation of Planning Schemes for Urban and Rural Areas, and should be suitably qualified. Preference will be given to applicants who have secured the Intermediate Examination of the Town Planning Institute or the Royal Institute of British Architects, the Royal Institution of Chartered Surveyors, or the Institution of Municipal and County Engineers.

Applicants for appointments (c) should be neat and efficient draughtsmen, and have a knowledge of surveying and levelling and ordnance survey revision, and preferably should have experience in a Planning Department. Any technical qualifications will be an additional recommendation.

Applicants for appointments (d) should be neat and expeditious draughtswomen or draughtsmen, tracers and colourists, with experience of work on 1/2,500 and 6 in. to the mile ordnance maps.

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

Applications, stating age, qualifications, training and experience, and giving particulars of past and present appointments, accompanied by copies of two recent testimonials, or in the case of H.M. Forces, the names of two referees, and endorsed Chief Planning Assistants (a), Planning Assistant (b) or (c), or Draughtswomen or Draughtsmen (d), must be delivered to the County Planning Officer, County Hall, Newport, Mon., not later than 2nd December, 1946.

VERNON LAWRENCE,

Clerk of the Joint Committees.

County Hall, Newport, Mon.
5th November, 1946.

840

BOROUGH OF BROMLEY.

BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the following positions:

(a) ENGINEERING ASSISTANT (Grade II). Inclusive salary £450, rising by annual increments of £15 to £500 per annum.

(b) ARCHITECTURAL ASSISTANT (Grade I). Inclusive salary £550, rising by annual increments of £15 to £600 per annum.

Subject in each case to satisfactory service, in accordance with the Council's Salaries and Grading Scheme.

Applicants for (a) should be Associate Members of the Institution of Civil Engineers and/or the Institution of Municipal and County Engineers, or possess equivalent qualifications, and have had experience in a Local Government Office.

Applicants for (b) must be Registered Architects, and preferably Associate Members of the Royal Institute of British Architects and/or have passed the examination of the Chartered Surveyors' Institute (Building Section).

The successful candidates will require to pass a medical examination, and to contribute to the Superannuation Fund under the Local Government Superannuation Act, 1937.

Applications, stating age, experience and qualifications, accompanied by copies of not more than three recent testimonials, must be received by me not later than Saturday, 30th November, 1946.

Canvassing, directly or indirectly, will be a disqualification.

S. CRITCHLEY AUTY,

Town Clerk.

Municipal Offices, Bromley, Kent.
6th November, 1946.

842

COUNTY OF LINCOLN—PARTS OF LINDSEY.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited from suitably qualified persons having a modern outlook for the following appointments on the permanent staff, at salaries in accordance with the National Scale:—

(a) SENIOR QUANTITY SURVEYOR. Grade VI, £535 per annum, rising to £600, plus bonus.
(b) SENIOR ASSISTANT ARCHITECTS (2). Grade V, £460 per annum, rising to £510, plus bonus.

(c) SENIOR ASSISTANT ARCHITECT. Grade IV, £420 per annum, rising to £465, plus bonus.

(d) INTERMEDIATE ASSISTANT. Grade I, £350 per annum, rising to £375, plus bonus.
The cost-of-living bonus is at present £59 16s. per annum.

Candidates for (a) should be members of the Surveyors' Institution, and should have had good experience in preparing Estimates, Bills of Quantities, and Final Certificates.

Candidates for (b) should be members of the R.I.B.A., and should have had experience in architectural design and construction, and especially in the design and erection of modern Educational Buildings. The successful candidates must provide their own cars, for which an allowance on the County Council's scale for an 8 h.p. car will be made.

Candidates for (c) should be members of the R.I.B.A. or Registered Architects, and should have had a sound experience in architectural design and in the preparation of working drawings.

Candidates for (d) must have passed or be about to sit for the Intermediate Examination of the R.I.B.A.

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

Application forms may be obtained from the County Architect's Department, County Offices, Lincoln, and applicants must clearly show for which post they are applying. Forms when completed must be returned to the undersigned not later than Friday, 22nd November, 1946.

ERIC W. SCORER,

Clerk of the County Council.

County Offices, Lincoln. 837

SALOP COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) SENIOR ASSISTANT ARCHITECT. Salary grade £460, rising to £600 per annum.

(b) ASSISTANT ARCHITECT. Salary grade £420, rising to £465 per annum.
(c) JUNIOR ASSISTANT ARCHITECT. Salary grade £330, rising to £375 per annum.

Candidates for appointments (a) and (b) must be Registered Architects, preferably Associates of the R.I.B.A., and for appointment (c) should be Registered Architects, and preference will be given to candidates who have reached the Intermediate stage of the R.I.B.A. The successful applicant for appointment (a) will be required to act as a Section Head, and some administrative ability will be an advantage.

A cost-of-living bonus, at present £59 16s. per annum, will be payable in addition to the salary scales above.

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

Applications, accompanied by copies of not more than three recent testimonials, should state age, qualifications, previous experience, and the present appointment of the applicant, and must be received by Mr. A. G. Chant, F.R.I.B.A., County Architect, 5, Belmont, Shrewsbury, not later than Monday, 22nd December, 1946.

G. C. GODBER,

Clerk of the Council.

Shirehall, Shrewsbury. 838
November, 1946.

METROPOLITAN POLICE.

APPOINTMENT OF POLICE ARCHITECT AND SURVEYOR.

Applications are invited for the post of Police Architect and Surveyor, at New Scotland Yard, in charge of the maintenance and erection of Metropolitan Police buildings. Candidates should be over 35 and under 50 years of age, and should be Fellows or Associate Members of the Royal Institute of British Architects, and have considerable experience in the maintenance of large buildings, as well as of design and erection. The appointment is permanent and pensionable, subject to satisfactory medical examination. Salary £1,200, by annual increments of £50 per annum, to £1,400 per annum, plus consolidated addition of £120 per annum. Applications should be sent on or before 30th November, 1946, to the Secretary, Office of the Receiver for the Metropolitan Police District, New Scotland Yard, S.W.1, giving details of experience and of all posts held. No testimonials should be sent. 841

BOROUGH OF HOVE.

ARCHITECTURAL ASSISTANT.

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

Applicants should have experience in the design and erection of general municipal architectural works and housing, and preference will be given to those who are members of the Royal Institute of British Architects.

The appointment will be subject to one month's notice on either side, and to the provisions of the Local Government and Other Officers' Superannuation Act, 1937. The salary is in accordance with Grade V (A.P. and T. Division) of the National Scale, £460-£510, plus cost-of-living bonus, at present £59 16s. per annum.

Applications, endorsed "Architectural Assistant," stating age, qualifications and experience, and accompanied by not more than three recent testimonials, must be submitted to the undersigned by not later than the first post on Friday, 29th November, 1946.

JOHN E. STEVENS,

Town Clerk.

Town Hall, Hove, 3.
November, 1946. 824

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of SENIOR ASSISTANT ARCHITECT. (a) £625-£725-£700; (b) £535-£525-£550.

Candidates should be Associates of the R.I.B.A., and have first-class architectural and administrative ability. The appointment may be made within the grade, according to actual experience in the carrying out of architectural works and knowledge of local government procedure.

Cost-of-living bonus, at present £59 16s. per annum, is payable in connection with the appointment.

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

Applications, on forms obtainable from this office, must reach me, the undersigned, not later than the 2nd December, 1946.

HUBERT BENNETT, F.R.I.B.A.,

County Architect.

County Hall, Wakefield. 839

THE CORPORATION OF THE CITY OF GLASGOW.

DEPARTMENT OF THE MASTER OF WORKS AND CITY ENGINEER.

Applications are invited for the following appointments, in the Department of the Master of Works and City Engineer:—

(a) CIVIL ENGINEERING ASSISTANTS. Candidates must be experienced in the preparation of plans and working drawings for general municipal civil engineering works.

(b) ARCHITECTURAL ASSISTANTS. Candidates must be experienced in the preparation of plans and working drawings for general municipal architectural works.

(c) QUANTITY SURVEYING ASSISTANTS. Candidates must be experienced in taking off quantities, preparing schedules and specifications, and the measuring and preparation of final measurements for general municipal engineering and architectural works.

(d) TOWN PLANNING ASSISTANTS. Candidates must have experience in the preparation of town planning schemes for development and redevelopment.

(e) HEATING AND VENTILATING ENGINEER. Candidates must be experienced in the preparation of designs, layouts and estimates of the requirements of heating, ventilating and supplying domestic hot water in hospitals, sanatoria, baths, libraries, and similar municipally owned buildings.

Applicants for the above appointments should possess recognized appropriate professional qualifications. The salary scale applicable to appointments (a), (b), (c) and (d) is £440-£220-£550, plus present war increase of £90 per annum, and placings thereon will be according to qualifications and experience.

In the case of appointment (e) applicants should state the salary required.

The appointments will be permanent, and are subject to the provisions of the Glasgow Corporation Superannuation Scheme. Selected candidates will require to pass a medical examination.

Applications, stating age, qualifications and experience, should be accompanied by copies of three recent testimonials, and must be lodged with the undersigned not later than 30th November, 1946.

ROBERT BRUCE, B.Sc., M.Inst.C.E.,

Inst. M. & Cy.E.,

Master of Works and City Engineer.
City Chambers, Glasgow, C.1. 848

ROYAL BOROUGH OF NEW WINDSOR

APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the permanent position of Architectural Assistant, in the Borough Engineer's Department.

Candidates must be Registered Architects. The salary will be in accordance with Grade IV and V (A.P.T. Division) of the National Scale of Salaries, i.e., £420, rising to £510 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

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

Applications, endorsed "Architectural Assistant," stating age, qualifications, present and past employment, and giving the names of three persons to whom reference can be made, must be delivered to the Town Clerk, 14, Park Street, Windsor, not later than 9 a.m. on the 30th November, 1946.

Applicants must disclose in writing whether they are related to any member or senior officer of the Council; and canvassing members or officers of the Council, direct or indirect, will disqualify.

R. WEBSTER STORR,

Town Clerk.

14, Park Street, Windsor.
5th November, 1946. 843

VACANCIES FOR DRAUGHTSMEN (ARCHITECTURAL).

PUBLIC WORKS DEPARTMENT, SALISBURY, SOUTHERN RHODESIA.

Applications are invited from Draughtsmen (Architectural), with good experience for posts in the Public Works Department, Salisbury, Southern Rhodesia.

Salaries of pay and conditions of service, etc., are set out hereunder:—

(1) Appointment will be on a salary scale of £240×£20 to £300×£50 to £350×£30 to £500×£25 to £600 per annum.

(2) The commencing salary may be higher than the minimum of the scale (but not exceeding four steps), according to the qualifications and previous experience of the officer appointed. Consideration will be given to allowing further steps up in respect of time spent on active service.

(3) A marriage allowance of £50 per annum and cost-of-living allowance is payable in terms of regulation if incumbent is eligible.

(4) Appointment will be for a probationary period of two years.

(5) Subject to satisfactory service, incumbent may be appointed if eligible to the Fixed Establishment, i.e., Permanent Staff, on expiration of the probationary period.

(6) Staff of the Fixed Establishment are required to become members of the Pension Fund on a Contributory basis.

(7) Applicants are advised to be medically examined prior to application. Confirmation of appointments after reporting for duty will be subject to the production of a satisfactory medical certificate on the prescribed form from a Government Medical Officer.

(8) Vacation leave on full pay is granted in terms of the Public Services Leave Regulations.

(9) Steamship and rail fares will be paid to Salisbury, Southern Rhodesia, for successful applicant, and half the cost of passage and fares of his wife and dependent children under 18 years of age. Travelling expenses in respect of railway journeys are paid in terms of regulations.

Application forms are available from the Secretary, Office of the High Commissioner for Southern Rhodesia, Rhodesia House, 429, Strand, London, W.C.2.

Closing date for the receipt of application is 7th December, 1946.

Canvassing will disqualify applicants. 844

CROWN AGENTS FOR THE COLONIES.

COLONIAL GOVERNMENT APPOINTMENTS.

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

QUANTITY SURVEYOR required by the Gold Coast Government Public Works Department for two tours of 18 to 24 months, with prospect of permanency. Commencing salary up to £810 a year (in the scale £475, rising to £840 a year), according to qualifications and experience. Separation allowance for married men of between £48 and £204, according to salary and number of dependents. Outfit allowance £60 on salary not exceeding £600 a year. Free passages and quarters. Candidates must be proficient in taking off, abstracting and preparing bills of quantities for general building work (including reinforced concrete). Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience, and mentioning this paper, to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/N/12810, or both letter and envelope. 839

COUNTY BOROUGH OF BIRKENHEAD.

APPOINTMENT OF SENIOR TOWN PLANNING ASSISTANT.

Applications are invited for the above appointment at a salary of £460, rising to £510 per annum, plus bonus, at present £59 16s.

Applications will be accepted from members of H.M. Forces.

The appointment is subject to one month's notice on either side, and to the successful candidate passing a medical examination. The person appointed will be required to contribute the appropriate proportion of his salary in accordance with the Local Government Superannuation Act, 1937.

Applicants must have had considerable experience in the preparation and administration of Town Planning Schemes, and should be Associate Members of the Town Planning Institute.

Applications in accordance with particulars obtained from B. Robinson, M.Inst.M. & Cy.E., Borough Engineer and Surveyor, Town Hall, Birkenhead, must be submitted to me, together with copies of three recent testimonials, in a plain envelope endorsed "Senior Town Planning Assistant," but not bearing any other name or mark to indicate the sender, not later than Monday, 2nd December, 1946.

E. W. TAME,
Town Clerk.

Town Hall, Birkenhead.
November, 1946. 855

COUNTY BOROUGH OF BOLTON.

Applications are invited for the following appointments, in the Borough Engineer and Surveyor's Department:—

(a) ONE ARCHITECTURAL ASSISTANT (Grade IV), A.P.T. Division of the National Joint Council Salary Scales, i.e., £420-£465 per annum, plus cost-of-living bonus, at present £59 19s. per annum.

(b) TWO ARCHITECTURAL ASSISTANTS (Grade III), A.P.T. Division of the National Joint Council Salary Scales, i.e., £390-£435 per annum, plus cost-of-living bonus, at present £59 19s. per annum.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the selected candidates passing a medical examination.

All applicants must have had a thorough architectural training, and be competent to prepare sketch plans, working and detail drawings and specifications. Applicants for the position on Grade IV should have had experience in design of school buildings. Preference will be given to members of the R.I.B.A.

Applications, stating age, experience and qualifications, accompanied by copies of not more than three testimonials, should be delivered to the undersigned not later than 10 a.m. on 28th November, 1946, and the envelope must be endorsed "Architectural Assistant, Grade IV or Grade III," as the case may be.

Relationship to any member of the Council or senior officer of the Corporation must be disclosed, and canvassing will disqualify.

PHILIP S. RENNISON,
Town Clerk.

Town Hall, Bolton. 798

BOROUGH OF BECKENHAM.

APPOINTMENT OF JUNIOR PLANNING ASSISTANT.

Applications are invited for the post of Junior Planning Assistant, on the Council's regular establishment, at a salary in accordance with Grade A.P.T.1 of the National Scale, viz., £330 per annum, rising to £375 per annum, plus London "weighting" of £20 and cost-of-living bonus, at present 23s. per week.

Applicants should be neat and expeditious draughtsmen, and have passed the Intermediate Examination of the Town Planning Institute, or hold equivalent qualifications, and should have a good experience of Local Authority Planning Schemes and Interim Development Control procedure.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and will be terminable by one month's notice on either side. The selected candidate will be required to pass a medical examination by the Council's Medical Officer of Health, or an individual medical referee appointed by the Council.

Applications, stating age, qualifications, experience, present appointment and salary, previous appointments, etc., endorsed "Junior Planning Assistant," and accompanied by copies of three recent testimonials, should be addressed and delivered to the Borough Engineer, at the Town Hall, Beckenham, not later than 12 noon on Monday, 2nd December, 1946.

Canvassing in any form will disqualify.

C. ERIC STADDON,
Town Clerk.

Town Hall, Beckenham.
2nd November, 1946. 815

COUNTY BOROUGH OF OLDHAM.

APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of a Senior Architectural Assistant in my department.

The salary will be at the rate of £460 per annum, rising to £510 per annum (plus cost-of-living bonus, at present £59 16s. per annum), being Grade V of the National Scale of Salaries.

Applicants must possess a recognized Architectural qualification, and experience in a Municipal Office will be an advantage.

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

Applications, stating age, qualifications and experience, and copies of three recent testimonials, must reach the undersigned not later than Wednesday, the 4th December, 1946, in envelopes endorsed "Senior Architectural Assistant."

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

7th November, 1946. 854

METROPOLITAN BOROUGH OF POPLAR.

APPOINTMENT OF ARCHITECTURAL ASSISTANT (GRADE IV).

Applications are invited from duly qualified Architects for the above permanent staff appointment, in the Borough Engineer and Surveyor's Department of the Council.

The salary attaching to the post will be A.P.T., Grade IV, of the National Scales of Salaries, as applicable to the London area, viz., £440 per annum, by three annual increments of £15 to a maximum of £485 per annum, plus cost-of-living bonus, which is at present £59 16s. per annum.

Candidates must have had extensive experience in the planning and design of housing schemes, preferably under a local authority.

The appointment will be subject to the provisions of the Poplar Borough Council Superannuation Acts, 1911 to 1937, and the successful candidate will be required to pass a medical examination. Termination of the appointment will be subject to one month's notice on either side.

Applications, endorsed "Architectural Assistant, Grade IV," stating age, qualifications and experience, present and past employment, and accompanied by copies of three recent testimonials, must be delivered to the undersigned not later than Friday, 29th November, 1946.

Canvassing members or officers of the Council in any form will disqualify.

S. A. HAMILTON,
Town Clerk.

Poplar Town Hall, Bow Road, E.3.
29th October, 1946. 828

CITY OF BIRMINGHAM COLLEGE OF ARTS AND CRAFTS.

Applications are invited for the post of HEAD OF THE SCHOOL OF ARCHITECTURE. The course of instruction is recognized by the Council of the R.I.B.A. as equivalent to and exempting from their Intermediate and Final Examinations.

The appointment will include 15 and 18 hours per week actual teaching, and the commencing salary will be the appropriate proportion of the full-time scale for the post, i.e., the appropriate proportion of £1,000-£25-£1,100.

A form of application and particulars of the appointment may be obtained from the College of Arts and Crafts, Margaret Street, Birmingham, 3, upon the receipt of a stamped addressed envelope, and must be returned not later than 30th November.

E. L. RUSSELL,
Chief Education Officer.
799

Architectural Appointments Vacant

Four lines or under, 5s.; each additional line, 1s. 6d.

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

ARCHITECTURAL DRAUGHTSMAN required, Maidenhead; capable of working up from sketches, preparing details, surveys, etc. Send details of experience and salary required to Box 673.

JUNIOR DRAUGHTSMAN required in Maidenhead Architect's Office. Send particulars of experience and salary required to Box 672.

ESTIMATOR required for Builder's Office in S.E. Kent; state age and salary required, and give references. Box 724.

EXPERIENCED DRAUGHTSMAN required for Precast Concrete Products Factory, specialising in reinforced concrete floors and masonry; applicants must be thoroughly experienced in detailing and taking off quantities, and preference given to one with experience of reinforced concrete design and calculations. Apply by letter only, stating experience and salary required, to Girtings Ferro-Concrete Co., Ltd., Rothwell, near Leeds. 706

ARCHITECT'S JUNIOR ASSISTANT (R.I.B.A. Intermediate standard) required for work on large housing schemes and industrial buildings; good opening for young ex-Service man with the right qualifications. Apply in writing, stating age, experience, and salary required, to Stewart & Hendry, F.R.I.B.A., 90, Fenchurch Street, London, E.C.3. 730

ARCHITECTURAL DRAUGHTSMAN for industrial work with large firm in Manchester district; state age and experience; good salary, according to ability. Box 768.

SENIOR ASSISTANT wanted, for rapidly expanding London Architects' office; salary £500 per annum upwards, according to ability; there are prospects of the successful applicant taking charge of a sub-office in the future. Box 746.

EXPERIENCED DRAUGHTSMAN wanted, with good knowledge of building construction and able to make surveys; salary £425 per annum; country practice. Write Box 783.

ARCHITECTURAL ASSISTANT required for the staff of the Company's Chief Engineer's Department at Weston Point, Runcorn, for the design of amenities and other buildings in chemical factories; age 25/40 years; should be registered or A.R.I.B.A.—Please write, stating age, experience, qualifications, and salary required, to Imperial Chemical Industries, Ltd., General Chemicals Division, Staff Department, Cunard Building, Liverpool, 3. 801

JUNIOR ASSISTANT, minimum 2 years' training in Building Construction, required for firm of Architectural and Industrial Designers; progressive post. Telephone 6127. 802

JUNIOR DRAUGHTSMAN (Architectural) required immediately.—Apply, giving particulars, salary required, etc., to Samuel Jackson & Son, Dean House, 19, Piccadilly, Bradford. 807

SENIOR ARCHITECTURAL ASSISTANT required to take over interesting and responsible work in Architect's Department of large Industrial and Commercial Company in London; commencing salary £10 per week. Box 808.

PLANNING.—School of Planning and Research for Regional Development requires, January, 1947, full-time TUTOR for Courses in Town and Country Planning; at least A.M.T.P.I. qualification essential; £500 per annum. Full particulars to 34, Gordon Square, W.C.1. 809

ASSISTANT required in Architect's Department of a London Brewery Company; age 25 to 30. Apply, stating age, experience, and salary required. Box 806.

JUNIOR ARCHITECTURAL ASSISTANT, interested in industrial design, required for office in W.I. Apply Box 803.

SENIOR ARCHITECT'S ASSISTANT required in busy office at Croydon, where there is considerable and varied work; must have had good experience and be first-class draughtsman. Write, stating age, full particulars of training and experience, and salary required, to Box 814.

LONDON HOSPITAL, WHITECHAPEL, E.1.—Architectural Assistant (Senior) required immediately; salary £500-£550 p.a. Write, stating training, experience, age, and when available, to the Surveyor. 820

ESTIMATOR and QUANTITY SURVEYOR required urgently by a firm of Builders and Contractors engaged on Large Housing Schemes, Factories, etc.; salary offered up to £450 per annum, according to experience. Apply to L. F. Halton, L.R.I.B.A., Architect to E. O'Sullivan, Ltd., Cray Avenue, St. Mary Cray, Kent. Telephone: Orpington 3737. 822

YOUNG, energetic Architect, of character and some experience, to represent firm of Maxwell Fry & Jane Drew in Gold Coast, West Africa; work mainly schools and colleges; salary up to £800, low income-tax; tour of 18 months; 3 months' paid leave; free house, car, passages and doctor; interesting and rewarding job, with future. Box 823.

ASSISTANT BUILDING MANAGER required for large contracting firm in Northern Ireland; headquarters at Belfast; applicant must have experience in connection with large housing contracts, and also with the organising and supervision of joinery works. Apply, stating salary, age, previous experience, to Box 825.

ASSISTANT required in Senior position; must be good building surveyor, and capable of taking work through drawing and detail stages. Please reply, stating experience, salary required, to B. W. Turnbull, F.R.I.B.A., 48, Cannon Street, London, E.C.4. 826

ASSISTANT ARCHITECT, with industrial building experience, required by Westminster Consultants for design work. Please give full details, qualifications, and experience, to Box 827.

EXPERIENCED ASSISTANT required by Architects in Westminster, with wide country practice; good draughtsman, with sound knowledge of building construction and surveying; salary £8, or according to experience. Box 836.

ARCHITECT, with progressive practice in South Kensington has the following vacancies:—(1) Male Shorthand-Typist (age 20-25), interested in building and with some aptitude for drawing; to assist on Rehousing and other work, and to train as Secretary-Librarian. (2) Junior Surveyor (age 20-25), with knowledge of Dilapidations, War Damage Surveys, Quantities and estimating; must have orderly mind and initiative. (3) Boy (age 15-16) straight from school, and up to school certificate standard, to train as Surveying and Drawing Office Junior. Box 846.

SURVEYOR'S ASSISTANT required in Derby office; must be experienced in all branches, particularly large land surveys, including use of theodolite and level; salary up to £400 p.a., according to qualifications. Also **SENIOR ASSISTANT QUANTITY SURVEYOR**, in Nottingham office; must be experienced in preparing bills of quantities, measuring work, adjusting variations and estimating; salary £400 to £500 p.a., according to qualifications. Good prospects in both cases. Applications, stating age, educational qualifications, experience, and copies only of testimonials, to Bromley & Cartwright, Chartered Architects, 6, Clarendon Street, Nottingham. 847

CAPABLE ASSISTANT AND JUNIOR ASSISTANT required at once in the Architect's Dept.; good all-round experience essential; interesting variety of work. Apply, stating full capabilities, experience, and salary, to the Secretary, Barnsley British Co-operative Society, Ltd., Wellington Street, Barnsley, Yorks. 849

WANTED. — **ARCHITECTURAL ASSISTANT.** Apply, stating age, experience, references and salary required, to Imperial Chemical Industries, Ltd., I.C.I. Estates Department, Northwich, Cheshire. 851

SENIOR ARCHITECTURAL ASSISTANT required immediately for responsible position; at least R.I.B.A. Intermediate standard essential; salary by arrangement. Apply Lavender & Twentyman, 2, Waterloo Road, Wolverhampton. 852

PROGRESSIVE appointment offered to capable and energetic Architectural Assistant (25/35) in private practice; near London (E.); good designer, accurate draughtsman, with good provincial experience, including surveying levelling, and with knowledge of quantities; salary according to experience and capability; minimum £416. Reply, with full particulars, to Box 853.

CAPABLE ASSISTANT required immediately; permanence and excellent prospects; must have ability and initiative. J. H. Martindale & Son, F.R.I.B.A., Architects, Cathedral Chambers, Castle Street, Carlisle. 856

REQUIRED, in Drawing Office of a large progressive Midland Brewery:—**SENIOR ARCHITECTURAL ASSISTANTS**; knowledge of licensed premises an advantage, but not essential; commencing salary £500 p.a., plus cost-of-living bonus. 867 10s. **JUNIOR ARCHITECTURAL ASSISTANTS**; excellent prospects; every help given towards qualifying; salary £300 p.a., plus cost-of-living bonus £52. Successful applicants for either position must be prepared to live in or around Burton-on-Trent. Box 857.

Architectural Appointments Wanted

Advertisements from Architectural Assistants and Students seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice.

ASSISTANT (aged 30), could help busy Architect or Surveyor; own office; 7 years with London Architect pre-war; plans from roughs, tracings, etc.; really expert shorthand-typist, experienced schedules, specifications, bills, etc.; would consider full-time post. Box 182.

DRAUGHTSMAN, aged 25, with 3 years' experience in Municipal engineer's office, requires post in Architect's office. Box 159.

ARCHITECT'S ASSISTANT requires part-time work in own home. Box 164.

REGISTERED ARCHITECT (42) desires position; 22 years' practical experience in all classes of work; cinemas, schools, housing, conversions, industrial and commercial work, surveying and levelling; salary by arrangement. Box 161.

R.I.B.A., A.M.T.P.I., 20 years' varied experience, seeks appointment requiring initiative and ability; accustomed to control of work from start to finish. Box 165.

CORPORATE SURVEYOR requires post; aged 31; ex-Major R.E.; sound all round experience drawing office and site supervision; all classes of surveys, dilapidations, specifications, etc.; capable of taking complete charge; salary required £550; private and commercial firm; London area. Box 162.

YOUNG, energetic, Final R.I.B.A. appeared Indian student seeks suitable employment. Write Box 163.

JUNIOR ARCHITECTURAL ASSISTANT requires progressive post; L.C.C. and other experience in draughtsmanship, plotting and measuring buildings; experience mostly with schools and houses; National Certificate Standard in Building Construction. F. N., 41, Matheson Road, W.14. 150

ARCHITECTURAL DRAUGHTSMAN; experience mainly of domestic work, sketch plans, all working drawings, detail, etc.; N.W. or N.E. England; salary by arrangement. Box 168.

ARCHITECTURAL ASSISTANT (Female), passed Inter. R.I.B.A., requires position in London area; previous office experience. Box 166.

YOUNG WOMAN (27), National Certificate of Building Construction, experienced draughts-woman, and general technical and administrative work, desires interesting and progressive job in London area. Box 167.

ARCHITECTURAL ASSISTANT, with wide experience, desires post in Salisbury area. Box 169.

ARCHITECTURAL ASSISTANT (Female) requires position in London office (temporary or permanent); good general office experience; in Channel Isles. Box 170.

Other Appointments Wanted

Four lines or under, 2s. 6d.; each additional line, 1s.

PERSPECTIVES, Pencil, and other medium executed well and quickly. Box 999.

LAND SURVEYS for Housing Schemes and other projects carried out by expert, with own car and equipment. Box 829.

For Sale

Four lines or under, 5s.; each additional line, 1s. 6d.

FILING CABINET (Mahogany), 7 ft. 6 in. by 4 ft., with 96 pigeon holes, glazed doors, £25. Waghorn, 8, William IV Street, Charing Cross. 866

DUMPY LEVEL, with Tripod and 14 ft. Staff; makers, Troughton & Simms; 14 in. four screw, with compass, long bubble and short cross bubble; complete with accessories in mahogany case; offers. Box 845.

Miscellaneous

Four lines or under, 5s.; each additional line, 1s. 6d.

A. J. BINNS, LTD., specialists in the supply and fixing of all types of fencing, tubular guard rail, factory partitions and gates. 99-107, St. Pauls Road, N.1. Canonbury 2061.

F. J. BAYNES, LTD., established over 100 years. Heating, Ventilating and Sanitary Engineers. 99/107, St. Paul's Road, N.1. Canonbury 2061-3.

FENCING FOR ALL PURPOSES.—Supplied and erected; established 100 years. Parker, Winder & Achurch, Ltd., 80, Broad Street, Birmingham, 1.

£5,000 to £250,000
INVESTMENT TRUST wishes to purchase PROPERTY LET to good tenants. Details of Houses, Flats or Shops to John Swait & Sons, Surveyors, The Mall, W.5. EAL. 2866. 804

"CAN I HELP YOU?" I have on my staff Architectural and Civil Engineering Draughtsmen, Building Estimating, Land Measuring and Quantity Surveyors. Write C. F. Rumble, 29/31, Whitehall, S.W.1. Tel.: Whitehall 8514.

WANTED.—One set of "Arts Et Matiers Graphiques." Please reply to Box 5.

HEATING, HOT WATER SERVICES, VENTILATION, AIR CONDITIONING for Hotels, Flats, Private Houses, Public Buildings, Factories; district heating and communal services; Consulting Engineers would be glad to collaborate with Architects in Design and Installation of Schemes. W. H. Ross & Partners. Temporary address: "Stratton," Deanery Road, Godalming. 599

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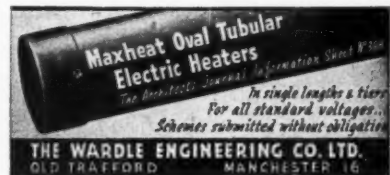
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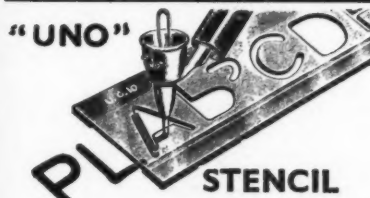
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