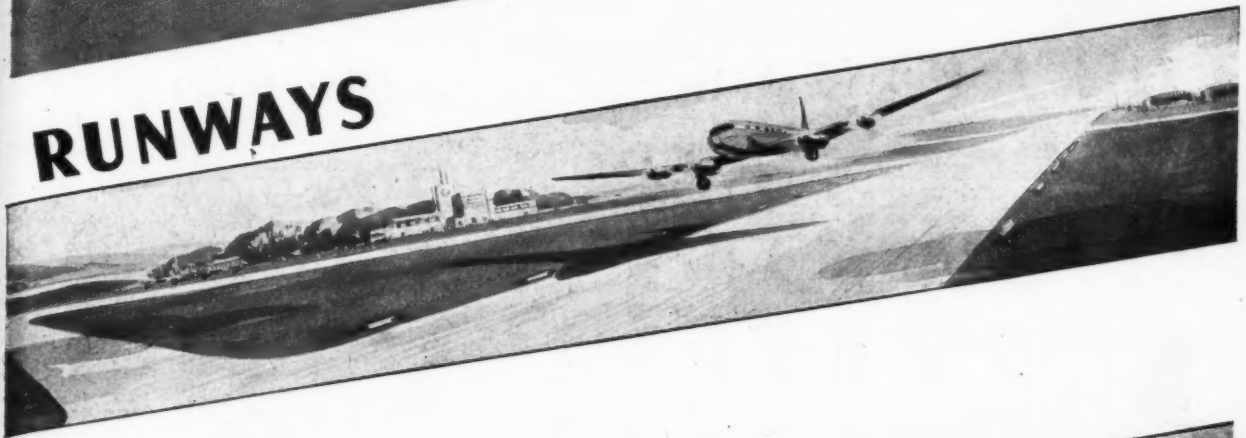
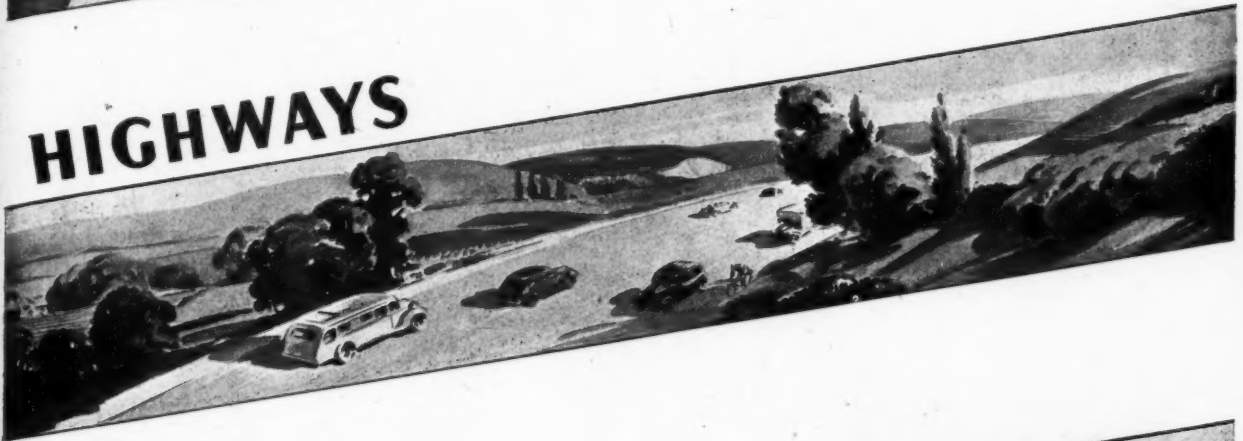


RUNWAYS



HIGHWAYS



BYWAYS



ALWAYS

VAL DE TRAVERS

AND ASSOCIATED COMPANIES

THE VAL DE TRAVERS ASPHALTE PAVING CO. LTD., 21-22 OLD BAILEY, LONDON, E.C.4



Before 1882 the outlook at the Royal Mint was pretty dim. That year the existing crude lighting arrangements gave way to the brilliant new electric lamps—lighted by P & G and E.P.S. batteries—and things began to look brighter. This was one of the first of many important public buildings lit by these famous batteries from that year onwards. A modern installation is that in Trades House at Glasgow. Here P & G and E.P.S. cells stand ready for any emer-

gency should normal mains lighting fail.

Plans for any building intended to accommodate a large number of people should include an emergency lighting system as standard equipment. Risk of pilfering, panic or even disaster consequent upon mains failure is thereby avoided. P & G and E.P.S. cells embody 60 years' manufacturing experience. The system can be made 100% automatic. We shall be glad to advise on any project.

PRITCHETT & GOLD and E.P.S. CO. LTD.

Formerly The Electrical Power Storage Co Ltd—the first Battery makers

TEA

FOR THE WORKERS



How to plan a Kiosk

Obviously, the basis of your planning must be the number of workers for whom the Kiosk is intended. The second consideration is the availability of a suitable site. It may be that you have in mind a position in your existing premises but find it too small to accommodate all the personnel at one session. The solution of course is to stagger the breaks, leaving intervals just long enough to allow for clearance of dirty cups and washing up. In considering this, it is well to bear in mind whether or not parties going to the kiosk will have to pass through other



workshops, with the possibility of distracting the workers in those shops. This applies, too, when no site is available inside present premises and a separate building has to be erected. Size of kiosk will depend on whether it is intended for tea-breaks only or for use during the luncheon interval, and these points will also govern the type and amount of equipment and the kiosk staff.

★ ★ ★

Each industry, and even each factory or workshop in that industry, has its own individual problems. It is impossible to outline a general plan to cover all, but specifications will gladly be supplied on request to cover your particular requirements. Thousands of industrial and commercial undertakings called in the Empire Tea Bureau during the war to advise on the planning of tea-services, and the benefit of that experience is freely offered to you.



EMPIRE TEA BUREAU

If you have any tea problems, write or 'phone to the Empire Tea Bureau,
22 Regent Street, Piccadilly Circus, S.W.1. Telephone: Whitehall 8632.

Consult



SERVICE

TELECOMMUNICATION and Time Control installations are now free of Government licence. Architects and Consultants who are considering new installations of the most modern type would do well to consult with Telephone Rentals Ltd.

We have been occupied with all types of installations for upwards of 40 years, principally but not exclusively upon a rental-maintenance basis. The firm is exceptionally well placed both to offer advice to professional men and also to carry out the installation and maintenance of the equipment itself in any part of the country, upon terms most suitable to professional men and their clients.

TELEPHONES

•
STAFF LOCATION

•
FACTORY BROADCASTING AND MUSIC

•
TIME RECORDING
Synchronised Clocks
Signals and Recorders

There are more than
200,000 T.R. Tele-
communication Instru-
ments in daily use
throughout the Country.

Telephone Rentals LTD

Head Office :

DEPT. P2 · KENT HOUSE · KNIGHTSBRIDGE · LONDON · S.W.7.

Branches in LONDON · BIRMINGHAM · BRISTOL · CARDIFF · LEEDS
MANCHESTER · NEWCASTLE-ON-TYNE · SHEFFIELD · GLASGOW
BELFAST · DUBLIN: and Maintenance Engineers throughout the Country.

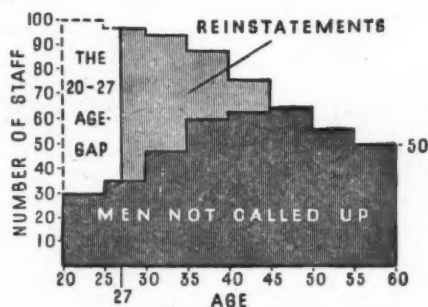
Telephone Rentals Ltd., is an organisation that has developed from the original office telephone business founded in 1933.

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

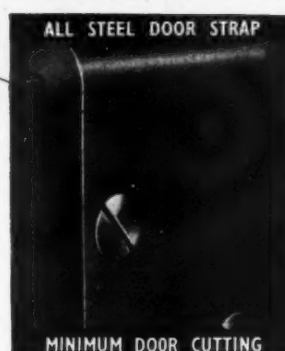
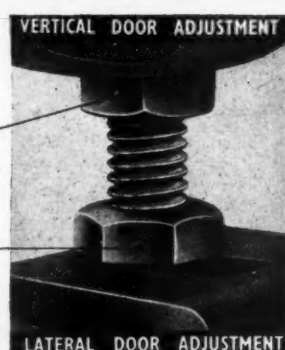
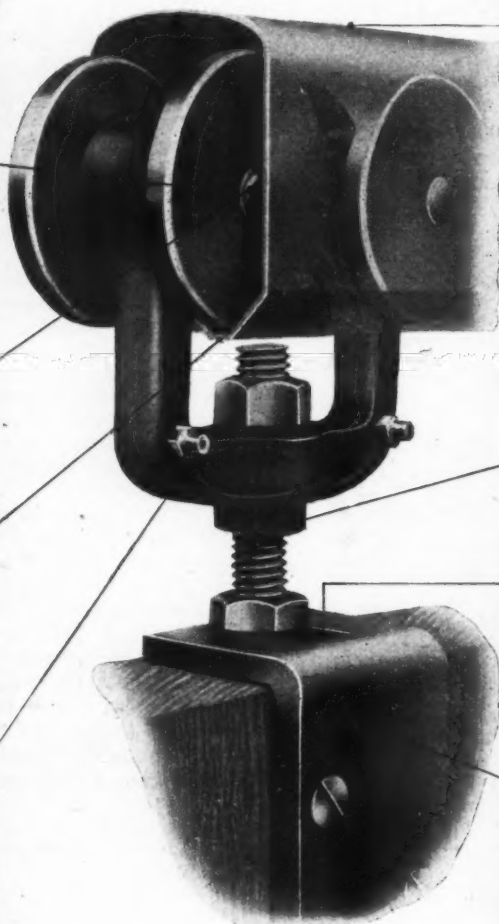
TWO TRAINING SCHEMES

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.

KING SLIDING DOOR GEAR



An Example of ENGINEERING PERFECTION

King Door Gear stands foremost amongst all makes in possessing the above features incorporated in the one product. For many years King's have specialised in conveying; moving things smoothly and efficiently; moving huge loads of 25 tons by overhead crane to a few pounds by door gear. The highly specialised knowledge gained from this experience enables King's to produce sliding door gear as near perfection as it is possible to make it. Within King's large organisation a special department is constantly working to secure even the smallest improvement in King's products. This research results in up-to-the-minute efficiency and reliability, in short—perfect design. This fact, combined with its keen competitive price, merits King Door Gear as a first consideration. The name King creates confidence. Stockists throughout the country have standard lines ready for immediate delivery. Write for illustrated booklet and price list.

GEO. W. KING LTD. HITCHIN HERTS

PHONE:
HITCHIN 960

★ Regular & adequate deliveries
of **BUILT-IN REFRIGERATORS**
can be made
from **JANUARY 1947**
for Housing Schemes



Electrolux

in the new

PERMANENT HOUSES

You've seen a lot in your technical press about Temporary Houses and their Electrolux *Silent* Refrigerators. So here—for a change—is something about Electrolux in two prizewinning Permanent Houses from a National Competition organised by the Housebuilding Industries' Standing Committee.

These model houses were recently shown to the public at Cranford Park Estate, Hayes, Middx. (built by Taylor Woodrow Construction Ltd.; designed by Messrs. T. P. Bennett & Son, F.R.I.B.A.); and also at Eastcote, Middx. (built by George Wimpey & Co., Ltd.; designed by Eric Collins, A.R.I.B.A.).

The illustration shows a corner of the kitchen at Cranford Park with the Regulo Cooker (made by Radiation Ltd.)—and the Electrolux Refrigerator, built into the kitchen furniture at convenient shoulder height. Under the Electrolux Refrigerator is ample storage space for non-perishable food. Like all 'built in' Electrolux Refrigerators (irrespective of whether they are operated by Gas or Electricity) it has no machinery, no moving parts. This means dependability, freedom from vibration, low maintenance cost, and, above all, *Silent Refrigeration at all times.*

NOW IN PRODUCTION...

Electrolux

Silent

REFRIGERATION



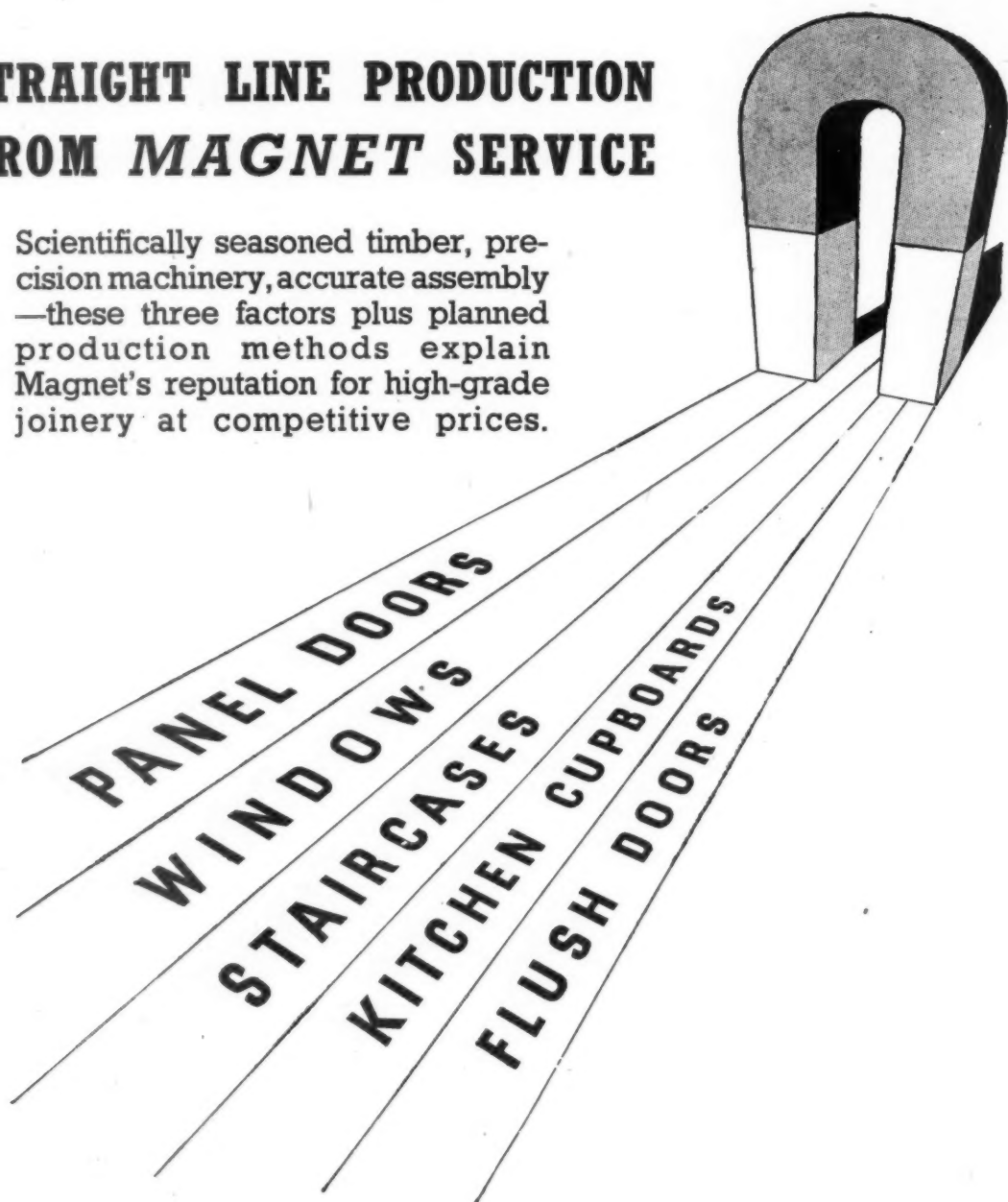
ELECTROLUX LTD. LUTON, BEDS. HEAD OFFICE: 153/5 REGENT STREET, LONDON, W.1.

Also Manufacturers of the famous Electrolux Suction Cleaner



STRAIGHT LINE PRODUCTION FROM MAGNET SERVICE

Scientifically seasoned timber, precision machinery, accurate assembly—these three factors plus planned production methods explain Magnet's reputation for high-grade joinery at competitive prices.



MAGNET JOINERY

LIMITED

WHITLEY STREET, BINGLEY, YORKS.

Telephone: 547 (3 lines)

LONDON ROAD, GRAYS, ESSEX

Telephone: 77 (5 lines)

Branches also at:

ANNE ROAD, SMETHWICK, BIRMINGHAM AND KNARESBOROUGH, YORKS.

THE EDLAC RANGE



There's a paint for every purpose made to do its job better, and quicker—and cheaper if possible. It is the "better and quicker" that receive priority and if we cannot get these and the "cheaper" (although we usually do) then we just drop the latter. If you are of the same mind that quality comes first, then when next you require paint we suggest you arrange to consider the EDLAC RANGE. Applied panels, ample samples and full details will gladly be sent, so that our claims may be confirmed and a technical representative is always at your service.

JUST to remind you, the EDLAC range includes:

SYNDEC & WENTWORTH High Gloss Enamel.	TARSEAL.
PERMADEC & WALDUR Oil-Bound Washable Water Paint.	EDLAC Plaster Primer.
FLATTA Flat Wall Enamel.	ALUMENE Aluminium Paint.
LEDEX & EDLAC Lead Paints.	ORALEX Metallic Paints.
EDLAC Plastic Paint.	EDLAC Obliterating White.
FLEXGLAZE Scumbling Glaze.	EDLAC Anti - Corrosive Primer.
VARSTAIN Combined Oil Varnish Stain.	STRIPPO Paint and Varnish Remover.

FERGUSON EDWARDS & CO. (LONDON) LTD.

PAINT & VARNISH MANUFACTURERS, ST. GEORGES MILLS, LONDON, N.E.
TELEPHONE: CLARKENWELL 7411 (8 LINES). TELEGRAMS: EDLACA, NORDO, LONDON



While we cannot pride ourselves that there is anything particularly magical about our methods of remote control, we do know that they can be relied upon to perform without musical effects. Silent gearing and thorough lubrication

look after that part of the business, and for the rest, operation is so simple that there is no need to call in the fakir. It is not beyond even the office junior to charm those high-up and out-of-the-way windows and ventilators into mute obedience.

ARENS

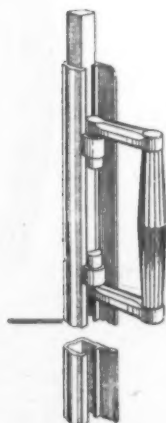
(Regd. Trade Mark)

REMOTE CONTROLS

Covered by Patent

SELF-LOCKING HANDLE AND SLIDE. Ideal for operating controls connected to Windows, Ventilators, Light Dampers, etc. Colour of grip and finish available in a range to harmonise with decorative schemes. Control can be locked in any position by a quarter turn of the handle. An indicating pointer can be fitted if required.

JUST SLIDE THE HANDLE!



ARENS CONTROLS LTD., TUNSTALL RD., EAST CROYDON, SURREY

Telephone : ADDISCOMBE 3051/4

360A STRATFORD ROAD, SPARKSHILL, BIRMINGHAM, 11.

Telegrams : UNICONTROL, PHONE, LONDON

BIRMINGHAM TELEPHONE : VICTORIA 2631

READY & WELL EQUIPPED



IN THE PAST YEAR WE HAVE BEEN
OCCUPIED IN THE TRANSITION STAGE
FROM WAR TO PEACE AND OUR
WIDESPREAD ORGANISATION IS
READY AND WELL EQUIPPED
FOR THE VAST PROGRAMME OF
ROAD & BUILDING CONSTRUCTION
THAT LIES AHEAD

**THE LIMMER & TRINIDAD
LAKE ASPHALT CO. LTD**

STEEL HOUSE, TOTHILL ST. WESTMINSTER, S.W.1

TELEPHONE. WHITEHALL 6776



"Wonder if I can get the 900 piles driven in a month."

Short of a tidal wave, snow blizzard or monsoon—Yes. On one urgent job the Franki Compressed Pile Co. drove an average of 250 piles a week for 20 months. Speed is the essence of a Franki contract.



"Waste of money using massive piles for this little job."

Agreed, sir. Try Franki Light Weight Piles—the bantam weight champions—specially designed to carry loads of 40 tons per pile.



"That warehouse next door doesn't leave me room to swing a cat."

Franki have specially constructed plant for just such difficulties.

"But that works out at a load of 80 tons per pile."

So what! Franki Standard Heavy Weights will take up to 90 tons each—with a healthy safety margin above that.

"We're in for a hard spell: wonder if we'll be held up."

Rigorous weather won't hold up a Franki job unless it be a real "brass monkey." Being moulded directly into the soil they can be driven at almost all times.

"All this needs is a bit of propping."

Then all you need is Franki Miga Piles. They can be jacked under a building without vibration, noise, smoke or steam, while up above it's "Business as Usual."

"Vibration would wreck the plant next door. I must cut it out somehow."

The Forum Pile is practically vibration-less. The method of installation is by mechanical digger. The resulting job will not only be 100 per cent. satisfactory but represent a very definite saving in costs.



ALL THE ANSWERS *by* FRANKI

SEND FOR A COPY OF OUR SILVER BROCHURE.

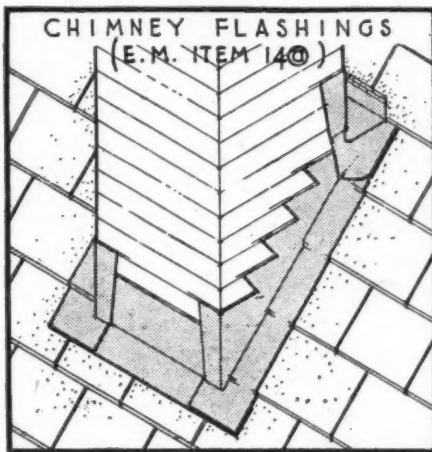
FRANKI PILES

CARRY MORE TONS PER PILE

THE FRANKI COMPRESSED PILE CO., LTD. 39, Victoria St., London, S.W.1
Telephone: ABBEY 6006-9
Telegrams: "FRANKIPILE, SOWEST, LONDON."

To ensure that available supplies of **LEAD** are used to the best advantage

the Ministry of Health have issued an Economy Memorandum which regulates the amount of lead to be used for certain purposes which are described and illustrated in a leaflet "Vital Minimum Uses of Lead Sheet and Pipe in House Building." Copies may be obtained from L.I.D.C. Illustrated below are 2 examples of vital uses which are included in the publication referred to.

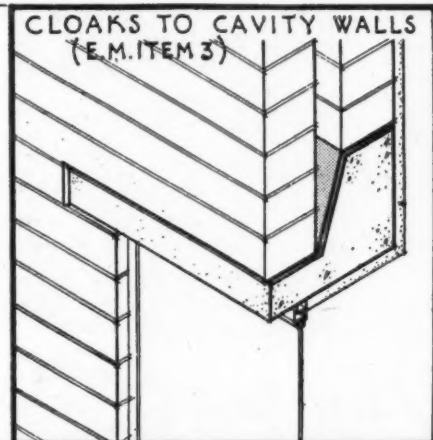


FLASHINGS TO CHIMNEYS

The units of sheet lead forming flashings for chimneys, which are the stepped flashings with apron or soakers and the front apron and back gutter, can be prepared and applied by a skilled plumber in a very short time, and can be worked to suit any roof covering material, whether slate or plain tile, moulded or contoured tile, or corrugated sheet material. 4 lbs. per sq. ft. substances of sheet lead when worked down in close proximity to the roofing material will continue to fit close to the roof irrespective of weather conditions. A permanent flashing is obtained which remains impermeable under the most severe conditions. The substance of lead for this purpose should not exceed 5 lbs. per sq. ft. (see Item 14(a) of E.M.)

CLOAKS TO CAVITY WALLS

An important feature of cavity wall construction is that proper provision is made where the cavity is closed by lintels above doors and windows to prevent a bridge for dampness being formed. Sheet lead is eminently suitable for this purpose: it is readily fitted in position, forms an excellent bond with mortar and is permanent. The use of substance not exceeding 3 lbs. per sq. ft. is permissible. (See Item 3 of E.M.)

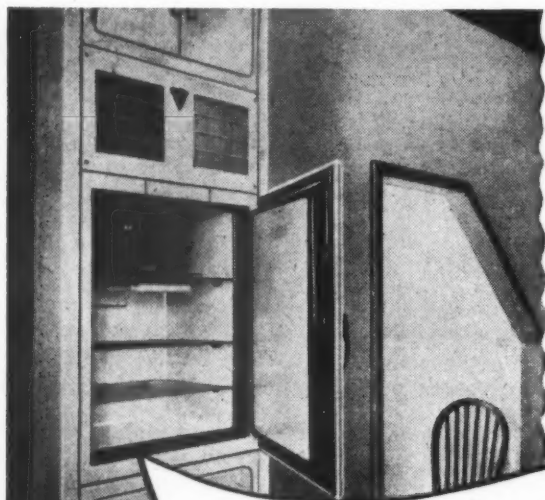


h
LEAD

The Technical Information Bureau of the Lead Industries Development Council, which exists to give assistance on problems relating to the use of lead sheet and pipe in building work, will be pleased to give advice on any questions relating to the present restricted uses of the materials.

LEAD INDUSTRIES DEVELOPMENT COUNCIL, EAGLE HOUSE, JERMYN STREET, LONDON. S.W.1

LEAD TECHNICAL INFORMATION BUREAU, 25 LOWER BELGRAVE STREET, S.W.1



Prestcold built-in refrigerators embody many outstanding advantages which architects and designers have been quick to appreciate. The model illustrated on the left has storage capacity of approximately $4\frac{1}{2}$ cubic feet, includes ice making and "cold cooking" facilities, needs no special air-bricks or ducting for ventilation of mechanism, and can be incorporated at any height into modern kitchen fittings. It has received great attention at all kitchen exhibitions at which it has been shown.

built-in refrigerators



by **PRESTCOLD**

PRESTCOLD WILL MAKE
REFRIGERATION
AN EVERY-HOUSEHOLD
WORD

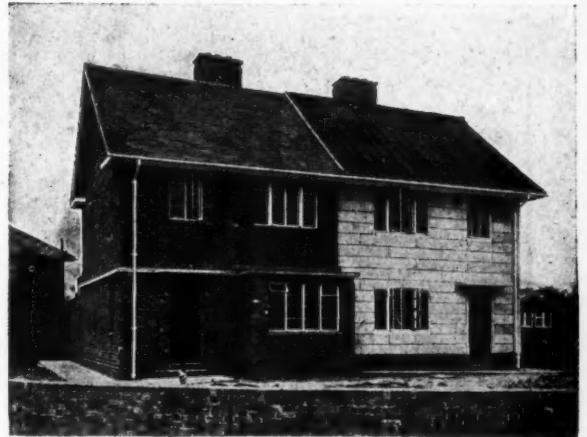
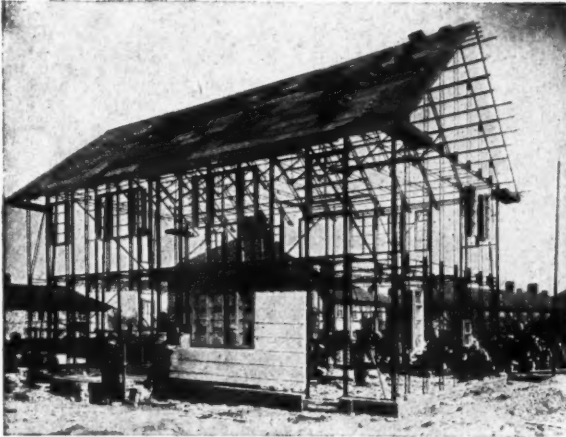


A PRODUCT OF THE PRESSED STEEL CO. LTD., COWLEY, OXFORD

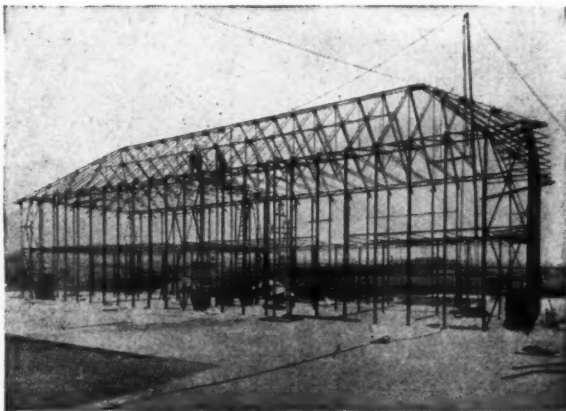
Illustrated above is the 3 cubic feet Prestcold refrigerator supplied to Government orders, for present-day housing schemes.

Any enquiries concerning built-in refrigerators will be welcomed by our technicians, and a free advisory service is readily at your disposal. Please write if you think we can help.

Steel Frames for **Permanent House Construction**



City of Birmingham Experimental Houses by Herbert J. Manzoni, Esq., C.B.E., M.I.C.E., City of Birmingham Engineer & Surveyor.



Demonstration Housing Site, Northolt, Middlesex, by the Ministry of Works.

Presweld is supplied to Contractors in the form of Complete Frames
or alternatively Roof Structures or Floor Beams as required.

HILLS
Presweld
TRADE MARK
STEEL FRAMEWORK

PROV. PATENT NOS. 544844, 544943, 270843, 270943

Designed and Produced by
HILLS PATENT GLAZING COMPANY LIMITED

ALBION ROAD, WEST BROMWICH. PHONE: WEST BROMWICH 1025 (7 lines)
LONDON OFFICE: 125 HIGH HOLBORN, W.C.1. PHONE: HOLBORN 8005/6



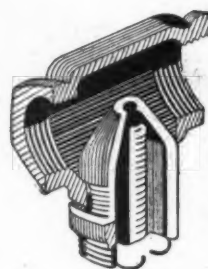
NOW is the time to prevent water pipes bursting in winter by fitting or specifying ZeroSS Anti-Burst Valves.

ZeroSS Anti-Burst Valves, by discharging the volume of water equivalent to the displacement of the expanding ice forming in an installation, relieve the increased pressure, which normally causes pipes to burst, and reseal automatically before the thaw takes place.

ZeroSS Valves, approved by many Water Authorities and specified by Architects and Sanitary Engineers throughout the British Isles, have proved their efficiency and reliability and may be recommended with complete confidence.

The ZeroSS Technical Department places its services at your disposal and will gladly prepare plans and working drawings or give advice on the protection of small or large water installations against frost damage.

ZeroSS Anti-Burst Valves, correctly installed, give a hundred per cent. efficiency and cost less than burst pipes.



ZEROSS — A certain and automatic safeguard against burst pipes due to frost.

Cannot corrode. No essential parts in contact with water.

Supplied with essential chambered tees and made in a range of types and sizes to suit all domestic and industrial water installations.

Can be fitted into iron, lead or copper systems with equal ease and efficiency.

Cost less than burst pipes.



For details write:

S. GRAHAME ROSS LTD., BATH RD., SLOUGH, BUCKS.



These beams will get an awful hammering, but the Isteg will take care of that. The Building Research people give it a higher safety factor than mild steel and it's better for impact. Apart from that it does show a saving and we don't have to worry about cracks.

for Concrete Reinforcement

ISTEG



STEEL

Manufactured by: GUEST, KEEN & NETTLEFOLDS, LTD., CARDIFF

McCALL & CO. (SHEFFIELD) LTD., TEMPLEBOROUGH • THE UNITED STEEL COMPANIES LTD. SHEFFIELD

AND ISTEG STEEL PRODUCTS LTD. (SALES), 7 PRINCES STREET, LONDON, S.W.1. PHONE: WHITEhall 3757



PRESS GANG

In factories, institutions, schools and offices in most parts of the country there is a press gang at work saving fuel. But it is an unusually willing and well-behaved press gang.

These Prestex non-concussive self-closing taps have to be pressed to serve and as soon as you stop pressing they stop serving! That's the beauty of them as water savers.

With these Prestex self-closers on the job you need no longer worry about the thoughtless people who always forget to turn off the tap.

The use of these taps is approved by most Water Companies throughout the country (including the Metropolitan Water Board).

Prestex

PEGLERS LTD.

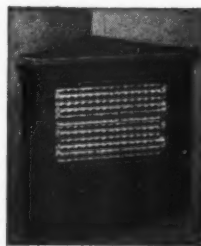
BELMONT WORKS, DONCASTER

and 58 SOUTHWARK STREET, LONDON S.E.1

ELECTRIC Heating and Cooking FOR

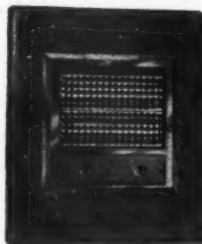
THE MODERN HOME

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

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



Wall Panel Fire

'Belling' Electric Domestic Cooking Equipment is, of course, famous for its high efficiency.

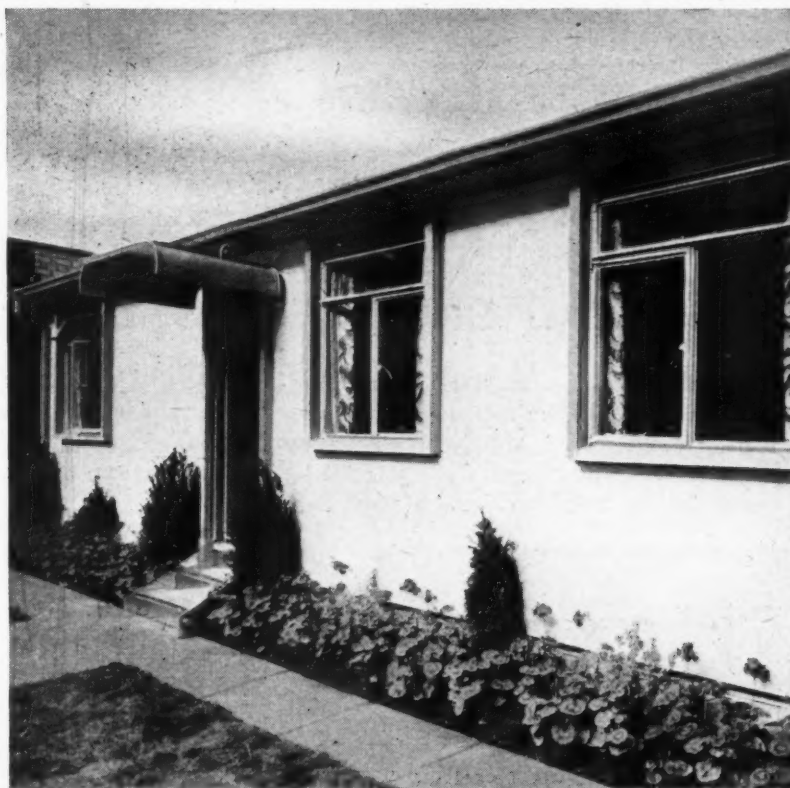
Although our present production is largely absorbed by urgent Government orders for Housing requirements, all enquiries will receive our keen and enthusiastic co-operation.

You can't beat a

Belling

Belling & Co., Ltd., Bridge Works, Enfield, Middlesex.
Telephone: Howard 1212

Metal, wood and brick



Duresco paints cover the whole field of decoration. For every condition and climate — for outside work and inside — for every surface from the metal, wood and brick of the pre-fabricated house exterior to the stone, stucco, brick or roughcast of the traditional housefront — there is a

Duresco product. Each Duresco paint is made in a wide colour range to which there are some interesting newcomers. Whether you need water paints, oil paints or enamels, you can specify a Duresco product and count on absolutely reliable results, because Duresco has passed so many tests over so long a period.

D U R E S C O

products

Duresco, King of Water Paints; Aquamat Water Paint; Silpaco Flat Oil Paint; Silcolac Hard-Gloss Paint; Silkardo Washable Distemper; Duresco Varnishes. For fuller details and colour-charts please write to Duresco Products Ltd., Charlton, London, S.E.7.

THE MASTICON PROCESS

FOR

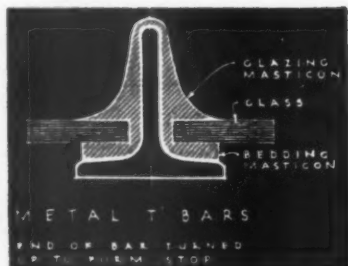
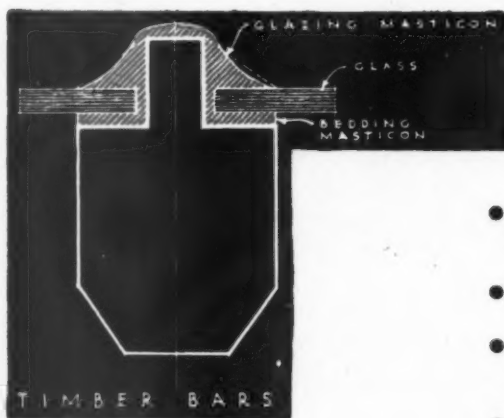
MODERN FACTORY GLAZING

by

INDUSTRIAL ENGINEERING LTD.

THE MASTICON PROCESS is a service for the glazing of roofs of Industrial premises. It combines the supply and fixing of special type metal T. bars, the glass being cushioned on

resilient Bedding MASTICON. The bars are sealed against the weather by the application of plastic GLAZING MASTICON over the exposed cap of each bar.



ADVANTAGES OF GLAZING BY THE MASTICON PROCESS

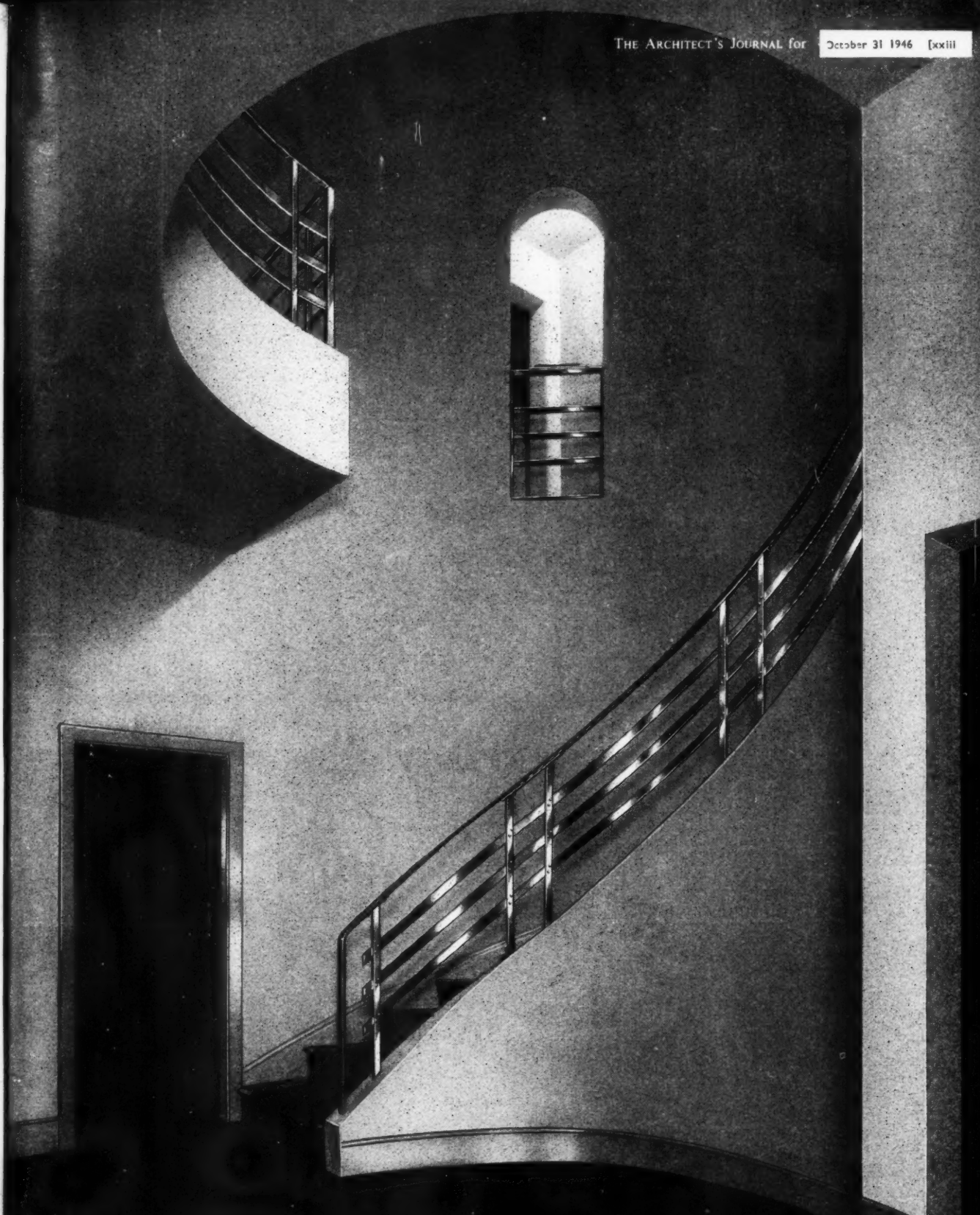
- Ensures permanently sound glazing which will withstand roof movement and vibration.
- Makes glazing joints which remain watertight.
- Protects metal bars against corrosion and timber bars against decay.
- Eliminates painting costs.
- Is unaffected by changes in temperature.

Our technical service is at your disposal to conduct surveys and submit estimates willingly and without obligation.

INDUSTRIAL ENGINEERING LTD.

Head Office : Mellier House, Albemarle Street, London, W.1

Telephone Number: Regent 1411 (P.B.X. 4 lines)



BIRMABRIGHT

"Birmabright" — the brand of aluminium used in this Northumbrian residence — is particularly resistant to atmospheric influences. The work was executed by Messrs. W. Aynesley & Sons Ltd. Architects: Archibald & Archibald, F.F.R.I.B.A. Write for illustrated leaflet to

EN-TOUT-CAS

POST-WAR RECONSTRUCTION ORDERS

The repairing or making new courts at the following noted clubs, etc. :
THE ALL ENGLAND CLUB, WIMBLEDON. A new No-Upkeep Court. Repairing all existing Hard Courts. New netting surrounds, etc., for Junior Championships, etc.

THE WEST HANTS CLUB, BOURNEMOUTH. Repairing all Hard Courts (eleven) for the British Hard Court Championship.

QUEEN'S CLUB, KENSINGTON. Re-making seven war damaged Grass Courts.

Also 478 orders have been received, which include some of the most important Schools, Hotels, Municipalities, well-known people, etc., in the country.

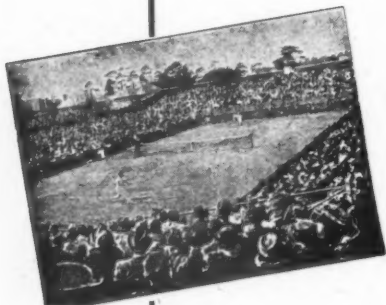
We are now able, thanks to returning staff and partial easing of the raw materials position, to undertake the construction of "En-Tout-Cas" Courts—the number, however, still being limited.

May we suggest that you allow us to put your name on our rotation list and then we can give your enquiry attention.

We are also engaged upon the construction of Sports and Recreation Grounds, and bulk levelling with the latest type mechanical tools can be promptly undertaken.

Work on Houses and Factories at present precludes the construction of Squash Courts and Swimming Pools (unless permits obtained).

We specialise in Grass Seeds for all types of Sports Grounds. Forty years of this work has given us the necessary experience that enables us to advise the correct mixtures to be used to suit the soil and to meet the requirement. We analyse soils free of cost and also advise and supply the best fertilizers to be used for each particular case.



THE EN-TOUT-CAS CO. LTD.

SYSTON Nr. LEICESTER

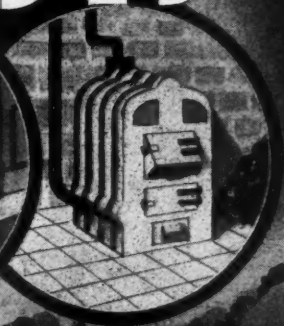
Telephone : Syston 86177 (3 lines)

London Office in Fortnum and Mason's Sports Dept. (3rd Floor)
 182, Piccadilly, W.1.

Telephone Nos. : Regent 0141-0142



SERCK TUBES



NON FERROUS & LIGHT ALLOY
 FOR ALL DOMESTIC AND
 INDUSTRIAL PURPOSES

SERCK TUBES LTD. WARWICK RD. BIRMINGHAM II. (Phone VIC 21478) and at LONDON & GLASGOW



* *Get moving with Winget!*

WINGET OF ROCHESTER

Concrete Machinery and
Civil Engineering Equipment
Manufacturers. Iron Founders

WINGET LIMITED, ROCHESTER, KENT. TELEPHONE: STROOD, 7276 (5 LINES). TELEGRAMS: WINGETISM ROCHESTER.

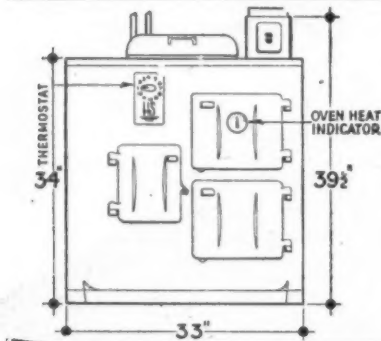
H.S. heat storage cooking

HOUSING SCHEMES

The "H.S." Cooker, regulated by thermostat, answers the national need for a Heat Storage Cooker, with its efficiency and startling fuel economy, sufficiently low priced to be used in municipal housing schemes.

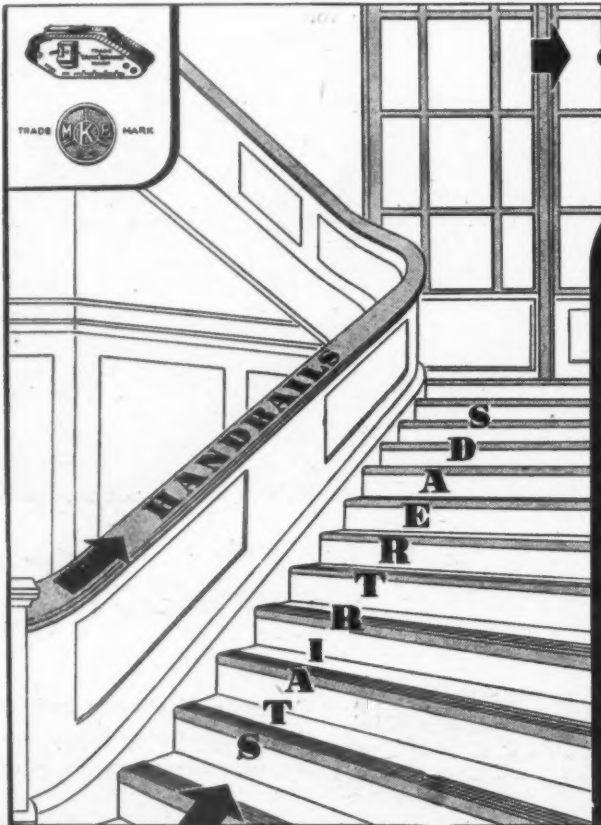
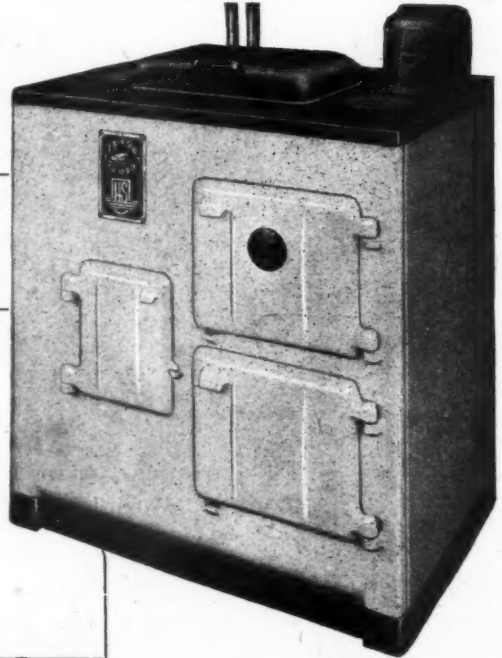
In addition to cooking, from one fire is provided a constant supply of hot water. Easy to work, providing a gentle warmth day and night, having two spacious ovens, top for roasting and lower for slow cooking, and extensive fast boiling hot-plate, the "H.S." brings the advantages of Heat Storage Cooking, FOR THE FIRST TIME, to the lower-income home.

FULL DETAILS GLADLY SUPPLIED ON REQUEST FROM
Sole Manufacturers - - **SMITH & WELLSTOOD LTD**
Est. 1854. Head Office & Works : **BONNYBRIDGE, SCOTLAND**



BRIEF TECHNICAL DETAILS

Overall Depth : 21 1/2"
Each Oven : 12" x 10" x 17" deep.
Inside diam. of flue outlet 4 1/2" suitable for 4" diam. asbestos pipe.
Boiler : 70/80 gall. water at 150/160° F. over 24 hours.
Storage Cylinder : 30/35 gall. within 15 feet of cooker and insulated.
Fuel : Anthracite, Coke or Phurnacite.
Consumption : 16/20 lbs. per 24 hours.
Weight : 588 lbs.
Finish : Mottled Cream Porcelain enamel.
Right or Left hand models available.



CASEMENTS

Where METAL matters

The extraordinary versatility of extruded sections in brass and bronze keeps pace with architectural development. In adaptability, speed of erection, beauty of line and durability, McKechnie Metal is unrivalled. All architects, constructional engineers and builders should be in possession of the latest data showing the unusual possibilities of McKechnie Architectural Metal.

McKECHNIE metal technique

McKECHNIE BROS. LTD., ROTTON PARK STREET, BIRMINGHAM, 16
Phone: Edgbaston 3581

LONDON - - 62, Brook Street, W.1. Phone: Mayfair 6182/3/4
LEEDS - - Prudential Buildings, Park Row. Phone: Leeds 23044
MANCHESTER-509/513, Corn Exchange Buildings, 4. Phone: Blackfriars 5094
NEWCASTLE-ON-TYNE - - 90, Pilgrim Street Phone: Newcastle 122718

IMPORTANT ANNOUNCEMENT

To Contractors concerned with problems of EARTH MOVING

THE most important "job" since the Battle of Britain, is the rebuilding of Britain. H.M. Government, appreciating the urgent need for making available to you the "tools" for the job, have

- (1) Released surplus ALLIS-CHALMERS Industrial Tractors which are now available to industry.
- (2) Licensed the future importation of new ALLIS-CHALMERS Industrial Tractors.

ALLIS-CHALMERS achievement in *mobile* scraping, excavating,

Diesel Industrial Tractors are the world's greatest **POWER**—adaptable for bull-dozing, angle-dozing, hoisting, towing, winching and every earth-moving job. Built round the world-famous General Motors 2-Cycle engine, these Tractors incorporate modern features that give higher speeds and greater power than any other Tractor on earth.

Mackay Agencies Ltd. will be pleased to give you full information regarding the procedure to obtain new and surplus machines.



ALLIS- CHALMERS

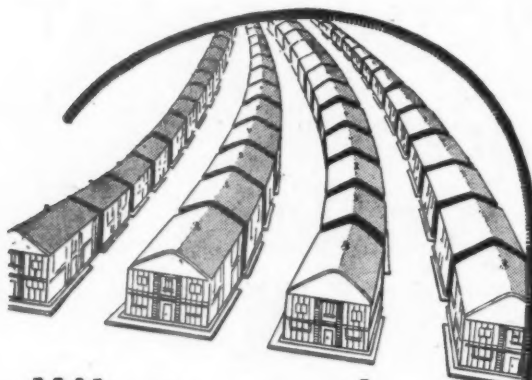
THE FASTEST, SMOOTHEST RUNNING AND MOST POWERFUL INDUSTRIAL TRACTORS ON EARTH

Sole Agents in the U.K. for ALLIS-CHALMERS Industrial Tractors, The BUCKEYE TRACTION DITCHER COMPANY and the Associated Tractor Equipment of Baker, Buckeye, Gar Wood and Carco. Stockists of spares for above. Complete works and field service overhauls at short notice.

MACKAY
AGENCIES
LIMITED

FAGGS ROAD, FELTHAM, MIDDLESEX

Telephone : FELTHAM 3415-9.



Whatever the Housing Target...

Whether the order is for two, or two thousand houses—or for any kind of building construction—specify "ASHTON" Cables and Flexibles.

All "ASHTON" Cable manufacture is laboratory controlled and they are guaranteed to meet every relevant specification. During the war we supplied endless quantities of "ASHTON" Cables and Flexibles to the Fighting Services. What was good enough for them is good enough for anything. Make sure of the best—specify "ASHTON" Cables and Flexibles—the Non Association Cables of repute.

Supplies are now available from numerous distributors throughout the country, but in case of any difficulty write direct to the makers.

ASHTON

CABLES and FLEXIBLES

made by

AERIALITE LTD

CASTLE WORKS-STALYBRIDGE-CHESHIRE



Specify ASHTON Cables and save money

©C

IF THE PAINTING

MUST BE GOOD

IT'S

WORTH

WAITING

for



DRYNAMELS

DRYFLEX

DURABLE GLOSS FINISH

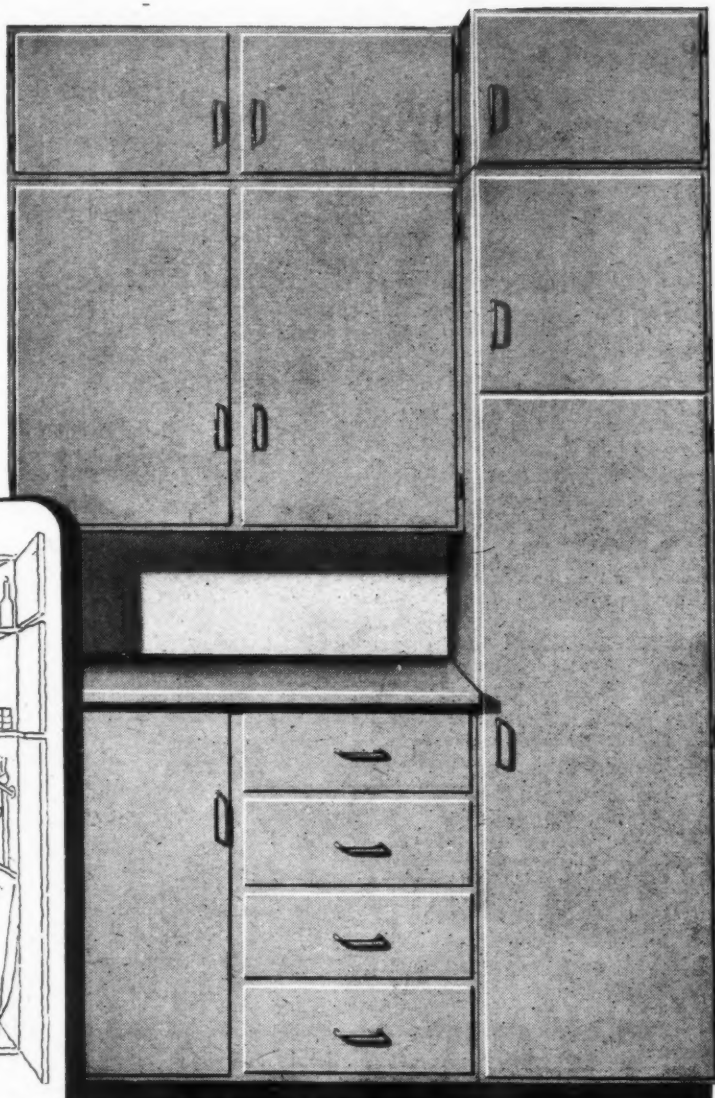
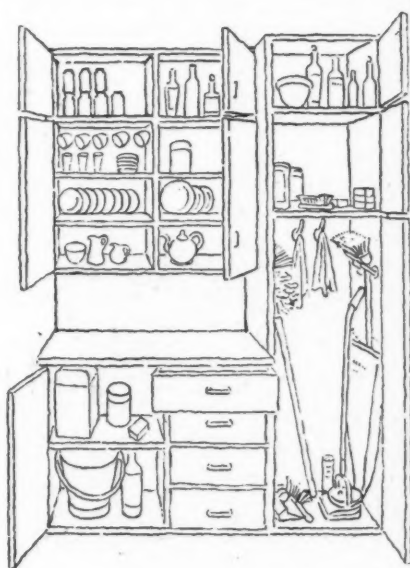
*Drynamels Specialist Service gives you
"Tomorrow's Finish—Today"*

DRYNAMELS LTD., SHAFTMOOR LANE, HALL GREEN,
BIRMINGHAM 2. TELEPHONE: SPRINGFIELD 1161/2
T.B.W.



STANDARD KITCHEN UNITS

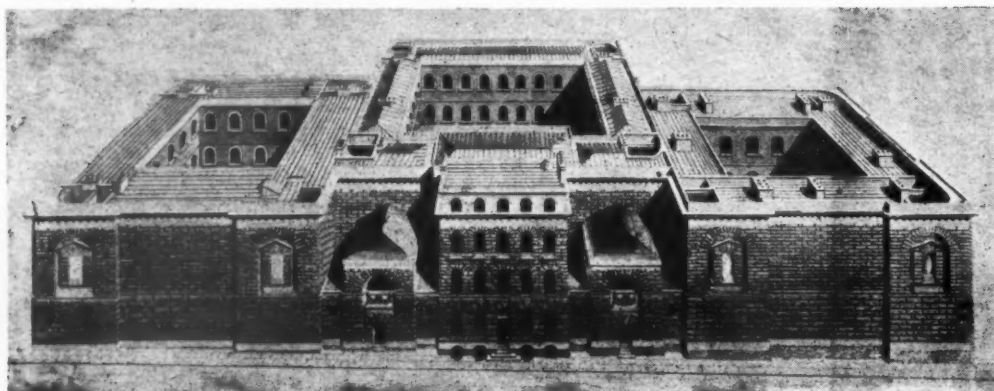
The broom cupboard is one of the most useful of the EJMA Kitchen Units. It holds two brooms, one mop, a vacuum cleaner and a carpet sweeper and, combined with two floor units, two wall units, and two storage units, forms the complete cupboard equipment for a small kitchen.



EJMA Kitchen Units conform to the overall sizes laid down in B.S. 1195:1944 and can only be obtained from certified users of the EJMA Certification Trade Mark.

For name of suppliers in any district, write to:—

**THE
ENGLISH JOINERY MANUFACTURERS ASSOCIATION**
SACKVILLE HOUSE, 40 PICCADILLY, W.1 REGENT 4448 (INCORPORATED)



Original water colour of Newgate Prison, by George Dance the younger. Reproduced by permission of the Trustees of Sir John Soane's Museum.

The younger Dance had been City Architect for more than 20 years

when the first Rowney founded his business in London. Much of Dance's best work, such as Newgate, was already done, but he remained in office for a further 20 years—long enough to see Rowney's reputation as securely established as his own.

Founded in that classic age, the House of Rowney has served great architects ever since. For one hundred and fifty-seven years a Rowney has directed the business. Each succeeding generation has re-

tained the cherished tradition of quality and craftsmanship. Each has, in turn, added the fruits of scientific progress to the store of a unique experience.

Today, most items of Rowney's impressive list of quality products are in short supply. But it is worth while, wherever you are, taking a little extra trouble to obtain them.

ROWNEY'S

Established 1789

PENCILS · ARTISTS' MATERIALS · ARCHITECTS' DRAWING MATERIALS

GEORGE ROWNEY AND COMPANY LIMITED, 10 AND 11 PERCY STREET, LONDON, W.1

ROWNEY'S "KANDAHAR" INK

Made in 20 colours, Black and White, in varying bottle sizes from ½ oz. These inks are in such perfect suspension that they do not leave a deposit at the bottom of the bottle. This means smooth, even flow from the drawing pen. It is well worth asking for Rowney's by name.

Lift Doors

BY

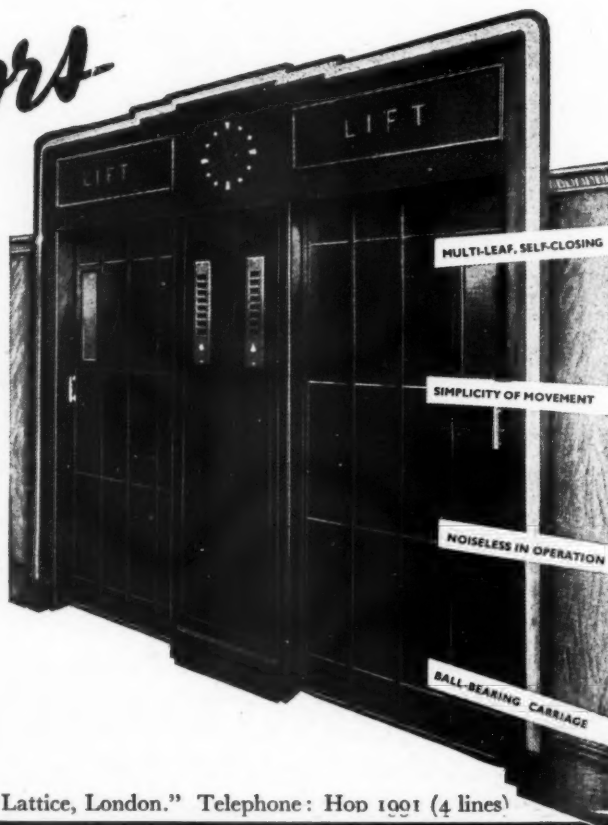
CASTON

The perfect fire-resisting lift door approved by the National Fire Brigade Association. Finish to match all types of decoration.

Established 1847

CASTON & COMPANY LTD.

Tabard Street, London, S.E.1. Telegrams: "Lattice, London." Telephone: HO 1001 (4 lines)



CRITTALL WINDOWS



FOR THE NEW HOUSES

By specifying STANDARD metal windows — from British Standard 990 : 1945 — you help to reduce the present unavoidable delay in delivery, and at the same time you ensure highest quality and lowest cost. Ask for leaflet 115 B.

THE CRITTALL MANUFACTURING CO. LTD.
BRAINTREE. ENGLAND



Gently undulating
Quite unlike

REZO *flush doors*

PATENT N° 314356

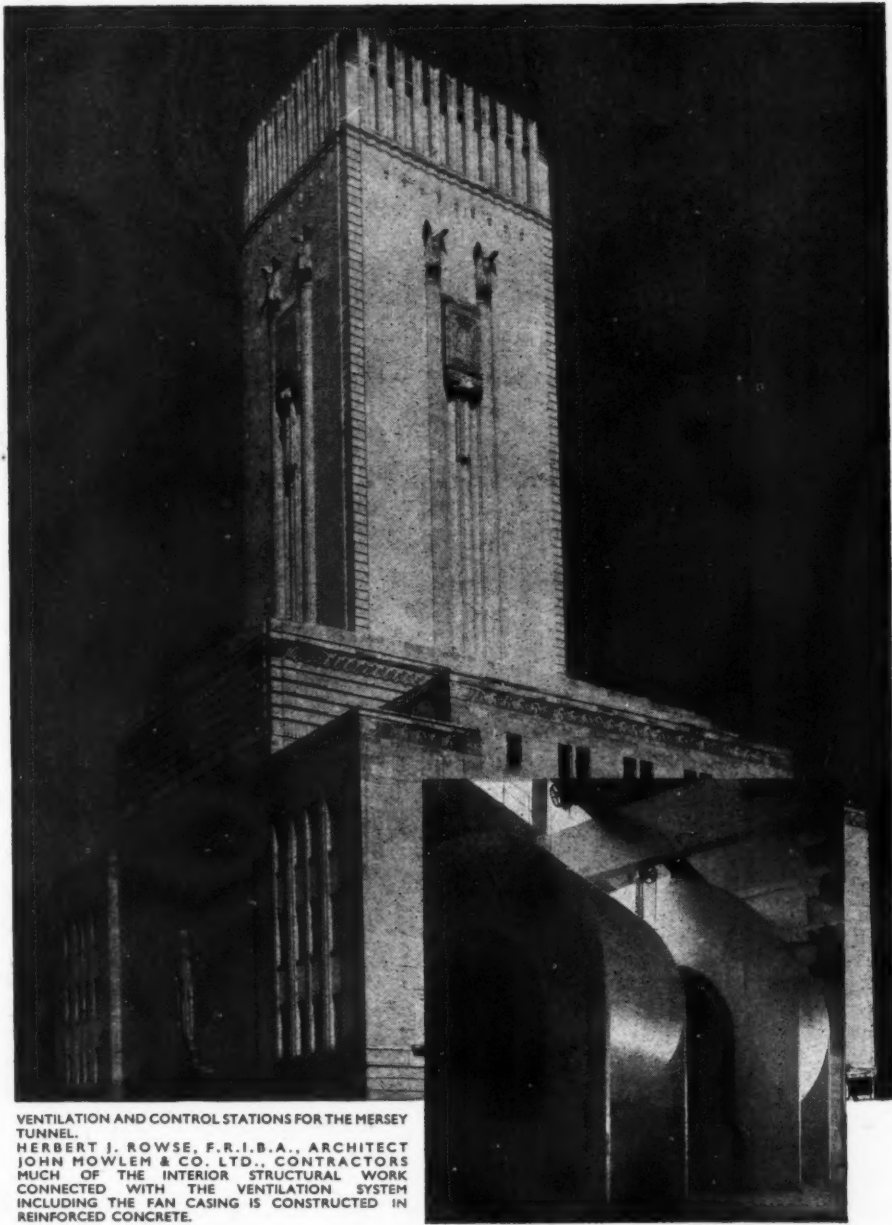
which always remain optically flat

All particulars from

GLIKSTEN DOORS LIMITED

11, Grosvenor Gardens ————— London, S.W.1

Branches at LIVERPOOL • BRISTOL • PAIGNTON



VENTILATION AND CONTROL STATIONS FOR THE MERSEY TUNNEL.
HERBERT J. ROWSE, F.R.I.B.A., ARCHITECT
JOHN MOWLEM & CO. LTD., CONTRACTORS
MUCH OF THE INTERIOR STRUCTURAL WORK
CONNECTED WITH THE VENTILATION SYSTEM
INCLUDING THE FAN CASING IS CONSTRUCTED IN
REINFORCED CONCRETE.

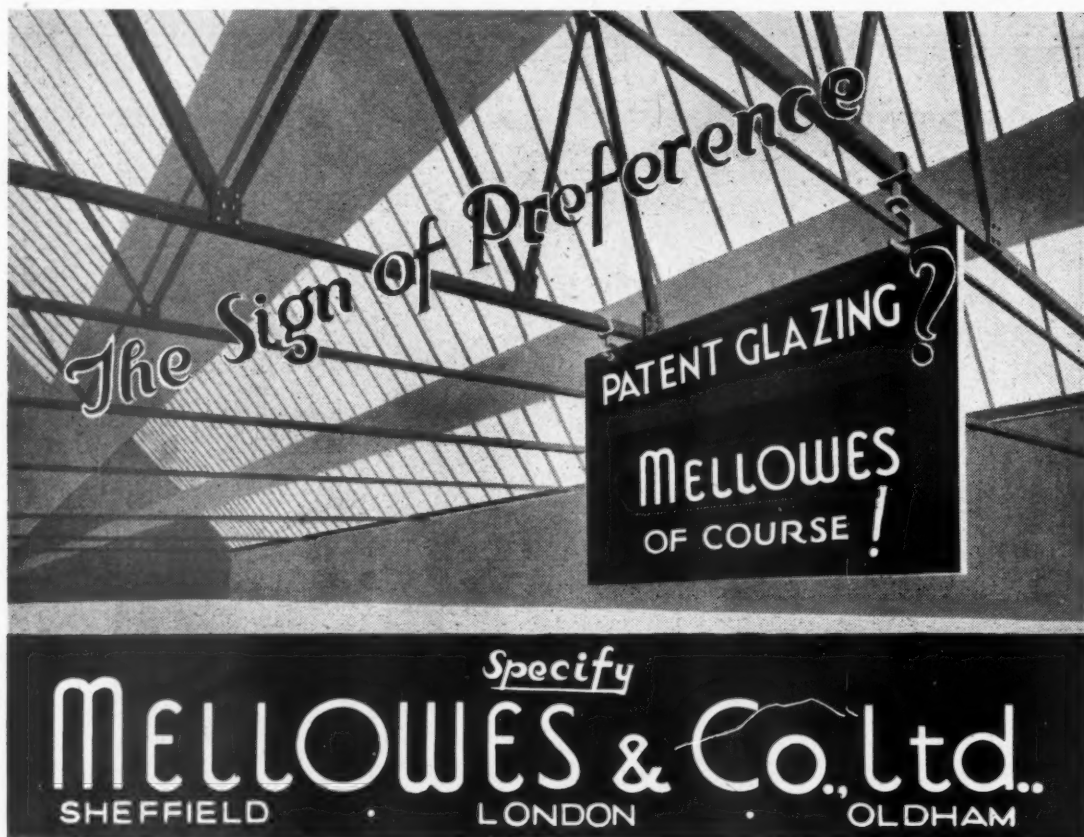
Reinforced Concrete by

THE TRUSSED CONCRETE STEEL CO., LTD.

6, Collingham Gardens, Earls Court, London, S.W.5.

Telephone: FRObisher 8141

Also at Manchester • Newcastle-on-Tyne • Birmingham • Glasgow • Cardiff • Leeds



The Sign of Preference

PATENT GLAZING?
MELLOWES
OF COURSE!

Specify
MELLOWES & Co. Ltd.
SHEFFIELD • LONDON • OLDHAM

'THE LIVING STONE'

Hands, chisel and stone strive with a common purpose to carve out of swift inspiration a lasting beauty. For Hopton-Wood is a stone of inherent warmth and character: responding instantly to the delicate hands and tools that work it.

From a hill in Derbyshire

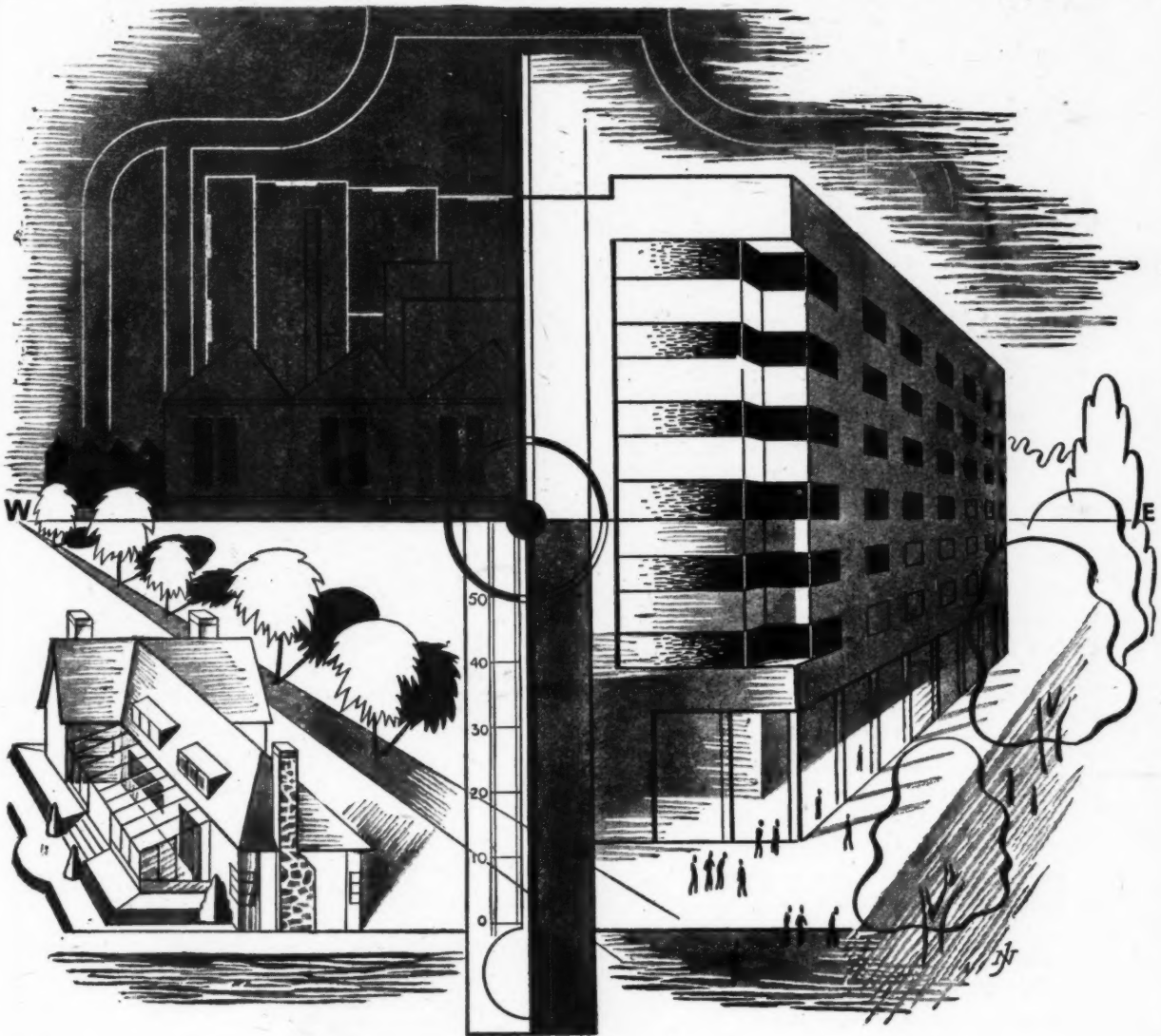
**HOPTON-WOOD
STONE**



THE HOPTON-WOOD STONE FIRMS LTD . CRAIG'S COURT HOUSE. 25 WHITEHALL, S.W.1

Quarries and Works: WIRESWORTH, DERBYSHIRE *Members of British Stone Federation*

BIGWOOD UNICALOR COAL STOKER



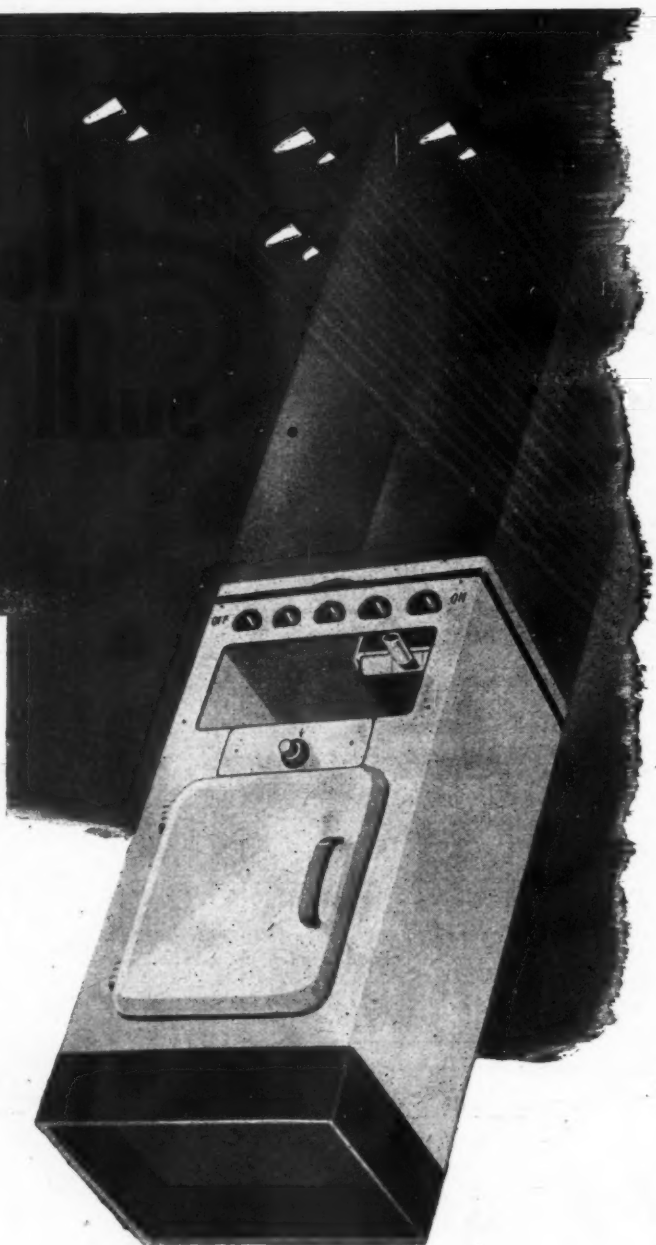
HEATING

Whatever the outside conditions, the Bigwood "Unicalor" Coal Stoker exactly proportions the fuel feed to the heating requirements, regardless of prevailing weather conditions. For the heating of institutions, flats, industrial and commercial premises, hotels, stores and of the larger private houses, "Unicalor" firing is ideal. It is clean, automatic, needs none but occasional supervisory labour, and the design and method of feed ensure the most efficient utilisation of fuel.

In preparing schemes for heating, the advantages of "Unicalor" should be fully borne in mind.

JOSHUA BIGWOOD & SON LIMITED · WOLVERHAMPTON

With all the surprise tactics of the Atomic bomb, the CORNER Cooker comes to an expectant world like a Bolt from the Blue. Here, at last, is the Kitchen Corner stone that has everything — Efficiency, Economy, Safety, Lasting Beauty, Solidity and Simplicity. The Corner Cooker is no ethereal dream. Like all other Corner productions it is a fact: and it has come to stay. That it will sweep all before it we have no doubt. It has only to be seen to be believed. If you'd like to know more about it and other CORNER Kitchen Appliances, come up and see us sometime or, if that is inconvenient, write to our Sales Manager, and let us come to see you.



The name that means a lot

G. CORNER & CO. LIMITED . ADAIR STREET WORKS . MANCHESTER . 1

AND REMEMBER - CORNER FOR KITCHENS

In co
war
pages
get a

D
N
Title
paper
by t

BO
Mus
Cour
CO
(Spo
HO
Desi
ties
R. Y
Bow
sions
durin
organ
don,
avail
meal
visit
and

L
Tea
10.3
4.30
HC.)

Sua
Exhi
(Spo
Asso

Hel
on I
At
(Spo

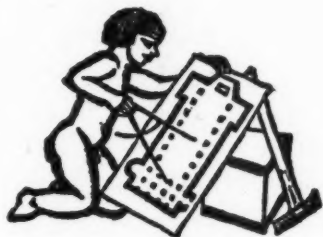
Ex
Roy
pain
from
is pe
of v
publ
days

Fu
Goo
30,
of a
held
how
attra
hom
at v

AA
the
(Spo

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 materials now in short supply, are not necessarily available for export.



DIARY FOR OCTOBER NOVEMBER AND DECEMBER

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 on the front cover.

BOOTLE. *National Buildings Record.* Exhibition at the Public Library, Museum and Art Gallery. (Sponsor, Arts Council.) Until Nov. 6

COLEFORD. *Ideas on Design in the Home.* Exhibition at the Town Hall. (Sponsor, Arts Council.) Until Nov. 2

HODDESDON. *Council of Industrial Design. Refresher Course for Young Designers.* Industrial designers and authorities on design, including Warnett Kennedy, R. Y. Goodden, Norbert Dutton and B. G. Bowden, will take part in talks and discussions with young designers and draughtsmen during a residential refresher course organised by CID at High Leigh, Hoddesdon, Herts. Limited number of places available. Tickets, two guineas inclusive of meals and accommodation. Students will visit the Britain Can Make It Exhibition and talk to its designers. (Sponsor CID.) Nov. 4-8

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

Sudbury and District Survey and Plan. Exhibition at 13, Suffolk Street, S.W.1. (Sponsors, Sudbury and District Planning Association and the Housing Centre.) Until Nov. 8

Helping Young People to See. Conference on Design for Youth Leaders and Teachers. At Brown's Hotel, Dover Street, W.1. (Sponsor, DIA.) Oct. 31

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

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

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

Captain R. L. Reiss. *The Rebuilding of Malta.* At 28, King Street, Covent Garden, W.C.2. Buffet lunch, 12.45 p.m. Talk and discussion, 1.15 p.m. (Sponsor TCPA.) Oct. 31

P. J. Marshall. *Planning in India and Burma.* At the Housing Centre, 13, Suffolk Street, S.W.1. 12.45 p.m., buffet lunch, 2s. 6d.; 1.15 p.m., talk and discussion. (Sponsor, HC.) Nov. 5

E. H. Penwarden and S. Anderson. *New Lighting for Old Buildings.* At the RIBA, 66, Portland Place, W.1. Light refreshments 5 p.m. to 5.40 p.m. Lecture 5.45 p.m. (Joint meeting of the RIBA and the Illuminating Engineering Society.) Nov. 6

Kurt Billig. *Prestressed Reinforced Concrete.* At the Institution of Civil Engineers, Great George Street, S.W.1. Invitation cards from Secretary, Reinforced Concrete Association, 94-98, Petty France, S.W.1. 6 p.m. (Sponsor, RCA.) Nov. 7

British Export Exhibition. At the London Exhibition Centre, New Coventry Street, W.1. Manufacturers desirous of taking space should communicate with L. M. Fisher, Controller and Organizer at the Exhibition Centre (Sponsor, Leon Goodman Displays, Ltd., managers of the Exhibition Centre.) Nov. 12-23

M. Lossos. *Continental Heating Practice.* At Room No. 1, Gas Industry House, S.W.1. 6 p.m. (Sponsor, IHVE, London and District.) Nov. 12

NORFOLK. *What is Modern Painting?* Exhibition at Norfolk Education Committee Youth Centres. (Sponsor, Arts Council.) Until Dec. 4

NOTTINGHAM. T. W. Beard. *Principles and Practice of Refrigeration.* At Victoria Station Hotel, 6.30 p.m. (Sponsor, IHVE, East Midlands Branch.) Nov. 6

SOUTHAMPTON. *What is Modern Painting?* Exhibition at Woolston Community Centre. (Sponsor, Arts Council.) Until Nov. 8

UXBRIDGE. *Pictures and Picture Making.* Exhibition at the County Branch Library. (Sponsor, Arts Council.) Until Nov. 2

WAKEFIELD. *Sculpture in the Home.* Exhibition at City Art Gallery and Museum. (Sponsor, Arts Council.) Until Nov. 9

WIMBLEDON. Shannon, Ltd., *Diamond Jubilee Party.* At the Town Hall. Nov. 12

NEWS

THURSDAY,
No. 2701

October 31, 1946
Vol. 104

News	307
Bodleian Library Extension ..	308
This Week's Leading Article ..	309
Astragal's Notes and Topics ..	310
Letters from Readers	311
Significant Form Without Function	312
Physical Planning Supplement: Kingston Upon Hull, A Plan for the City and County ..	313
Friluftstaden Housing Estate at Malmö, Sweden. Designed by Eric S. Persson	319
Information Centre	321
Societies and Institutions ..	323

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.

A striking feat of constructional engineering under difficulties lies behind the completion of the NEW DUNLOP FACTORY at Speke, now equipped for production.

During the war the site was an aircraft factory, and the last Halifax was flown off as late as July last year. The main buildings are 1,440 ft. long by 600 ft. wide, spans being 200 ft. wide. One of the main constructional changes needed for the change over from aircraft production to the most modern rubber processing and rubber goods manufacturing plant in operation to-day was the installation of very heavy foundations to support the massive machinery. The 58 heavy foundations, together with their services trenches, required 20,610 cubic yards of excavations and 9,611 cubic yards of concrete. Four typical examples are: Nine internal mixer bases requiring the excavation of 1,188 cubic yards; two fabric calendar bases 255 cubic yards; six belt bases 1,385 cubic yards, and two autoclave pits 2,270 cubic yards. The development of the layout for the various lines of manufacture was by means of the standard Dunlop one eighth inch to the foot scale models, which were positioned on to a layout board measuring 16 ft. by 8 ft., and photographed as development proceeded. Capital outlay for the factory is estimated at over £1,000 for each man on the pay-roll.



Aluminium and its alloys have a big part to play in the vast building programme, and it is important that architects, engineers and builders should be informed of the technique of using these building materials in association with concrete, cement, and plaster.

Generally speaking, the effect of concrete on aluminium depends on its alkalinity and moisture content. Aluminous cement, with low

alkalinity, does not react appreciably with aluminium; nor does plaster in dry conditions. Portland cement tends to attack aluminium during the curing period, especially if the moisture content is high, or if porosity is considerable, as in the case of light-weight concretes. Aluminium should in these circumstances be insulated from the concrete by means of bituminous paper, or by applying bituminous paint.

WE CAN GIVE YOU FACTS ABOUT ALUMINIUM .

NORTHERN ALUMINIUM COMPANY LTD. BANBURY, OXON. Makers of NORAL Products

From AN ARCHITECT'S Commonplace Book

THOUGHTS OF A 19TH-CENTURY SHARAWAG: WHY WE TAKE REFUGE IN NATURE.

[From *The Art of Building Cities* by Camillo Sitte; translated by Charles T. Stewart (Reinhold Publishing Corporation).] There is no need to design modern city plans in the mechanical manner that has become common; there is no need to exclude the splendour of art in building cities; and there is no need to renounce the accomplishment of the past. It is not true that modern traffic requires it. It is not true that public health requires it. Indifference and a lack of intelligence and good will condemn the modern city dweller to live his life out in a formless mass of monotonous dwellings and streets. It is true, of course, that the beneficent power of habit gradually dulls our senses to the impressions they receive, but how sadly this modern superficiality envelops us when we return from Florence or Venice. Perhaps that explains why the fortunate inhabitants of these cities that have been built with such artful magnificence are rarely disposed to leave them, while we, on the other hand, must annually escape to take refuge in nature for a few weeks in order to endure the city for the rest of the year.

★
**Mr. Frederick Gibberd F.R.I.B.A.,
IS TO PLAN THE SATEL-
LITE TOWN OF HARLOW**
which will house 60,000 people.

★
**Ministries of Health and Works:
Paints containing linseed or FATTY
OILS SHOULD NOT BE
USED for decorative purposes.**

Severe restrictions on the use of paint are necessary because of acute shortage of linseed oil and other raw materials. How these economies can be made is shown in a memorandum prepared by the Ministry of Works in collaboration with other Government Departments. It deals mainly with site work on permanent buildings of traditional types and is based on the following principles:—(1) Paints containing linseed or other fatty oils should not be used for purely decorative purposes. (2) Permanent buildings should have the preference over temporary in the use of paint. (3) Protection against corrosion and decay of essential structural parts of buildings should have preference in the use of paint over the less important parts. (4) The functions of buildings as well as destructive and contaminating conditions must be taken into account—for example, hospitals, dairies and kitchens, and exposure to severe atmospheric conditions. The memorandum points out that in using the fewer coats of paint specified in the schedule, better results are obtained by using darker paints instead of white and light tints. Moreover, opaque white pigments are in short supply. Cement paints, silicate paints, tar, tar paints and wood preservatives are all in good supply and may be used for all new or maintenance work without restriction. The memorandum has been circulated by the Ministry of Works to Government Departments and to the paint and building industries and by the Ministry of Health to local authorities as well as water, sewerage, hospital, cemetery, burial and mental hospital boards, voluntary hospitals and water companies. The Minister of Health (Mr. Aneurin Bevan) has asked for their co-operation in achieving economy in paint wherever possible.

The Royal Artillery are appealing for funds to build HOMES FOR DISABLED MEN AND WIDOWS and an addition to the RA War Memorial at Hyde Park Corner. The target figure is £250,000, and so far

£180,000 has been assured. The houses are being erected in groups all over the country, and 162 houses in 15 districts have so far been arranged. The houses are being built for the memorial by the British Legion Haig Homes. A proportion in each group is specially designed to mitigate the handicaps of men suffering from special types of disablement. While the houses are being built, interest on invested funds is being devoted to holiday grants as required to disabled and dependents. A small sum has also been set aside for an addition to the RA War Memorial at Hyde Park Corner to take bronze tablets commemorating the 25,000 artillerymen who lost their lives in the war. A donation of £1,000 enables a house to be named as the donor wishes. Contributions should be sent to the Hon. Secretary, RA War Memorial, 6, Duke Street, St. James's, S.W.1.

On October 22 the Ministry of Works announced the following changes in the SELLING PRICES OF BUILDING MATERIALS.

Changes in the authorized maximum selling prices of metal windows, Cornish slates, aluminous cement and Nautilus Flue Blocks are announced by the Ministry of Works. *Metal Windows.*—On application by the Metal Windows Manufacturers' Association, Ltd., the Minister of Works has authorized an increase of 7½ per cent. on the list selling prices of standard metal windows and doors, the increase to be effective as from September 25. The total increase on list prices is, therefore, now 12½ per cent. The extra charge authorized for galvanizing has been increased by 1½ per cent. to 17½ per cent., also as from September 25. *Cornish Slates.*—The Minister of Works has authorized an increase of 7½ per cent. in current selling prices of Cornish slates as from September 10. *Aluminous Cement.*—The ex-works selling price of aluminous cement manufactured by the Aluminous Cement Co., Ltd., has, under a voluntary price agreement between that company and the Ministry of Works, been reduced by 15s. to £11 per ton, as from September 26. *Nautilus Flue Blocks.*—As a result of negotiations with the Ministry of Works, the Nautilus Fire Co., Ltd., have reduced the selling prices of Nautilus Flue Blocks by 10 per cent., the reduction being operative on all dispatches from October 1.



All Hallows, Barking-by-the-Tower, the parent church of Toc H, one of the eleven war damaged City of London churches recommended for restoration by the Final Report of the Bishop of London's Commission. (The City Churches, Press and Publications Department, Church Assembly, price 1s.) It is recommended that of the 20 bombed churches, 11 should be rebuilt or restored, five have their sites sold, St. Augustine's, Watling Street, be used either as a chapter house or choir school for St. Paul's Cathedral; and the remaining three should be the sites for extra parochial church halls or institutes.



The New Bodleian Opened By The King



On Thursday last the King opened the £1,000,000 extension to the Bodleian Library at Oxford. Designed by Sir Giles Gilbert Scott, R.A., the building is primarily a book store—it will house 10,000,000 volumes—the main reading room being situated in the old Bodleian. Books are carried to and from the new and the old Bodleian by a mechanical conveyor, running vertically the full height of the new building and horizontally through a tunnel under Broad Street to the old one. The external walls of the new extension are Bladon stone from quarries a few miles outside Oxford, with dressings of Clipsham stone. Windows are anodized aluminium alloy. The main construction of the new library is, however, in steel and concrete. It is a vast rectangular book-stack round which runs an outer building, as it were, consisting on each of its three floors of a passage (going round the four sides of the stack) on the outer side of which are rooms, devoted to administration, research, and other purposes. The above photograph shows the fronts to Broad Street (left) and Parks Road; that on the left, the King and Queen, with the Chancellor of Oxford University, at the entrance, just after the official opening. Much of the cost of the Bodleian extension was contributed by the Rockefeller Institute. Land has also been reserved outside Oxford for the erection of a store for little-wanted books, and altogether it is calculated that the University has provided for the needs of the Bodleian for two hundred years to come.

★
The
Charter
the fol
use of
F. S.

As there
on the m
it kno
announc
authoriz
the desi
(and no
Fellows
Instituti
whether.
to be u
sideratio
decides
its prop
be app
member
general
to ascen
may be
societies
risk of
Finally,
involvin
laws, m
Privy C
time, an
it is pos
the mat

★
The
RIBA
Exami
will be
instead
as p

Profes
studen
mers
have
THI
auspic
and th
The pa
gramme
Wells,
and oth
The fo
Society
Society
Dorset
turers a
Ruding
A.R.I.B.A
Sydie L
R.W.A.,
A.R.W.A.
F.R.I.B.A
(Dipl.),
Oatley,
lum, A.
Waller.

Mr.
relinqu
TAN
having
tive O
consti

★ *The Royal Institution of Chartered Surveyors has issued the following notice concerning the use of members' designatory letters F.S.I. AND P.A.S.I.*

As there have been a number of questions on the matter, the Institution wishes to make it known that until it is formally announced that a change has been authorized by His Majesty's Privy Council, the designatory letters F.S.I. and P.A.S.I. (and no others) will continue to be used by Fellows and Professional Associates of the Institution respectively. The question whether, and if so what, new initials are to be used by members is now under consideration by the Council. If the Council decides to propose new designatory letters, its proposals must, under the Bye-laws, be approved by a general meeting of members and confirmed at a subsequent general meeting. Steps must also be taken to ascertain whether any new letters that may be proposed are objected to by other societies on the ground of similarity and risk of confusion with their designations. Finally, the proposed use of any new letters involving, as it will, an alteration in Bye-laws, must receive the sanction of H.M. Privy Council. This procedure will take time, and it may be some months before it is possible to make an announcement on the matter.

★ *The ORAL EXAMINATION, RIBA Final and Special Final Examinations at the London Centre will be held on Friday, December 13, instead of Thursday, December 12, as previously announced.*

Professor C. E. Cornell and sixteen students of architecture from Chalmers Technical School, Gothenburg, have PAID A VISIT TO THIS COUNTRY under the auspices of the British Council and the Bristol Society of Architects.

The party stayed at Bath and their programme included visits to Bristol, Salisbury, Wells, Glastonbury, the Cotswolds, Oxford, and other places of architectural interest. The following members of the Bristol Society of Architects, the Gloucestershire Society of Architects, and the Wilts and Dorset Society of Architects, acted as lecturers and guides: H. C. Bankart, A.R.I.B.A., Ruding Bryan, T. H. B. Burrough, A.R.W.A., A.R.I.B.A., C. A. Crozier Cole, A.R.I.B.A., W. Sydie Dakers, L.R.I.B.A., C. W. F. Denning, R.W.A., F.S.A., F.R.I.B.A., J. Ralph Edwards, A.R.W.A., F.R.I.B.A., F.S.A., Mrs. Molly Gerard, F.R.I.B.A., A. B. Grayson, F.R.I.B.A., A.A. (Dipl.), J. H. Hollier, L.R.I.B.A., Sir George Otley, LL.D., R.W.A., F.R.I.B.A., T. W. Snailum, A.A. (Dipl.), A.R.I.B.A., Colonel N. H. Waller, M.C., T.D., F.R.I.B.A.

Mr. Gerald Essame O.B.E. is relinquishing the post of ASSISTANT SECRETARY, RIBA, having accepted a post as Administrative Officer on the staff of the newly-constituted National Coal Board.

RECONSTRUCTION AND RESTORATION

ONE of the major problems with which architects are faced in the work of reconstruction is that of rebuilding destroyed portions of historic edifices. The question has been raised in the correspondence columns of recent issues of the *RIBA Journal*, where it has been pointed out that, so far as British architects are concerned, it is probable that they will be invited to share in this work in other countries as well as their own.

The manner in which these problems will be tackled is likely to raise in an acute form the old question of the choice between an attempted reproduction or a complete break with the destroyed work. It is obvious that no hard line can be drawn, as there will be much damage which, although severe, will be so piecemeal as to force the architect's hand in the direction of reproduction. For instance, in the case of one damaged house in a Regency terrace, straightforward reproduction is obviously desirable and presents no difficulties, whereas in the case of one bay of a Gothic nave some satisfactory reproduction might be impossible today, some bold but subtle and entirely new treatment might be the best solution. In extreme cases of the disappearance of the major part of a building, the problem will have to be faced in the broadest way and the possible necessity of a complete break with the original must not be shirked.

When we, and perhaps we should add the civilised world, are in complete mastery of a thoroughly worked out new "style," such problems will scarcely arise. For those architects of the great periods who found themselves in the position of having to add to, or even to destroy and rebuild, the major portions of a building conceived in a past style had no inhibitions: they built as they knew how, and in the rare instances in which they attempted continuation of a past style the results of their work were generally unsuccessful. The west towers of Westminster Abbey provide an example and proclaim their lack of harmony with the rest of the Abbey, in spite of their attempted similarity in style, whereas the baroque porch of the church of St. Mary-the-Virgin at Oxford makes a pleasant contrast to its Gothic background.

But to-day we are in a far more delicate position. The most important fact which might prevent us from entering successfully into this work is that our immediate needs are wholly utilitarian and not in any way monumental. Nevertheless, the monuments of the past cannot be allowed to disintegrate, and in most cases it is a spiritual or cultural necessity that they should be completely restored to their proper use. Are we to leave this work only to the few whose scholarship has accumulated through years of study and familiarity (by reason of their practice in the designing of buildings based on one or other of the traditional styles), or are we safe in encouraging a young architecture to make its imprint on these mutilated

beauties of past ages? The answer is surely that we must show confidence in the architects of to-day, those who have been trained between the two wars and those whose training is yet to be completed, by welcoming their participation in the work of reconstructing these damaged monuments.

But in giving our confidence to the new generation we must ensure two things. First that a real discrimination is shown in the selection of those who are to carry out the work. For this purpose a Reconstruction (Historical Monuments) Committee might be set up under the sponsorship of the RIBA, with the express purpose of compiling a panel of names of those willing, and considered by the Committee to be suitable for this work. This Committee, should have the widest publicity through UNESCO and other suitable organisations, to ensure that the fullest use shall be made of it.

The second essential is that those students in architectural schools who show a desire or an aptitude to undertake this type of work should be especially encouraged by a post-graduate course specifically designed to train them for the work: not, again, as imitators, but as men who, historically sensitive, may materially contribute to further developments in architecture by their particular ability to complement the work of the past.



The Architects' Journal

13 Queen Anne's Gate, Westminster, S.W.1
Phone: Whitehall 0611

N O T E S

&

T O P I C S

PUTTING ALL PEVSNER IN A RAGE

Of course I asked for it . . . and said as much at the time. I hadn't learned my gardens the H. F. Clark way, and was apparently 30 years adrift in calling Campden Hill Square Early Victorian. From Dr. Pevsner comes the dreaded broadside, thunderous, well-aimed, lethal: "Please allow," he writes, "an irritable ageing man to voice his accumulating displeasure with Mr. Astragal. There he is (September 26) chasing me all the way from Hampstead to Campden Hill Square to

see his Early Victorian square, and that should mean a square with carpet bedding and the other paraphernalia of Loudon and after. And what do I find? The normal square of the early nineteenth century with a serpentine walk and lawn and shrubs and, I admit, very pleasantly grouped trees."

As the smoke of the explosion clears, the boom of another salvo is heard. (Again Astragal ducks for cover.) "This, Sir," he continues, warming to his subject, "is not the first fool's errand on which Mr. Astragal has sent me. His favourite method of annoying me is his random use of initials. May I take just one instance; your number of September 19. In it he congratulates MKR on its first anniversary, and gives me details of the annual report of ABS. Hopefully I turn to your ingeniously devised cover and find no MKR and no ABS. Am I uncommonly dense and should I know at once what MKR is, 'battling nobly with the State department over the European works of art removed to the USA?' Is it the Middlewest Kukluxklans' Rally? Or the Masterpieces (Kidnapped) Rescuers?"

No, Sir, you will not find MKR on the *A.J.* cover. MKR'S Weekly (as is

regularly explained in the *A.J.*) is the name of an American magazine—[who knew or cared what Mr. T. P. in *T.P.'s Weekly* stood for?—and you of all people should be familiar with the dispute over the European works of art removed to the USA by the State Department "for safe keeping." The omission of ABS from the cover is admittedly a sad omission, which I have asked the editor to correct as soon as possible. [It stands for Architects' Benevolent Society, not Astragal Being Silly.]

As for your postscript, Dr. P., CVE stands for Council for Visual Education—a body for which you have recently written a booklet, and not for the Council for Victorian England, of which you are so anxious to become a member. The latter is, as you say, a long needed branch of the Georgian Group, and I look forward to seeing you as its first president.

"Am I blaming Astragal unjustly?" concludes the doctor. "Is it he who lays these traps, or a whole *A.J.* team, or is it" (he addresses now the editor) "perhaps you, Sir?"

They are not traps, doctor . . . they are perhaps the errors of ignorance and the sins of dormitory talk. Forgive them, correct them, misunderstand them even, if you must. It's nice to know there's a doctor in the house, and that, as Groucho used to say, he's enjoying the game.

CONTACT CONTINUES

Keeping in touch—whether with old friends, current events, or just the latest Gloag volume—is, goodness knows, a task which demands a major part of one's energies these days. But for those who are flagging in the struggle, here comes *Contact* (Mark II),* a rich miscellany of reports and essays gathered round the main theme of Britain between West and East, and superbly served up at the ridiculously low price of 3s. 6d.

Between its gay covers it contains articles by R. H. Crossman and David Mitrany, Stephen Spender and Arnold Toynbee, Arthur Koestler and V. S. Pritchett; drawings by Topolski,

*Published by Nicholson and Watson.

Grosz, and Falconer . . . analyses of Aneurin Bevan and Brighton Pavilion, English Fascism and the French theatre, Bethnal Green (by Ruth Glass), and Mayfair (by Marganita Laski). There are also news letters from Capetown and Calcutta, Geneva and Melbourne—all of them decorated by Edward Bawden whose stiff patterned drawings just avoid being elbowed out of existence by as strong-armed a collection of advertisements as you ever saw, and the whole technicoloured issue wheeling and counter-marching like troops at a tattoo is marshalled under the firm and skilful eye of art editor Henrion.

For him and his colleagues this second volume is a triumph, for they have succeeded in gaining visual clarity and directness without losing more than was necessary of that capering exuberance by which the layout of *Contact I* will long be remembered.

Treat yourself then to this three and sixpence worth of contiguity with current affairs and ideas. I think you'll find it well worth it.

BROCKS, CAIRNS, AND INDETERMINATE STRUCTURES

"Bishop Lyttelton used to torment me with barrows and Roman camps, and I would as soon have attended to the turf graves in the churchyards. I have no curiosity to know how awkward and clumsy men have been in the dawn of arts, or in their decay." That was Horace Walpole, but most people know the feeling even if they haven't the good fortune to number bishops among their acquaintances.

Even Astragal, who cultivates the art of being all things to all men, has never quite managed to be an antiquary to antiquaries. So that when he was

confronted with three substantial volumes on the ancient monuments of Orkney and Shetland* something in him cried out: "To Betjeman's Wykehamist his Norman fonts, to RCAM (Scotland) its brocks and cairns; thy joys, O Astragal, lie far from these."

However, such voices are not to be listened to, and plugging his inward ear, Astragal made a closer examination of the volumes in question. (He cannot pretend to have read them, because such books are not meant to be read.) And his more rational self was soon satisfied that they were everything they should be and that the Commission had completed its very necessary task in its usual thorough and scholarly manner.

It is unavoidable that a large part of these particular volumes should be given up to brocks, cairns, and Indeterminate Structures (as the Commission calls them) which are not of great moment to any but specialists. Nevertheless, there is—in case you had forgotten—a cathedral of considerable grandeur at Kirkwall in Orkney. Then the twelfth century church at Egilsay, with its tapering towers, is a ruin of more than antiquarian interest, while some of the more ancient remains have a certain queer drama of their own.

A feature of these volumes that must enormously increase their value as works of reference is not, I think, shared by any of their English counterparts. To the account of each monument is appended a bibliography—that is, of course, when literature on the subject exists.

ASTRAGAL

*Royal Commission on the Ancient Monuments of Scotland, *Twelfth Report with an Inventory of the Ancient Monuments of Orkney and Shetland*, three volumes, 10s., £1 15s. and £1 or £3 3s. inclusive for the three. (H.M. Stationery Office.)



St. Magnus Church, Egilsay. From the Twelfth Report with an Inventory of the Ancient Monuments of Orkney and Shetland of the Royal Commission on the Ancient Monuments of Scotland, reviewed by Astragal this week.



LETTERS

F. R. Jelley, A.R.I.B.A.

Donald Cowan, A.R.I.B.A.,
Dip. Arch (Lond.), A.I.Arb.

Paul Reed,
Press Officer, the British Council

What is this Qualification?

SIR.—As one of your old but not yet senile contributors I wonder whether you can still spare a corner of your Journal, where I feel I shall be operating on friendly and familiar ground, to propound a question put to me by a young friend who has just returned to the profession after several years abroad on active service, and who has been studying the advertisement columns, where applications for appointments are invited from architects "holding A.R.I.B.A. or equivalent qualification."

What is this equivalent qualification to which town clerks, city engineers and borough surveyors refer so mysteriously?
Sutton F. R. JELLEY

Building Without an Architect

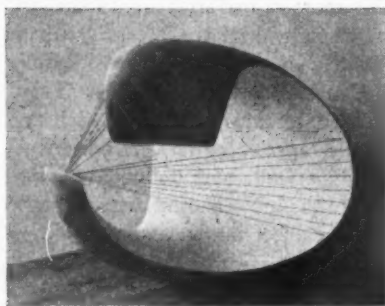
SIR.—During the past few months whilst engaged in industry, I have been appalled by the amount of building, both in progress and in preparation, being carried out by industrialists and other non-professional persons.

Several engineers were of the opinion that although their work was obviously outside the scope of an architect, they were well qualified to design a building, especially as they would design on their knowledge of structures, thus ensuring a strong result, if not a fancy one.

Taste can best be described by the way a number of people, mostly of the self-made variety, depicted their future premises, as being impressive places, and from their sketches, they felt sure that their builders would get the idea and give them the desired result.

These two paragraphs are somewhat exaggerated; nevertheless they show something of an outlook, and one can only trust that something be done to make building operations costing over a certain amount

SIGNIFICANT FORM WITHOUT FUNCTION



Examples of the work of two of Britain's foremost sculptors recently exhibited in London. Top, reclining figure in bronze by Henry Moore. Extreme left, oval sculpture of wood with white interior by Barbara Hepworth. Left, the Wave, wood with colour and strings, also by Barbara Hepworth.

illegal unless supervised by a member of one of the professional bodies.
Chigwell

DONALD COWAN

No Bushels for Britain

SIR,—Your article, *No Bushels for Britain*, has been read here with much interest, and I am glad to send you some information about the questions raised on British Council activities.

With regard to exhibitions dealing with building: an exhibition entitled *Replanning Britain*, comparable in size to the Swiss exhibition, was assembled, in conjunction with the RIBA, and is now touring Europe. It is hoped that another such exhibition will be ready for circulation by the beginning of next year. It is considered that an exhibition on planning is of interest to countries themselves concerned with planning projects and of special interest to the countries whose problems, like our own, have been made more acute by war devastation.

Material for these exhibitions is assembled on the advice of a Committee of experts and with the constant co-operation of the Ministry of Town and Country Planning. The one now on tour deals with the work of this Ministry, the Ordnance Survey Department and voluntary bodies, such plans

as the LCC County of London Plan, the Greater London Plan, and the schemes for Norwich, Durham, Exeter, Coventry, Plymouth, Hull, Manchester and for the re-development of the Clyde Valley. The exhibition also includes a photographic section on housing compiled by the Building Centre. This exhibition requires 700 feet of wall space and includes nine models in addition to the screens displaying plans and photographs.

With regard to co-operation with other organizations, the British Council, as you say, is in constant touch with the RIBA and also, through that body, with the AA, the Mars Group, the Design Research Unit, etc., the latter having been commissioned by us, in conjunction with the RIBA, to produce the British Section of the UNESCO International Exhibition of Architecture in Paris this autumn. This exhibition, according to UNESCO directions, laying particular stress on education, is of projects planned or begun since 1939. Full information of this exhibition will be available later, and it will be on view to the public in the Musée d'Art Moderne, Paris, from November 18 to December 30.

The British Council is in very close touch with the Arts Council, each Council being represented on the other's Advisory Committees. As a general rule the British Council is responsible for all official exhibitions abroad, while the Arts Council is

concerned with exhibitions in this country, some of which may be brought here through the British Council.

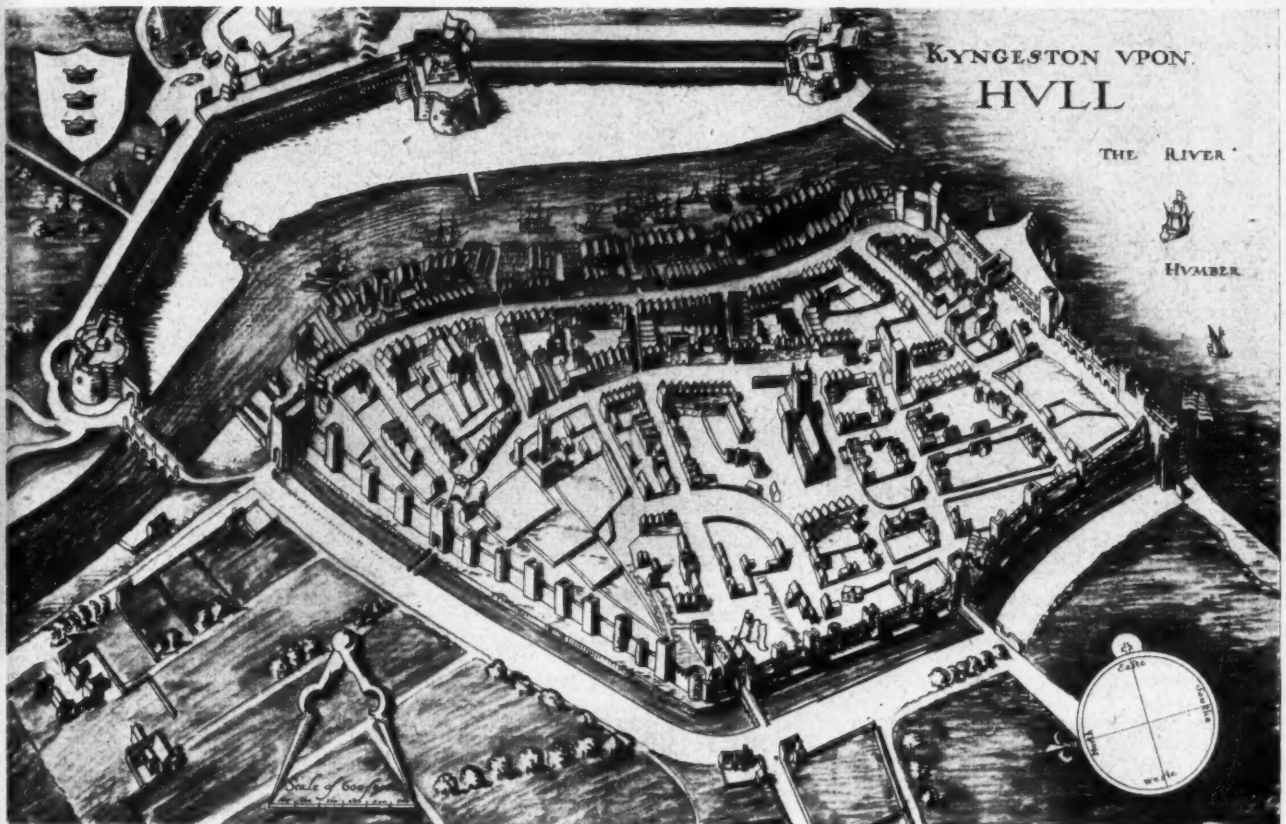
There is also co-operation between the Council for Industrial Design and the British Council. Bi-monthly meetings are attended by representatives of the above and of the Arts Council.

Sending overseas exhibitions of well-designed British goods to show primarily to foreign buyers is the concern of the Export Promotion Department of the Board of Trade, but similar exhibitions, from the point of view of prestige, are undertaken by the British Council, to show fine examples of British workmanship abroad. An exhibition of crafts has recently returned to this country after a tour of 3½ years in the USA and Canada, and another is going to Australia and New Zealand.

To assist in the planning and selection of material for all exhibitions organized by the British Council, sub-committees of experts are set up. The Director of the Victoria and Albert Museum is on the Council's Fine Arts Advisory Committee, and the Council is in constant touch with the Keepers of the various departments in that museum. Other organizations with whom the Council is in contact include the Design in Industry Association, the CIAD, and it also keeps in touch with individual designers.

PAUL REED, Press Officer,
The British Council
London

PHYSICAL PLANNING SUPPLEMENT



KINGSTON-UPON-HULL

A PLAN FOR THE CITY AND COUNTY

The new Plan for Kingston-upon-Hull has now been published, after being accepted in principle by the City Council. The Plan was prepared by the late Sir Edwin Lutyens, and Professor Sir Patrick Abercrombie, and acknowledges the use of the Civic Survey prepared by Mr. Max Lock and his associates. (See AJ July 29, 1943) The City Architect of Hull was responsible for some of the detailed layouts. The main features of the Plan are summarised below, with relevant extracts from the Report in smaller type. Above, a perspective showing mediæval Hull, which now forms the old core of the City.

The City of Kingston upon Hull is one of the three most bomb-damaged areas in the country: it has suffered, not only destruction, but dislocation of the very life of a community; rebuilding and reconstruction are necessary and urgent upon a scale hitherto undreamed of since its great development under Edward I. There is now both the opportunity and the necessity for an overhaul of the urban structure before undertaking this second refounding of the great Port on the Humber.

community planning

This is the conception of Hull as a great Civic Community, subdivided, however, into a series of Community Units, these again built up from Neighbourhood Groups founded on an area served by a Primary School. Local Centres, a physical indication of boundaries of communities and the freedom from through traffic are, among others, features of this approach to planning, which is no longer content with a bare housing scheme.

The proposed residential areas of the city are looked upon as a

series of self-contained communities, bounded generally by some physical feature such as a railway, road, river, or open space. The administration of the city, made up of a series of such precinct communities, would be rendered extremely inconvenient were the existing Ward boundaries to be retained. These Ward boundaries are purely administrative boundaries, crossing main roads and railways in the most haphazard fashion and in no sense provide the natural physical boundaries desirable for effective community precinct planning. Further, the composition of the Wards is unsatisfactory; no less than fifteen Wards consist of a conglomeration of housing and industry, leaving only six out of a total of twenty-one Wards wholly residential in character. Under such conditions it has been found quite impossible when applying the density standards to make use of the existing Ward boundaries. The results of the calculations have been to break up the Wards into fragments and to reform these fragments into neighbourhoods, two of the Inner Ring neighbourhoods are made up of fragments from five different Wards, while the whole Inner Ring Community embraces no less than twelve different Wards.

central rehousing

The policy proposed of radical rebuilding of central areas, requiring a big reduction of population at the centre, adequate local space and area for community purposes is illustrated by a typical scheme lying between the old Anlaby Road and Hessle Road. The re-routing of the former is in accord with the policy of freeing a residential area from through traffic.

The first Residential Areas (Area 1 and Area 2) in the City to be replanned in detail are incorporated in the Anlaby Road Reconstruction Scheme. These two Areas have been selected for the following reasons:

(a) A large proportion of the existing property is dilapidated or derelict.



EDUCATION HEALTH AND COMMUNITIES

Above, a map illustrating the proposed grouping of Community Units ; road and railway proposals can also be identified. Below, a detailed Plan for the redevelopment of a central area ; industry and housing are separated by a strip of open space.

CENTRAL REHOUSING



(b) The areas are extremely overcrowded.

(c) A considerable amount of war damage to property has been caused by enemy action.

(d) Certain *Slum Clearance Areas* were being developed prior to the outbreak of war, and an opportunity is now presented to extend the scope of the original proposals and incorporate such areas in the new Scheme.

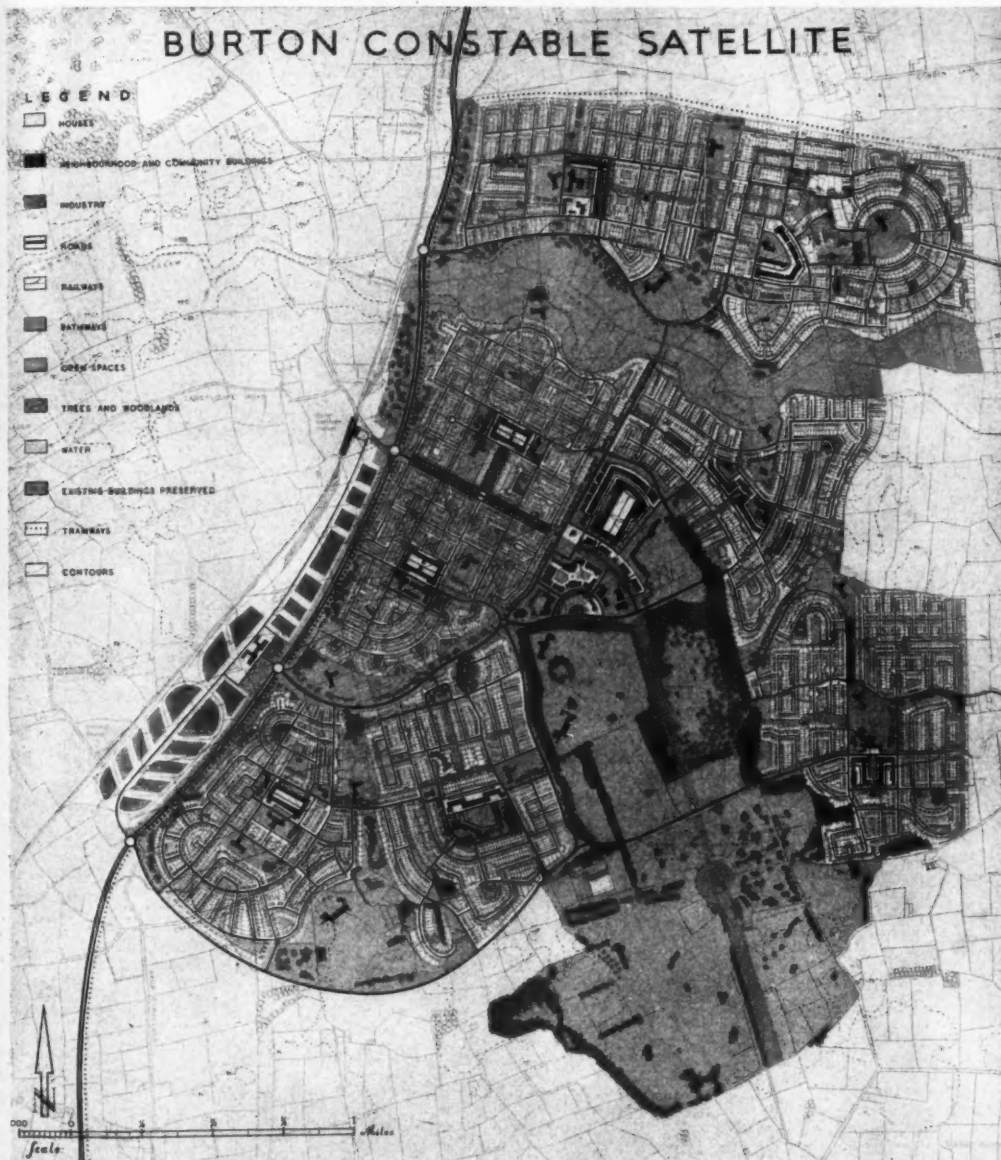
The two Areas to be replanned cover parts of the Colman, Albert, North Newington, South Newington and Myton Wards, and lie between the diverted Anlaby Road to the north, the Hesse Road to the south, the Reconstructed City Centre to the east, and the High Level Railway to the west. They are separated by the Reconstructed Boulevard and communication between them is by means of bridges

over the sub-arterial road. Immediately to the south of the two Residential Areas an Industrial Zone is proposed. This is separated from the Residential Areas by a narrow green belt along the south side of Hessel Road and extends for the whole length of the Industrial Area.

satellite

The overspill from central rehousing is proposed to be grouped into a single Satellite which will be planned to allow of an expansion and to contain an industrial *trading estate* for factories not dependent upon the Dockside. The creation of this Satellite is visualized as a short term work to be

SATELLITE



The overspill from central rehousing is proposed to be grouped into a single Satellite at Burton Constable. An industrial area is included to provide the new residents with work. The beautiful and historic Burton Constable Estate is retained in this layout.

completed with all necessary services in two or three years on a scale of operations comparable with that of Mulberry Harbours. The question of inclusion within the Municipal Area is a matter for the Boundary Extension Commission; there is a precedent for the inclusion of such a Satellite.

After weighing up all the possibilities and advantages of several alternatives, e.g.,

- (i) the building up and coalescence of the western suburbs.
- (ii) the enlargement of Beverley or Hedon or certain villages.
- (iii) the selection of three or more sites on new ground grouped around Hull.

it has been decided to recommend the industrial population overspill of about 53,000 persons be accommodated in a single new town or Satellite localized on or near the Burton Constable Estate. This should be developed to make a full Community Unit of about 60,000 persons with a trading estate which could take a number of industries not requiring water frontage.

shopping centre

This is planned as a highly specialized precinct, free from through traffic but adjacent to the central traffic routes. Something completely new in Shopping Centres is here proposed, which should restore to Hull its pre-war position serving a population of some 500,000 people. There is accommodation for increased shopping space and for the small shop as well as the great store. Car parking has been given special consideration in a way which will give unobstructed progress to passing vehicles approaching the various shops. It was considered essential that the shopping centre should be

located within the inner traffic ring and after very careful consideration it was decided to locate it in the neighbourhood of Osborne Street, rather than to base it upon Prospect Street. The space available between Anlaby Road and Hessle Road is sufficiently large for the purpose, and is well situated in relation to the Civic Centre whose main axis it continues.

The shopping centre lies within easy walking distance of the proposed new terminal station and is adjacent to the existing Paragon terminal. It is doubtful if retail trade derives much benefit from its proximity to a railway terminal when it is generally found to have so much traffic concentrated about it as to make direct access to the shops impossible, except by means of pedestrian bridges, subways, or by leaving the shopper to run the gauntlet of a fast-moving traffic stream. In fact, the long intervening distance between the prosperous main shops of Chester and Plymouth and their railway stations would seem to show that proximity to a railway station is of little or no importance to the prosperity of the retail trade.

The problem of the precinct shopping centre is to provide safe conditions for the pedestrian customer while giving adequate vehicle access to the shops, without destroying the lively and bustling character that makes the popular shopping centre the magnet it is today. The scheme shows how it is possible for the pedestrian to shop in bustling safety on an avenue that forms the main link with Queen's Gardens and the adjoining business, cultural and entertainment centres. Vehicle access is provided by a single horse-shoe shaped highway which is subdivided into a primary and two secondary service roads, along that part of it that forms the backs of the shops.

industrial and dock expansion

Industrial expansion is provided for up the River Hull and

AD 1299

CITY & COUNTY OF KINGSTON-UPON-HULL

SCALE :



GENERAL DEVELOPMENT

The General Development Map provides a comprehensive view of the proposals in the new Plan for Kingston-upon-Hull. Heavy bomb damage has provided the opportunity for major reconstruction of this historic city.

eastwards along the Humber Docks. A distinct area is laid out for industries of a *special* character as regards smell, noise, etc. An expansion of the Dock area eastwards on the Humber as far as Paull is planned.

There are three main industrial areas recommended: River Hull, Hedon Road, and Hesse Road Areas. They provide for a potential expansion of ground area of 479 acres, which almost doubles the ground area in Hull at present occupied by the scattered industries. No one can say with any certainty to what extent industry in Hull will expand, even though the immediate pre-war years can serve as a guide; yet it is important not to zone too much land area for industry and create a false price value on the land. To counter this, it is proposed that the Hedon Road Area should be released for

industry under a series of General Development Orders. The extent of potential land suitable for industry to the east is considerable and might well, in the future, extend even to Paull, and it is recommended as the areas where further expansion could take place only when the other areas have been occupied by industry to the scheduled limit. There should not be any further expansion of the River Hull Area, nor of the Hesse Road Area. It is suggested that the Fishing Industry (a comparatively new one in Hull) should be based upon a new site at Salt End, where there is ample undeveloped land, as well as land capable of reclamation from the Humber.

river Hull

A bold proposal is made for *impounding* the River Hull, increasing its connection with the Humber Docks, and providing for an extension of industrial frontage.

Wolfe Barry, in his Report of some 60 years ago, rejected the idea of widening and straightening the river on account of the cost of compensation and of endangering the stability of the warehouses by inundation. It is true that any material dredging is almost certain to undermine the wharves and foundations of warehouses, but modern sheet piling methods can be the safeguard to counter that risk.

GTON UPON HULL

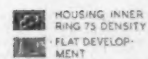
AD 1944

PLAN

GENERAL
DEVELOPMENT

LEGEND

RESIDENTIAL

HOUSING INNER
SUBURB 50 DENSITY

EDUCATIONAL

JUNIOR INFANT
SCHOOL
GRAMMAR SCHOOL
TECHNICAL
COLLEGE

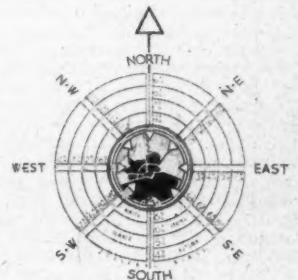
PUBLIC BUILDINGS

CITY CENTRE
HOSPITAL

INDUSTRIAL

SPECIAL
INDUSTRY

COMMUNICATIONS

LINK ROADS
WATERWAYOTHER BUILT-UP
AREAS
OPEN SPACES
CEMETERY
RURAL ZONE

NOTE: THE ABOVE MAP IS FOR GENERAL GUIDANCE ONLY. THE ARCHITECTS' JOURNAL HAS NO RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION CONTAINED THEREIN. THE ARCHITECTS' JOURNAL HAS NO RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION CONTAINED THEREIN.



The opportunity for such a venture is more financially possible to-day than ever before, owing to the blitz and the dilapidated condition of the frontages which have already lost something, at least, of their original value; in fact, it may be possible to reduce compensation to the single consideration of the interruption of trade alone if a system of exchange of sites is worked out. The dock should not be tidal owing to the danger of silting up from the Humber water. A non-tidal River Hull would mean that the Beverley trawlers could not continue to be floated down the river unless dredging was continued as far north as Beverley itself, and there does not seem to be sufficient justification for that.

Whether or not the cost of this project is worth while is hard to say, but an investigation of its possibilities should be made. An indication of how it can fit into the general plan for the city as a whole gives a broad picture of the effect of the project.

level crossings

A comprehensive and, it is hoped, final scheme for Hull's outstanding road and rail problem is proposed, involving the total elimination of the railway ring *at grade* and a widening of the high level ring, set in a spacious park strip. It

must be stated that the whole central road and rail system depends upon the solution of the Level Crossings. It is understood that the Ministry of Transport is opposed to this proposal and favours the alternative of bridges to overcome the difficulty.

Several ideas for a solution to the railway problem have been sifted in relation to the city reconstruction problems with a view to finding one which might at the same time provide an acceptable solution to the LNER Company. During the preparation of the City Planning proposals a departure from the original plan was found desirable, involving the resiting of Paragon Station and its proposed link with the high-level ring: a minor amendment was the connection of the Hornsea line to the high-level without passing through Wilmingtong Junction. The railway plan now consists of an encircling high-level ring carrying all the industrial and passenger traffic clear of the central area of the city. The main line from London follows its present route past the Priory sidings and after climbing the easy gradient of the existing fly-over it continues at the same level to join up with a widened embankment of the existing high-level. Following this existing high-level ring a temporary connection is made with Paragon Station so that it can be retained as a temporary



The proposals for the development of the City Centre include a Shopping Centre free from through traffic, and the Queen's Gardens as a nucleus for the Civic Centre. To the north, is the proposed future terminal railway station replacing the Paragon Station.

measure until the building up of the new station at Wright Street when that is ultimately constructed. The main line will then continue further round the northern leg of the ring where it descends a widened embankment of the existing Cannon Street branch line to the new terminal station.

railway station

Although the Paragon will doubtless remain for some years as the main Station (and the Hotel probably permanently), the re-arrangement of the central lines indicates a new Station north of Queen's Gardens; this will enable a more logical plan of the central area to be achieved.

By far the most important station affected by the scheme is the Terminal-Paragon Station. Unfortunately, it is not ideally situated for a scheme embodying a single high-level railway system, as its only reasonable link is complicated by the existing Scarborough and Barnsley lines converging at the same point on the main railway ring. The reconstruction of the central area bounded by this ring is undoubtedly influenced by the location of this link, and although its position does not prevent planning on community lines the link for the proposed new site for the station would definitely improve community development: it would prove a suitable division between the residential areas on the west from the River Hull industrial area to the east. The station which it is proposed will ultimately replace the Paragon is situated about Wright Street. It lies quite near the old Passenger Terminal of the Hull & Barnsley Railway—Cannon Street Station—which is superseded in the scheme. It falls conveniently into the general plan at the head of the proposed central boulevard where the Beverley Road by-pass from the north provides easy access to it.

road system

The policy of a greater concentration of traffic on through routes (with a minimum of cross roads and riparian building), contrasted with quiet areas or precincts, has been followed.

Two urban rings are proposed, one on the site of the low level railway ring and the other, an inner ring round the centre: the level of the latter are complicated with the crossings of the River Hull and a high level section south of the Parish Church. The importance of the inter-communication between the town areas divided by the river is of as much consequence to the people of Hull as the elimination of the Level Crossings; delays and congestion from held-up traffic streams at a river bridge create disorganization to much the same extent as the Level Crossings. The High Level Bridge across the Humber will be the most spectacular addition to the landscape and will give a new link to the South.

civic centre

The Queen's Gardens form a magnificent nucleus of a spacious Civic Centre. The aim has been to complete this, to articulate it with the old Mediæval Centre and the City Hall and Art Gallery.

Queen's Gardens, whose layout is remodelled slightly, forms the

great City Square, with its western termination opened out to the City Hall (eventually to be rebuilt on the axis of the Gardens). The enclosure of the space is maintained and public buildings are grouped around it. The curious angle formed by the Guildhall which faces away from the Gardens, has given rise to an asymmetrical group at the south-east end. The nondescript character of the present buildings flanking the eastern end of the Guildhall have been made derelict by bomb damage and present an even stronger case for creating a more worthy setting for this important building. Other buildings included in the Centre include a cultural group, the Law Courts and Police Administration, Museum, Art Galleries and Public Library.

schools

Education Buildings of different types and for different ages are distributed throughout the area, and closely related to Community and Open Space planning.

The existing educational system in Hull includes both the Grammar and Council School groups, and this system has been extended and reorganized to conform to the latest requirements of the Board of Education which are the result of discussions held between the Research Division of the Ministry of Town and Country Planning and the Board of Education. The school areas on the plan indicate the size of building and recreation areas required for the different types of schools in the whole organization. Each neighbourhood unit is self-sufficient up to school-leaving age.

agriculture and green-belt

These first-rate determinants of planning, both safeguarding agriculture and limiting the spread of the town, have been carefully worked out with the Ministry of Agriculture.

The main existing urban area of Hull and the new Satellite are both to be kept compact, a margin for growth being left within the urban fence. The footpaths, lanes, riding and cycle tracks through the green belts and open country form a system corresponding to that of the roads: the paths are given definite objectives for present-day use and care is taken to impair, by severance or otherwise, the farms as little as possible.

aerodrome

Flying is one of the foremost features of the Communications Plan. One of the existing Aerodromes, perhaps rather far out, will be used, and quick motor-way connection established with the centre.

It is proposed that one of the new war-time Aerodromes be selected which is likely to give the best service and accommodation. Leconfield, it is believed, will offer good opportunities for development. With the re-opening of trade relations in the post-war years there will be plenty of passenger and high-grade freight between this country and the north-eastern centres of Europe, and it may well call for a Seaplane Station to cater for the heavier traffic for which the modern flying boats excel over land planes. It is claimed that if a Seadrome was favoured, the proposed new Inner Ring Road and Routes Nos. 6 and 7 would provide excellent communication with a Seadrome situated at Hedon Haven.¹



FRILUFTSTADEN HOUSING ESTATE AT MÄLMÖ, SWEDEN DESIGNED BY ERIC S. PERSSON

Friluftstaden (literally: Open Air Town) is a Swedish example of the Garden City. The aim of its designer-builder was to create a neighbourhood of private houses at low cost which contained many of the advantages of flats. Terrace housing is his solution.

To reduce costs, all service mains are laid along the basements *inside* the houses. There are very few roads, and houses are approached through the gardens by narrow traffic-free paths. These

methods cut road, service and upkeep costs by over two-thirds as compared with the usual villa lay-out.

To give privacy, the houses are set back from each other, with entrances to alternate houses on opposite sides of the rows. Thus bays are formed in front of each house giving privacy and protection from the weather on three sides. The private gardens are small and lead into communal green spaces.

District heating warms all the houses, and there is a community centre of shops and other amenities including a domestic agency where help can be obtained by the hour. Rooms for guests or for house-maids can also be rented in the centre.

Garbage from each house is disposed of through a chute running into a bin, out of sight in the basement, where it can be easily collected and used as fuel at the district heating plant.

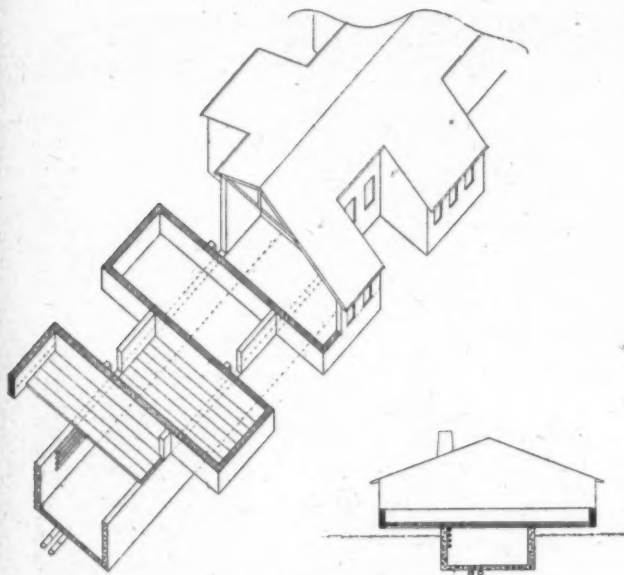
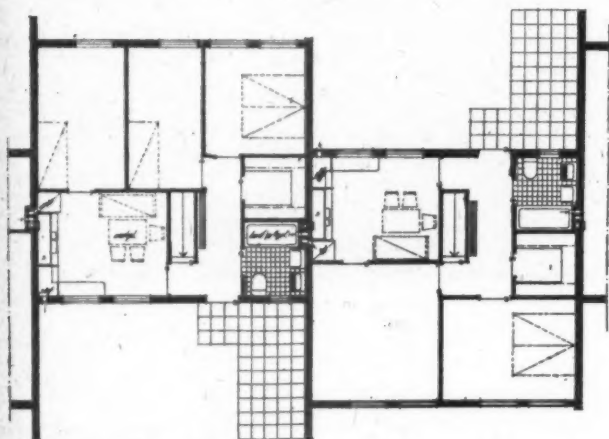
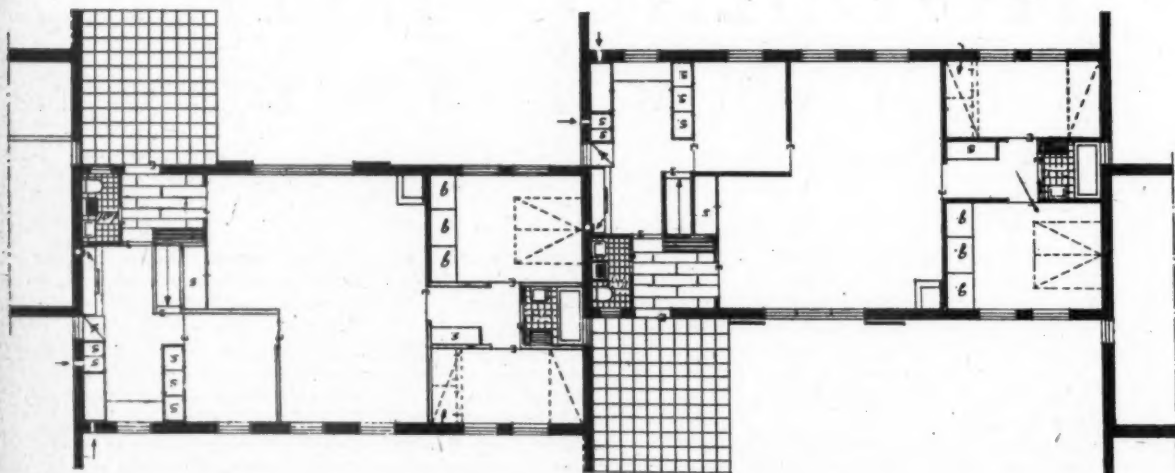


DIAGRAM SHOWING CONSTRUCTION



PLAN OF HOUSES FOR 1-2 PEOPLE



PLAN OF HOUSES FOR 4-6 PEOPLE

HOUSING ESTATE AT MALMÖ



A close-up of one of the houses.

Basements contain storage space, hobby and utility rooms. A communal laundry is also available in the community centre.

In the most recent houses built at Friluftstaden a long passage below ground level runs right along outside the basements of each row, giving an extra back entrance to each dwelling and extra space for cycles, etc., and areas for beating carpets or drying clothes. The construction of some of the houses is of interest in having a basement of reinforced concrete (containing the services), which is narrower than the upper floor and forms a cheap and effective foundation in which footings and projections are eliminated. The upper floor is cantilevered out over the basement by a reinforced-concrete structure which forms the base of the upper storey walls. This can be seen in the diagram reproduced here. Floor joists are of patent light-weight concrete design giving good insulation. Walls otherwise are of brick, part of which is distempered externally. The pitched roofs are of traditional tile covering.

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

2786 Rebuilding Cities

CONTRASTS IN METHODS OF REBUILDING CITIES. (Land & Liberty, July, 1946, pp. 164-165.) Review of LCC Stepney and Poplar Scheme. Proposals for Berlin. Economic aspects of land acquisition and taxation.

An examination of the LCC Stepney and Poplar scheme shows that one of the main difficulties in carrying out the replanning of a city lies in the fact that the existing subdivision of land does not provide plots of suitable size or shape for modern development. This difficulty becomes accentuated where land is taken for the formation of roads and open spaces, leaving fractions of plots in private ownership. Although the sections dealing with war-damaged areas in the Town and Country Planning Act, 1944, contemplate that the local authority will buy the whole of the land so affected, it is shown by means of figures for the annual outgoings and revenue, that, once the development is complete, stupendous costs and great practical difficulties are involved.

A detailed account follows of reconstruction proposals for Berlin which are contained in the draft of a law submitted to the Berlin authorities by the newly formed League for Land and Liberty. It is considered that these proposals do not represent a general solution of the land question, but that they solve the problem of excessive subdivision of ownership by reducing the number of sites in separate ownership and therefore the number of direct contributors, which would facilitate the valuation and taxation of land values. The author commends the Berlin idea to the careful consideration of town planners.

2787 Playing Fields

NEW TOWNS AND PLAYING FIELDS. W. H. Biddlecombe. (Parks and Sports Grounds, August, 1946, pp. 373-375.) Short article giving useful information on requirements and suggested allocation of acreage per neighbourhood.

The provision of playing fields should be in the hands of (1) the developing company, and (2) the local authority and education committee. Playing fields, well maintained at reasonable rentals, should be let to clubs seasonally. A modern pavilion should be provided, equipped with all facilities for developing social life, with skating rinks, handball and other games areas developed as part of the pavilion building. Other facilities recommended include a central sports arena, children's play areas, swimming, boating and paddling pools.

Taking a suggested population of 60,000 developed in neighbourhood units of 10,000 as a basis for estimating needs, the author assumes that 80 acres of open space per 10,000 population would be a liberal esti-

mate. Of these 80 acres (independent of commons, woods and golf courses) 30 acres should be allowed for school playing fields and 10 acres for parks, gardens and putting greens. The remaining 40 acres represent the amount of playing fields per 10,000 population which should be allocated in the following manner:—

- 3 acres central sports arena.
- 10.5 " six football or hockey pitches.
- 18 " cricket, athletic and other games.
- 3 " children's local play areas.
- 2 " twelve hard courts.
- 1 " two bowling greens.
- 2.5 " pavilion, roads, car park, shrubbery.

40 acres total per 10,000 population.

2788 Legislation

STATUS OF URBAN REDEVELOPMENT LEGISLATION AS OF AUGUST 7, 1946. (The Urban Land Institute, Washington, D.C., August, 1946.) Short summaries of USA urban redevelopment laws. Redevelopment Corporation Laws. Housing Redevelopment Laws. Redevelopment Land Agency Laws.

Redevelopment Corporation Laws: These Bills, passed in twelve states, encourage large private financial institutions to participate in slum clearance through the construction of housing projects.

Housing Redevelopment Laws: The powers of local housing authorities are increased thereby making them development agencies. The need for housing for the low-income groups is stressed. Control of housing authorities remains largely in the hands of the Federal Public Housing Authority in Washington. Seven states have passed this legislation, fourteen others have rejected it.

Redevelopment Land Agency Laws: Under this legislation new redevelopment agencies are established which are controlled wholly by local government authorities except in the case of Columbia. These agencies have power to acquire land, to issue bonds, and to sell or lease the land to private enterprise in accordance with an approved comprehensive plan. Twelve states have adopted these laws. So-called short Bills enabling municipalities to acquire blighted and slum areas for redevelopment by private or public bodies have been passed in Illinois and New York. Missouri has adopted a state constitution which authorizes any city or county operating under its constitutional charter to acquire areas for redevelopment.

2789 USA Directory

PROVISIONAL DIRECTORY OF HOUSING AND PLANNING AGENCIES: UNITED STATES AND LATIN AMERICA. F. Violich. (Pan American Union, Division of Labour and Social Information, Washington, D.C., May, 1946, not priced.) Introductory notes on import-

ance and mechanics of information exchange. Classified directories of United States and Latin American housing and planning agencies.

The pamphlet has been issued in order to answer demands for interchange of information between the United States and Latin America, and among the Latin American republics themselves. With increasing international contacts in many fields facilities should be augmented to provide for a more systematic exchange of technical information. It is hoped that with the publication of a select list of the principal agencies in the field of housing and planning in both North and South America an intensification of regular interchange will be encouraged, and that specific requests for information directly to the agency concerned will be facilitated.

The first part of the directory deals with the United States, the second covers similar agencies in Latin America. Within these general groups the agencies are presented in four categories:

1. Official Organisations including national, state, county and municipal government offices.
2. Unofficial Organisations such as citizens' groups, professional associations, private institutions, trade union committees, etc.
3. Periodicals comprising both commercial trade journals and professional reviews dedicated chiefly to housing and planning.
4. Educational Institutions naming those universities which offer curricula in housing and planning.

The directory in its present form is tentative only, but will be re-issued in a more permanent form in the near future. In conclusion it is stated that in all matters of interchange of information among specialists and others interested in the fields of housing and planning the Division of Labour and Social Information offers the facilities of its housing and planning information service.

The pamphlet serves a most useful purpose and should be followed up by similar publications in this and other countries to set in motion the machinery for an international planning information exchange throughout the world.

STRUCTURE

2790 Reinforced Concrete

PROPOSED MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES. (American Concrete Institute, USA, \$2.50.) Standard drawings showing general arrangement and reinforcement details for various types of structure.

The proposed standard has been prepared by representatives of the different types of organisations in USA furnishing reinforcing steel. It is a useful guide for detailing reinforced concrete.

2791 Mac-Girling House

THE MAC-GIRLING HOUSE. Designed by John McGregor. (The Architect and Building News, August 9, 1946, pp. 84-86.) Structure using 4 ft. x 2 ft. x 11 in. hollow concrete wall units. Details of construction and erections with illustrations. See No. 2554:16.5.46.

2792 Soil Stabilization

A STUDY OF THE GROWTH OF GRASS IN "SURFACE-STABILIZED SOIL." Martin

A. F. Sutton, F.L.S., in collaboration with T. F. N. Alexander and F. C. West, B.Sc. (Sutton & Sons, Ltd., Reading, 3s. 6d.) Description of surface stabilisation of grass areas by means of bituminous stabilizers. Experiments described in detail. Authors suggest treatment as having value in sports areas, for draw-in spaces on grass verged roads as well as for grass aerodromes.

2793 Shell Construction

BUS GARAGE AT WYTHENSHAW, MANCHESTER. Architect: Noel Hill. (*The Architects' Journal*, September 5, 1946, pp. 176-177-178.) Large span cylindrical shell construction.

The Wythenshawe bus garage, completed in 1942, consists of three parts, each covered by a barrel vault roof. The main area, in which 100 double-decker buses can be accommodated, is 290 ft. long with a clear span of 165 ft. Its cylindrical shell roof has a radius of 180 ft. and a width of 174 ft. It is supported on rigid frames at 40 ft. centres. The repair hall is covered by seven barrels of 132 span and 33 ft. width each. The washing room is roofed by four barrels having a span of 58 ft. and a width of 16 ft. 6 in. The shell thickness is 2½ in. in all three parts. This building is the largest span shell construction so far completed in this country.

2794 Reinforced Concrete

GASHOLDER TANK CONSTRUCTION. (*The Builder*, August 30, 1946, p. 226.) Reinforced concrete in the construction of a gasholder tank at South Gosforth for the Newcastle-on-Tyne and Gateshead Gas Co. New features.

The tank holds 5,000,000 gallons of water for sealing purposes to house a three-lift telescopic gasholder of 3,000,000 cu. ft. capacity. The design was made with the utmost economy in structural steel and timber shuttering. Three polygonal rings of reinforced concrete beams and columns provide a support for the crown of the holder when fully lowered. Permanent brick shuttering for the outer retaining walls of the tank was used. The internal diameter of the wall is 216 ft., the depth 31 ft. 9 in. The maximum rise of the holder above ground level is 110 ft.

2795 Sheet Copper Work

SHEET COPPER WORK FOR BUILDING. (*Copper Development Association. Publication No. 5. 1946.*) Practical detail book for all architectural uses of copper. Emphasis on methods of workmanship which are described in detail. Chapter on corrugated copper roofing and copper tiles. Thorough treatment of subject, including uses not at present economically possible. Very well illustrated.

This is a practical handbook on the application of sheet copper to roofing work, rain-water goods, damp-proof courses, flashings and sheathings. There is a section on welding methods. Illustration is by 14 sheets of isometric drawings which show the processes involved more clearly than normal working drawings, and are exceptionally informative.

The fact that this handbook has been through eleven impressions since its first issue in 1934 is some indication of its general value.

MATERIALS

2796 Copper

COPPER THROUGH THE AGES. (*Copper Development Association. Publication No. 3. 1945.*) General account in non-technical terms of uses of copper and copper alloys, from pre-historic times. Chapter on architectural uses. Book contains much out of the way information and a bibliography. Well illustrated.

2797 Copper and Soil Corrosion

THE RESISTANCE OF COPPER TO SOIL CORROSION. H. G. Taylor. (*Copper Development Association. Publication No. 35. 1946.*) Technical paper on resistance of copper to soil corrosion. Particular reference to gas and water services. Theory of soil corrosion and methods of testing. Results of comparative tests of copper and other materials. Experience with buried copper. Dissimilar metal corrosion. Illustrated. Bibliography.

This is a reprint of a paper originally published in *The Engineer* for February 16 and 23, 1940. It contains tabulated results of field and accelerated tests for corrosion of copper and other metals, both in this country and by the Bureau of Standards in the United States. There is a detailed summary of experience with buried copper services in England, the USA and Australia under unfavourable soil conditions. Consideration is given to galvanic corrosion caused by contact of dissimilar metals, and methods of avoiding trouble from this cause are discussed. There is a detailed list of references.

The paper is a valuable summary of available information on the subject; the general emphasis is on the advantages of copper over other materials.

MISCELLANEOUS

2798 Scientific Communication

SCIENTIFIC COMMUNICATION. M. Goldsmith. (*The Scientific Worker. Journal of the Association of Scientific Workers*, Vol. 1, No. 4, August, 1946, pp. 24-26.) Report on discussion on dissemination of scientific information during recent Royal Society Empire Scientific Conference.

Dissemination of scientific information to the general public and communications between scientists were two important aspects discussed at a number of sessions of the recent Royal Society Empire Scientific Conference. A report was presented from a working party set up by the British Association under the chairmanship of Sir Richard Gregory which stressed the necessity, on the administrative side, for an Institute of Scientific Information. Such an institute would be an organized but not exclusive channel of contact between agencies responsible for the dissemination of scientific information and the original sources of scientific knowledge. Some of its main functions would be to maintain in a readily available form a record of all scientific research in the world as a whole; to be in constant communication with scientists in every field; to supply to the press and other media the latest information in regard to pure and applied science; to answer requests for authorities on all scientific subjects; and to advise and recommend on all matters connected with publicity.

Discussing scientific information services it was stated that there are more than 40,000 scientific journals in the world, and that no country has attempted to assemble or to make a systematic review of more than a small fraction of these publications.

Prof. J. D. Bernal said that the individual paper was the basic unit of scientific publication, and that it was necessary to reorganize its production and distribution. He suggested the distribution of individual papers and abstracts by a number of central distributing offices set up jointly by scientific societies and other publishing bodies in each country.

Recommendations made by the Scientific Information Services Committee under Sir Alfred Egerton were concerned with the establishment of a network of information services throughout the dominions; with the publication, classification and distribution of individual scientific papers in separate form or as reprints; with the issue of occasional reviews of special branches of science both for the specialist and for the general scientific reader as a supplement to other forms of publication; with the extended provision of micro-film services and other means of documentary reproduction; and with the qualifications, special training and selection of staff in scientific information services and special libraries.

2799 Filing and Indexing

REPORT ON FILING AND INDEXING: A STUDY OF THE PRINCIPLES AND PRACTICE OF CLASSIFICATION AS APPLIED TO FILING SYSTEMS. O. W. Roskill. (*O. W. Roskill & Co. (Reports), Ltd., 1946, £2 2s.*) Critical examination of various filing, indexing and classification systems. Applications of classification to filing. Survey of modern filing equipment, and list of suppliers.

The purpose of filing is to preserve documents in an orderly and accessible manner. Prior to the setting-up of a filing system it is, therefore, necessary to examine every type of document to be held in the files. The report suggests the following elementary but essential questions to be answered in respect of each type of document:

- Is it really necessary to keep the information it conveys, or can it be found in an equally convenient form elsewhere?
- Is it sufficiently explicit and accurate?
- If it is bulky, is it necessarily so?
- Is it of suitable shape and sheet size, or can standardization be effected?
- Will reference to it be a frequent regular occurrence, occasional or rare?
- Who is likely to refer to it?
- In what connection is it likely to be required? To what extent must it be cross-referenced?
- For how long will it continue to be of live interest? When should it be transferred to reserve files, and when destroyed?
- What quantity will there be in the live files at any one time?

This analysis will enable the documents to be grouped according to the nature and frequency of reference required and facilitate the choice of an appropriate classification system.

The report then goes on to examine in great detail various filing and indexing systems; their principles and their suitability under particular circumstances. The following aspects are dealt with:

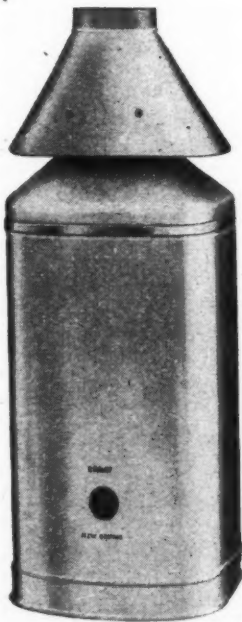
Name Classification covering alphabetical arrangements by names, difficulties to be observed, and various methods by which these difficulties may be overcome.

Subject Classification covering questions of subject classification either in the files themselves or by a separate index. The

An Exclusive Formula

GAS + GEYSER = INSTANT HOT WATER

Only a Gas Geyser gives Instant Hot Water



It is the *only* way to get hot water *instantly*. Moreover, with a EWART Geyser—A Multipoint—bath or sink geyser you get it the cheapest way; the cleanest way; the most efficient way—no stoking and no waste of fuel. Hot water whenever you need it, piping hot *instantly* at any time of the day or night, at the sink, basin or bath by turning a tap. Let EWART plan your hot water supply—and always specify EWART Geysers.

EWART GEYSERS

MULTIPOINT • BATH • SINK

EWART & SON, LTD. 169 REGENT ST. W.I. — WORKS: LETCHWORTH, HERTS. ESTD. 1834.

6473

Scottish Agents: JAMES R. THOMSON & CO., Ltd., 10, Blythswood Street, Glasgow, C.2
Northern Ireland Agents: CENTRAL MERCHANTS, Ltd., Upper Queen Street, Belfast.

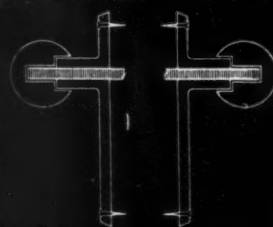
A KNOB'S JOB

A door knob should do its job gently yet firmly. It should be able to stand up to all the use and abuse it is likely to get during a long life. It should be easy to fix and it should remain fixed with neither looseness nor rattle. And it should be good to look at, a quiet delight to the eye always.

That's how Lacrinoid make door knobs, and all other types of door furniture of course.

LACRINOID

TRADE MARK



Showing the 'floating' spindle principle, dispensing with grub screws and allowing greater variations in door thickness.

LACRINOID PRODUCTS LTD • MOULDERS OF ALL PLASTICS • 90 REGENT ST. W.I. Regent 5001

difficulties encountered in determining the varying designations of a subject are discussed at great length, as well as the necessity for and possible methods of careful and ample cross-referencing and indexing. Specific subject classification systems explained include the Dewey System and the Universal Decimal Classification (both of which are based on subject code numbers), the Dosse and the Borlase Matthews systems based on a combination of alphabetical and numerical subject codes; and finally the American Library of Congress Classification which is also an alpha-numerical system.

Further chapters deal with the filing and indexing of abstracts of technical or other information; with the application of particular classification systems to filing; and with available filing and indexing equipment, including micro-film apparatus.

The report provides a valuable summary of up-to-date filing and classification practice. Although it is not meant to be fully comprehensive, it should be useful as a guide to tackling the very intricate problems of classification and efficient filing generally. The factual information given will help to determine the usefulness of particular classification schemes in regard to particular problems, but it must be kept in mind that every filing problem has its own special difficulties which can only be overcome by careful adaptation to special needs.

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.

2800

Treatment of Oak

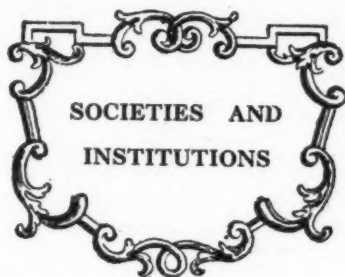
A Could you give us any information about the treatment and preservation of oak? We have used a considerable amount of oak both externally and internally in the building of our houses. Much of the interior work has been adzed (that is, the dummy half-timbered work and such like), and also the external woodwork of barge boards, fascias, etc.

Much of the internal work we have lined and wax polished, but the trouble mostly arises in the oak frames, etc., of the external doors and windows. These of course are planed and moulded, and we are anxious to find some treatment that, whilst preserving them, will not alter the colour. We have used raw linseed oil, and whilst we do not doubt its qualities as a preservative, we object to the yellow tinge of colour imparted to the oak, and we should be obliged if you could recommend any treatment that might overcome this difficulty.

The barge boards, fascias, etc., are beginning to look a little washed out and in need of some sort of treatment. Again, we are up against the problem of altering the natural colour of the weathered oak, and therefore hesitate to apply Solignum, Cuprinol or other advertised preservatives for this reason.

Q The two preservatives mentioned in your letter can be obtained as a colourless preparation which enables the natural colour of the oak to be retained.

Regarding the treatment of oak with linseed oil, although this causes a slight discoloration it is very little different from the colour that untreated oak turns after exposure for a time.



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.

City of Westminster

District Heating

October 10, at a meeting of the Westminster City Council, the Housing Committee recommended that the Council agree in principle to adopt a DISTRICT HEATING SCHEME for the new Pimlico Housing Estate and for the Cambridge Street and Alderney Street Estate by purchasing heat from Battersea Power Station. This was the result of a report submitted by S. B. Donkin, of Donkin and Kennedy, consulting engineers. Below are notes from the speech made at the meeting by Alderman C. P. Russell, the Chairman of the Housing Committee.

C. P. Russell. There are three possible methods of heating the new Pimlico Estate:—

1. BY OWN BOILER PLANTS

(a) One for each major Block or Section.
(b) Two for the whole area as provided for in the recent architectural competition.

(c) One for the whole area.

The last two Mr. Donkin shows to be 15 per cent. more efficient than the first.

2. BY HEAT ELECTRIC SYSTEM

Heat Electric system is heat obtained as a by-product of the generation of electricity. The installation is designed primarily for the production of electricity but by special designs of apparatus, heat which is otherwise lost in the condensers is utilised to provide useful heat for space and water heating.

In a normal station the efficiency of electricity generation is from 20 per cent. to

30 per cent. of heat value of fuel consumed. By means of heat electric system this can be raised to about 80 per cent. taking electricity and heat together. In Pimlico there are two alternatives:—(a) To erect our own station and to sell the electricity generated to Grid. We have no powers to sell electricity and to use some of the heat for central heating hot water. (b) To purchase heat from Battersea produced by the heat electric system.

3. BY HEAT PUMPS

The Heat Pump is a modern invention and is in effect a refrigerator used the other way round. In a refrigerator the heat is abstracted from the compartment to be cooled and this heat is dissipated usually in an air-cooled radiator. In a heat pump, heat is abstracted from a convenient source, usually a river or lake, and this heat is used for whatever purpose it is needed. In Pimlico it would be the Thames and this would give us the necessary heat for central heating and hot water.

The peculiarity of a heat pump is that for a given input of energy translated into terms of heat, several times this amount of heat is produced. This heat is, of course, not created, but comes from the heat source used, e.g., the Thames.

In the Pimlico scheme there are two possible ways of using the heat pump:—

(a) By purchasing the electricity to drive the motors which drive the heat pumps.

(b) By purchasing our own boiler plant to generate steam which would be used partly to drive the heat pumps and partly to assist in heating water, probably in the ratio of heat pumps two parts, steam one part.

Lastly, there is the method by which we might purchase heat direct from the boilers of the Battersea Power Company.

Each of the three methods I have outlined, viz.: 1. Own boiler plants, 2. Own heat electric plant, 3. Own heat pump installation, would require us to set aside a considerable area of the site for the necessary plant, would entail boiler plant with its chimney, smoke, and dirt emission, delivery of coal, removal of ash, noise, and considerably skilled attention at all times. If possible, all will agree, I am sure, that it would be a great advantage if they could be avoided.

The heat pump driven by purchased electricity, would also entail considerable space, and inevitably a fairly considerable amount of noise.

The purchase of heat from Battersea either direct from the boilers or from heat electric generator has none of the disadvantages. There would be no noise, no dirt, no smell, no coal to be delivered, no ash to be removed. All that is required is a hot water tower and a valve house for controlling the heat, the latter requiring little attention.

In comparison with present methods, there would be no difficulty about storage of fuel or delivery of coal to high flats.

After considering all the alternatives, Mr. Donkin strongly recommends the purchase of heat from Battersea produced by the heat electric system. We are very lucky that our site in Pimlico has everything in its favour for this system owing to its location near to Battersea and the existence of the necessary tunnels under the river.

As far as economics are concerned, everything is in favour of the heat electric system. The cost of the heat delivered to the flats is least, the ordinary central heating plant coming next. But the capital cost to be found by the city under the latter scheme is over twice that of the heat electric, viz. £139,200 for central boiler house and £53,100 for the heat electric. The capital cost for the heat pump system is estimated to be from £172,000—£178,000 whichever method is adopted.

Taking capital charges and running costs together, Mr. Donkin's estimates show the weekly cost to the tenant of an average

flat to be as follows:—

	s.	d.
Heat electric	4	8
Central boiler	5	2
Heat pump, own station	5	8½
Heat pump, purchased electricity, 8s. 4d. or 11s. 2d., according as elec- tricity is supplied at ½d. or 1d. per unit, Existing method (fires, 15 4 etc.)		

It may be argued that these estimates may not be realised in practice. But I should be fairly entitled to reply to that, that the results might prove to be even better. But I do not feel it necessary to stress the financial side as supposing that the heat electric proved to be no more economical than the most favourable alternative, viz., a central boiler house, the advantages are so overwhelmingly in its favour, that I should have no hesitation in recommending the Council to adopt it.

From the national point of view there is the further point that for the same amount of heat supplied to the flats the saving in fuel as compared with existing methods, i.e., fireplaces, etc., is 5,000 tons per annum, as compared with a central boiler installation about 2,000 tons per annum.

Now what does the scheme propose to supply:—

(a) 30 gallons of hot water per head per day all the year round—a priceless boon for the housewife with no more trouble than the turning of a tap.

(b) A heated linen cupboard and towel rail all the year round.

(c) A temperature in the living room of 65 deg. and in the rest of the flat of 60 deg. This temperature can be maintained until the outside temperature drops to just below freezing. Below this temperature some means of topping up will be necessary by means of an electric or gas radiator, points for which will be provided.

Heating all the rooms in the flats will make possible the use of all the rooms whenever required instead of all the family being crowded into the living room, or the kitchen being the only warm place. The children can do their homework or play their games in their own bedrooms, mother can retire to hers if she wishes, leaving father in lordly loneliness in the living room with the radio.

This scheme, while unique in many ways, is not in principle new. But as far as I know it has not been adopted on so large a scale nor under quite similar conditions. To that extent it may be said to be an experiment. But I am confident that the Council will be wise to undertake it. In early stages it will be expensive, but after completion of Sections 1 and 2, there will be substantial savings. And, in the national interest, a scheme of this kind is urgently necessary to gain experience.

Westminster has never lacked courage in adopting new methods and giving a lead. We should consider that the conditions are such that we can embark upon this scheme with good confidence in the result, and the added advantage that we are at the same time doing a job of national importance and contributing in no small way to the solution of the fuel problem.

NSAS

Conference

October 24 to 26, at Brighton. At the ANNUAL CONFERENCE of the National Smoke Abatement Society, attended by representatives of 200 municipal authorities, fuel experts, doctors, scientists and industrialists, speakers included Sir George Elliston, Chairman of the Health Committee, City of London Corporation, and

Charles Gandy, Chairman of the Executive Committee of the NSAS.

Sir G. Elliston: The Government is firmly committed to a policy of cleaner air. It would seem therefore, that the main task of the Society is not to dwell as formerly upon the ravages of atmospheric pollution, now universally recognised as a national waste, but the more constructive work as to how this pollution can be diminished most effectively and in the shortest possible time. The Society's policy is no longer a counsel of perfection; it has now become a matter of urgent necessity on the lowest economic grounds alone.

There is little use the Ministry of Fuel and Power and other Ministries lamenting the shortage of coal for every purpose, industrial, domestic and export when we scatter no less than two and a half million tons of it unburnt into the air to cause damage to our buildings and possessions, which with other costs conservative authorities have estimated at two million pounds per week.

Jaded as our minds are these days with all kinds of astronomical statistics, a mere two and a half million tons of coal a year is perhaps not sensational. Nevertheless it represents four days' output for every miner in the country, and would be enough to provide an extra four or five hundredweight of fuel to every family during the coming winter. If the heat we lose through smoke and other allied results of wasteful burning could be harnessed to industry, the fuel crisis would be over and all Mr. Shinwell's anxieties would vanish for ever more.

The serious manpower shortage is one of the reasons for the coal shortage. Yet, fantastic as it may seem, we are in effect employing ten thousand miners to produce smoke, and a far greater number of other people in clearing up and making good all the damage it does.

Smoke knows no boundaries, and few areas in Britain are entirely free from its direct effects, while a substantial part of the smoke bill is paid for by those who live in the cleanest parts as much as by the remainder. The cost of smoke to trade and industry, for instance, is paid for in the long run by the consumer, whether he lives in Sheffield or St. Ives.

It is no exaggeration to say that the fight against the smoke evil, an evil from which we have suffered for so long, and which for generation after generation has wasted so much of the nation's health and wealth; is now entering its final and decisive stage. The full implementation of all that is contained in the Domestic Fuel Policy Report, the provision of new kinds of legislation and the early establishment of expanding smokeless zones—all these and other policies are practicable, and give well-defined objectives that, when they are won, will mean the virtual end of smoke.

As chairman of the City of London Health Committee, perhaps I may be allowed to mention two steps taken during the past year by the Corporation in the cause of smoke abatement. Encouraged by this Society they first considered the creation of smokeless zones within the city but they found the problem was complicated by the smoke output from the great railway stations and from steamships in the port. For the time being therefore they had to be content with securing in a Private Bill, now on the Statute Book, a clause requiring prior approval by the City Health Department of all new fuel-burning installations. That in itself was a considerable achievement, but the Corporation decided to go further and get expert advice on the possibilities of district heating for the extensive areas of the city devastated during the war. On the face of it, it seems an unique opportunity for the piping of heat and hot water to the acres of offices and warehouses which must be

rebuilt during the next few years. No previous scheme at home or abroad has dealt with a great commercial centre which has to be re-created *de novo* and where the advantages of district heating are more obvious. The Corporation is now awaiting a report from its expert adviser, and it is hoped that financial and other considerations will justify the adoption of a scheme which would automatically create smokeless zones in large areas of the City.

C. Gandy: There is now no city or town of consequence in the country whose Health Authorities do not regard the elimination of smoke as essential to public health.

It is the local authorities who are the front line of the battle. Parliament alone can provide the new powers they need and the responsibility for the direction of operation lies and must increasingly lie with the Central Government.

The Government must give a definite lead in regard to the setting up everywhere of regional smoke authorities with statutory powers and duties. Without superseding similar functions exercisable by the larger local authorities, these might include the employment of an adequate staff of expert fuel consultants and inspectors, arrangements for prior approval of installations including standard domestic appliances, the taking of observations throughout the region and relating the same to those in adjoining regions, the collection and dissemination of air pollution statistics, progress reports, and information, for the guidance of the Central Government and of constituent authorities, for the use of special classes of fuel users, and for the general public, and arranging for the training of smoke control personnel and the training and certification of stokers.

In spite of the pressing need for fuel economy and the urgent importance of providing tenants of all new houses with up-to-date fireplaces which will give pleasing results with smokeless fuel, we hear with dismay that appliances of obsolete pattern are still being produced and supplied to housing authorities, on the pretext that the completion of houses cannot be delayed until the new grates are ready. That this should be the case more than two years after the Housing Manual of 1944 had urgently recommended that the new types only should be used in all new housing shows an inexcusable lack of co-ordination between responsible Government Departments. A firm declaration of Government policy in this matter coupled with the determination to allocate the required materials would have avoided the trouble and it may be hoped that it is still not too late for proper action to be taken.

The growth of the smoke cloud over our countryside has been so gradual that we easily think of it as a natural climatic condition. Besides the damaging effect of falling soot and acid extending far outside the smoke producing areas and causing an average annual deposit of not less than 10 tons per square mile in rural districts, it is now estimated that 2 out of the 3 million tons of smoke pollution emitted in solid form is in so fine a state as not to descend by gravity. Carried upwards to the lowest temperature inversion, often near the stratosphere at a height of some 33,000 feet, some 40,000 tons of this "air flotsam" is usually hovering over the whole country, cutting off a high percentage of available light, especially in those climatic conditions when maximum light is needed for plant growth. The overall loss in agricultural productivity, including that of market gardens and allotments, has been estimated at as much as between 20 per cent. and 30 per cent. It is hoped that Agricultural Research Stations will in the near future make a closer study of these effects, and that Farmers' and Allotment Holders' Associations will give the matter the attention it deserves.

Craftsmanship Lives Anew in

FINE TIMBER



PHINEAS

PETT

(1570-1647)

Master Builder of the Navy, responsible for all Shipbuilding including the "Sovereign of the Seas", the largest and most highly ornamented ship of the day, (a model is preserved in the Royal Naval College, Greenwich).



a first-class Dining Room: 'The Queen Mary'

Timber was used not only to fashion the hulls of our early naval vessels, but their builders also used it to decorate the exteriors and interiors of these superb examples of the craftsman's skill. The ship-builders and designers of today have the advantage of being able to call on many other allied materials and services—veneers from all over the world, water resistant plywood (flat, shaped, or metal faced)—and modern methods of kiln drying, fireproofing, etc.

WILLIAM MALLINSON & SONS LTD

TIMBER AND VENEER MERCHANTS AND PANEL MANUFACTURERS

130-150 HACKNEY ROAD • LONDON • E 2

TELEPHONE • BISHOPSGATE 1234

TELEGRAMS • 'ALMONER' LONDON

MANY ARCHITECTS WHO ARE NOW RETURNING to practice from their wartime jobs are anxious to obtain the latest information regarding a number of building products and services. We print the form below in response to a number of requests . . . it will save you time and trouble.

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."

.....

Please ask the manufacturers to send further particulars to:—

NAME

ADDRESS

.....

A.J. 31.10.46

Let the Government give the lead, let the necessary laws be passed to enable the Local Authorities to carry out their smoke campaign.

SPRRD

Planning Courses

The third of the Three Months' Completion Courses in Town and Country Planning at the School of Planning and Research for Regional Development ended on September 30. The following candidates passed the course successfully, and are accordingly exempt from the final examination of the Town Planning Institute.

Distinctions were obtained by: E. W. Beaumont, A.R.I.B.A., Lancaster; S. H. A. Rollison, P.A.S.I., Tonbridge; H. S. Howgrave-Graham, A.R.I.B.A., Su.sex.

Other successful candidates in order of passing were: B. Buck, A.R.I.B.A., Winchester; E. W. N. Mallows, A.R.I.B.A., South Africa; R. F. King, P.A.S.I., London; G. T. Goalen, A.R.I.B.A., London; R. Carton Tickell, DIP. ARCH. (Liverpool), Cheshire; B. Buchbinder, DIP. ARCH. (Prague), Czechoslovakia; J. G. Hird, A.R.I.B.A., Glasgow; P. L. Joseph, A.R.I.B.A., Birmingham; B. C. Maynard, A.R.I.B.A., London; W. Fairbank, Lancashire; R. J. Morling, A.I.L.A., Morde; H. J. C. Pratt, A.R.I.B.A., Essex; F. A. G. White, P.A.S.I., London; R. A. C. Macfarlane, A.R.I.B.A., Wrexham; D. Boyd, A.R.I.B.A., London; R. L. Thorpe, A.R.I.B.A., New Zealand; B. A. Le Mare, A.R.I.B.A., London; G. A. Atkinson, A.R.I.B.A., Hull; H. Jackson, A.R.I.B.A., Cambridge; C. H. Every, A.R.I.B.A., London; L. B. Reed, Chichester.

Announcements

Mr. W. A. Bassett, L.R.I.B.A., has taken into partnership Mr. Peter Berner, A.R.I.B.A., A.M.T.P.I. They will practise under the title Bassett and Berner, at 47, High Street, Tonbridge, Kent. Telephone: 274.

The War Damage Commission announces that Mr. William Milburn, B.Sc., F.R.I.B.A., F.S.I., of Sunderland, has relinquished the position of Deputy Commissioner for the Northern Region. Mr. Arthur Hollis, P.P.A.I., F.S.I., of Leeds, the Deputy Commissioner for the North Eastern Region, will act in a similar capacity for the Northern Region also.

The following two new appointments have been made to Harris Lebus, manufacturers of furniture, Finsbury Works, Tottenham, N.17: Mr. Jack Pritchard, Director of Product Development. He has been a co-member with Sir Herman Lebus on the Board of Trade Furniture Working Party, whose report it is expected will be published shortly. Mr. Claude Simmonds, Director of Public Relations at the Board of Trade, Director of Sales.

Mr. Geoffrey Clark, L.R.I.B.A., Chartered Architect and Town and Country planning Consultant (formerly of Messrs. Harding, Thompson and Partners), has taken into partnership Mr. R. G. M. Chase, A.R.I.B.A., M.T.P.I. (late Major R.E.). The firm is practising under the name of Geoffrey Clark and Partners at The Old Rising Sun, The Quay, Wareham, Dorset. On being released from the forces in August, 1945, Mr. Chase was employed in the Ministry of Town and Country Planning until joining Mr. Clark.

Mr. Kenneth Bayes, A.R.I.B.A., of Design Research Unit has moved to 37, Park Street, W.1 (Mayfair 9255). He would be glad to receive trade catalogues at this address.



BY APPOINTMENT
TO THE LATE KING GEORGE VI

BROMSGROVE GUILD LTD

ARCHITECTURAL METALWORKERS

BROMSGROVE

WORCESTERSHIRE



For All Constructional Needs

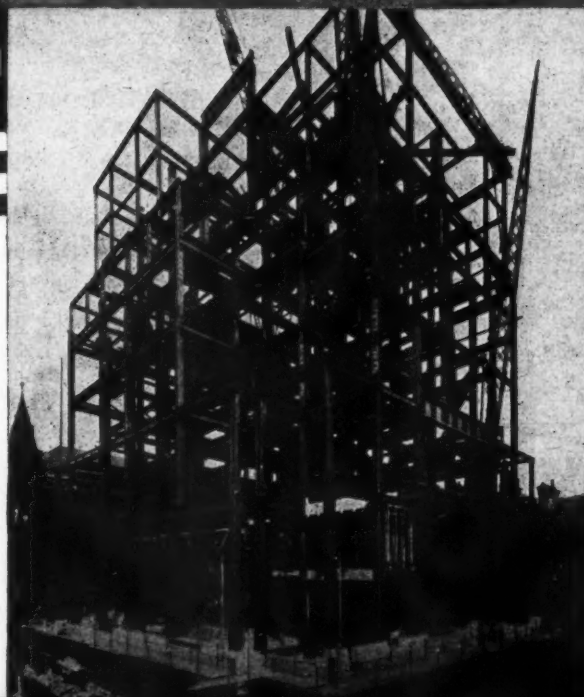
RUBERY-OWEN

DARLSTON

S-STAFFS



**SAVE NOW
BUY LATER**



**SAVE NOW
BUY LATER**

LONDON IMPERIAL BUILDINGS, 56, KINGSWAY, W.C.2 BIRMINGHAM 3, LOMBARD HOUSE, Gt. CHARLES ST.



Tretol Liquid Waterproofer when added to the gauging water will permanently waterproof mass concrete and renderings against strongest sub-soil water pressure without any deviation from normal work. Its chemical action guarantees absolute efficiency.

TRETOL LTD. 12-14 North End Road, London, N.W. 11

Tel. Speedwell 4621 (5 lines)

TRETOL
LIQUID CEMENT
WATERPROOFER



It is obviously desirable to have copies of plans which are as clear and crisp in detail as the original drawings and tracings. Small lettering and figures should be reproduced with perfect legibility. This is quite possible if carried out correctly.

Ilford Limited manufacture a complete range of document papers and other products suitable for every copying process and for use with all types of copying machines. They are speedy, contrasty and orthochromatic, giving intense blacks and needle-sharp white lines.

The more important varieties of Ilford Document Papers are :

ILFORD DOCUMENT PAPERS No. 4 & 4T
for camera negatives and positives.

ILFORD DOCUMENT PAPER No. 60
for enlargements from smaller film negatives.

ILFORD REFLEX DOCUMENT PAPER No. 50
for reflex copying.

ILFORD PHOTOMECHANICAL PAPER
where specially opaque negatives are required.

Ilford Limited offer an expert advisory service on all matters concerning the application of Photography to plan-copying in Engineering and other Industries. An Ilford booklet is available, 'Photography Applied to Plan Copying in Engineering and other Industries', which describes techniques adaptable for use in every drawing office.

ILFORD
Document Papers
ILFORD LIMITED • ILFORD • LONDON



STERLING FELT

*plays an important part
in the building programme*

SPECIFY "STERLING" CORRUGATED
HAIR FELT INSULATION SHEETS

"STERLING"

DOUBLE SIZE

HAIR FELT SHEETS

34" x 40"

Made only by—

**STERLING TEXTILE
INDUSTRIES LTD**

STERLING WORKS, ALEXANDRA ROAD, PONDERS END

Phone: HOWARD 2214-5, 1755

MIDDLESEX.

STERTEX, ENFIELD

ENQUIRE FROM YOUR MERCHANT

TRADE ENQUIRIES INVITED



**Poised for
Service!**

*Eagerly awaiting the
relaxation of controls*



*Be prepared and
specify*

ARMOUR
BRAND



**PAINTS &
ENAMELS**

*Armourdor, Armourmatt,
Armourset, Armoursheen.*

FERRODOR

Vitros

*Limited
Supplies
for
PRIORITY
WORK
ONLY*

**Griffiths Bros & Co.
LONDON, LTD.**

MACKS ROAD, BERMONDSEY, LONDON, S.E.16

Telephone: BERMondsey 1151

Telegrams: AQUOL, PHONE, LONDON.

"A. B. S."

HOUSE PURCHASE LOANS

ALTERNATIVE SCHEMES

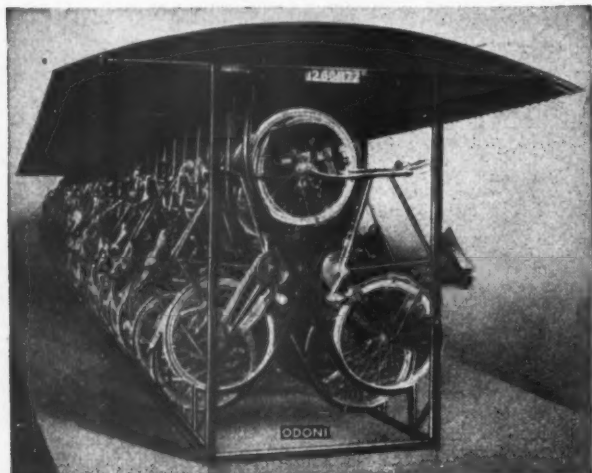
1. Normal advance 80% of Valuation.
Interest 4% gross. (Borrower pays Survey
Fee and Legal Costs totalling 1½% of Loan.)

2. Normal Advance 85% of Valuation.
Interest 4½% gross. (Office pays Survey
Fee and Own Legal Charges.)

REPAYMENT by means of an Endowment
Assurance term not exceeding 25 years
under (1) or 30 years under (2).

Particulars from:—

The Secretary,
A.B.S. INSURANCE DEPARTMENT
66, Portland Place, London, W.1.
Tel: WELbeck 5721.



**ODONI PATENT
ALL-STEEL BICYCLE STANDS**

Write for fully illustrated catalogue

VARIOUS TYPES TO SUIT REQUIREMENTS

Sole Manufacturers and Patentees:

ALFRED A. ODONI & CO. LTD.
SALISBURY HOUSE : FINSBURY CIRCUS
LONDON, E.C.2

Telephone:
MONarch
8638/9

WORKS: LONDON, S.W.

Telegram:
"Odoni, Ave
London"

*But you can get
'THE TIMES'
now*

—and it's ten pages daily

You can also get THE TIMES LITERARY
SUPPLEMENT, THE TIMES EDUCATIONAL
SUPPLEMENT, THE TIMES WEEKLY EDITION
Order from your local newsagent

THE  TIMES
—a part of Britain's life

NEW AIR WITH
Vent-Axia

A SIMPLE AND
ATTRACTIVE METHOD OF
UNIT VENTILATION

VENT-AXIA LTD., 9 VICTORIA STREET, LONDON, S.W.1. Telephone: ABBy 5168-9
And at GLASGOW, MANCHESTER, BIRMINGHAM, LEEDS

When daylight fades ...



THEY SWITCH TO

**METROVICK
COSMOS
LAMPS**



METROPOLITAN-VICKERS ELECTRICAL CO. LTD., Number One Kingsway, LONDON, W.C.2
SJA614

The first
and original
"latex foam
cushioning"



In the form of a mattress or seating it yields a measure of comfort and hygiene never before imagined.

was **DUNLOPILLO**

DUNLOP RUBBER COMPANY LIMITED (DUNLOPILLO DIVISION) RICE LANE, WALTON,
LIVERPOOL 9. LONDON: 1, ALBANY STREET, N.W.1. TELEPHONE: EUSTON 3434.

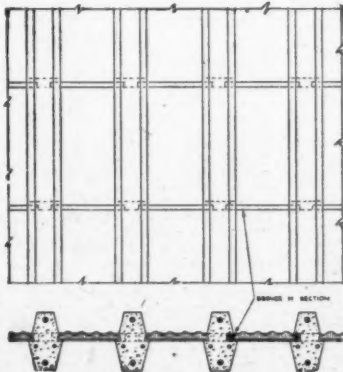
46/DP.3d

GLAS-CRETE WINDOWS

REINFORCED CONCRETE AND GLASS CONSTRUCTION

Patent "Cristol" Window construction, comprising vertical R.C. mullions, grooved and slotted to receive "H" bronze members, which in turn carry special high-relief glass units or sheet glass.

It is thus possible to construct windows continuously up to any desired height, as the weight of each glass is carried on the "H" members, which, in turn, transmit it to the mullions. Mullions are spaced at 9in. or 12in. centres when high relief glass units are used, but may be spaced up to 2ft. centres when glazing is carried out in sheet glass.



J. A. KING AND COMPANY LIMITED
181 QUEEN VICTORIA STREET, LONDON, E.C.4
TELEPHONE: CENTRAL 5865 (4 LINES) TELEGRAMS: KINOVIQUE CENT LONDON

CLASSIFIED ADVERTISEMENTS

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.

Public and Official Announcements

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

LONDON COUNTY COUNCIL.

Applications are invited for the following positions:—

(1) QUANTITY SURVEYORS AND ASSISTANTS (SENIOR AND JUNIOR). Required for:

(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 £60 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.W.1, enclosing stamped addressed foolscap envelope.

Canvassing disqualifies. 947

NORTH RIDING EDUCATION COMMITTEE.

Applications are invited for the post of TECHNICAL ASSISTANT, in the Buildings Department. The applicant should be a neat draughtsman, with some experience in surveying sites and buildings, and with a sound knowledge of the routine work of an architect's office. The salary scale is as for the General Division under the National Joint Council's scheme, rising to £300 a year at 30 years of age, plus cost-of-living bonus, at present £39 16s. a year. The post is subject to the Local Government Superannuation Act. Further particulars and form of application may be obtained by sending a stamped addressed foolscap envelope; completed applications should be returned by 16th November, 1946. Canvassing will disqualify.

F. BARRACLOUGH,

Secretary.

Education Offices, County Hall,
Northallerton.

704

SURREY COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

PRINCIPAL ASSISTANT ARCHITECTS:

Commencing salary £800, rising by annual increments of £25 to a maximum of £900, inclusive.

Applicants must hold either a degree in Architecture or be Members of the Royal Institute of British Architects, and should have had a good experience in the control of staff, organisation of work, and had a good training and an adequate experience in the design and construction of modern buildings. One of the appointments will require a specialised knowledge of the design of school buildings.

The following appointments will carry a cost-of-living bonus, at present £59 16s., and London allowance of £20 per annum.

ASSISTANT ARCHITECTS (Grade VIII):

Commencing salary £625, rising by annual increments of £25 to a maximum of £700 per annum.

Applicants must hold either a degree in Architecture, or be Members of the Royal Institute of British Architects, and have had a good training and an adequate experience in the design and construction of modern buildings.

ASSISTANT ARCHITECTS (Grade V):

Commencing salary £460, rising by annual increments of £15/£20 to a maximum of £510 per annum.

Applicants must hold either a degree in Architecture or be Associate Members of the Royal Institute of British Architects, and should have had a good training and an adequate experience in the design and construction of modern buildings.

ARCHITECTURAL ASSISTANT (Grade I):

Commencing salary £330, rising by annual increments of £15 to a maximum of £375 per annum.

Applicants should have had a good training in architecture.

ASSISTANT QUANTITY SURVEYORS (Grade VIII):

Commencing salary £625, rising by annual increments of £25 to a maximum of £700 per annum.

Applicants should possess approved qualifications and experience, and preference will be given to those who are Members of the Royal Institution of Chartered Surveyors (Quantities Sub-Division). They should be capable of undertaking all stages of the work for the preparation of Bills of Quantities, including preliminary estimates; the preparation and settlement of final accounts; site measurements; and the preparation of interim certificates.

ASSISTANT QUANTITY SURVEYORS (Grade V):

Commencing salary £460, rising by annual increments of £15/£20 to a maximum of £510.

Applicants should possess approved qualifications and experience, and preference will be given to those who are Members of the Royal Institution of Chartered Surveyors (Quantities Sub-Division). They should be experienced workers-up, capable of abstracting and billing in all trades, and drafting specifications from Bills of Quantities.

ASSISTANT QUANTITY SURVEYORS (Grade III):

Commencing salary £390, rising by annual increments of £15 to a maximum of £435 per annum.

Applicants should have passed at least the Intermediate Examination of the Royal Institution of Chartered Surveyors (Quantities Sub-Division), and be capable of undertaking working-up, and the general technical duties of a Quantity Surveyor's Office.

ASSISTANT BUILDING SURVEYOR (Grade V):

Commencing salary £460, rising by annual increments of £15/£20 to a maximum of £510.

Applicants should possess approved qualifications and experience, and preference will be given to those who are Members of the Royal Institution of Chartered Surveyors (Building Sub-Division). They should be capable of drafting specifications in all trades, preparing schedules of dilapidations, the preparation of detailed estimates for general maintenance works, and surveys of properties.

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

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-on-Thames, not later than the 15th November, 1946.

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

DUDLEY AUKLAND,

Clerk of the Council.

County Hall, Kingston-on-Thames.

691

BOROUGH OF BUXTON.

BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the under-mentioned appointments, on the staff of the Borough and Water Engineer:—

(1) CHIEF ENGINEERING ASSISTANT.

(2) ARCHITECTURAL ASSISTANT.

The salaries for both these appointments will be in accordance with Grade II of the National Joint Council, namely, £360 p.a., rising by three annual increments of £15 to £405 p.a. Cost-of-living bonus, at present £59 16s., will be paid in respect of both these appointments.

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

Preference will be given to candidates possessing the recognized professional qualifications, and applications from Service men who are to be released in the near future will be considered.

Applications, stating age, qualifications and experience, accompanied by copies of two recent testimonials, should reach the undersigned not later than 7th November, 1946.

A. C. W. RYLAND,

Borough Surveyor.

Town Hall, Buxton.

11th October, 1946.

665

MIDDLESBROUGH EDUCATION COMMITTEE.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the under-mentioned appointments, on the established staff in the Architect's Section of the Middlesbrough Education Department:—

(a) ARCHITECTURAL ASSISTANT. Salary in accordance with Grade IV of the National Joint Council Scales (£420-£465 per annum).

Applicants should be experienced in the preparation of working drawings and details for public buildings. Preference will be given to candidates who are members of the Royal Institute of British Architects, and have had previous experience in educational building work.

(b) ARCHITECTURAL ASSISTANT. Salary in accordance with Grade I of the National Joint Council Scales (£330-£375 per annum).

Applicants should have had good general experience in an architectural office, and be competent to make surveys and take levels.

A cost-of-living bonus, at present £60 per annum, will be payable in addition to the basic salary in each case.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937.

Applications, stating appointment applied for, giving full details of age, training, qualifications, present and previous appointments, type of experience, together with copies of not more than three recent testimonials, should be delivered to the Director of Education, Education Offices, Woodlands Road, Middlesbrough, by not later than Friday, 22nd November, 1946.

Canvassing, directly or indirectly, will be a disqualification.

E. C. PARR,

Town Clerk.

Town Clerk's Office, Middlesbrough.

October, 1946.

697

COUNTY BOROUGH OF BURNLEY.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following positions:—

(1) SENIOR ARCHITECTURAL ASSISTANT (Grade V). £460 to £510, plus bonus, at present £59 16s. per annum.

Applicants should have had experience in the design of educational buildings, and preference will be given to Associates of the Royal Institute of British Architects.

(2) ARCHITECTURAL ASSISTANT (Grade IV). £420 to £465, plus bonus, at present £59 16s. per annum.

Applicants should preferably have had experience in either housing or educational work, and previous service with a Local Authority would be regarded as an advantage.

Conditions of service are those formulated by the National Joint Council. Both appointments are on the established staff, and are 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 Borough Engineer and Surveyor, Town Hall, Burnley, to whom applications should be returned in the envelope provided not later than noon on Monday, the 11th November, 1946.

Applicants should make it clear in their applications as to the position for which they are applying.

C. V. THORNLEY,

Town Clerk.

575

BOROUGH OF STRATFORD-UPON-AVON.

APPOINTMENT OF ARCHITECTURAL AND PLANNING ASSISTANT.

Applications are invited for the above appointment, in the Borough Engineer and Surveyor's Department. The salary will be £330 per annum, rising by annual increments of £15 to £375 per annum (Grade I, A.P.T. Division), plus cost-of-living bonus, at present £59 16s. per annum.

Applicants should have passed the Intermediate examination of the Royal Institute of British Architects or its equivalent.

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

Forms of application may be obtained from Mr. P. C. Smart, A.M.Inst.C.E., Borough Engineer and Surveyor, Municipal Offices, Stratford-upon-Avon, to whom they should be returned, together with copies of three recent testimonials, not later than Monday, the 18th November, 1946. Canvassing in any form, either directly or indirectly, will disqualify.

T. E. LOWTH,
Town Clerk.

Town Clerk's Office, Sheep Street,
Stratford-upon-Avon, 698

COUNTY BOROUGH OF WOLVERHAMPTON.

Applications are invited for the following permanent appointments, in the Architectural Section of the Borough Engineer and Surveyor's Department, in accordance with the National Scale of Salaries:—

(a) PRINCIPAL ARCHITECTURAL ASSISTANT (to act as Deputy to the Chief Architectural Assistant). Grade VII, A.P. & T. Division. Salary £575-£650 per annum, plus cost-of-living bonus, as present £60 per annum.

Applicants should be Associates of the Royal Institute of British Architects, and preference will be given to candidates trained at a recognized School of Architecture and with good experience of architectural design and construction, particularly of schools, housing, and other work normally undertaken by a Local Authority.

(b) SENIOR ARCHITECTURAL ASSISTANT (Class I).

Grade VI, A.P. & T. Division. Salary £535-£600 per annum, plus cost-of-living bonus, at present £60 per annum.

(c) SENIOR ARCHITECTURAL ASSISTANT (Class 2).

Grade V, A.P. & T. Division. Salary £460-£510 per annum, plus cost-of-living bonus, at present £60 per annum.

Applicants for appointments (b) and (c) must be Associates of the R.I.B.A., and have had sound training and experience in general architectural work and in the preparation of working drawings and specifications.

The appointments, terminable by one month's notice on either side, are subject to the provisions of the Local Government Officers' Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination. The Conditions of Service will be those of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services.

It is likely that housing accommodation can be provided if necessary for the successful candidates.

Applications, stating age, qualifications, and full details of experience, together with copies of three recent testimonials, should be delivered to the undersigned not later than Thursday, the 16th November, 1946, in sealed envelopes, endorsed "Principal Architectural Assistant," "Senior Architectural Assistant (Class 1)," or "Senior Architectural Assistant (Class 2)."

J. BROCK ALLON,
Town Clerk.

Town Hall, Wolverhampton.
October, 1946. 699

ISLE OF ELY COUNTY COUNCIL.

Applications are invited from suitably qualified persons for the following appointments, in the County Architect's Department:—

(i) QUANTITY SURVEYOR (Grade IV). Salary £420-£465 per annum.

(ii) SECOND SENIOR ASSISTANT ARCHITECT (Grade III). Salary £390, and by £15 p.a. to £435 per annum.

(iii) AN ARCHITECTURAL ASSISTANT (Grade II). Salary £360, and by £15 p.a. to £405 per annum.

The National Conditions of Service (including cost-of-living bonus) will apply, and the appointments will be subject to the Local Government Officers' Superannuation Act, 1937, the passing of a medical examination, and to one month's notice on either side.

Applications, accompanied by full particulars, and three recent testimonials, must reach the County Architect, County Hall, March, not later than the 9th November, 1946. Canvassing, directly or indirectly, will disqualify.

R. F. G. THURLOW,
Clerk of the County Council.

County Hall, March.
14th October, 1946. 671

COUNTY BOROUGH OF GREAT YARMOUTH.

BOROUGH ENGINEER'S DEPARTMENT.

APPOINTMENT OF PLANNING, ARCHITECTURAL AND SURVEYING ASSISTANTS.

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

(a) ONE SENIOR TOWN PLANNING ASSISTANT (permanent), at a salary in accordance with Grade V of the National Scale of Conditions of Service, commencing at £460 per annum, rising to £510 per annum, plus cost-of-living bonus (at present £59 16s.).

(b) TWO SENIOR ARCHITECTURAL ASSISTANTS (permanent), at a salary in accordance with Grade V of the National Scale of Conditions of Service, commencing at £460 per annum, rising to £510 per annum, plus cost-of-living bonus (at present £59 16s.).

(c) TWO ARCHITECTURAL AND SURVEYING ASSISTANTS (permanent), in the Town Planning Department, at a salary in accordance with Grade III of the National Scale of Conditions of Service, commencing at £390 per annum, rising to £435 per annum, plus cost-of-living bonus (at present £59 16s.).

Applicants for appointment (a) should have had experience in the preparation and administration of planning and reconstruction schemes, and must be Corporate Members of the Town Planning Institute.

Applicants for appointment (b) should be Corporate Members of the Royal Institute of British Architects, and must have had experience in design and construction, particularly in relation to houses, schools, and public buildings.

Applicants for appointment (c) should have good architectural or surveying experience, and be good draughtsmen. Preference will be given to applicants having some planning experience, who are Corporate Members of the Royal Institute of British Architects, the Royal Institute of Chartered Surveyors, or the Institution of Municipal and County Engineers.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination, and will be terminable by one month's notice on either side. Applications, stating age, qualifications and previous experience, together with copies of three recent testimonials, should be enclosed in an envelope endorsed with the title of the appointment to which the application refers, and must reach the undersigned not later than Friday, 15th November, 1946.

Canvassing, directly or indirectly, will be deemed a disqualification, and candidates must disclose in writing whether, to their knowledge, they are related to any member or holder of any senior office under the Council. Any candidate failing to do so will be disqualified, and if appointed will be liable to dismissal without notice.

FARRA CONWAY,
Town Clerk.

Town Hall, Great Yarmouth. 714

COUNTY OF LINCOLN—PARTS OF KESTIVEN.

COUNTY ARCHITECT'S DEPARTMENT.

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

(a) QUALIFIED ARCHITECTURAL ASSISTANT. Salary in accordance with National scales, A.P.T. Division, Grade V (£460-£510), plus cost-of-living bonus of £59 16s. per annum on the Council's scale. A.R.I.B.A. or similar qualification is essential, and experience in Education and General County work is desirable.

(b) ARCHITECTURAL ASSISTANTS.

(i) Salary in accordance with National scales, A.P.T. Division, Grade IV (£420-£465), plus cost-of-living bonus of £59 16s. per annum on the Council's scale.

(ii) Salary in accordance with National scales, A.P.T. Division, Grade III (£390-£435), plus cost-of-living bonus of £59 16s. per annum on the Council's scale.

Experience in Education and General County work for both these appointments is desirable.

Travelling and subsistence allowances on the Council's scale will be paid, and the appointments are subject to the provisions of the Local Government Superannuation Act, 1937, to satisfactory medical certificates, and to one month's notice in writing on either side.

Canvassing, either directly or indirectly, will be a disqualification, and candidates in their applications must disclose whether to their knowledge they are related to any member of the Council or to the holder of any senior office under the Council.

Applications, indicating for which of the appointments the candidates wish to be considered, should be sent to the undersigned, together with copies of two recent testimonials, by the 30th November, 1946.

J. E. BLOW,
Clerk of the County Council.

County Offices, Sleaford, Lincs. 727

BOROUGH OF LUTON.

BOROUGH ENGINEER'S DEPARTMENT—TECHNICAL STAFF.

Applications are invited for the following appointments:—

(a) ESTATES AND MAINTENANCE ASSISTANT. Salary £535-£220-£220-£225-£600.

(b) THREE SENIOR ARCHITECTURAL ASSISTANTS. Salary £535-£220-£220-£225-£600.

(c) ARCHITECTURAL ASSISTANT. Salary £420-£15-£465.

(d) TWO JUNIOR ARCHITECTURAL ASSISTANTS. Salary £330-£15-£375.

(e) SENIOR QUANTITY SURVEYING ASSISTANT. Salary £535-£220-£220-£225-£600.

(f) SENIOR ENGINEERING ASSISTANT. Salary £460-£15-£220-£510.

(g) TWO ENGINEERING ASSISTANTS. Salary £420-£15-£465.

(h) ONE JUNIOR ENGINEERING ASSISTANT. Salary £360-£15-£405.

(i) TWO JUNIOR ENGINEERING ASSISTANTS. Salary either £255-£15-£300 or £330-£15-£375, according to qualifications.

(j) CHIEF PLANNING ASSISTANT. Salary £700-£25-£900.

(k) PLANNING ASSISTANT. Salary £360-£15-£405.

(l) ASSISTANT MAINTENANCE ENGINEER. Salary £360-£15-£405.

(m) TRACING ASSISTANT (Male or Female). Salary, General Division.

(n) ASSISTANT BUILDING MAINTENANCE SUPERINTENDENT. Salary £255-£300.

Applicants for appointment (a) must have had an extensive experience in the maintenance of buildings of all descriptions and in estate work, including valuations, and be R.I.B.A. or P.A.S.I. The person appointed will be required to provide and maintain a car, for which an allowance will be paid at the rate of £60 per annum.

Applicants for appointments (b) and (c) must be A.R.I.B.A., and have had extensive experience in the design and construction of public buildings, schools and municipal houses and, in particular, have had recent experience in the design and development of housing schemes.

Applicants for appointment (i) should have had good general experience in the installation, repair, and maintenance of all types of lighting, heating and ventilating plant, etc., in public buildings and institutions. They should have made some progress in obtaining a qualification such as that of the Institute of Heating and Ventilating Engineers or the Institution of Mechanical Engineers.

Applicants for all other appointments must hold appropriate professional qualification or, in the case of junior appointments, have made progress in obtaining qualifications, and have had experience in municipal works appropriate to their profession.

The persons appointed to appointments (j) and (n) will be required to provide and maintain a car, for the use of which a maximum allowance of £75 and £60 per annum respectively will be paid.

The appointments are all subject to the provisions of the Local Government Superannuation Act, 1937, and temporary cost-of-living bonus, at the rate of £59 16s. per annum (for males), is payable in respect of each appointment. It may be possible to provide housing accommodation if it is required, within a reasonable time of the appointments being taken up.

Applications, suitably endorsed, giving particulars of age, qualifications, and experience, together with copies of not more than three recent testimonials, should be delivered to the Borough Engineer, Town Hall, Luton, Beds., not later than first post on Thursday, the 28th November. Canvassing, directly or indirectly, will disqualify.

W. H. ROBINSON,
Town Clerk.

Town Hall, Luton.
22nd October, 1946. 729

METROPOLITAN BOROUGH OF BETHNAL GREEN.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointment of Three Architectural Assistants (Temporary Staff), in the Borough Engineer and Surveyor's Department, for work in connection with Post-war Housing.

Candidates must have had wide experience in the preparation of designs, working drawings, specifications, and estimates, and preference will be given to Associate Members of the R.I.B.A., fully conversant with the principal Building Acts and Regulations.

Salary, in accordance with A.P.T. Division (Grade V) of the National Scales of Salaries, £460, rising to £510 per annum (plus London "weighting," at present £20 per annum), plus cost-of-living bonus, at present 23s. per week.

Applications, stating age, qualifications and experience, with copies of three testimonials, endorsed "Architectural Assistant," must reach the Borough Engineer and Surveyor, Town Hall, Bethnal Green, E2, before noon on Friday, the 8th November, 1946.

S. P. FERDINANDO,
Town Clerk.

692

COUNTY BOROUGH OF SOUTHAMPTON.
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(1) ASSISTANT ARCHITECT (permanent). Grade V, £460-£510, plus £59 16s. cost-of-living bonus.

(2) ASSISTANT ARCHITECT (permanent). Grade IV, £420-£465, plus £59 16s. cost-of-living bonus.

(3) ARCHITECTURAL ASSISTANT (temporary). Grade I, £330-£375, plus £59 16s. cost-of-living bonus.

(4) JUNIOR ARCHITECTURAL ASSISTANT (General Division). Salary (£65-£300) and bonus, according to age.

The above appointments are primarily in connection with the Council's new housing and school programmes; preference will be given to candidates who have passed examinations for membership of the Royal Institute of British Architects, and in the case of the senior posts qualifications in Town Planning will be considered an advantage.

Applications, giving full particulars of age, qualifications and experience, and enclosing copies of two recent testimonials, should be sent to Denis Winston, M.A., B.Arch., A.R.I.B.A., M.T.P.I., Civic Centre, Southampton, to reach the above on or before 25th November, 1946.

R. RONALD H. MEGGESON,
Town Clerk. 713

BERKSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF TECHNICAL STAFF.

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

(a) ASSISTANT QUANTITY SURVEYOR, 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 bonus.

(b) ENGINEERING ASSISTANT, 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 bonus.

(c) ASSISTANT ARCHITECT, at a salary of £390 per annum, rising by three annual increments of £15 to a maximum of £435 per annum, plus bonus.

The above grades are on the National Scale of Salaries, and the cost-of-living bonus is at present £59 16s. per annum.

Candidates for appointment (a) should be members of the Surveyors' Institution (Quantities Section), and should have had wide experience in preparing approximate estimates and bills of quantities, adjustment of accounts, etc.

Candidates for appointment (b) should be members of the Institution of Heating and Ventilating Engineers, and should have had wide experience in design and supervision of heating, hot water supply, electrical and general mechanical installations.

Candidates for appointment (c) should be Registered Architects, and should have had considerable experience of preparing working drawings and be able to take charge of contracts.

All the appointments will be subject to the Local Government Superannuation Act, to one month's notice on either side, to the successful candidates passing a medical examination, and to the Council's General Conditions of Service for Administrative, Professional, Technical and Clerical Staff for the time being in force.

Application forms can be obtained on receipt of a stamped addressed envelope from the County Architect, 10, Abbots Walk, Reading, to whom they should be returned completed, together with copies of three recent testimonials, on or before Monday, 18th November, 1946.

Canvassing, directly or indirectly, will be a disqualification.

H. J. C. NEOBARD,
Clerk of the Council. 703

HUNTINGDONSHIRE COUNTY COUNCIL.
ARCHITECTURAL ASSISTANT.

Applications are invited for Two Architectural Assistants at salaries of £330 to £375, according to qualifications and experience, plus bonus, at present £59 16s. per annum.

The persons appointed will be contributory employees under the provisions of the Local Government Superannuation Act, 1937. The appointments will be terminable by one month's notice on either side.

Applications, stating age, qualifications, experience, and date on which duties could be commenced if appointed, together with copies of testimonials, should be sent to Mr T. H. Longstaff, M.Inst.C.E., F.R.I.B.A., County Architect, Walden House, Huntingdon, by not later than Tuesday, 5th November, 1946.

J. B. KELLY,
Clerk of the County Council.
Council Offices, Huntingdon.
24th October, 1946. 710

COUNTY OF LINCOLN—PARTS OF
KESTOVEN.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of DEPUTY COUNTY ARCHITECT. Salary will be £700 per annum, rising by annual increments of £25 to a maximum of £750 per annum, plus cost-of-living bonus of £59 16s. per annum, on the Council's scale. Travelling and subsistence allowances will be paid on the Council's scale, and the person appointed will be required to provide and maintain a car.

A.R.I.B.A., or other similar qualifications, is essential, and candidates should have had experience in the architectural work normally carried out by the Architect's Department of a County Council. Experience in connection with Educational architectural work is particularly desirable. Applicants should possess administration experience and be capable of controlling staff.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, to a satisfactory medical certificate, and to the termination of the appointment by three months' notice in writing on either side.

Canvassing, either directly or indirectly, will be a disqualification, and candidates in their applications must disclose whether to their knowledge they are related to any member of the Council or to the holder of any senior office under the Council.

Application forms may be obtained from the undersigned, and should be returned to him, together with copies of two recent testimonials, by the 30th November, 1946.

J. E. BLOW,
Clerk of the County Council.
County Offices, Sleaford, Lincs. 726

PONTYPRIDD URBAN DISTRICT COUNCIL.

Applications are invited for the following appointments, all of which are permanent, and subject to the provisions of 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 exclusive of the cost-of-living bonus, at present £59 16s. per annum.

(1) CHIEF ASSISTANT ARCHITECT (Grade VIII). £700 per annum, plus bonus.

(2) ARCHITECTURAL ASSISTANT (Grade II). £360-£405 per annum, plus bonus.

(3) ARCHITECTURAL ASSISTANT (Grade I). £330-£375 per annum, plus bonus.

Candidates for appointment (1) must be Registered Architects and Associates of the Royal Institute of British Architects, with considerable experience of Housing and Municipal Architectural Work.

For appointments (2) and (3) preference will be given to candidates who have passed either the Intermediate or Final examination of the R.I.B.A.

Applications, stating age, present and previous positions, technical training and qualifications (with dates), and concise particulars of experience, together with the names and addresses of two persons to whom reference may be made, must be delivered, appropriately endorsed, to the undersigned, to arrive not later than Thursday, the 14th of November, 1946. Canvassing will be a disqualification, and candidates must disclose any relationship to Members of the Council.

H. LEONARD PORCHER,
Clerk of the Council.
Municipal Buildings, Pontypridd.
18th October, 1946. 702

HARROGATE AND DISTRICT REGIONAL
PLANNING COMMITTEE.

APPOINTMENT OF PLANNING OFFICER.

Applications are invited for the appointment of Planning Officer, at a salary of £900, rising subject to satisfactory service by annual increments of £50 to a maximum of £1,000 per annum, plus cost-of-living bonus (at present £59 16s. per annum). Applicants must be Corporate Members of the Town Planning Institute, and have had considerable experience in the preparation and administration of planning schemes. Preference will be given to persons who also possess a recognized qualification in architecture, civil engineering, or surveying.

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

Applications, stating age, qualifications, and experience, accompanied by copies of two recent testimonials, and one name for reference, should be delivered to the undersigned in envelopes endorsed "Planning Officer," not later than the 28th November, 1946.

Canvassing, directly or indirectly, will disqualify.

J. M. DODDS,
Honorary Clerk of the Harrogate and
District Regional Planning Committee.
Town Clerk's Office, Municipal Offices,
Harrogate, Yorks. 670

MANCHESTER MUNICIPAL COLLEGE OF
TECHNOLOGY
(FACULTY OF TECHNOLOGY IN THE
UNIVERSITY OF MANCHESTER).

APPOINTMENT OF ASSISTANT LECTURER
IN BUILDING.

The Governing Body invites applications for an ASSISTANT LECTURESHIP IN BUILDING, with the title and status of Assistant Lecturer in the University of Manchester.

Candidates should be Associates of the Royal Institute of British Architects, with good professional experience.

Salary scale: £420 per annum, rising by annual increments of £20 to £500 per annum. Commencing salary according to qualifications.

Conditions of appointment and form of application may be obtained from The Registrar, College of Technology, Manchester, 1. The last day for the receipt of applications is Monday, 25th November, 1946.

Canvassing, either directly or indirectly, will disqualify a candidate for appointment.

J. E. MYERS,
Principal of the College. 708

BOROUGH OF TAUNTON.
ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) ASSISTANT QUANTITY SURVEYOR (Grade V), commencing salary £460, rising by annual increments of £15/£20 to a maximum of £510.

(b) ASSISTANT QUANTITY SURVEYOR (Grade I), commencing salary £330, rising by annual increments of £15 to a maximum of £375. Both appointments will carry a cost-of-living bonus, at present £59 19s. 3d. per annum.

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

EAST SUFFOLK COUNTY COUNCIL.
APPOINTMENT OF HEATING AND
LIGHTING ENGINEER.

Applications are invited for the appointment of a Heating and Lighting Engineer, on the permanent staff of the County Architect's Department.

The appointment will be subject to the National Scheme of Conditions of Service, and will be on a salary range of £450 per annum, rising, subject to satisfactory service, by £15 to £600 per annum, plus bonus. Commencing salary according to experience and qualifications.

Applicants must be Members or Associate Members of the Institution of Heating and Ventilating Engineers, be capable draughtsmen 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.

The successful candidate will be required to provide and maintain his own car, and will be paid a travelling allowance in accordance with the Council's scale.

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

Applications, stating age, full details of previous experience and qualifications, accompanied by copies of not more than three recent testimonials, must be delivered to E. J. Symcox, F.R.I.B.A., County Architect, County Hall, Ipswich, not later than Friday, 29th November, 1946.

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

CECIL OAKES,
Clerk of the County Council.
County Hall, Ipswich.
14th October, 1946. 745

SOMERSET COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments in the above-named Department—
Class I.—ARCHITECTURAL ASSISTANT. Salary £430 by £15 to £475.

Applicants must be Associates of the Royal Institute of British Architects or hold equivalent professional qualifications, with good experience in Architectural design.

Class II.—ARCHITECTURAL ASSISTANT. Salary £310 by £15 to £355.

ARCHITECTURAL ASSISTANT—IMPROVER. Salary £130 by £10 to £230.

Class III.—QUANTITY SURVEYORS. Salary £510 by £15 to £415.

JUNIOR ASSISTANT QUANTITY SURVEYOR (WORKER-UP). Salary £130 by £10 to £230.

BUILDING SURVEYOR. Salary £250 by £12 10s. to £350.

Applicants must not be more than 45 years of age, and must be capable of dealing with works of a character which will include contracts, improvements and maintenance of County Buildings, reporting clearly on structural matters, and preparing specifications and estimates relating to such works. The successful applicant will be required to provide himself with a car, for which an allowance will be made.

The commencing salaries in each of the above-mentioned posts will be determined by experience and qualifications. Cost-of-living bonus in accordance with the Council's scale will also be paid.

All the above-mentioned appointments will be subject to the rules and regulations of the County Council from time to time in force, the provisions of the Local Government Superannuation Act, 1937, and to the passing satisfactorily of a medical examination by the Council's Medical Officer of Health.

Applications, stating age, training, experience, qualifications, together with copies of three recent testimonials, should be sent to the undersigned not later than the 12th November, 1946.

R. O. HARRIS, F.R.I.B.A.,
County Architect.
Park Street, Taunton, Somerset. 739

BOROUGH OF ILFORD.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.

APPOINTMENT OF TEMPORARY ARCHITECTURAL ASSISTANTS.

Applications are invited for the appointments on the Temporary Staff in the Borough Engineer and Surveyor's Department of two Architectural Assistants. The salary will be at the rate of £275 per annum, plus £59 16s. cost-of-living bonus, plus £20 London weighting.

Candidates must be Associate Members of the Royal Institute of British Architects, and have a thorough knowledge of architectural works, with experience in the design and preparation of working drawings for all types of public buildings, housing schemes, etc., and be fully competent to prepare specifications for such works.

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination by the Council's Medical Officer.

The appointments will be subject to one month's notice on either side.

Applications, stating age, qualifications and experience, accompanied by copies of three recent testimonials, should be forwarded in a sealed envelope, endorsed "Architectural Assistant," to reach the undersigned by Friday, the 15th November, 1946.

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

CHARLES N. ROBERTS,
Town Clerk.
Town Hall, Ilford.
24th October, 1946. 742

MINISTRY OF WORKS.

Applications are invited to fill vacancies for ARCHITECTURAL ASSISTANTS, either male or female, in an unestablished capacity, for Drawing Office duties, in London and all main Provincial cities. Applicants should have had an approved period of recognized training. Experience with a practising Architect, Local Authority or Government Department would be regarded as a considerable advantage, but candidates without the latter qualifications would receive consideration. The salary will be up to £510 per annum inclusive, according to qualifications and experience.

An application from anyone who is at present employed by another Government Department cannot be considered unless his services have been declared redundant with his department.

Apply in writing, stating town district in which employment is desired, to:—Chief Architect, WG10/JWG Room 10, Ministry of Works, Abell House, John Islip Street, London, S.W.1. 725

CITY OF LEEDS.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of CHIEF ASSISTANT ARCHITECT (Housing, Drawing Office Section), commencing salary £650 per annum, rising by annual increments of £25 to a maximum of £750 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

Candidates must be Registered Architects, with a wide experience in domestic architecture and modern building requirements, and regulations in connection with housing. The person appointed will be required to supervise and control a large drawing office.

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

Applications, on forms to be obtained from the undersigned, accompanied by copies of not more than three recent testimonials (not returnable), must be received by me in the envelope supplied therefor, not later than 10 a.m. on Friday, the 8th November, 1946.

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

R. A. H. LIVETT, O.B.E., A.R.I.B.A.,
City Architect.
Priestley House, Quarry Hill, Leeds, 9.
October, 1946. 701

Tenders

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

COUNTY OF LINCOLN—PARTS OF LINDSEY.

FOUR PAIRS OF POLICE HOUSES AND ROAD WORKS.

The County Council invite Contractors to Tender for FOUR PAIRS OF POLICE HOUSES and other Works, comprising NEW ROAD, SEWERS AND FOOTPATHS, at the CIVIC CENTRE SITE, SCUNTHORPE, Lincs. Copies of the Specifications, Forms of Tender and Bills of Materials may be obtained from the Quantity Surveyors, Messrs. Place, Leslie & Holden, 23, South King Street, Blackpool, and the Drawings may be inspected at the offices of the Clerk to the County Council, County Offices, Lincoln, or at the offices of the Architects. Sealed Tenders, endorsed "Police Houses, Scunthorpe," to be delivered to the Architects, Messrs. C. B. Pearson & Son, F.R.I.B.A., 18, Dalton Square, Lancaster, on or before Monday, the 11th November, 1946.

The County Council do not bind themselves to accept the lowest or any Tender.

ERIC W. SCORER,
Clerk of the County Council.
County Offices, Lincoln.
15th October, 1946. 709

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.

TWO ASSISTANTS required for progressive private office on East Coast. All details and salary to Box 648.

BUILDERS' SURVEYOR AND ESTIMATOR required for priced Schedules of Dilapidations; experienced man over 35, able to work without supervision; London area. Salary desired and particulars to Box 681.

SENIOR ASSISTANT DRAUGHTSMAN required; London district; experienced in industrial design an advantage; salary £350-£400. Box 661.

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

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

ARCHITECTURAL ASSISTANTS (SENIOR) required immediately; commencing salary £450 p.a. State training, qualifications, experience, and when available, to Anthony Steel & Owen, A.R.I.B.A., Cogan Chambers, Bowditch Lane, Kingston-upon-Hill. 695

WANTED.—ARCHITECT'S ASSISTANT, with general experience and knowledge of quantities. Apply, with full particulars of experience, stating age and salary required, to JAMES R. ASHWORTH, L.R.I.B.A., 11, Cannon Street, Accrington, Lancs. 700

ARCHITECTURAL ASSISTANT required in West Country office for busy and expanding general practice; Inter. R.I.B.A. standard; good draughtsman, able to make surveys and prepare working drawings. Also Town Planning Assistant, to help in preparation of interesting town improvement scheme. In both cases state salary required, with full particulars of experience, etc. Box 716.

QUANTITY SURVEYOR required in East Anglian Architect's office; salary in accordance with experience and capability. Full details to Box 721.

ARCHITECTURAL ASSISTANT required in busy Architect's office; intermediate or higher standard. Full details to Box 722.

ARCHITECT'S SENIOR ASSISTANT wanted in established private practice, West Country county town; Associate, school trained, with practical experience, good designer, capable administrator, quick worker; five assistants employed; salary £416; permanency for the right man. Box 720.

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

EXPERIENCED DESIGNER/DRAUGHTSMAN; decorative electric lighting fittings; period and modern styles; sound knowledge of mechanical and electrical aspects essential; permanent position; pension scheme; salary according to age and experience. Apply to Staff Manager, The General Electric Co., Ltd., Magnet House, Kingsway, W.C.2. 705

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 Girdings Ferro-Concrete Co., Ltd., Rothwell, near Leeds. 706

SENIOR ARCHITECTURAL ASSISTANT required immediately; commencing salary up to £500, according to qualifications; experience in modern factory design an advantage; good prospects for keen man. Raymond E. Hawkins, L.R.I.B.A., Lloyds Bank Chambers, Cannock, Staffs. 707

FIRST-CLASS MANAGER wanted for large combined Architectural, Quantity Surveying and Building Departments; applicants must have sound knowledge of building construction, able to supervise erection, knowledge of planning and design of factories, warehouses, offices, etc.; also experience in modern shop design, pricing, costing, surveying and valuation; the successful candidate will require to co-ordinate the sections; only candidates with necessary experience need apply; substantial salary for right man. Application in confidence, endorsed "Building," to Robert W. Leckie, Secretary, Scottish Co-operative Wholesale Society, Ltd., 95, Morrison Street, Glasgow, C.5. 711

SENIOR ASSISTANT required; A.R.I.B.A. preferred, or about to qualify; commencing salary £450-£500. Pick, Everard, Keay & Gimson, 6, Millstone Lane, Leicester. 712

ARCHITECTURAL ASSISTANT wanted by large industrial concern; able to prepare small and large scale working drawings without supervision; state age, experience, and salary required. Box 723.

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

JUNIOR ASSISTANT required in busy office at Croydon; should be up to Inter. R.I.B.A. standard, and only a good and accurate draughtsman would be considered. Write, stating age, training, experience, and salary required, to Box 731.

QUALIFIED CHIEF ASSISTANT/OFFICE MANAGER, age about 35, to assist Architect, South-West London, with varied medium size practice; salary £600 p.a. Box 732.

BUILDING SURVEYOR wanted by large London commercial company; capable of preparing war damage dilapidations, specifications and drawings for conversions, in London and Provinces; salary £400-£500, according to experience. Please reply to Box 733.

ARCHITECTURAL ASSISTANT wanted, in London office of Staff Architect to large industrial company; well trained, good draughtsman, able to handle large and small jobs from sketch plans to finish; salary £400-£500, according to qualifications. Please reply to Box 734.

£8 a week Architect's Assistant required in Birmingham office; interesting general practice. Box 735.

JUNIOR ARCHITECTURAL ASSISTANT required, 36 miles from London, or Qualified Assistant, with a view to partnership. State age, experience, and salary required. Box 737.

ARCHITECT'S SENIOR and JUNIOR ASSISTANTS required; good salaries offered, according to experience. S. J. Stephenson & Gillis, 2, Saville Chambers, North Street, Newcastle-on-Tyne. 738

ASSISTANT required for progressive position in young practice handling domestic work and industrial design; intelligence, versatility, and experienced draughtsmanship essential. ASSISTANT also required with experience of dilapidations, war damage, specifications, etc. Applications, with brief particulars, to Eric Lyons & Townsend, Mill House, Bridge Road, East Molesey, Surrey (office situated near Hampton Court). 740

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.

YOUNG Lady (19), holding Matriculation and school trained, would like post in Liverpool or Manchester as Junior Assistant; neat draughtswoman, with knowledge of general construction, also knowledge of general office routine, typing. Box 146.

QUANTITY SURVEYOR requires appointment, preferably North-East; experienced on industrial and housing schemes; good worker. Box 148.

ARCHITECT to large Company would like change to Manager of private practice; 22 years' experience. Box 151.

REGISTERED ARCHITECT (36) desires position in general capacity, but mainly surveying, levelling, setting out large schemes, etc.; 18 years' experience in all classes of work; would consider suitable position abroad; salary by arrangement, but minimum £650. Reply Box 149.

ARCHITECT and SURVEYOR, L.R.I.B.A., age 41, desires permanent position, with view to partnership, or with Brewery Co.; experienced licensed houses, hotels, hospitals, factories, housing estates, working drawings, details, quantity surveying, land surveying, levelling, accounts, etc.; salary £600 p.a. Box 154.

DRAUGHTSMAN desires full or part-time employment in or near Bedford. Box 152.

ARCHITECTURAL ASSISTANT (aged 25) seeks position in Southern Counties; first-class draughtsman, accurate leveller and surveyor; Inter. R.I.B.A. standard. Box 153.

Other Appointments Wanted

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

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

CITY ARCHITECT, with own office, would undertake spare-time preparation of working drawings, etc., to fill gaps caused by postponed contracts; confidential. Box 669.

SECRETARY/SHORTHAND TYPIST, age 28 years, seeks position in Architect's office, in London or suburbs; salary £6 per week; free after 9th November, 1946. Box 736.

TO KEEP THE WOLF AWAY.—Whilst waiting for the right job a demobilised R.E. Major, school trained, qualified in Architecture and Town Planning, seeks part-time work in London; 7s. hour; overtime and piecework rates quoted. Box 718.

R.I.B.A., 13 years' experience, seeks part-time work (mornings only); surveys, sketches, working drawings, etc.; remuneration by arrangement. Box 719.

REGISTERED ARCHITECT (Dipl. Arch.) wishes to undertake spare-time work at home address; perspectives, sketch plans, working drawings, etc. Box 741.

For Sale

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

FOR SALE.—Quantity of Oak Panelling, including Cupboards, Doors and overmantels; offers invited. Carter Jonas, Cambridge. Tel.: 3428/9. 699

70,000 slightly under-burnt and unsorted 2 1/2 in. bricks; suitable all inside work; immediate delivery; no permit needed. Wellingborough 2692. 723

FOR SALE.—400 d.c. Express Company Lift; self-levelling automatic push-button control; excellent condition; 6 cwt. load, or 4 persons; a larger model being installed is only reason for selling.—E. ROBERTS, LTD., Kingsway House, Cardiff. 715

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.I. Canonbury 2061.

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

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

FENCING AND GATES of every type, supplied and erected. Specialists in chain link. Boulton & Paul, Limited, Norwich.

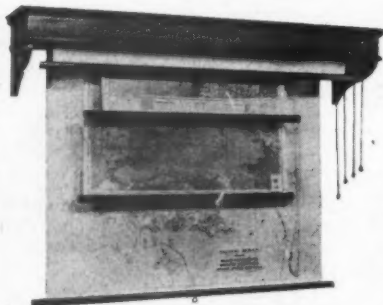
£5,000 to £250,000

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.

DRAWING OFFICE EQUIPMENT

WE are stockists of a wide range of Drawing Office Equipment, and can supply sensitised papers and cloths, drawing, detail and tracing papers; Drawing Inks and instruments; Mounted or Sectional Papers and Photo Prints, to meet the specialised or everyday needs of architects and draughtsmen.



We are equipped to handle all types of map and plan mounting, from individual sheets to complete schemes.



The Advance wooden Drawing Stand fitted with parallel motion straight edge. Fully adjustable for height and slope.

HARPER & TUNSTALL LTD. LETO WORKS, EDGWARE, MIDDLESEX.

Phone: EDGWARE 4455.

Telegrams: OFTERIAL, EDGWARE.

Branches in:

LONDON

39, VICTORIA STREET,
S.W.1

BIRMINGHAM

3, GT. CHARLES STREET,
BIRMINGHAM, 3.

GLASGOW

221, ST. VINCENT STREET,
GLASGOW.

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

WANTED.—Complete set of "Typography." Box 487

THE ALLEN - LYMAN SECRETARIAL BUREAU. Bank Chambers, St. Giles' Square, Northampton (Tel. No. 4697), 7, Rose Crescent, Cambridge (Tel. No. 3606). Specialists in Specifications and Bills of Quantities, and we invite you to send yours to either of the above Branches; prompt attention, accuracy, and efficiency guaranteed. 658

SALES EXECUTIVE, with excellent references, keen to act as Selling Agent for specialist building products and equipment; unique Home Counties connection, educational, architects and authorities, and County and Municipal Authorities; London office and staff available; thorough and competent representation assured. Box 147.

RAPID WRITING for busy people. Send 3d. for first lesson. Double Speed Longhand (S30), 92, Gt. Russell Street, W.C.1. 666

WANTED, to purchase, "British Isles and Their Vegetation," by Tansley; "Site Planning in Practice," by Thompson; "Gardens in Modern Landscape," by Tunnard; in good condition. Box 717.

"THE ARCHITECTURAL FORUM" of America has returned to its pre-war size and format. Annual subscriptions can now be accepted at 50s. per annum, prepaid, through Stohart & Son, Ltd., 9, Victoria Street, London, S.W.1 (ABBEY 2858). 744

Educational Announcements

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

R.I.B.A. QUALIFYING EXAMINATIONS. Mr. C. W. Box, F.R.I.B.A., M.R.San.I. Courses of Correspondence and Personal to Stadlo, 115, Gower St., London, W.C.1. (Tel.: Euston 3906).

R.I.B.A. and T.P. INST. EXAMS. Private Courses of Tuition by correspondence arranged by Mr. L. Stuart Stanley, M.A., F.R.I.B.A., M.T.P.I. Tutor, 212, Euston Road, N.W.1. Tel.: EUS. 7760.

INDUSTRIAL ROOFING
Contractors
SPECIALISTS IN TROUGHING
DECKING & DOUBLE SHEETING
Distributors of all A.C. Products
RJ SYMONS LTD
STATION APPROACH HINCHLEY WOOD
ESHER SURREY EMBERBROOK 3535/6

For **ELECTRIC MOTOR STARTERS**
of proved reliability . . . Specify
"ELLISON"
Made by GEORGE ELLISON Limited, Perry Barr, Birmingham, 22B

NEW FLOORS for OLD
Wood Floors Planed, Sanded,
Repaired and Treated.
FLOOR RENOVATIONS LTD.
38, LAMBTON ROAD, E.3. Phone: AMH 1080
Sandpapering machines for hire.

"COSMO" EJECTORS
FOR FILLING
VATS, KIERS, TANKS,
CISTERNS.
LIFTING WATER FROM
WELLS, SUMPS,
CELLARS.
HOLDEN & BROOKE, LTD.
MANCHESTER, 12
66, VICTORIA ST., LONDON, S.W.1

L.P.T.B. BUS SHELTER COMPETITION

The Kee Klamp System of Tubular Construction has among its chief characteristics, swift dismantling and rapid re-erection, combined with rigid construction. We will send intending Competitors all information. Examine this before entering your design.

The Geo. H. Gascoigne Co. Ltd.,
Berkeley Avenue, Reading.

Telephone: Reading 4831/2/3.

Electrical Contracting

For a complete and

helpful service



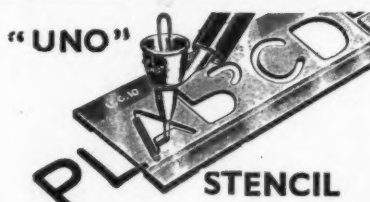
RING WEMBLEY 0194

SERVICE ELECTRIC CO. LTD.

ABBAY MANUFACTURING ESTATE
ALPERTON MIDDXX

STEELWORK BY
R. W. SHARMAN LTD.
SWANWORKS, HANWORTH, MIDDXX

Phones: Feltham 3007. Sunbury 2367. Grams: "Sharmans," Feltham.

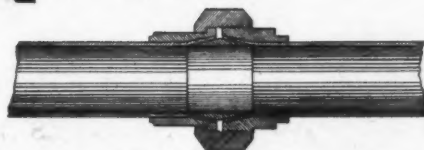


"UNO" STENCILS
for Lettering
ENGINEERS' & ARCHITECTS' PLANS

A. WEST & PARTNERS, Ltd.
36, BROADWAY, WESTMINSTER, LONDON, S.W.1



"KONGRIP"



**COMPRESSION FITTINGS FOR
LIGHT GAUGE COPPER TUBES**

The fitting for hot and cold water, steam, and exhaust pipes. Makes secure joint, unaffected by extremes of temperature, pressure or vibration. The extended sleeve supports the the tube and the assembled joint does not offer obstruction to free flow. Simple to instal and take apart again for alterations or extensions.
Send for Catalogue.

Wm. BARTON & SONS, Ltd.
11 FORREST ROAD, EDINBURGH, 1.
TELEPHONE: 31891
TELEG.: STERILIZE

Alphabetical Index to Advertisers

	PAGE		PAGE		PAGE
Aerialite, Ltd.	xxviii	En-Tout-Cas Co., Ltd.	xxiv	Northern Aluminium Co., Ltd.	xxxviii
Aidas Electric, Ltd.	—	Etchells Congdon & Muir, Ltd.	—	Peglers, Ltd.	xx
Aluminium Development Assoc., The	—	Ewart & Son, Ltd.	xxxix	Quonal Alfred	xvii
Anderson, C. F., & Sons, Ltd.	—	Excel Asphalt Co., Ltd.	—	Pressed Steel Co., Ltd.	xvi
Architects' Benevolent Society	xlv	Ferguson, Edwards & Co. (London), Ltd.	xi	Pritchen & Gold and E.P.S. Co., Ltd.	iv
Ardror Insulation Co., Ltd.	ii	Flexo Plywood Industries, Ltd.	—	Prodorite, Ltd.	—
Arens Controls, Ltd.	xii	Floor Renovations, Ltd.	liii	Proved & Producing Properties, Ltd.	ii
Bailey, Sir W. H., & Co., Ltd.	—	Franki Compressed Pile Co., Ltd.	xiv	Restall, Fredk., Ltd.	—
Baker, W. A., & Co., Ltd.	—	Fulwood & Bland, Ltd., R. J.	lv	Ross, S. Graham, Ltd.	xviii
Baldwin, Son & Co., Ltd.	—	Gascoigne, The Geo. H., Co., Ltd.	liii	Rowney, George, & Co., Ltd.	xxx
Barton, Wm., & Sons, Ltd.	—	Gillett & Johnston, Ltd.	lv	Rownson Drew & Clydesdale, Ltd.	—
Bath Cabinet Makers & Artcrafts, Ltd.	liii	Gleason Doors, Ltd.	xxxii	Rubery, Owen, & Co., Ltd.	xliii
Bellamy & Co., Ltd.	xx	Gray, J. W., & Son, Ltd.	—	Sadd, John, & Sons, Ltd.	—
Bigwood, Jos., & Son, Ltd.	xxxv	Greenwood's Airvac Ventilating Co., Ltd.	ii	Sanders, Wm., & Co. (Wednesbury), Ltd.	—
Birnao Wright, Ltd.	xxiii	Grimths Bros. & Co. (London), Ltd.	xlv	Sankey-Sheldon	—
Bolton Gate Co., Ltd.	—	Hall, Robert H., & Co. (Kent), Ltd.	—	Scaffolding (Great Britain), Ltd.	—
Boue, Connell & Co., Ltd.	—	Harper & Tunstall	lii	Secomastic, Ltd.	—
Boulton Taper Structures, Ltd.	—	Harvey, G. A., & Co. (London), Ltd.	—	Serck Tunes, Ltd.	xxiv
Bradbury, Joseph, & Sons, Ltd.	—	Helliwell & Co., Ltd.	—	Service Electric Co., Ltd.	liii
Braitwaite & Co., Engineers, Ltd.	—	Hills Patent Glazing Co., Ltd.	xvii	Shaffer, James, Ltd.	—
Briggs, William, & Sons, Ltd.	iv	Holden & Brooke, Ltd.	liii	Sharnan, R. W., Ltd.	liii
British Aluminium Co., Ltd., The	—	Hope, Henry, & Sons, Ltd.	—	Sharp Bros. & Knight, Ltd.	—
British Gas Council	—	Hopton Wood Stone Firms, Ltd.	xxxiv	Smith's English Clocks, Ltd.	—
British Rubber Development Board, The	—	Huntley & Sparks, Ltd.	—	Smith & Willstood, Ltd.	xxvi
British Thomson-Houston Co., Ltd.	—	Ilford, Ltd.	xliv	Sterling Textiles Industries, Ltd.	xlv
British Trane Co., Ltd.	—	Imperial Chemical Industries, Ltd.	—	Sundala Board Co., Ltd.	—
Bromsgrove Guild, Ltd.	xlii	Industrial Engineering, Ltd.	xxii	Sutcliffe, Speakman & Co., Ltd.	—
Calders, Ltd.	—	International Correspondence Schools	—	Symons, R. J., Ltd.	liii
Cargo Fleet Iron Co., Ltd.	—	Isteg Steel Products, Ltd.	xix	Taylor Woodrow Construction, Ltd.	—
Carlton Metal Moulding Co., Ltd.	—	King, George W., Ltd.	xvii	Telephone Rentals, Ltd.	vi
Carrier Engineering Co., Ltd.	—	King, J. A., & Co., Ltd.	xviii	Tentest Fibre Board Co., Ltd.	—
Caston & Co., Ltd.	xxx	Kieft, Cyril, & Co., Ltd.	—	"The Times"	xli
Cattle, R., Ltd.	—	Lacrinoid Products, Ltd.	xi	Tretol, Ltd.	xli
Cellacite & British Uralite, Ltd.	—	Laing, John, & Son, Ltd.	—	Trussed Concrete Steel Co., Ltd.	xxxiii
Cement Marketing Co., Ltd.	—	Leaderfish, Ltd.	—	Tucker, Duncan (Tottenham), Ltd.	—
Chance Brothers, Ltd.	—	Lead Industries Development Council	xv	Tudor Accumulator Co., Ltd.	—
Clarke & Vigilant Sprinklers, Ltd.	—	Limmer & Trinidad Lake Asphalt Co.	xlii	Twistee Reinforcement, Ltd.	—
Colt Ventilation, Ltd.	—	Lloyd Boards, Ltd.	iv	United Steel Companies, Ltd.	—
Corner, G., & Co., Ltd.	xxxvi	Lowe, J. & H. (Cranes), Ltd.	—	Universal Asbestos Co., Ltd.	—
Crittall Manufacturing Co., Ltd.	xxxi	MacKay Agencies, Ltd.	xxvii	Val de Travers Asphalt Paving Co., Ltd.	iii
Crittall, Richard, & Co., Ltd.	—	Magnet Joinery, Ltd.	x	Venesta, Ltd.	—
Cutting, R. C., & Co., Ltd.	—	McKechie Bros., Ltd.	xxvi	Vent-Axia, Ltd.	xli
Denny Mott & Dickson, Ltd.	—	Mallinson, William, & Sons, Ltd.	xli	Versil, Ltd.	—
Doulton & Co., Ltd.	—	Marley Tile Co., Ltd., The	—	Wadsworth, Wm., & Sons, Ltd.	—
Dunlop Rubber Co., Ltd.	xlvii	Mathews & Yates, Ltd.	—	Walker, Crosswell & Co., Ltd.	—
Durafencing, Ltd.	—	McCarthy M., & Sons, Ltd.	—	Wardle Engineering Co., Ltd.	—
Dureco Products, Ltd.	xxi	Mellows & Co., Ltd.	xxxiv	Ward, Thos. W., Ltd.	—
Dynamels, Ltd.	xxviii	Metal Window Information Bureau	—	Warwick Rim Sectioning Co., Ltd.	—
Eagle Pencil Co.	ii	Metropolitan-Vickers Electric Co., Ltd.	xli	West & Partners, Ltd.	liii
Electrolux, Ltd.	ix	M.K. Electric, Ltd.	li	Willcox, W. H., & Co., Ltd.	—
Electroway Heaters, Ltd.	—	Midland Joinery Works, Ltd.	li	Winget, Ltd.	xxv
Ellison, George, Ltd.	liii	Mills Scaffold Co., Ltd.	lvi	Wimpey, George, & Co., Ltd.	—
Empire Tea Bureau	v	Ministry of Labour & National Service	vii	Woods of Colchester, Ltd.	—
English Joinery Manufacturers Assoc.	xxix			Zinc Alloy Rust Proofing Co., Ltd.	—

For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Educational, Legal Notices, Miscellaneous Property and Land Sales—see pages xlviii, xlix, i, ii, iii and liii.

Points of Good Design

M.K. SOCKET OUTLETS

Spring grip sockets were first patented by M.K. in 1919.

Contact is so good that the 5 amp. rated socket is satisfactory for 10 amp., and many thousands have been approved and used in Gt. Britain and overseas for 2 k.w. loads.

- (1) Provide good and lasting contact.
- (2) Limit expansion and prevent distortion.
- (3) Exert permanent inward spring pressure.

USE B.S.S. STANDARDS TO AVOID CONFUSION



M. K. ELECTRIC LTD.
EDMONTON, N. 16

THE HEART OF EVERY SOCKET



GE iii
 CX vi
 vi vi
 iv
 ii
 iii
 CX
 iii
 —
 —
 —
 iv
 iii
 iii
 —
 vi
 lv
 iii
 vi
 vi
 iv
 iii
 —
 —
 ii
 vi
 —
 —
 —
 iii
 v
 —