

# THE ARCHITECTS' JOURNAL



## standard contents

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

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

IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1.	Sloane 3158/1601
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
I of Arb.	Institute of Arbitrators, 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197/5176
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institute of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
IWA	Inland Waterways Association. 11, Gower Street, W.C.1.	Museum 9200
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MARS	MARS Group (English Branch of CIAM). Secretary: Gontran Goulden, Building Centre, 9, Conduit Street, W.1.	Mayfair 8641
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. 23, Saville Row, W.1.	Regent 8411
MOHLG	Ministry of Health of Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James's Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalt Mine-Owners and Manufacturers Council. 94-98, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street S.W.1.	Abbey 4813
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 8161
NCBMP	National Council of Building Material Producers. 10, Princes Street, S.W.1.	Abbey 5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4451
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4341
NPL	National Physical Laboratory. Head Office, Teddington.	Molesley 1380
NSA	National Sawmilling Association, 14, New Bridge Street, E.C.4.	City 1476
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Whitehall 9936
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Edinburgh 20396
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5721
RICS	Royal Institution of Chartered Surveyors, 12, Great George St., S.W.1.	Whitehall 5322/9242
RFAC	Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5100
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5006
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 8866
SCR	Society for Cultural Relations with the USSR. 14, Kensington Square, W.1.	Victoria 5783
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Oxford 47988
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London E.C.4.	
SIA	Structural Insulation Association. 14, Moorgate, London, E.C.2.	
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Council, Glasgow.	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	
TCPA	Town and Country Planning Association. 28, King Street, Coventry, C.1.	
TDA	Timber Development Association. 21, College Hill, E.C.4.	
TGC	The Gas Council. 1, Grosvenor Place, S.W.1.	
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	
TTF	Timber Trades Federation. 69, Cannon Street, E.C.4.	
WDC	War Damage Commission. Devonshire House, Mayfair Place, W.1.	
WEDA	Welfare Equipment Development Association. 74, Victoria St., S.W.1.	
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	

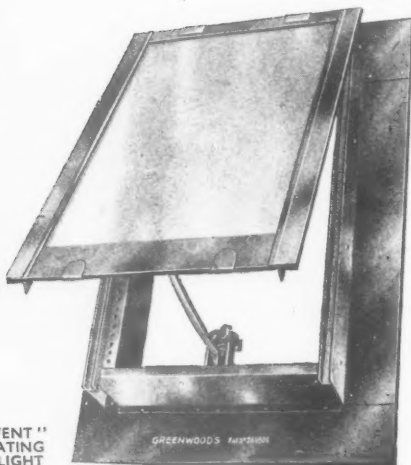
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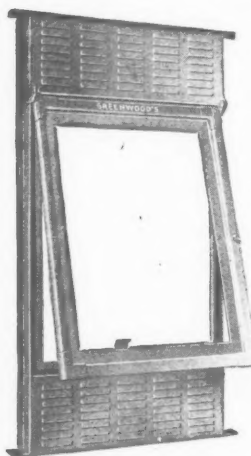


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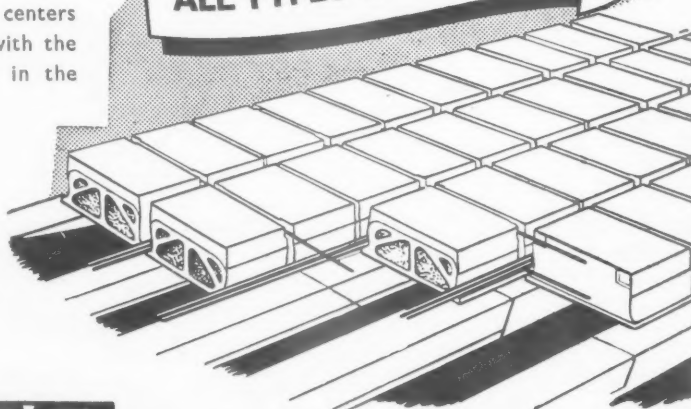
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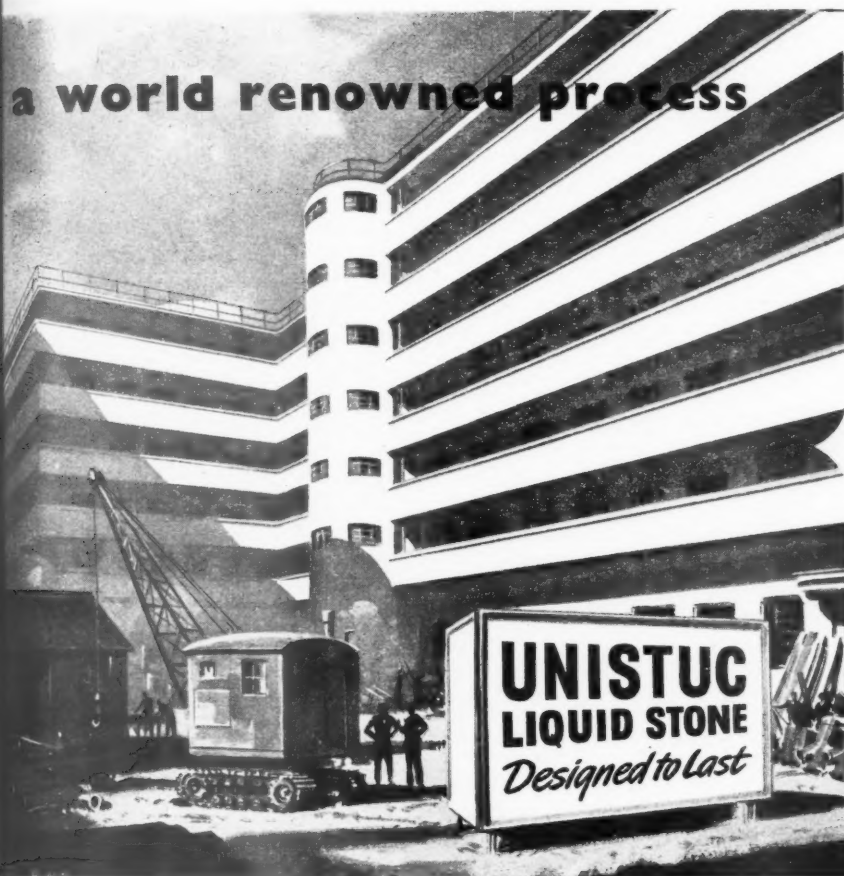
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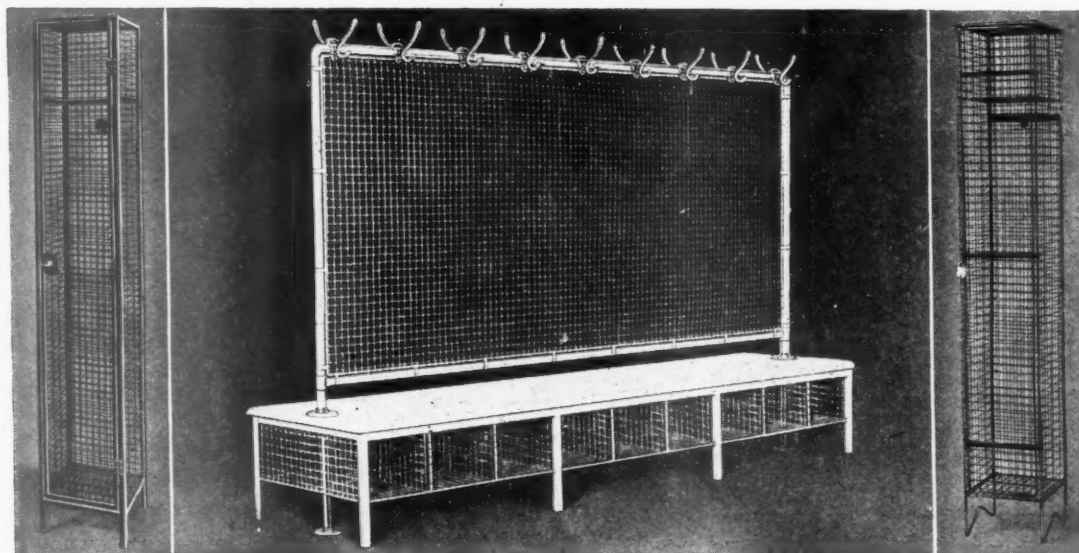
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## CLOAKROOM FITTINGS AND WIREWORK LOCKERS



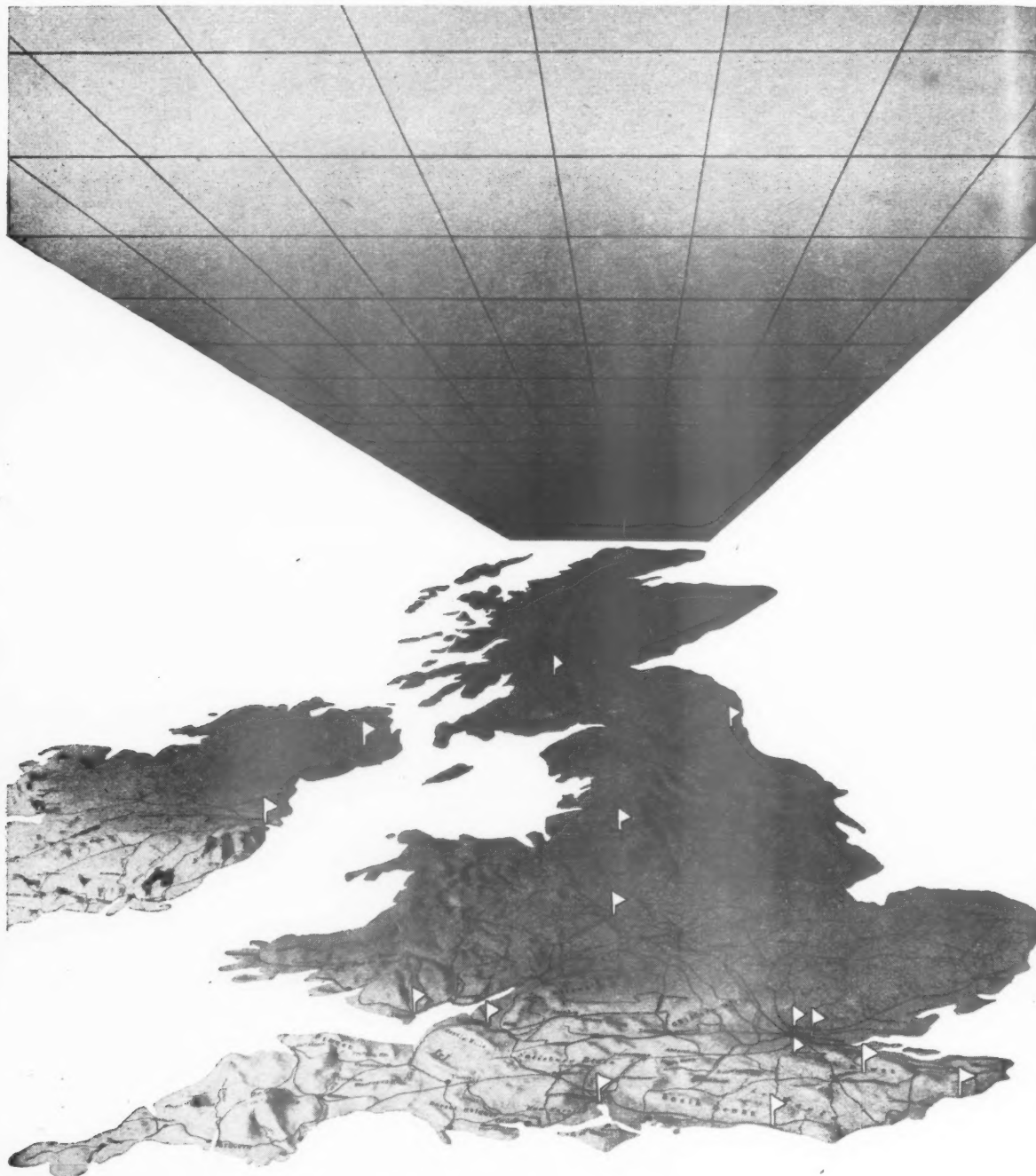
Harvey Wirework Clothes Lockers are strong and durable, and economise space. Available in single units or nests of 2, 3, 4, or 5 Lockers.

Harvey Cloakroom Fittings have been designed to meet the requirements of all modern cloakrooms. The double-sided island stack illustrated above is approx. 5' 6" high and is constructed of tubular framework enclosing a wirework panel. The wooden seat is supported by an angle frame and tee bar legs, incorporating boot and shoe compartments approximately 12" wide x 9" high x 12" from front to back. Send for List A.J. 830

Sizes: 72" high x 12" wide x 12" deep, 72" high x 10" wide x 18" deep. Other types of Lockers to suit special requirements can be made to order.

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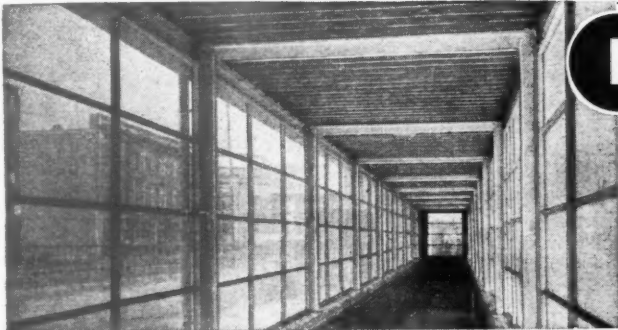
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1

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The underside of a 'BITUMETAL' Deck provides an attractive aluminium ceiling. The aluminium requires the minimum of attention and gives light weight with strength.



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By the inclusion of a  $\frac{1}{2}$ " thick insulation Board as part of the roof, considerable Thermal insulation is gained. The complete roof has a "U" value of 0.33 (N.P.L. Report).



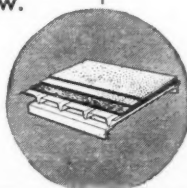
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**Roof Deck weatherproofed and water-proofed.**

Briggs Multi-Layer Bitumen Roofing provides a flexible covering sufficiently ductile to allow for normal movement. Attractive coloured surfaces can be obtained.

'BITUMETAL' provides a complete roof from ceiling to deck. It can be laid in any part of the country and it is economical in cost. Full particulars can be obtained from Area offices listed below.

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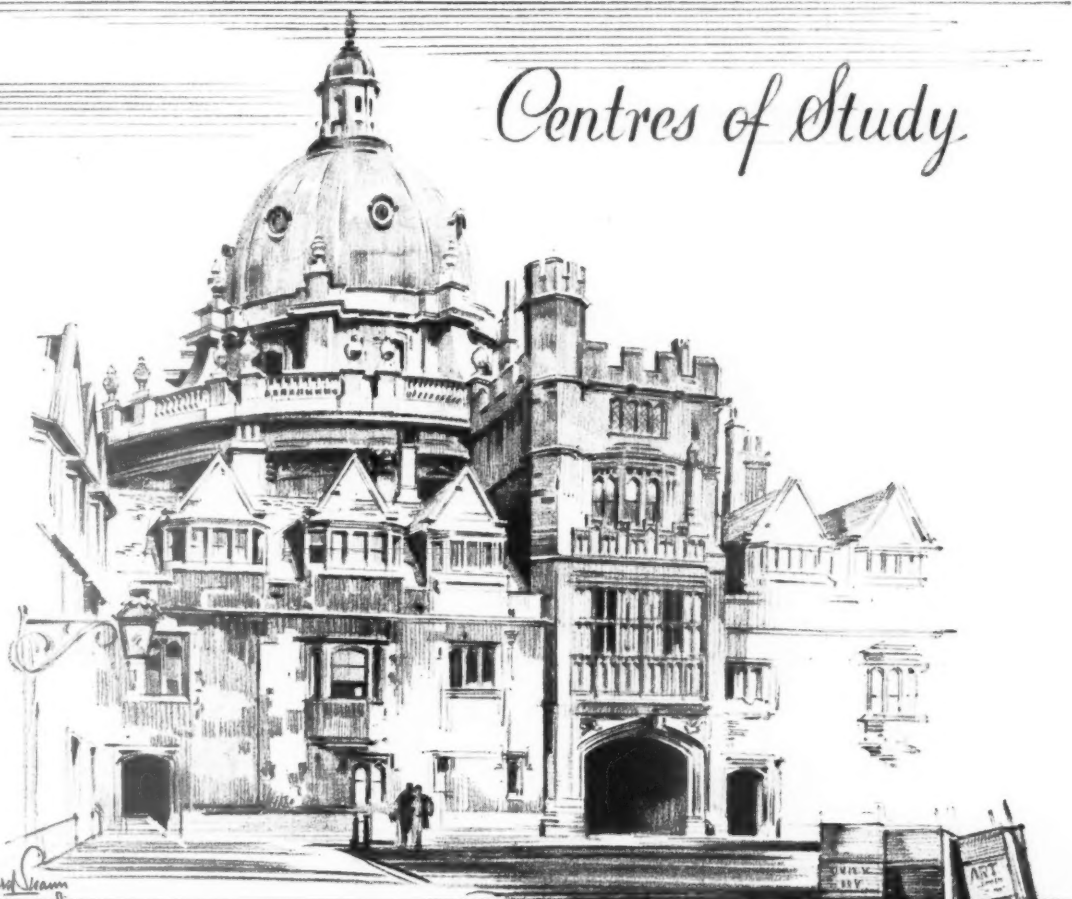
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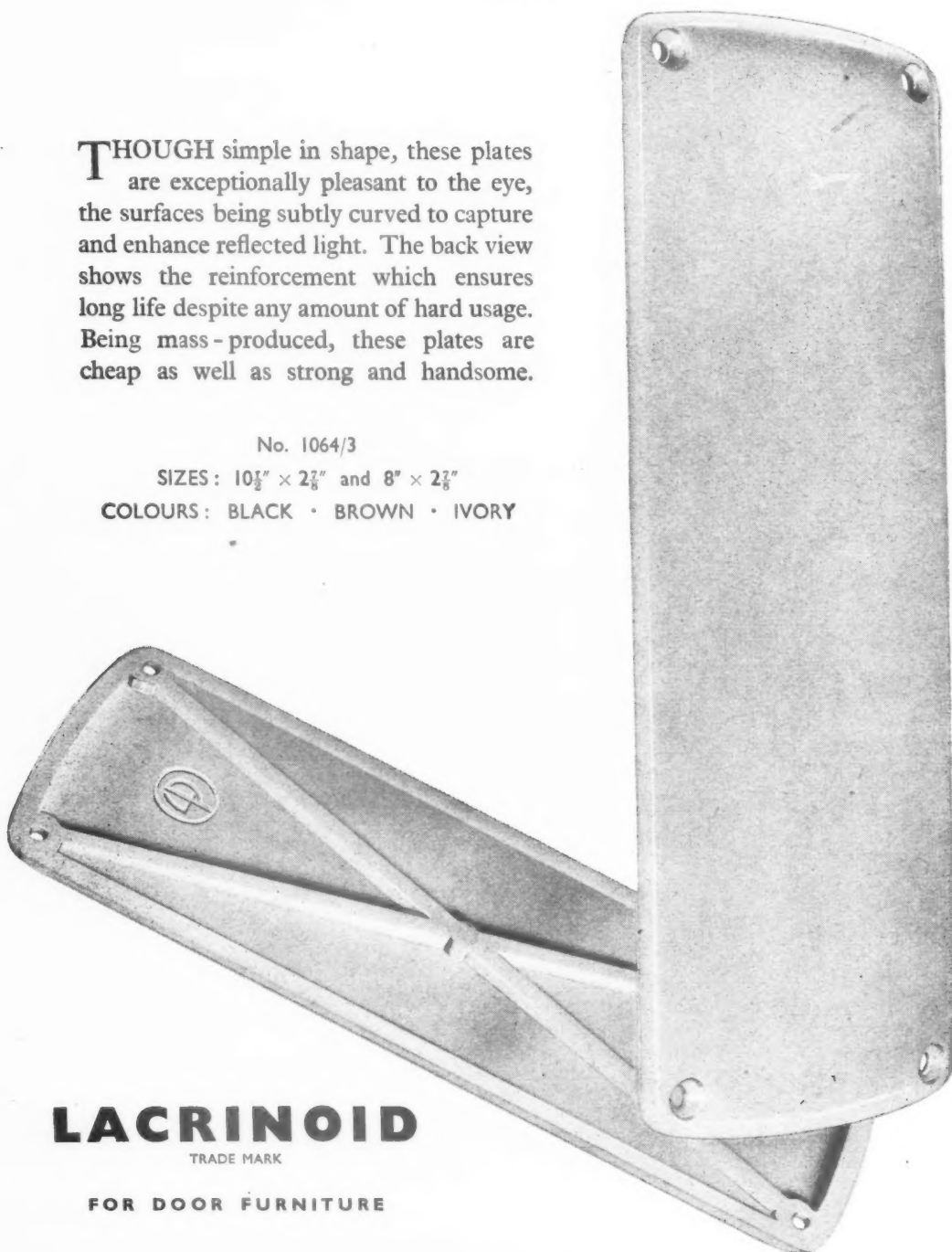
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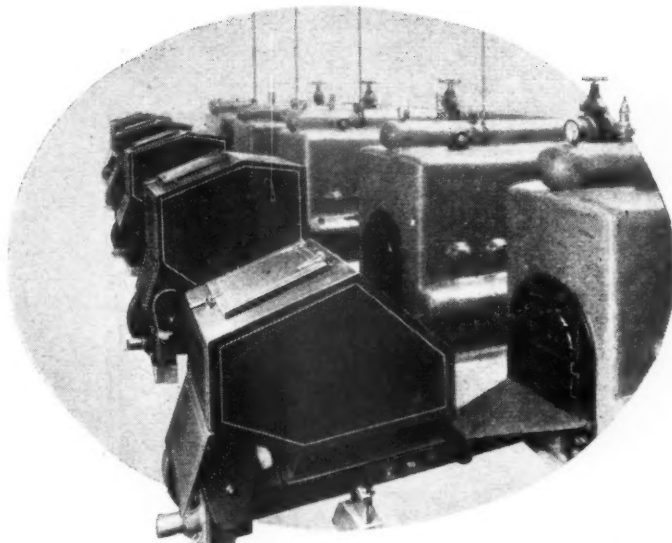
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become—

1. A TENTEST LINING reduces heat loss through roof and walls from 75% to 25%—reduces fuel consumption and maintenance costs.

2. PATENT METAL COVER STRIP entirely eliminates the need for painting and repairs.

**1943**

**"In what time . . . ?"**

When insulating a building it is essential to choose materials that will add-up most quickly. It is also essential to choose materials that will pay for themselves in the shortest possible time. The Tentest Fibre Board is the answer. It is the only material that will pay for itself in less than 6 months.

**1944**

**Insulating existing buildings**

Insulating existing buildings with Tentest Fibre Board is the only method that will pay for itself in less than 6 months.

**1947**

**INSULATED FACTORIES USE LESS COAL**

INSULATED FACTORIES USE LESS COAL. The Tentest Fibre Board is the only material that will pay for itself in less than 6 months.

**1948**

**"COMBINED OPERATIONS"**

**SAVE <sup>still</sup> MORE FUEL - says George**

George says: "I can reduce my fuel consumption for space heating by 25% by using Tentest Fibre Board. I can also reduce my fuel consumption for space heating by 25% by using Tentest Fibre Board. I can also reduce my fuel consumption for space heating by 25% by using Tentest Fibre Board."

**1951**

**How to Save Fuel**

There is no doubt that fuel is going to remain scarce and expensive for a long time to come. For the amount required to warm a building can be drastically reduced, by a method which involves an initial outlay only, with no maintenance charges.

**the answer is INSULATION —the TENTEST way**

We are continually demonstrating the value of insulating structures by means of lining with Insulating Board, using our Specialised Construction Methods. By thus increasing the Thermal Resistance of the building, you can make fuel go very much further; and if the Tentest Fibre Board Company carries out the work, before the war, you are sure of the savings to be obtained by lining. And if they were worth while then, how much more so are they now!

**THERE IS A SPECIALISED CONSTRUCTION METHOD TO SUIT YOUR JOB. MAY WE ARRANGE FOR OUR REPRESENTATIVE TO CALL?**

"Our book 'Structural Insulation' is a mine of information on this vital subject. We shall be glad to send you a free copy on application."

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(Telephone: Barnet 5501 (5 lines))

**1951**

**How to Save Fuel**

There is no doubt that fuel is going to remain scarce and expensive for a long time to come. For the amount required to warm a building can be drastically reduced, by a method which involves an initial outlay only, with no maintenance charges.

**the answer is INSULATION —the TENTEST way**

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\*Phone: BARNET 5501 (5 lines)

\*Grams: Fibboard, Norphone, London.

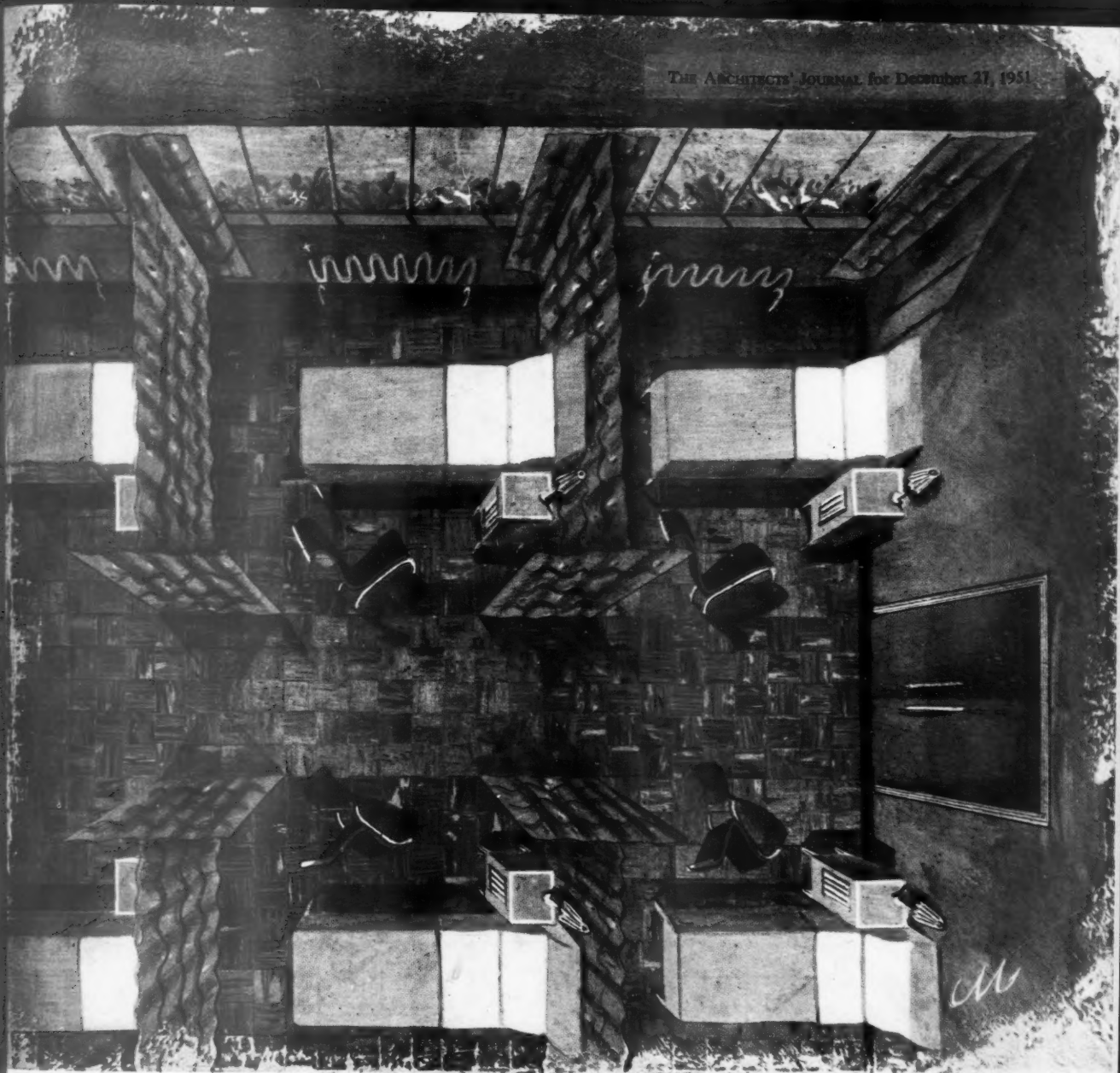
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Telephone: Whitehall 9366









*Design for a floor in a Hospital Ward · From the original Collage by R. MYERSCOUGH-WALKER*

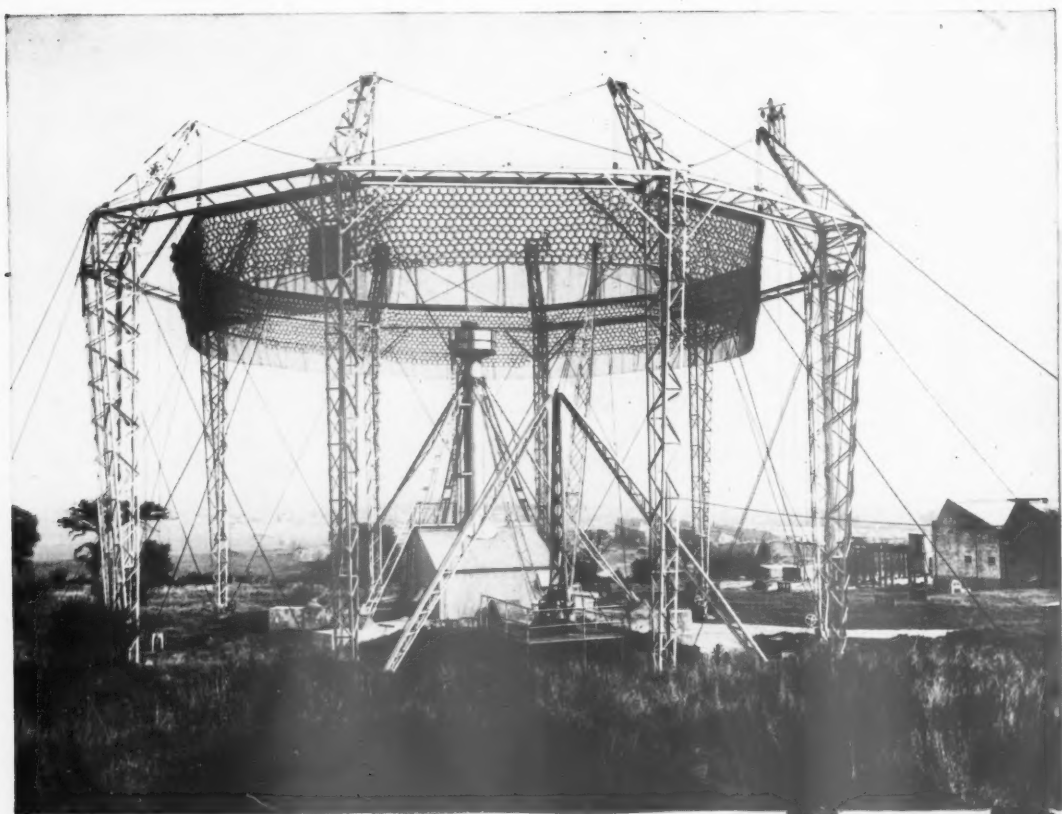
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the walk*

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**MARLEY**



## The versatility of steelwork

The unusual outer structure shown in the illustration is a safeguard against fragments of helicopter rotor blades which might disintegrate when under test.

In contrast with the above is this heavy stanchion for a slabbing mill at the works of Consett Iron Company. The structure over the excavation is a temporary support for the derrick of the 25 ton crane.

**B·C·S·A**

BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION  
ARTILLERY HOUSE, WESTMINSTER, S.W.1







# *Where are the BRICKS going?*

## 6: TELEPHONE EXCHANGES

The development of Post Office services, severely curtailed for four years, became a matter of urgency after the War.

Among many other needs, accommodation had to be provided for extensions of the Telephone System, and the new brick-built Exchanges now coming into service are pleasing features of our towns and cities.

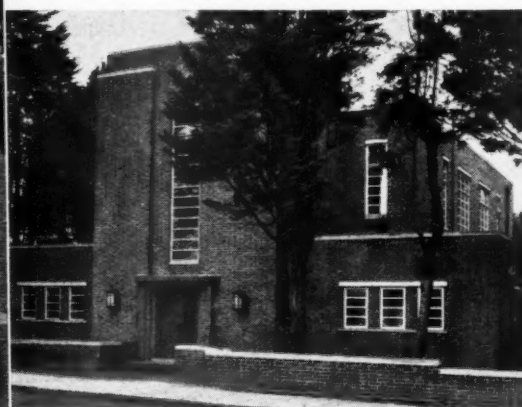
The preference for Brick, which is seen in most classes of post-war construction, has made heavy demands on the Brick industry. Supplies are being allocated as fairly as possible. Meanwhile, no effort is being spared to maintain the upward trend of production.



Wembley Telephone Exchange.  
Architect : F. M. Dean, M.B.E., A.R.I.B.A.



Newmarket Telephone Exchange.  
Architect : Christopher Bristow, O.B.E., A.R.I.B.A.



Broadstairs Telephone Exchange.  
Architect : Christopher Bristow, O.B.E., A.R.I.B.A.



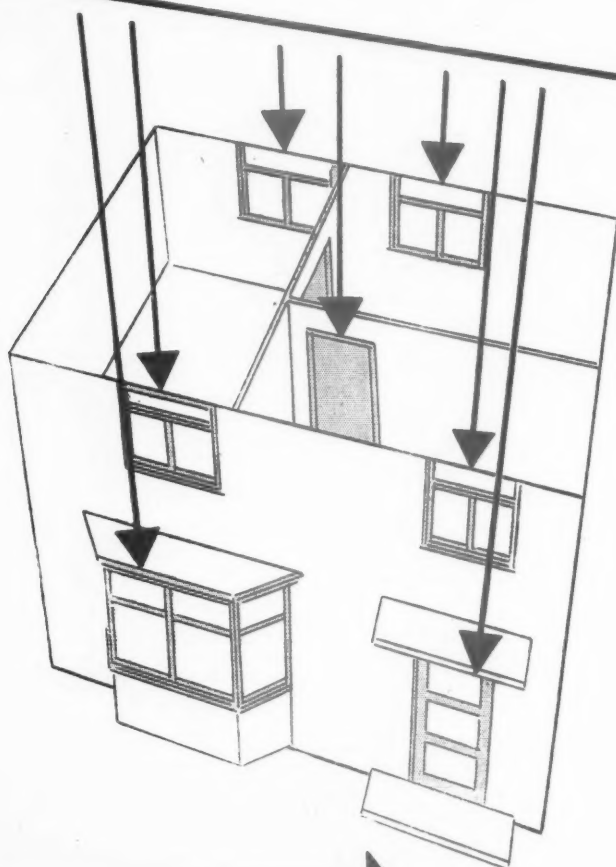
Buckhurst (Director) Auto Exchange.  
Architect : A. Bulloch, O.B.E., F.R.I.B.A.

# BRICK

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windows in mind



**DOORS**—dowelled panel to BSS 459, also flush types—and **WINDOWS** are the specialities of the three modern Magnet factories each—strategically sited to ensure absolute satisfaction on the important point of delivery-to-the-day.

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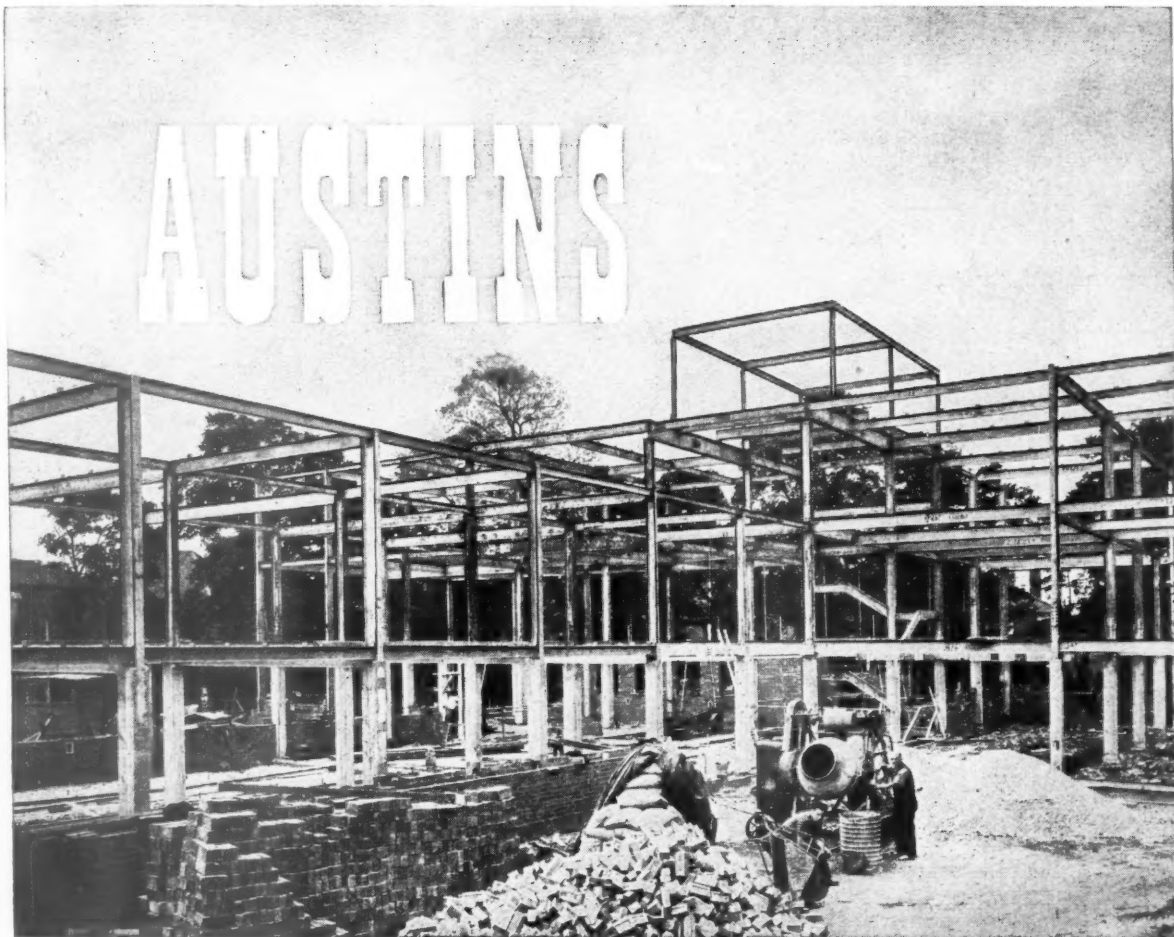
Please address your enquiries to your nearest Magnet factory—they are assured of prompt and helpful attention.

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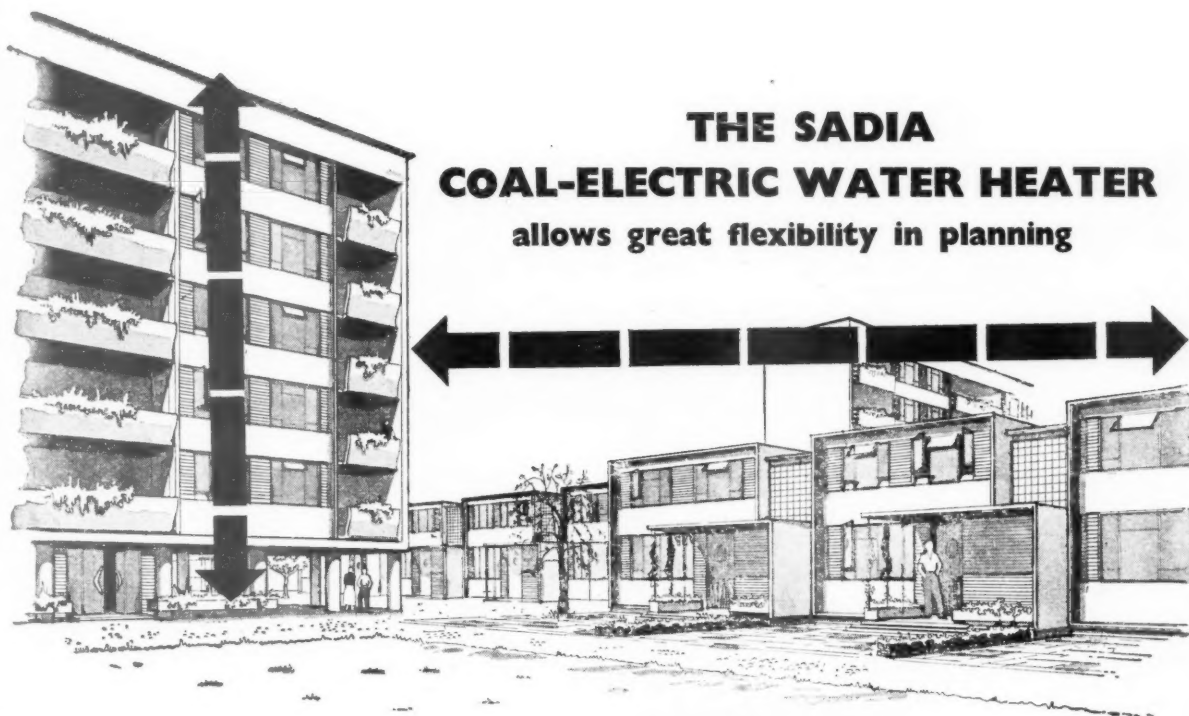
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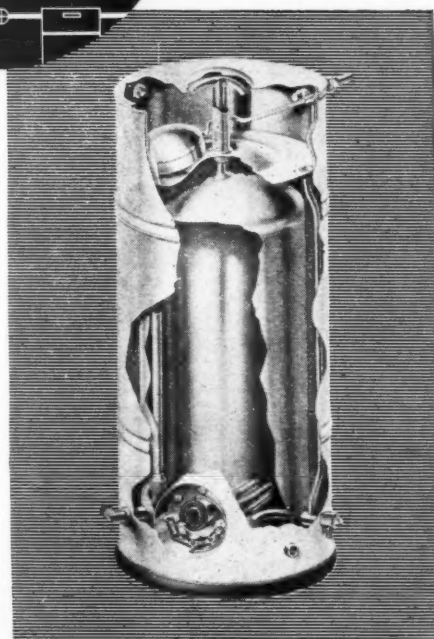
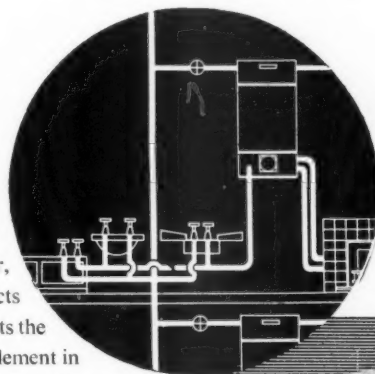
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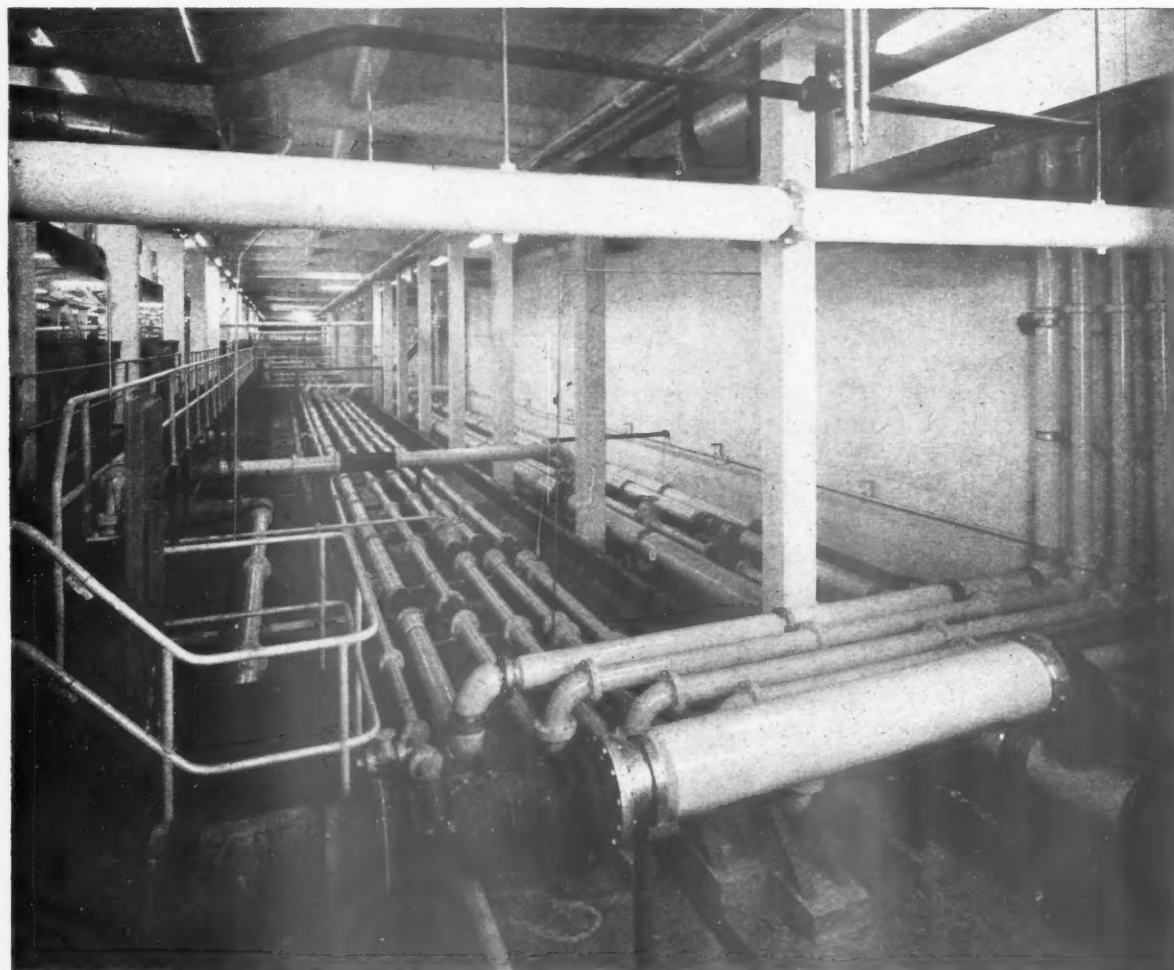


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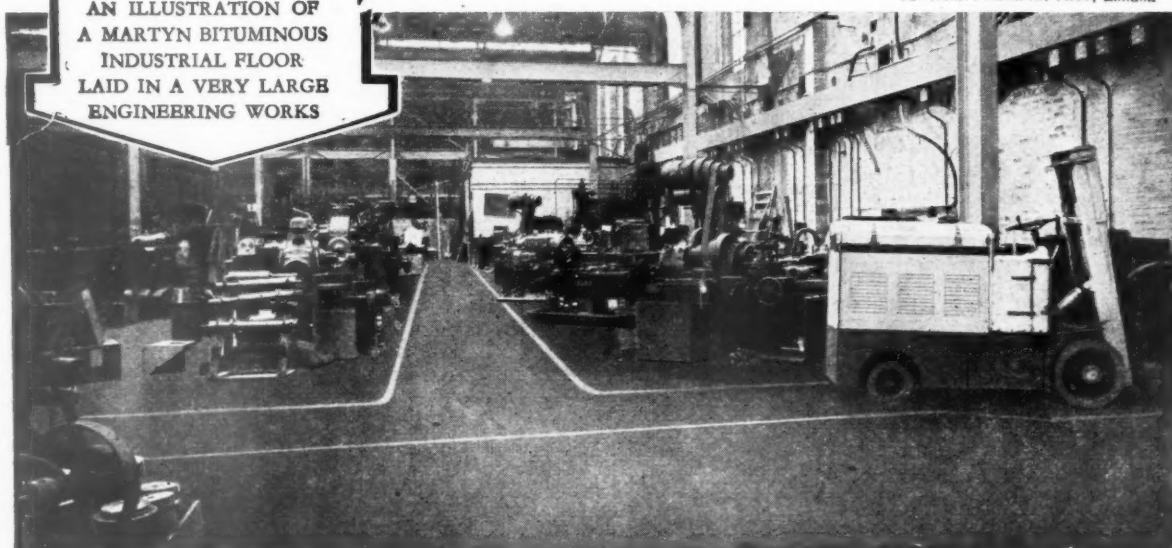
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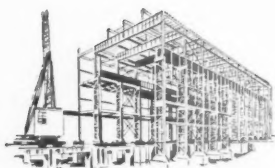




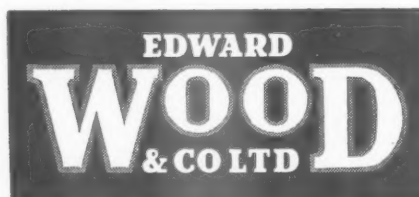
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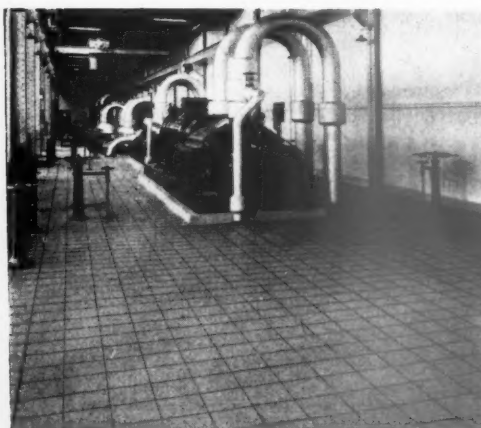
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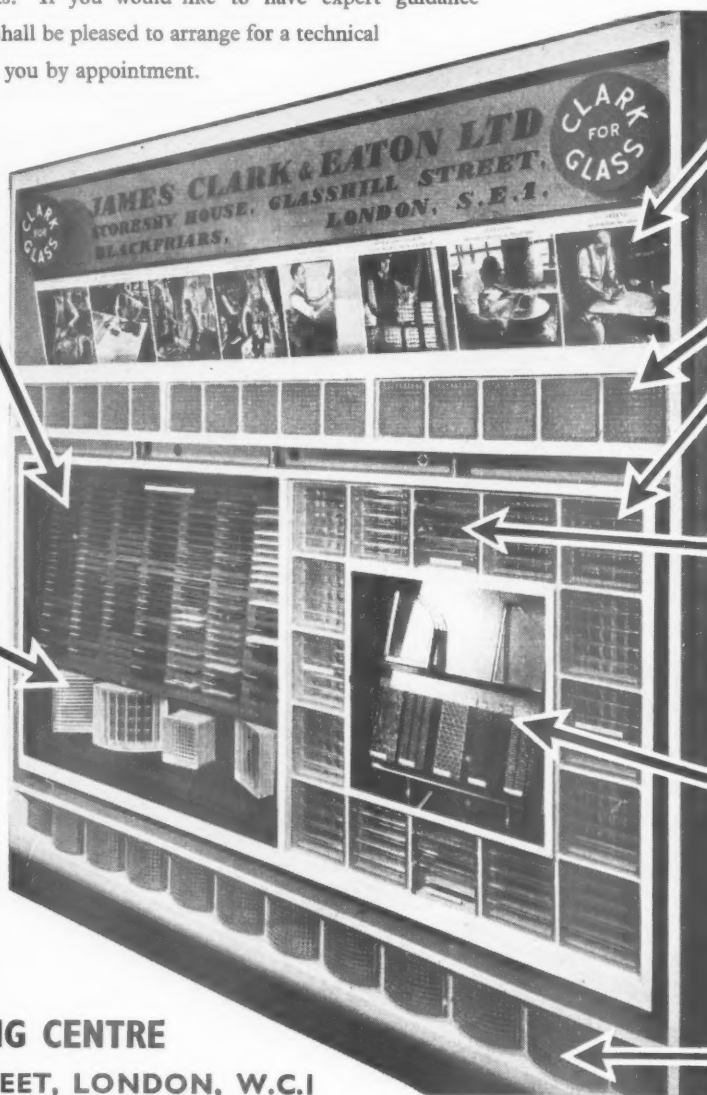
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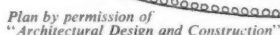


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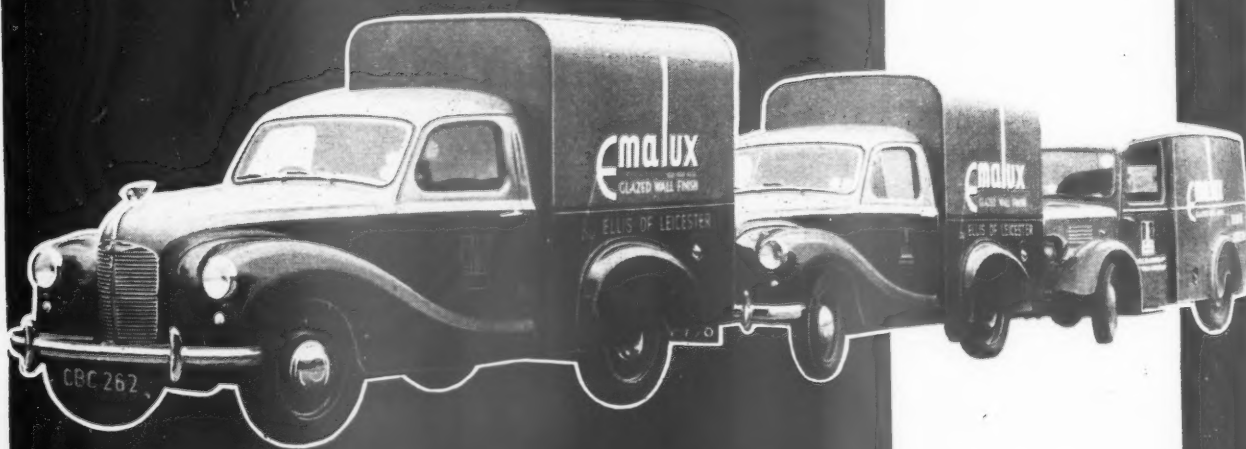
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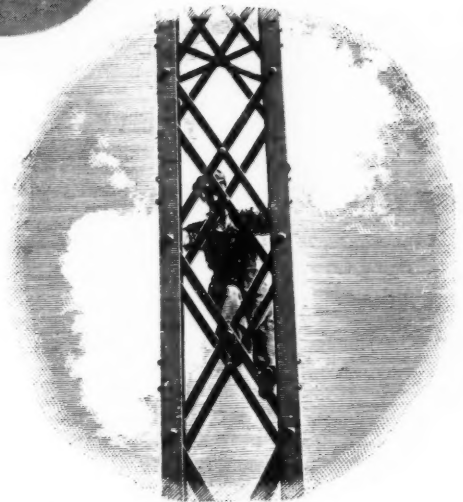
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THE ARCHITECTS' JOURNAL

No. 2965 27 DECEMBER, 1951 VOL 114

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#### PRINCIPLES FOR PRINCIPALS

Now that Michael Patrick is safely balanced upon that traditionally thin pie-crust which spans the bubbling stewpot in Bedford Square—and our best and warmest good wishes to him—the clouds of rumour and speculation will presumably gather around other vacant seats of learning—in particular Liverpool. (And don't forget that the chair at Edinburgh is still as empty as the day Gordon Brown left it to join, *via* Hong-Kong, the wild men of Borneo, where informed circles—you know, those clever round ones—say he is now busy and happily at home.) No doubt the usual names are being canvassed, but the air is so loud with the whirr of grinding axes and the clatter of hobby-horses hooves that it

is difficult for those who serve on the Selection Committee to remember just what it is they are after.

\*

Is it to be the Glamour Boy, the Man of Distinction, whose lustre is so brilliant that even if he never goes near the place—because obviously he will be a busy and successful man—the reflected glow will keep the school warm and lighted? Is it to be the Scholar with his head in the clouds, or the Practical Architect with his feet embedded in the sub-soil? Must he practise? Need he teach? Should he like YOUTH? Must he have a sense of humour? "Obviously" cry the unhappy selectors "he must be and do and have all of these things." "Obviously," we must reply, "no such man exists—or at least we have yet to meet him."

\*

All we can do is to remind the selectors of a few basic points, clichés perhaps, which in their agonies of indecision they may forget. Here are a few at random. (Further suggestions welcomed.) First, eschew the dogmatic. There is no inflexible optimum size for a school year or for a whole school, and smart buildings and impressive syllabuses do not necessarily make good architects.

\*

Quality of education always and only depends upon the quality of the man teaching. Second, students are incurably conservative. They will protest to the last ditch against the removal of a system against the imposition of which they protested equally strongly a year previously. Third, hire a practising architect by all means, but don't forget that if he is the best sort of practising architect his ear will always be half-cocked (if not three-quarter cocked) to the music of the

concrete mixer and the foreman's voice, rather than to the lecture room or studio. (All right, I know there are exceptions, but exceptions are exceptional.)

\*

(I think perhaps the need to practise is often over-emphasised. Who, for instance, can name with ease a single building by Professor Reilly? And yet his name as a teacher is alive as ever it was.)

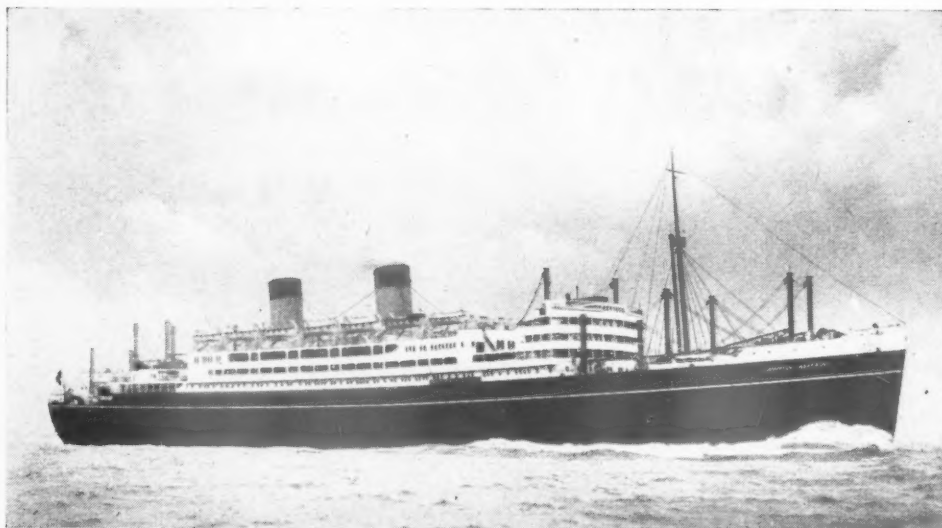
\*

Fourth, beware of—but do not blame the candidate for whom the post is frankly a waiting room where he frets impatiently until the train of a good job comes along to whisk him off to success. (On second thoughts is such a warning quite fair? Even an impatient and ambitious man may have something useful to contribute during his short stay.) Fifth, Distrust the man who thinks that youth is always right. It is right no more (and no less) frequently than anybody else. There is no future in my opinion for those over thirty years old who think that in order to teach it is necessary to sit with the students cross-legged on the studio floor.

\*

Sixth. Handle with care the crank and the rebel. He may be—as Shaw says—but a sadist in disguise, but sometimes he is a saviour. I hope correspondents will add to mine their quota of gypsy-warnings—not forgetting the gypsiest of them all—that a good man at the top will attract good men to his staff (witness the golden age of MOTCP under Professor Holford and the LCC today under Robert Matthew and Leslie Martin).





NO RUST  
*on* HOPE'S  
HOT-DIP GALVANIZED  
WINDOWS  
*after TEN years at sea*

INSTALLED IN THE "DOMINION MONARCH" IN 1938  
OVERHAULED IN 1948 AFTER 8 YEARS' WAR SERVICE  
THERE WAS NO RUST

HENRY HOPE & SONS LTD., BIRMINGHAM & 17 BERNERS STREET, LONDON, W.1

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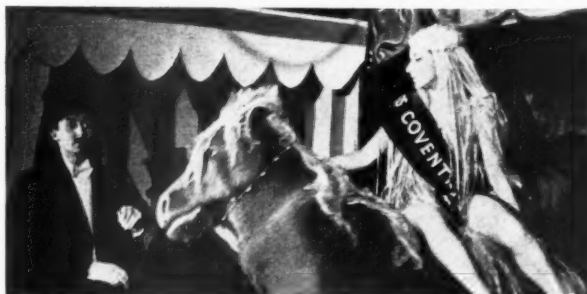
## TRIP TO CAIRO

A colleague who has been in Cairo during the recent crossness reports that one of the first "symbolic" acts undertaken by the Egyptian Government was to start work (at last) on the long-promised demolition of the Kasr-el-Nil Barracks. The top storey of the pink, handsome, arcaded structure, once the official home of British troops—and familiar to many of you who visited Cairo during the war—has already disappeared, and clouds of dust were billowing over the Nile, making the throats of the occasional horde of shouting demonstrators hoarser than ever. (This noise, incidentally, one reporter says, at once called to mind Evelyn Waugh's famous description of an Oxford boating dinner—"that unmistakable roar which is the sound of the British upper classes baying for broken glass.")

The opportunity presented to the architects and planners when the barracks have gone will be a fine one, for the site, which some of you will remember, is somewhat similar in size and setting to that of the Houses of Parliament in London. It lies between the river and a fine, tree-planted, square, and is flanked by a bridge. The resemblance to Parliament Square is underlined by the presence, if not the appearance, of Adrian Gilbert Scott's English Cathedral, about where the Abbey stands. No fine plans for the future seem to have been published, but, peering through the cracks of a hoarding on a traffic island our reporter could see a large circular plinth in course of construction. A mosque? A statue? Or —? Nobody could, or would, say.

Flying back a day or so later, the aircraft made a splendidly tight turn over Rome railway station—just what every architect could have asked for—and it was therefore no surprise for our reporter to learn in later conversation with the captain of the aircraft, that he was not only the son-in-law of a well-known architect, but had even passed his Intermediate RIBA himself before forsaking the T-square for the joystick. Those who constantly challenge the architect's claim to be an expert in everything from thermal insulation to child psychology may like to know that this architect made one of the gentlest landings ever experienced by our reporter.

*Scenes from the AA student pantomime given recently at 34, Bedford Square during the school's annual all-night carnival. The pantomime "Ronde la Bende," traced the history of architecture from the Stone Age onward and owed apologies to (among others) the film, "La Ronde" and the musical play, "South Pacific."*



## THE ACADEMY'S FIRST CENTURY

One of the best things about the Royal Academy winter exhibition, "The First Hundred Years of the Royal Academy," is its arrangement. The hanging committee have contrived that every room and gallery should have its own special subject and character, so that in effect there are fourteen or fifteen separate exhibitions. You pay your money and takes your choice, according to whether your mood is for miniatures or sporting pictures, Turner or Pre-Raphaelites.

The architectural room is a disappointment. I could hardly believe the catalogue when I found no reference to Sir John Soane; but it is true that he is not represented. True also that earlier

heavy-weight, Sir William Chambers, is represented by nothing more substantial than a design for a ceiling. One almost gets the impression that this section of the exhibition was hurriedly thrown together at the last moment as an afterthought, though in fairness it must be added that there are some good things, including Ferrey's delightful "View of Bournemouth, a new marine neighbourhood in the estate of Sir G. W. T. Gervis, Bart., MP," Cockerell's not altogether unknown design for the Royal Exchange, and Salvin's pretty drawing of Scotney Castle.

## WIG-WAM WISDOM

Congratulations—by smoke signal—to Big Chief I-SPY of the *News*

*Another annual function held recently was the ABS annual dance at the Dorchester. Among those present can be seen, left foreground, H. T. Cadbury Brown, and, centre right, H. J. W. Alexander, Secretary of the Architectural Association*





## *A Thought for the New Year*

It is, perhaps, fitting that we should close a year which has not been lacking in excitement in the architectural world, by giving a thought to the glories of the past. We hope there is no need for us to explain that this winning design, by T. A. Greeves, in the ABS competition for "a monument to the good old days of architecture" is on no account to be built in Portland Place—or elsewhere for

that matter. And we hope that those architect readers who would like to see it built—and there may be more than we fear—will have a far from prosperous and successful New Year. To other readers—to those, in fact, who are in step with us—we offer seasonal wishes and recommend a close study of the plan for yet another cheap house which we publish on page 766.

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## POINTS FROM THIS ISSUE

The County of London Development Plan .....	Leading article, page 759 and critical report, page 761 ff.
ABS competition results .....	pages 758, 765 and 766
"Sunday Times" South Bank competition results .....	page 767
Housing at Brynmawr, South Wales .....	page 770 ff.
Review of library of information sheets .....	page 780 ff.

## Town Planning Editor: No. 3

## MEGALOPOLITAN DEVELOPMENT PLAN

THE completion of an official plan controlling the development of London, and the submission of it for the formal Government approval which will endow it with legal validity, is an important occasion in the long history of the metropolis. Although there are some serious omissions—particularly in the road proposals—which will need better defence than they have yet been given to make them acceptable, this statutory "development plan" for the County of London is in the main based on the recommendations made by Sir Patrick Abercrombie and J. H. Forshaw in their monumental advisory plan of 1943. As far as it goes it is a very impressive document. The LCC and its officials (and especially the Planning Section of the Architects' Department) deserve great credit for it.

The replanning of the world's biggest and most muddled urban complex—the Mumfordian Megalopolis itself—is an almost superhuman task. And the detailed consideration of that replanning is far too complicated a matter for any newspaper or technical journal to undertake. Indeed there can be very few people outside the office where the plan was made (and not many there) who can speak with authority of its contents as a whole. And, even so, this is merely the *beginning* of the continuing process of producing a plan for a *part* of London. The gigantic nature of the task almost intimidates one out of comment on it. Yet seeing this plan now (and acknowledging the courage and technical ability that have gone into the making of it) we cannot but wonder whether this beginning should have been made in this way, and whether the continuing process should continue along these lines.

Perhaps the task is too enormous to be done rationally and tidily. But this plan is not the proper beginning; and it is doubtful if the completion of it through the filling in of details should be the responsibility of its authors. Whereas ordinarily the best system of planning may be through two tiers, a regional one and a local one within the national superstructure, London being as vast and complex as it is an intermediate tier, a sub-regional plan, i.e., *this* present plan, is beyond all doubt valuable, and perhaps essential. But although the LCC admits, and indeed emphasises, that the carrying out of this

*Chronicle*, who has informed the young entrants in one of his competitions that an event seen on a television only counts half-marks. To get an "Ordinary Merit" the Redskins must see it with their own eyes. This is first-rate advice even if it does come from a wig-wam pitched in Fleet Street. In America, we have been told, televisioners now have to have the names of sponsored products spelled out for them by the announcer because they have forgotten how to read—Even in this country many people have learned almost to prefer the picture of an object to the object itself—a particularly dangerous pitfall for architects, so few of whom seem to bother to go and look at a building before passing judgment upon it. Listen then—I beg your pardon, I mean Hist then, to the wisdom of I-SPY, and teach your little Redskin or tiny squaw that the only way to get a feather in his or her cap is to use those relentless little eyes.

\*

And here is another piece of kindly advice to palefaces who are much bothered by those who persist in bringing out their albums of holiday snapshots. It comes from Moray McLaren's new Pelican, *The Scots*, a race which he says is careful about giving anything away, including praise. After a long time spent leafing through an album the hero of his story—an elderly Scot—picked out one photograph. "That" he said, "is the worst."

## TELEVISION

Everyone knows that the TV world is not a happy one and that any producer or artist of sincerity or intelligence is liable to be frustrated from the start. Congratulations, therefore, must go to Peter de Francia—a young painter—who having appreciated the possibilities of architecture as a TV subject, has apparently fought his way to the point of getting it accepted for four or five major programmes. This is an achievement in itself. I don't know details yet but I gather that the programmes are to go on the air after Christmas and that each will deal with a building or town planning scheme of major interest. If I can discover a friend with a TV set I shall make a point of having a look.

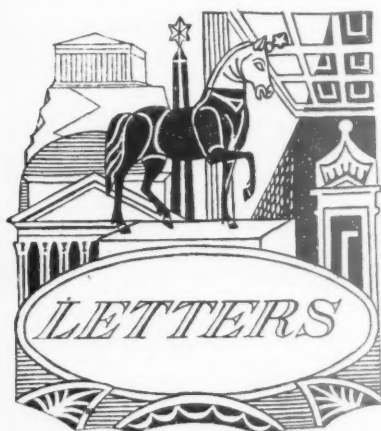
ASTRAGAL



plan depends on the goodwill and co-operation of its neighbours, a proper regional plan for Greater London has never even been attempted and no agency to make it exists.

The County of London Development Plan may fail because of this. But there is perhaps not much that can be done about that now except through forced co-ordination by the responsible Government departments. It may also fail at the other extreme, i.e. because the LCC using this intermediate as a beginning, will proceed to detailed local planning. But there is still time to avoid this.

London is too big, too gigantically complicated to be capable of being properly planned by a single central agency, however enlightened and powerful that agency may be. Indeed vast areas of it are little more than nominally touched by this present plan as such, although they are controlled by the powers which it gives. Quite properly the devastated and outworn East End is having the LCC's first attention. Almost its whole attention, too. Those who know what is happening know that most other parts of the metropolitan area are not being genuinely planned at all but are merely being subjected to piecemeal control by way of day-to-day decisions. This happens because of the mere mechanical difficulties of doing so tremendous a job. But more important than these difficulties is the question of whether it should be done this way even if it were possible. Can it not be soundly argued, both for the preservation of the *locus genii* of the various districts of London, and for the continuance of active democratic local government, that local planning, within the broader-than-local-framework, should, in the first instance at least, be a local matter; and that Chelsea should be planned in Chelsea, Bermondsey in Bermondsey, and Hampstead in Hampstead? Now that this great Development Plan is being considered, these other questions for the future should be considered also.



### Housing in Northern Ireland

SIR.—Mr. Cole, whose letter regarding the Housing Subsidies in Northern Ireland which you published on Dec. 6, is quite obviously not a native of Northern Ireland. His letter is typical of a number of architects from "across the water" who for the last few years found living and housing accommodation here; it is full of false facts and unconsidered criticism.

*English Architect in Northern Ireland*

Gordon Graham, A.R.I.B.A.

I should earnestly advise Mr. Cole to take his time in judging building and planning matter in Northern Ireland, and to study carefully local conditions, social history and economics and all the circulars published by the Ministry of Health & Local Government and "Stubbs."

The regulations controlling the number of apartments in subsidy houses is no longer valid and a publication similar to the Housing Manual had been published by the Ministry eighteen months ago, these are some of the facts. I would suggest that some of his figures are also wrong—the bulk of housing work is carried out by local and public authorities, their average standard of design and construction, being quite as high as in England.

I agree that bay windows and stained-glass leaded lights appear all too frequently, but could the Socialist Planning Act, 1948, annihilate them? Is it doing so, or are the "ignorant clientele" who admire such ex-

creescences being eradicated from the population?

One cannot deny that bad workmanship is frequently encountered, but is this not universal?

While the housing problem in Northern Ireland is still acute, thousands of people have been able to buy their own homes with the aid of Government Subsidy, whereas in England the mere thought of building a house would be stifled by the development charge.

Finally, I would point out to Mr. Cole that the British Government has no influence over the Northern Ireland Government on housing policy.

ENGLISH ARCHITECT IN NORTHERN IRELAND

### Road Pattern

SIR.—The letter from D. Jennings Smith (December 6) on the subject of road pattern in all its aspects has raised a number of points which deserve the most serious consideration by architects and town-planners in this country. Your correspondent has, of course, raised one of the fundamental issues of town-planning—circulation.

Clear appreciation of the problem of circulation in contemporary cities has provided the basis of several theories of neighbourhood and city-planning, be it the Radburn idea or Le Corbusier. After the series of hopeless palliatives which we have seen in this country—white-sleeved policemen on rostrums, traffic lights, the ludicrous gamut of road signs, Belisha beacons, morbid poster publicity, road wardens, and now zebra crossings—the editors of the JOURNAL would be doing a service to the country if they made a major issue of the subject.

Is it too much to suggest a Government-sponsored effort designed to attract detailed studies of all aspects of the problem by the best brains in architecture and town-planning?

Existing conceptions of road layout must be scrapped. Our traffic circulations, both in residential neighbourhoods and central areas, simply do not function, and are grossly uneconomic. How do we assess the effect on our national economy of the fantastic road death rate, the permanently maimed, the wastage of time and petrol in our clogged streets, the injury to the health and nervous system of every person in this country? What factor do we apply in order to estimate the conditions of tomorrow?

We must formulate some principles. In my opinion the principles which I list below (which have been put very much more clearly by someone who must some day qualify for the Gold Medal), must be repeated again and again until they form the basis of the circulations in our towns.

1. Vehicular traffic and pedestrians must be completely separated.

2. This principle should not be applied only to the problem of small children going to school, but to the whole range of everyday activities of every person, even mere day-dreaming whilst walking nowhere in particular.

3. If the uncompromising application of this principle calls for new administrative methods then our administrators must produce them.

4. The gross wastage caused by our existing, irrational traffic circulations must be fully taken into account when assessing the economics of any new proposals.

5. The need for local transport, other than our own legs, must be reduced. A human scale must be applied to our designs for neighbourhoods and cities.

6. This is not idealism. We cannot afford to prolong the series of half-measures, and so refuse to face the problem, any longer.

GORDON GRAHAM.

Nottingham.





In last week's JOURNAL, Derrick Childs summarized the main points of the County of London Development Plan. This week he gives a critical report of the Plan.

## LONDON PLAN A Critical Report By Derrick Childs

The Public Inquiry into the Development Plan for the Administrative County, which includes the City of London and the LCC area, is not likely to be held for several months. In the meantime a very large number of people will be examining and criticizing the plan in all its facets. If adequate discussion of the Plan's principles and details are to take place, it is imperative that copies of the printed report of the

Survey and Analysis and of the Statement on the Development plan should be made available for sale to the public as soon as possible. Without the aid of these documents, or at least effective summaries of them, it will be impossible for the representatives of the many interests concerned to attempt a fair defence of, or opposition to, the London County Council's proposals.

The Report of the Survey and Analysis represents the Council's interpretation of the wide variety of survey material which requires to be compiled in support of a modern development plan and the Council's views on the policies and proposals which it recommends for the approval of the Minister of Housing and Local Government. The Report comprises 330 pages of text, tables and diagrams and it brings\* to light much new material.

The Statement on the Development Plan is a very different kind of document; it is a factual statement of proposals. The 200 pages of text are devoted to explanatory matter, definitions and tables; the latter, compiled in support of the plans and maps, number about 170 pages alone. The tables describe each area of land zoned, its location, acreage, etc. Incidentally, a table which will be very useful to architects when advising clients on change of use is the Use Zone Chart on page 11. This lists the different use zones and for each use zone describes which building uses will normally automatically be allowed and which building uses will require the Council's special permission.

The importance of this development plan is that, firstly, it is a statement of the London County Council's policy both on immediate and long-term redevelopment. Secondly, it provides an order of priority for the carrying out of proposals and, thirdly, it attempts to estimate very broadly the cost at current price levels of the proposals.

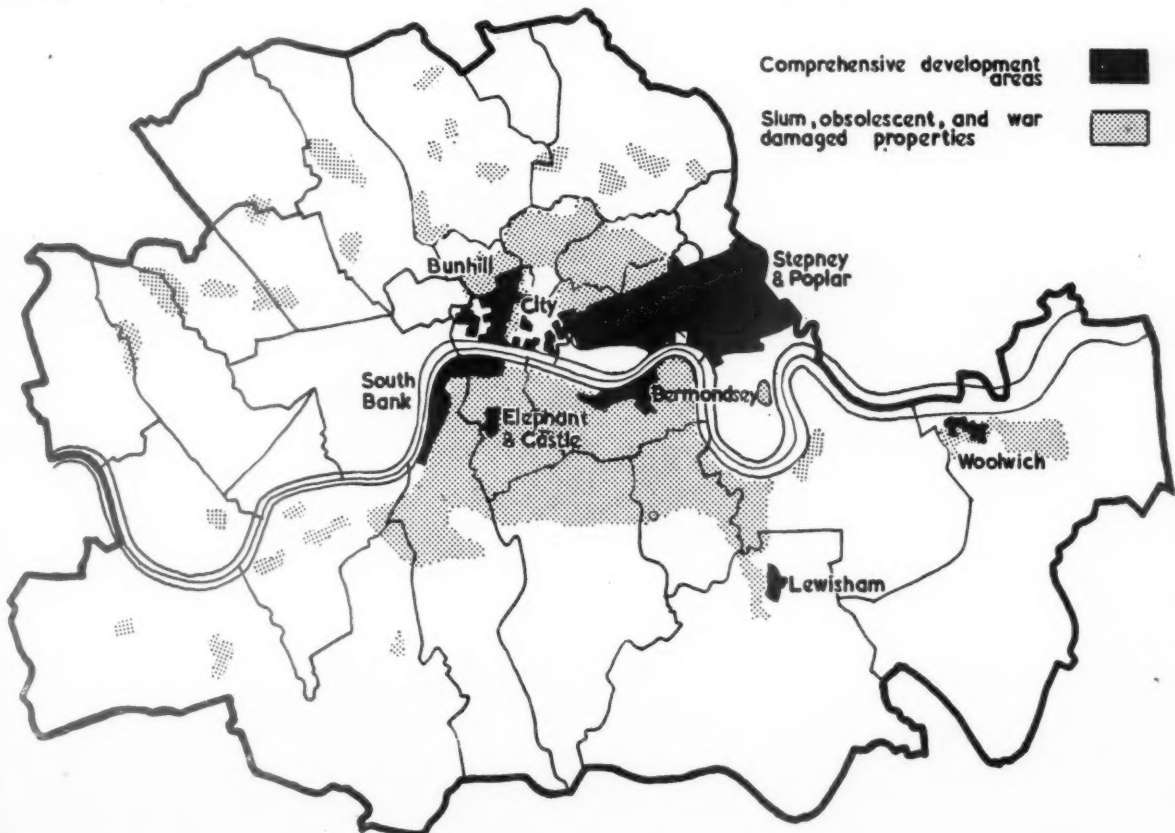
It is estimated that the maximum annual gross capital expenditure which the Council could undertake during the period of the Development Plan would amount to roughly £27 million during the next 20 years, i.e., a total of £450 million over the whole period.

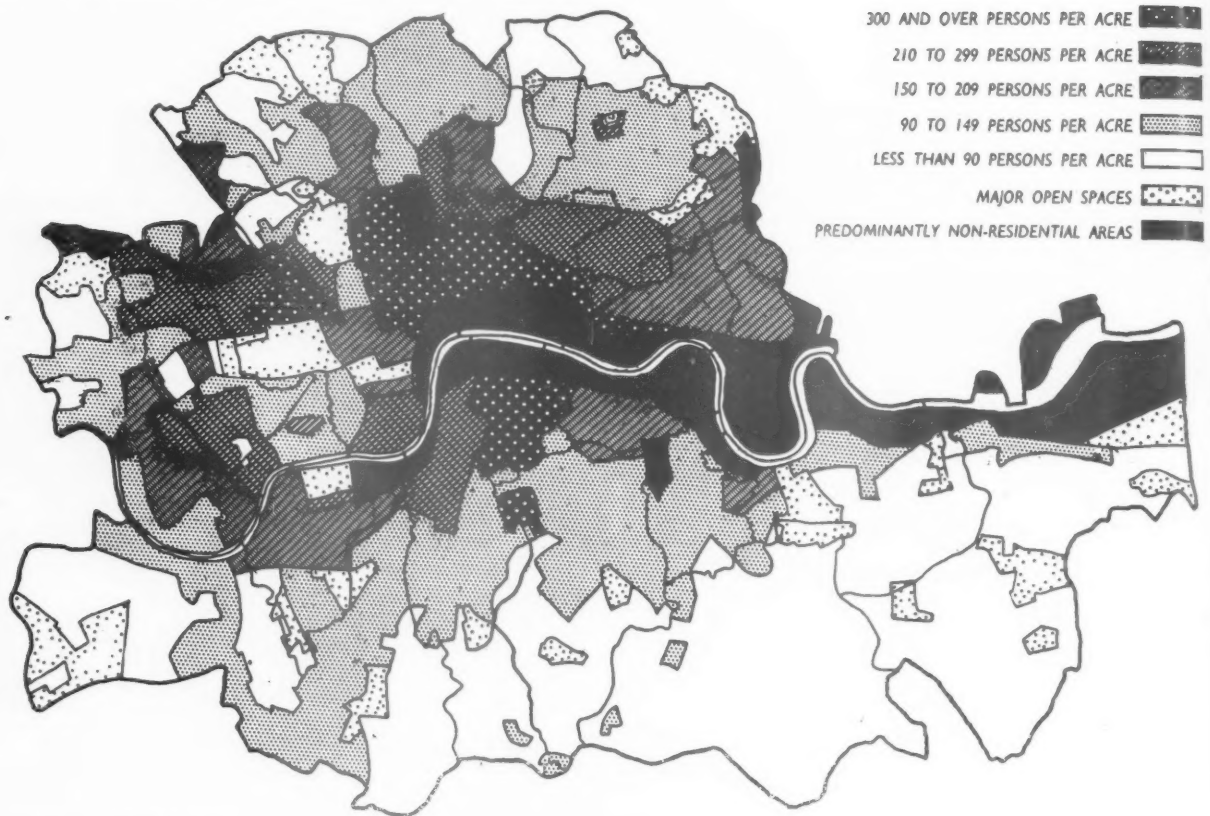
This estimate does not take into account the Council's present programme of housing in the out-county estates. Expenditure on this account during the first five years of the plan is likely to amount to about £33 million. The programme for in-county and out-county activities together, therefore, may amount to an average expenditure of over £34 million, compared with the £27 million considered to be within the Council's resources. The Council believes, however, that this scale of development is not likely to be reached owing to shortages of labour and materials, especially in the years of rearmament, and that some adjustment in the order of priorities for the different sections of the plan will have to be made from time to time.

The effect on rates of the development programme will be severe. The Council's Finance Committee have reported that a very heavy burden will be imposed on the rates, in spite of the fact that substantial contributions to services such as housing, health, education and road improvements will be made by way of Government grants. It appears that the additional burden at the end of the first five years would be about 9d. or 1s. and that at the peak period the additional rate charge on the Council's proposals alone may be between 3s. to 4s. These estimates, it seems, are based on the assumption that the financing of redevelopment by a local authority remains on the same footing as now.

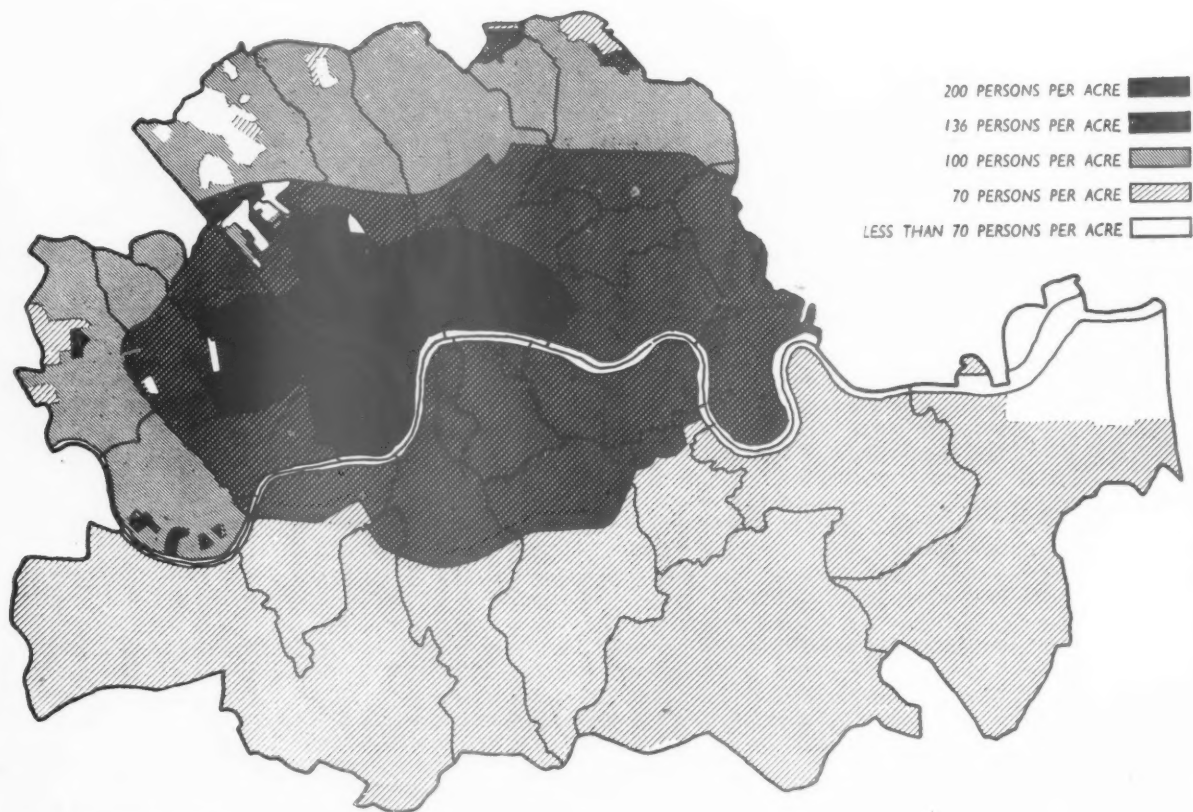
With the completion of this draft development plan the evolution of a London development plan has reached a new phase;

The areas of comprehensive development are shown superimposed on the main areas of slum, obsolescent and war-damaged property.





*Existing residential density.*



*Proposed residential density.*

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the foundation of an "operational" plan has, as a first examination of the plan would suggest, been well laid. The foundation can now be strengthened by constructive public criticism. As a beginning to understanding the plan it is as well to remember that the plan is partly a declaration of the Council's own development programme for the next twenty years and partly a forecast of the requirements of government departments, the Metropolitan Boroughs and other authorities. Furthermore, the plan only takes into account the development programmed for the City and County it neither considers development in the LCC out-county estates nor in the areas which may reasonably be expected to receive the over-spill of industry and population.

Apart from the written matter, the Council's Planning Department has prepared the full complement of survey maps and two basic plans, the Town Map which to a scale of six inches to one mile outlines proposed Use Zones, and the Programme Map which

shows the phases of development. These two plans summarise the developments projected: details are drawn to a scale of twenty-five inches to a mile for the series of plans for the eight comprehensive development areas proposed. These are the areas of upwards of 30 acres that the Council have selected for early rebuilding or redevelopment according to a comprehensive plan. The names of these areas were listed in last week's issue of the JOURNAL and in this issue are shown diagrammatic plans of three of the areas, the City of London, South Bank and the Elephant and Castle.

In the City 244 acres are scheduled for comprehensive redevelopment; in the first

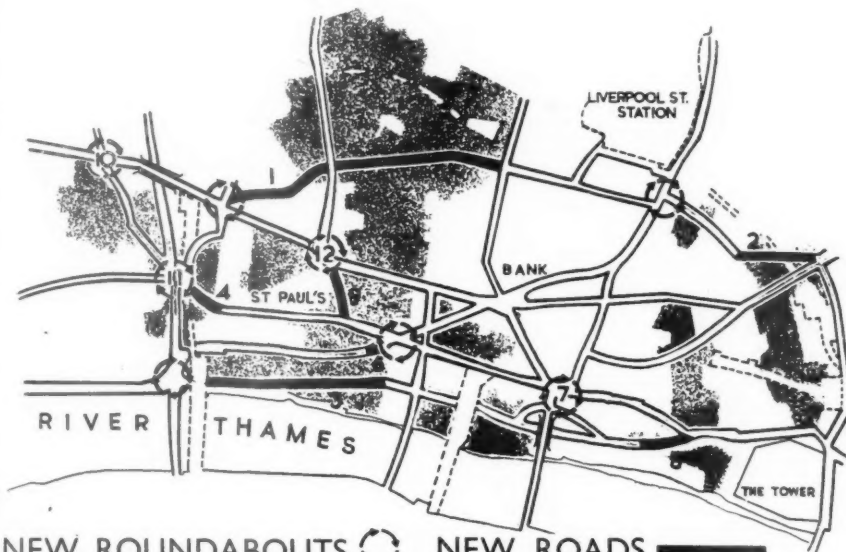
period a concentrated effort will be made on the rebuilding of the areas of bomb devastation behind Moorgate and to the east of St. Pauls.

Along the South Bank, an area of 425 acres including 137 acres of the River Thames, the first period building programme will be concentrated on the provision of new government offices.

At the Elephant and Castle, one of the worst traffic bottle-necks in London, the intention is to redevelop to new building lines and to lay out a large roundabout serving the existing roads some of which are to be widened, notably London Road.

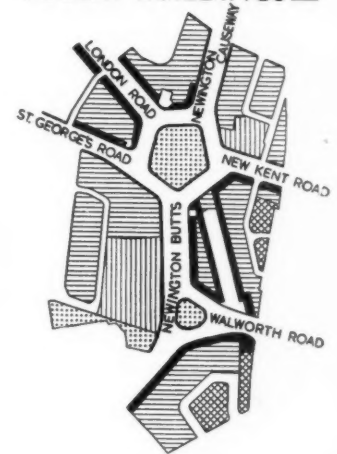
The series of maps and plans are completed

*Details from the map of comprehensive development areas shown on page 761. Below, left, map of the City of London comprehensive development area showing new roads and road widening proposals. Below, right, proposed development of the Elephant and Castle. Bottom left, road improvement at Hyde Park Corner. Bottom right, map of the South Bank comprehensive development area.*

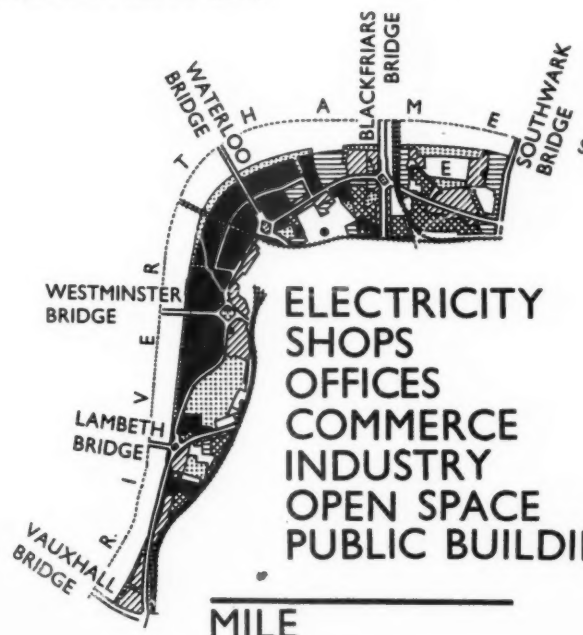
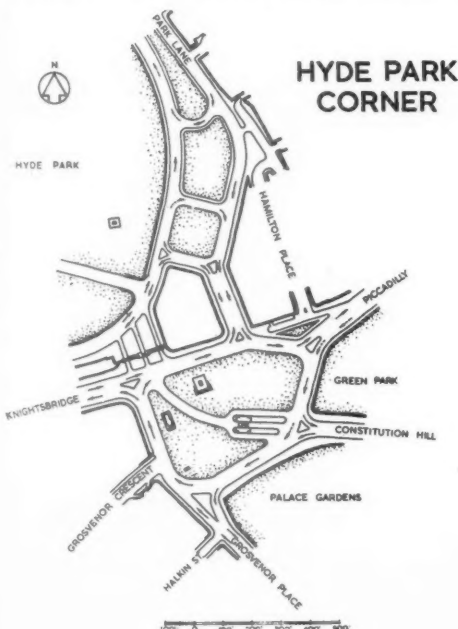


NEW ROUNDABOUTS ○ NEW ROADS ———  
EXISTING ROADS WITH IMPROVEMENTS ———  
AREA OF COMPREHENSIVE DEVELOPMENT ■

SHOPS  
COMMERCE  
INDUSTRY  
OPEN SPACE  
PUBLIC BUILDINGS



1/4 MILE



MILE



with the maps showing the Council's proposals for the designation of land as subject to compulsory acquisition during the first five years of the Plan. The designation maps number 150 and cover about 400 acres of land, excluding land in the City, Stepney and Poplar and Bermondsey areas of comprehensive development which are subject to declaratory orders under the 1944 Act. Besides the Council's own proposals for designation, 193 sites, amounting to some 290 acres, have been included on behalf of Ministers of the Crown, other local authorities and statutory undertakers.

#### ROADS

One of the most unsatisfactory aspects of the London plan is the continuing maintenance of the *status quo* on road layout while traffic congestion in central London steadily gets worse.

In their Development Plan the Council have abandoned any attempt to put forward a scheme of ring motorways for fast traffic. It is now recognized that major road im-

provements will have to start from scratch and that the maximum benefit will have to be derived from the limited expenditure that may be possible in the immediate future. The Council's road policy favours the retention of the existing road layout, with some new main road mileage however, and to concentrate effort on easing ordinary traffic circulation by the provision of improved traffic intersections. In the early stages of the 20-year period priority will be given to improving traffic flow in central London.

The plan is to form an inner circular road and two intersecting inner cross-routes. The inner circular road is bounded by Marylebone Road on the north, Elephant and Castle on the south, Edgware Road on the west and Aldgate on the east. The construction of new links, one known as the Western Avenue Extension between Marylebone Road and Western Avenue with a flyover over Harrow Road, and the other known as the Eastern Avenue Extension between Bethnal Green and Eastern Avenue

should eventually immensely improve east and west traffic flow.

Within central London the principal road works which the Council advocate for early construction follow the lines of the recently completed reconstruction of the roundabout at Parliament Square; in a number of cases the reconstruction will be a major project as the set back of building frontages will be entailed, for instance as at the Elephant and Castle. The sites of some of the projected new intersections include St. Giles Circus, Holborn-Kingsway, Kings Cross, Vauxhall Bridge and Victoria. The plan published in last week's JOURNAL gives an idea of the number of these intersections; they are sufficiently numerous to suggest that the appearance of central London will be considerably altered by the construction of these new intersections. Is it too much to hope that by the time of the public inquiry the Council's Architects Department will have prepared a number of studies of the effects of these new layouts in terms of three dimensions? The reconciliation of scales suitable for the pedestrian, the smooth flow of road traffic and the larger form of public and commercial building is certainly one of the most difficult forms of civic design; it may also be one of the most rewarding.

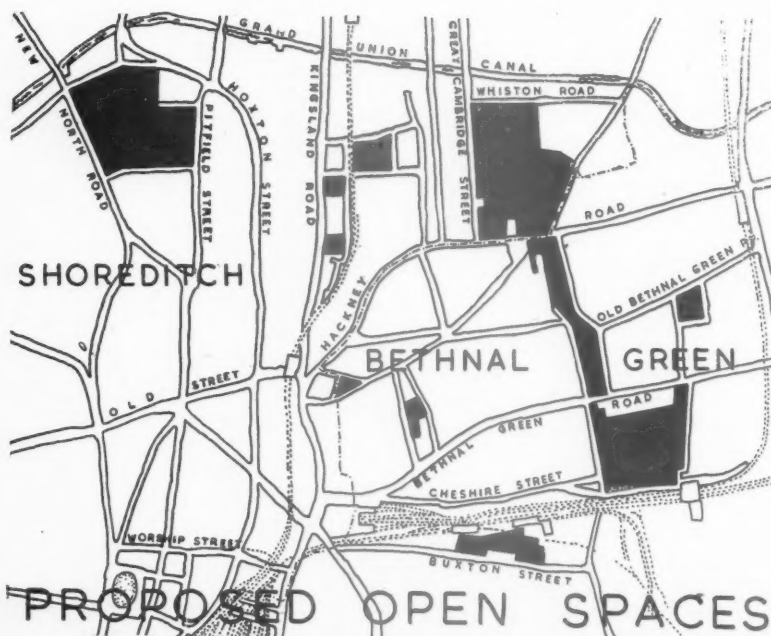
The Council's road proposals are based on the promise that in a congested urban area the great majority of road journeys are short and their argument is that the most satisfactory results will come through the speeding up of the average traffic flow generally; within the central area separation of local, local through and long distance traffic should not be attempted. The road proposals are a most interesting aspect of the development plan and they merit the closest attention.

The Council at present are powerless as regards relieving traffic congestion: they are not in a position to curb growth of traffic or the demand for it, and they are prevented from embarking upon new road works by the Government's ban on new road construction. How long this position should be allowed to continue is one of the most urgent aspects of the Development Plan.

#### INDUSTRY AND COMMERCE

Within the Administrative County 4,111 acres are in use for industry. The Development Plan's allocation is only very slightly less, namely about 4,102 acres. Of existing industry about 1,460 acres are located in residential and ancillary zones and most of this, it appears, can be regarded as non-conforming. Of these 1,460 acres it is estimated that 1,170 acres could be accommodated in industrial zones, leaving about 290 acres to be decentralized outside the County boundary. In planning for the re-location of industries the principle adopted has been to provide for the re-location of industries tied to London. Mainly land unsuitable for housing has been chosen.

The Council agree that the decentralization of industry is probably the most difficult of all planning problems. The Survey Report points out that overgrowth and intermixture of factories and houses are not local diseases, but have national causes and need national remedies and the solution depends on planned migration of industry and population from the County. Present regulations permit extension of existing industrial buildings up to 5,000 square feet without planning permission. These may take place without the Council's knowledge and could produce a large increase in potential employment. Opportunities to re-locate by planning control, industry and commerce which does not conform with zoning, are at present limited strictly to the Council's financial resources which are virtually negligible in proportion to the size of the problem. In addition restrictions on capital investment include what amounts to a temporary embargo on any Council action to limit non-conforming uses on purely town planning or amenity grounds. Moreover,



Top, plan of the county showing diagrammatically, with dots, proposed open spaces. Above, a detailed plan of proposed open spaces represented by two dots in the plan above.



within various use categories, changes can take place without planning consent so that factories can be vacated perhaps by a firm moving out-county, and be re-occupied without the Council or Government Departments even knowing. In any case the firm vacating the premises wants to dispose of them at full industrial value. There have also been instances of industry moving to New Towns from areas in London where increased industrial employment would be an advantage.

The foregoing remarks on the re-occupation of vacated industrial premises also apply in many respects to vacated commercial premises.

### HOUSING AND DENSITY

As an introduction to a few observations on density and housing it will be useful to summarize the population estimates which have been made for the Administrative County. Estimated population 1948, 3,339,100; estimated population 1951, 3,348,336; projected population 1971 (by natural increase), 3,549,600; estimated overspill of population, 380,000; tentative estimate of population for the Administrative County 1971, 3,150,000 (dependent on movement of overspill to districts outside the County).

The Council propose that the distribution of population should be in the form of five main density zones—200, 136, 100, 70 and under 70 persons to the acre. These figures represent average figures; within zones there may be higher or lower density pockets, e.g., higher on the fringes of large open spaces and lower in areas of special amenity. The 200 zone includes the City; Westminster; Finsbury; Holborn; the southern part of Paddington, St. Marylebone and St. Pancras; and a few small areas including that adjoining the west end of Kensington Gardens. The 136 zone covers most of Chelsea and such areas as Poplar on the north side and Southwark on the south side of the river. The 100 zone includes Fulham, most of Hammersmith and parts for instance of Hampstead. The 70 zone includes Greenwich and Woolwich and parts of Lewisham and Wandsworth and adjoining boroughs. The under 70 "zones" are more in the nature of low density pockets.

There are very few virgin sites left in the County on which the LCC and the Metropolitan Boroughs can start building houses. For one of these the County Council has recently produced its well known scheme for Roehampton; on the south-east side of London part of Woolwich marshes is scheduled for building over; and in parts of Wimbledon the very large gardens of some of the houses provide a few isolated pockets of virgin land. The main house-building programme will call for rebuilding on sites cleared of their at present sub-standard dwellings. One of the problems met with in redeveloping housing areas is to provide housing accommodation during the rebuilding period for the displaced people. One solution to the problem can have considerable bearing upon the layout of the completed estate. That is to design for variable densities, which however average to the approved standard, and to build to the higher densities first. In that way it is possible for the people who are to be rehoused in the area to stay in the vicinity during the building period.

It will seem that the redevelopment of the City and the County to the standards recommended will entail the moving out of the County of about 380,000 people. This number of people, or in current jargon, the overspill, derives from the redevelopment of areas of substandard housing and from the provision of sites for public buildings, schools, public open spaces and roads, etc.

It is estimated that in the first five years of the plan the overspill will amount to 145,000 and the balance of 235,000 will occur in the second period of 6-20 years.

Out of this figure of 145,000 for the first period accommodation can be found in the LCC out-county estates for 69,000 people only. Planning of the last estate is in hand and it is reckoned to complete all the estates in three years time, and a substantial part of the efficient LCC housing organization may be forced to a halt. At present the New Towns themselves are not building at a fast enough rate to absorb the balance of the overspill. The implications of this are serious.

Adequate provision must very soon be made for the speeding up of building in the new or expanded towns to house the LCC overspill of population or failing this the County Council will, surely, be obliged to develop further out-county estates or turn inwards and raise density standards with the consequential loss in housing standards and all other amenities of urban life.

Fundamentally, the issue of the London Plan is at stake.



### ABS

#### Competition Results

The winner of the first prize in the ABS competition for a monument to the good old days of architecture is T. A. Greeves, A.R.I.B.A. His design, and those of the second and third prizewinners, Peter Taylor and G. Finch, are illustrated on pages 758 and 766 of this issue.

The runners-up are Leslie J. Tucker, N. H. Musgrave, Denis Mason Jones (A.R.I.B.A.) and "S. Pecksniff."

### POOLE

#### Competition Designs on View

The premiated and commended designs in the Poole Technical College Competition will be on view at the RIBA, 66, Portland Place, W.1, from Friday, January 11, to Friday, January 25, 1952; weekdays 10 a.m. to 7 p.m., Saturdays 10 a.m. to 5 p.m.

### TIMBER

#### Licensing Procedure Simplified

The Government has decided to simplify the licensing procedure for timber.

As from January 1, the licensing periods will be of six months—January to June, and July to December—instead of three months. Licences for each of the half-yearly periods will be issued to meet a consumer's need during that licensing period; and he will, as

now, be entitled to acquire timber under that licence up to 15 days after the end of the half-year covered by the licence.

The special concession announced in Circular 97/50—dispensing with the need to apply for a fresh licence for timber included in a licence issued during the preceding quarter, but not acquired—will be withdrawn as regards licences issued for 1952 and subsequently. This concession will apply to licences for the acquisition of timber in the present quarterly period ending December 31, 1951, but for no longer.

From January 1, all softwood buying overseas will be done by private traders, who were only partially responsible for British imports in 1951.

The total imports in 1952 will be limited to an amount necessary to maintain the present rate of consumption and to provide necessary commercial stocks. The amount of sawn softwood expected to be imported privately during the year is estimated on this basis to be about 600,000 standards. Import licences for an initial total quantity of 350,000 standards will be issued as soon as possible. Licences will be given to persons or firms in proportion to the quantity of softwood which they have purchased under this year's arrangements.

### IDEAL HOMES

#### MOHLG Homes at 1952 Exhibition

Two of the three houses to be exhibited at the *Daily Mail* Ideal Home Exhibition in March next year will be examples of the cheap houses which Harold Macmillan, Minister of Housing and Local Government, spoke about in Parliament recently. The third house will be an old people's bungalow.

The MOHLG has asked the COID to co-operate in finishing the houses, and the council is inviting retail furnishers to help. For each house the council will pay a designer with experience of such work to select from a retailer's stock furnishings which are suitable for the building. No fee will be charged to the retailer, who will be given credits, together with facilities for distributing leaflets or price lists.

### ARCUK

#### Maintenance Scholarships in Architecture

The Architects' Registration Council of the United Kingdom offer for award in June, 1952, certain maintenance scholarships in architecture. The scholarships will consist of a grant for the payment of one-third of the school fees and, when necessary, a maintenance allowance. The scholarships will be renewable from year to year until the student has finished his or her school training. They will be available for students of British nationality who could not otherwise afford such training to enable them to attend architectural schools approved by the council. The scholarships will be available both for students who have already begun their training and for students wishing to begin their training. Scholarships will not be granted to students who will be less than 17 years of age on October 1 of the year in which the examination is taken. Particulars and forms of application may be obtained from:—The Secretary to the Board of Architectural Education, Architects' Registration Council of the United Kingdom, 68, Portland Place, London, W.1. Copies of previous years' examination papers may be obtained on payment of 6d. The closing date for the receipt of applications, duly completed, is January 31, 1952.



## MOW

## Leaflet on Damp-Proof Courses

"Damp-Proof Courses," No. 23 in the MOW series of advisory leaflets designed to meet the needs of the small builder, clerk of works, foreman or craftsman, explains in simple language the functions of damp-proof courses, where and why they are needed, what materials to use and how to lay them. The leaflet is published by HM Stationery Office.

Diagrams show damp-proof courses in cavity walls, over door and window openings, under window cills, and in parapets. The provision of a damp-proof layer on the surface of a solid ground floor, or as a "sandwich" between thicknesses of concrete, is explained. The leaflet contains notes on the types of d.p.c. material in common use and the precautions to be taken to obtain satisfactory results.

Copies of leaflets No. 23, and of previous leaflets already published, are obtainable from HM Stationery Office (post orders to PO Box No. 569, London, S.E.1) or through booksellers, at the following rates: 25 copies for 3s. 6d., 50 copies for 6s. 6d., 100 copies for 12s. 6d., 1,000 copies for £5. These costs include postage.

Single copies are 3d. each. Postage on quantities less than 25: up to 4 copies, 1½d.; up to 14 copies, 2d.; and over 14 copies, 3d.

## SOUTH BANK

## Architect Wins "Sunday Times" Competition

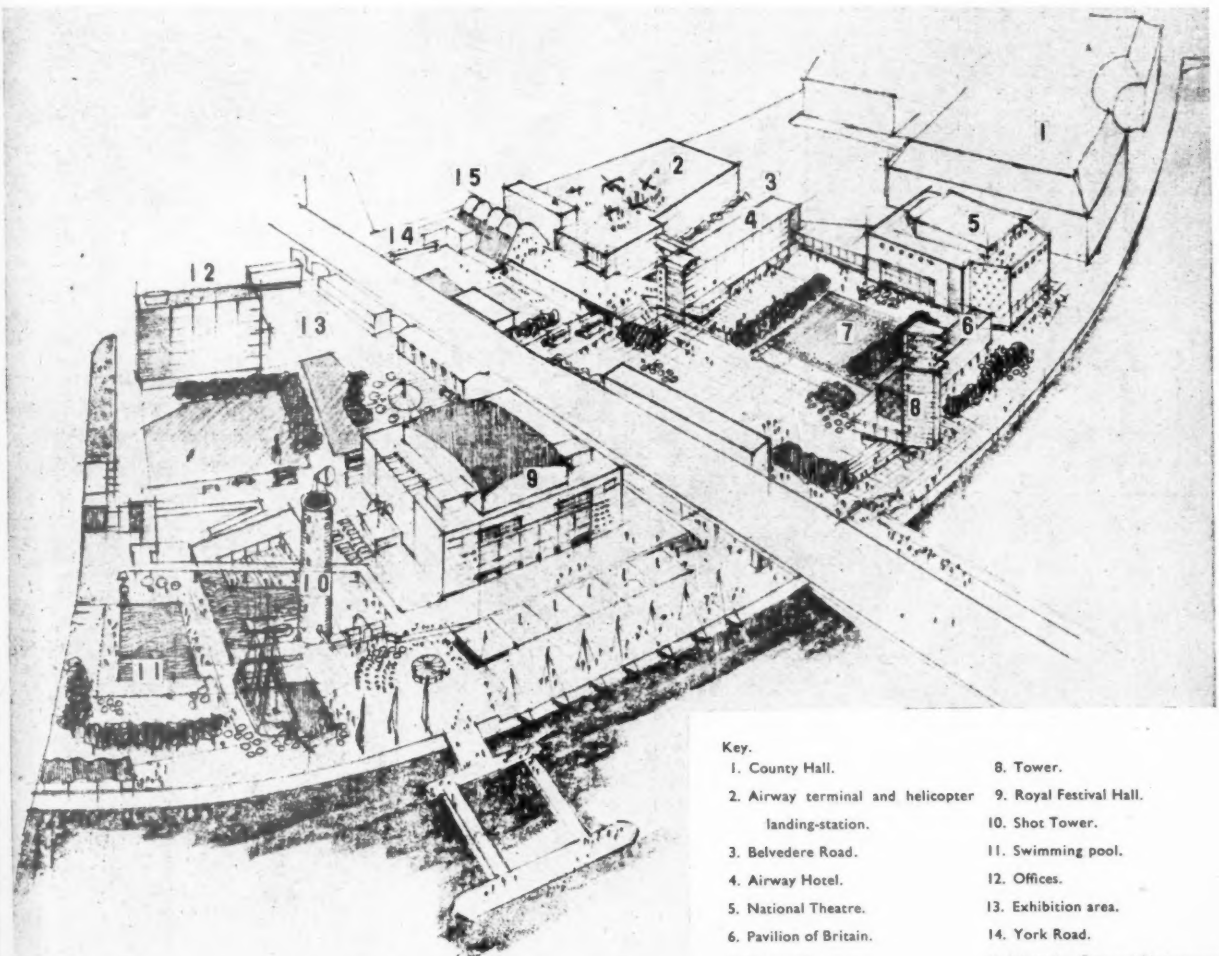
The *Sunday Times* South Bank competition has been won by D. Mason Jones, A.R.I.B.A., of Linton, Yorks, whose design is illustrated below. According to the judges, Sir Alan Herbert, John Summerson and Sir Stephen Tallents, "a surprising number of competitors missed the very definite lead given by the buildings, prescribed as permanent in the conditions." But, the judges' report continues, Mr. Jones's plan "does suggest a good conversion of the ephemeral Festival idea into a useful, lively and charming quarter of London." No competitor was able to persuade the judges that government buildings would be a "welcome addition to the site," and they considered that schemes for hospitals, educational centre, conference halls, etc., failed, in so far as they treated the site "much like any other site." In Mr. Jones's design, the National Theatre, with its view across the river, forms the end of a square in which there are shops, cafés, trees and fountains. On the south side of the square an airways hotel is linked to the airways terminal and helicopter landing station, with a multi-storey garage below. This has a frontage of offices and shops to Belvedere Road. From the "Theatre Square" would be views across the river to Westminster through the columns of the

"Pavilion of Britain," and the Tower would form a new vertical feature with sight-seeing platforms. The riverside walk, which runs the length of the site contains cafés, bars, boats, bookstalls and small open air exhibitions, and an old windjammer dry-docked on the terrace above gives added interest to the landing stage. Around the shot tower a swimming-pool forms a summer recreation centre, and this is linked to the permanent exhibition-area formed round the "Lion and Unicorn" building, the Telecinema and television pavilion. The judges described the "Theatre Square" as "urbane without being too formal" and liked the way Mr. Jones has planned the down-stream site. They had their doubts, however, about the "Pavilion of Britain" and thought "something less bulky, such as a riverside restaurant, . . . a preferable alternative." The first prize was £100; the second prize (£25) was won by K. G. A. Feakes, of Earley, Berks., who, to quote the judges, "boldly surrenders most of the up-stream area to a botanical garden and, in general, shows an appreciation of spaciousness notably lacking among most of his fellow competitors."

## LAND RECLAMATION

## Urgent Need for Action

The "Reclamation of Abandoned Industrial Areas," was the title of a paper read by L. Dudley Stamp before the RSA, recently. The following extracts are



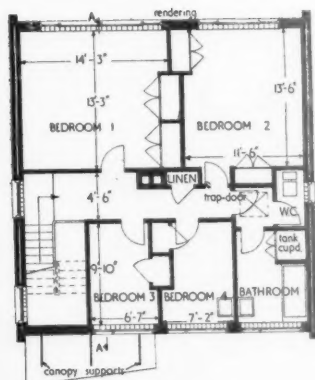
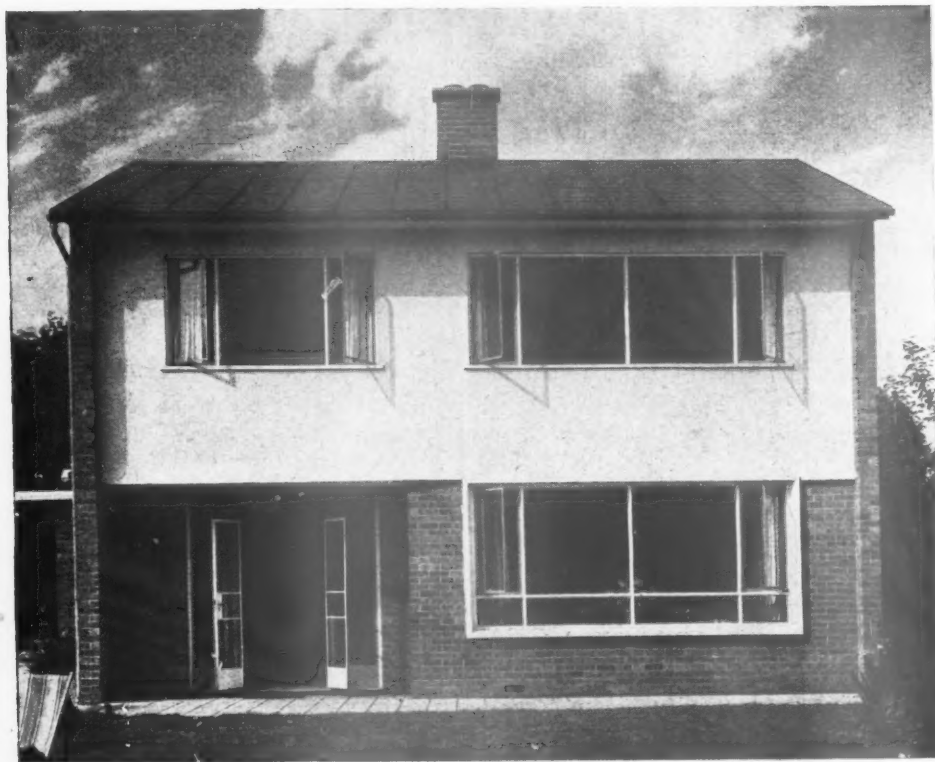
## Key.

- |  |                                   |
|--|-----------------------------------|
| 1. County Hall.                                    | 8. Tower.                         |
| 2. Airway terminal and helicopter landing station. | 9. Royal Festival Hall.           |
| 3. Belvedere Road.                                 | 10. Shot Tower.                   |
| 4. Airway Hotel.                                   | 11. Swimming pool.                |
| 5. National Theatre.                               | 12. Offices.                      |
| 6. Pavilion of Britain.                            | 13. Exhibition area.              |
| 7. Theatre Square.                                 | 14. York Road.                    |
|  | 15. Waterloo Gate and Underground |

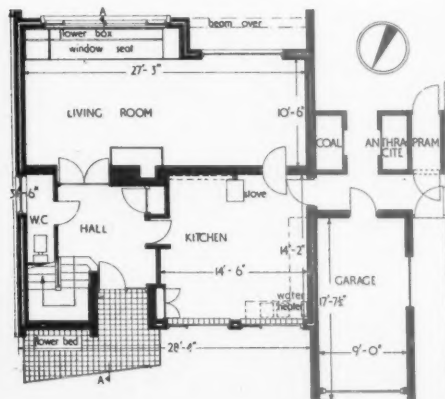
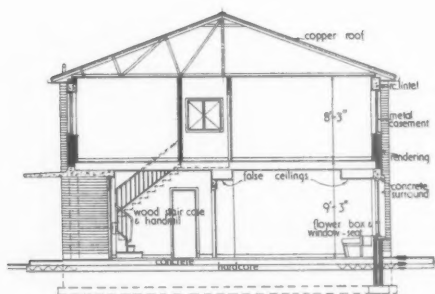
The winning design in the *Sunday Times* South Bank Competition. See note on this page.



## HOUSE IN PENSHERST GARDENS,



First Floor Plan

Ground Floor Plan [Scale:  $\frac{1}{8}'' = 1'-0''$ ]

Section A-A

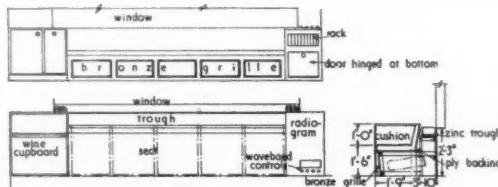


In this house for a private client in Edgware, designed by David and Ruth Stern, maximum ground floor flexibility and four bedrooms on the first floor were required. The kitchen is divided into two areas by a cupboard fitment which incorporates a table for breakfast or other meals. The site is 42 ft. wide by 150 ft. deep on a north-south axis and lies between existing properties. The south facade overlooking the garden is seen left; on the opposite page, top and bottom, are two views of the north facade facing the road. The house, which was restricted to 1,500 sq. ft. is 30 ft. deep and mainly to avoid a high tiled roof to span this depth, a copper roof on 1-in. fibreboard was chosen. The 11-in. exterior cavity walls are faced with hazel sand faced bricks and pale blue rendering at



## EDGWARE, MIDDLESEX

first floor level. The tiles on the porch wall, seen right, and the cast aluminium rainwater goods are blue grey. The ground floor is concrete with 2-in. screed and finished with wall-board on a bituminous membrane as insulation and carpeted. The first floor is of joists and boarding. Internal partitions are of 3-in. breeze blocks. The general contractors were G. V. & E. Conway. For sub-contractors see page 784.

Details of Living Room Fittings (Seen Below) Scale:  $\frac{1}{4}$ " = 1'-0"

taken from Professor Stamp's paper: "The reclamation of abandoned industrial areas is of very great importance to this country for at least two reasons. One is economic the other aesthetic. Britain is a crowded country and every acre is precious in the national economy. There ought not to be any waste lands—not a single acre should be lying idle with its fate undecided. From the aesthetic point of view it may be more difficult to assess the importance of restoration.

"It is sufficient to say that not only is the acreage involved very large, but that an even greater acreage is affected indirectly. In calculations which I put recently before the Town Planning Institute I indicated that within the next twenty years the execution of our housing programme, the extension of mineral workings—including coal, ironstone, gravel, chalk, limestone, clay, etc.—and other developments in hand or contemplated, would require anything from 500,000 as an absolute minimum to 2½ million acres of what is at present open farmland, to be transferred to other uses. It is a shattering thought that if we accept the extravagant demands of housing standards we may cover with houses and other urban developments in the near future an area more than the combined surface of the counties of Berkshire, Buckinghamshire, Oxfordshire, Hertfordshire and Bedfordshire. I do not think it is any state secret that the government departments concerned have been moved to look at the problem involved, and that the official view—though not published in detail—is that the acreage which will be so used is of the order of 750,000 acres, equal to the whole of the counties of Berkshire and Bedfordshire. The greater part of this expansion will take place over productive farmland unless intensive use can be made in the re-development of land already devoted to non-agricultural use. That is to say, every acre of derelict or waste land which can be re-used. As an excellent example of reclamation showing many of the problems involved, let us take the old Black Country. Many local authorities are involved in this area, some of them do not extend beyond the confines of the old coalfield, whilst others extend beyond to the surrounding non-industrialized farming areas.

"The first group, those confined to the coalfield, have more or less been compelled to redevelop old industrial sites for housing and other purposes. Those of the second group tended to show the inevitable trend and to demand open farmlands for their housing extensions rather than to face the problem of redeveloping their derelict lands, thus eating into the country's land resources and leaving existing eyesores intact.

## DIARY

*How the South Bank Exhibition was Planned and Built.* Hugh Casson. Three lectures to children. (Tickets on application.) At 66, Portland Place, W.1. (Sponsor, RIBA.) 3 p.m.

DECEMBER 31, JANUARY 2 AND 4

*Expression in Modern Architecture.* Frederick Gibberd. At 66, Portland Place, W.1. (Sponsor, RIBA.) Also announcement of award of prizes and studentships. 6 p.m. JANUARY 8

*Neighbourhood Planning in the New Towns.* S. L. G. Beaufoy. At 13, Suffolk Street, S.W.1. (Sponsor, the Housing Centre.) 6 p.m. JANUARY 15

## HOUSING

at BRYNMAWR, SOUTH WALES

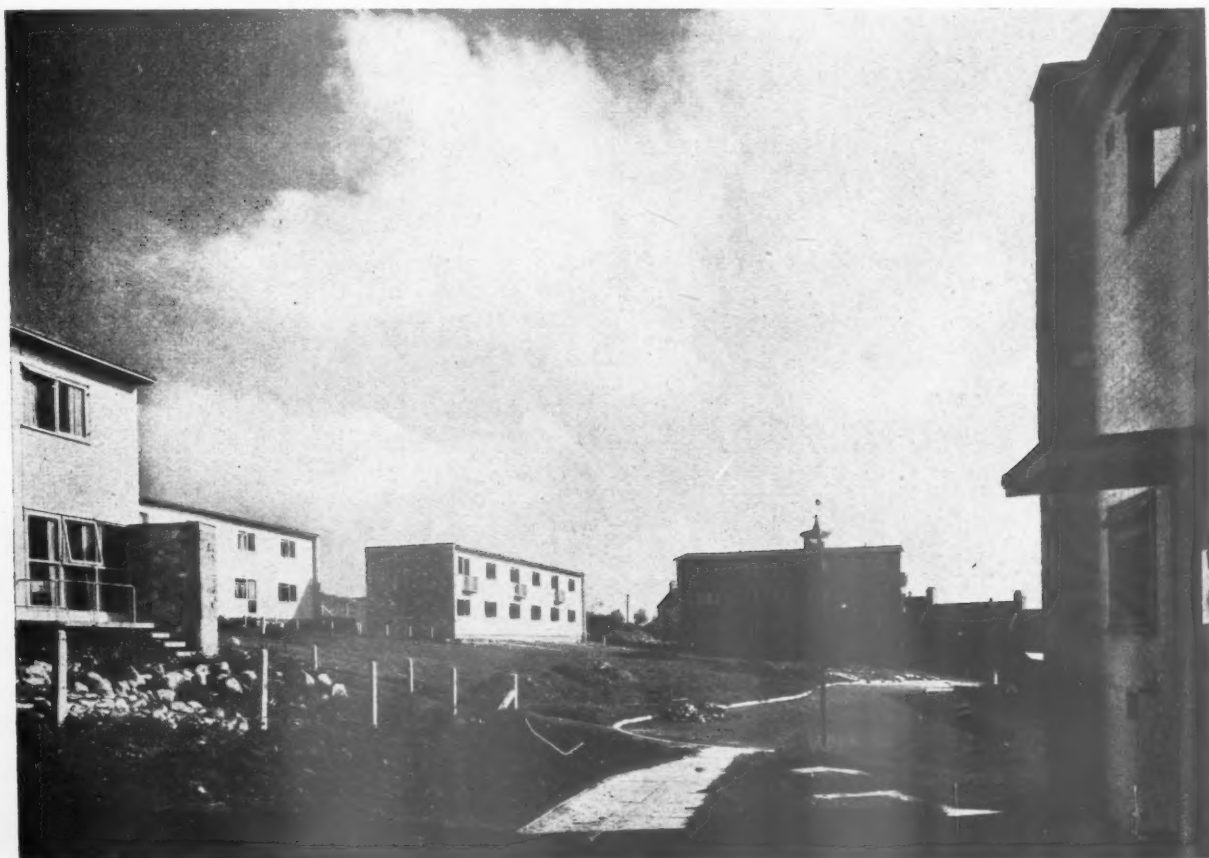
designed by YORKE, ROSENBERG and MARDALL

associate-in-charge : J. PENOYRE

structural consultant : OVE ARUP and PARTNERS

The first stage of the housing scheme at Brynmawr to be completed contains 20 houses and 15 flats and a small community centre on the ground floor of the block of flats. The Brynmawr and District Housing Society was formed for the housing of key workers employed by the Brynmawr Rubber Company at their new factory, and the society manages the housing and a communal garden for four houses which do not have an individual plot.

*View looking north-east.*



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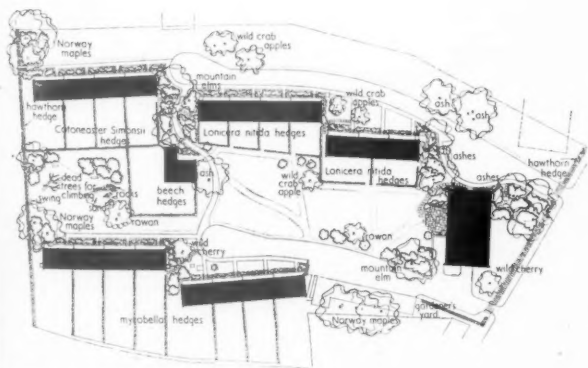
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*Above, looking north-east at the model of the site. The completed portion is on the right.*

**SITE.**—The ground slopes steeply to the south and the terrace houses are laid out to follow the contours with the blocks of flats at right angles on an east-west axis. The overall density will



Layout and planting plan for stage one

be about 16 dwellings per acre when the scheme is fully developed.

**PLAN.**—The simplest possible plan form has been adopted and repeated for the sake of economy.

*Below, view from the undeveloped part of the site, looking south over the new terrace houses.*



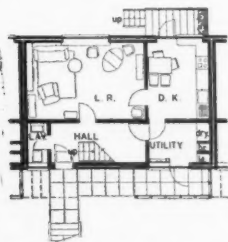


Looking west, with three-storey flats on the left.

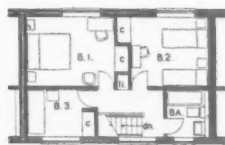
## HOUSING

at BRYNMAWR, SOUTH WALES

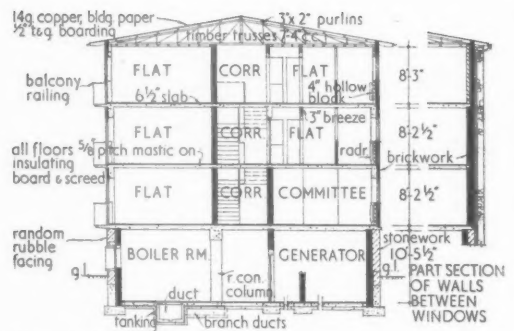
designed by YORKE, ROSENBERG and MARDALL



Ground floor plan of terrace house



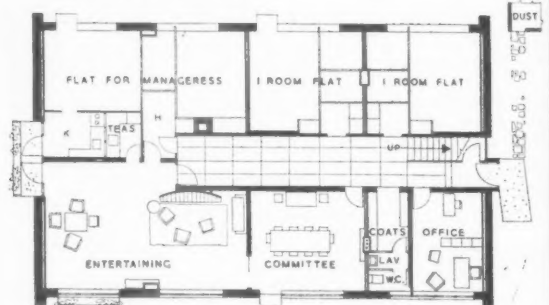
First floor plan [Scale:  $\frac{1}{8}'' = 1'0''$ ]



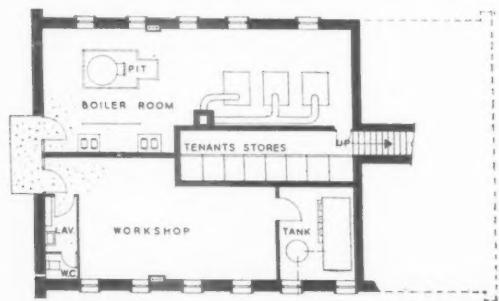
Cross section through flats



Typical upper floor plan



Ground floor plan [Scale:  $\frac{1}{4}'' = 1'0''$ ]



Basement plan of 3-storey block

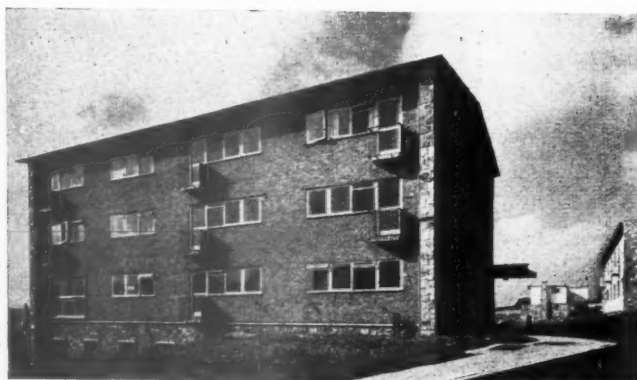
Right, south and west facades of terrace house block. Extreme right, looking north-east at terrace houses from four-bedroom house.







*Right, looking north-west with the south facade of a three-storey block on the right. Below, east and north facades of flat block.*



A glass-roofed yard to each house provides storage for dustbins, bicycles, etc., and for clothes drying. The boiler house for the entire scheme is situated on the lower ground floor of the block of flats.

**CONSTRUCTION.**—The houses have external cavity walls of  $4\frac{1}{2}$ -in. common bricks with an inner skin of 4-in. breeze. The party walls have two 4-in. skins of breeze and the partitions are either  $4\frac{1}{2}$  in. brickwork, brick-on-edge or 3-in. breeze. The ground floor is concrete with the raised portion of precast concrete slabs serving as a heating



East and north facades of four-bedroom house.

## HOUSING

at BRYNMAWR, SOUTH WALES

designed by YORKE, ROSENBERG and MARDALL

The four-bedroom house. Below, east facade. Right, south and east facades.



First floor plan of four-bedroom house

Ground floor plan [Scale: 1/8" = 1' 0"]

duct. End walls to terraces and flats and walls below ground floor slab level are built in second-hand local stone. The block of flats has load-bearing brick external walls with RC floor slabs.

**FINISHES.**—External walls of terraces are rendered in alternating colours of grey, white or pink and a facing brick is used for side walls of the flats. The floor slabs in the block of flats have a layer of glass silk under the reinforced screed. Internally walls are finished with oil-bound distemper in standard colours and one wall to each room in the flats is papered. Rubber floor tiles are laid in ground floor rooms and in the flats, except in utility rooms, where quarry tiles are used. Aluminium sinks are installed in houses and stainless steel sinks in flats.

**SERVICES.**—The boiler house for district heating is sufficiently large to contain additional boilers to serve at least 100 dwellings with central heating and hot water. The boilers are oil fired and thermostatically controlled. The raised portion of the ground floor in the houses has pipes suspended under the floor slabs.

The contract price for the houses was about 23s. per sq. ft., but due to increases in materials and labour costs, the final figure is expected to be about 25s. The general contractors were W. & A. Davies, Ltd. For sub-contractors see page 784.

## SCHOOL EXTENSION

at RUSTHALL, TUNBRIDGE WELLS, KENT  
designed by PITE, SON and FAIRWEATHER  
in collaboration with S. H. LOWETH, County Architect

An old country house was converted some three years ago to provide accommodation for 30 children and staff as a special school for girls. The buildings illustrated here are the new assembly hall, foyer and practical room, which are connected to the original building by a short ramped corridor, and a boiler house which has been converted from the original stables. Further extensions are to be added later to provide new classrooms, practical rooms and a dual-purpose hall to accommodate, ultimately, 120 girls and 10 staff.

*South elevation of new assembly hall.*



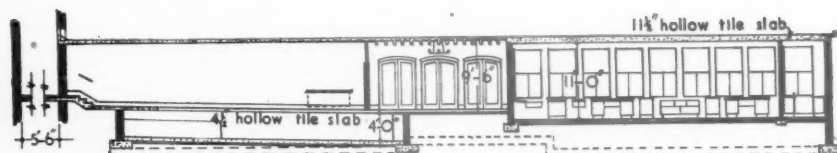


Looking east, with the assembly hall windows on the left.

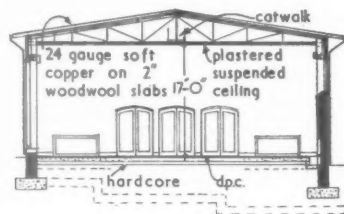
**SITE.**—The school is about half a mile outside the village of Rusthall and is set on high ground with good views to the north-west, in which direction the ground falls steeply. The site is well wooded and fine trees screen the buildings from the road.

**PLAN.**—The assembly hall has been planned to flank the entrance court and not to obstruct the fine views which are obtained from the common rooms in the old building. The foyer opens directly on to the gardens and the scenery dock and green room are accessible from the entrance court.

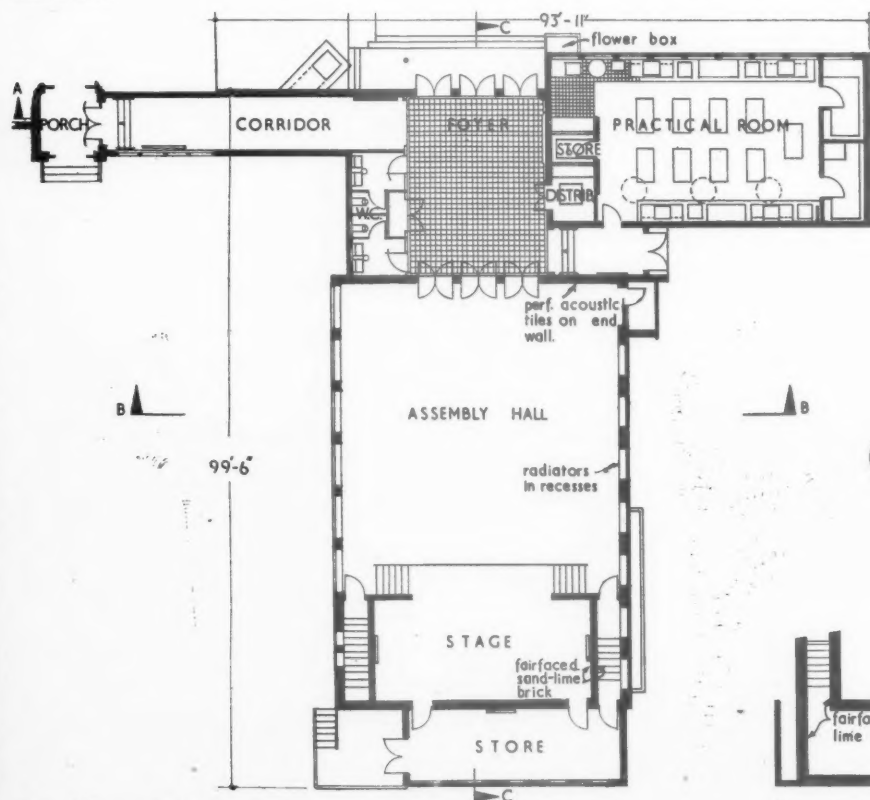
**CONSTRUCTION.**—The assembly hall and practical room have load-bearing cavity brick walls, hollow tile flat roof slabs and suspended floors. The assembly hall roof is carried on light steel trusses and purlins. To construct the boilerhouse the whole of the front stone wall of the stables was removed and the elevation remodelled in brickwork and precast concrete



Section A-A



Section B-B



Ground floor and basement plans (Scale:  $\frac{1}{4}'' = 1' 0''$ )

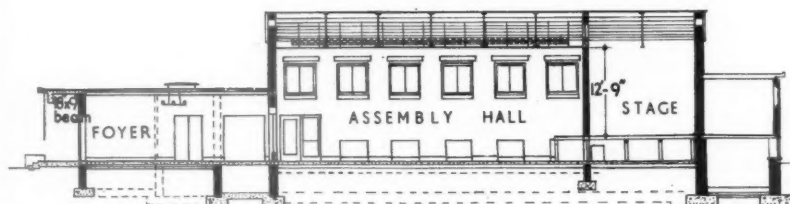
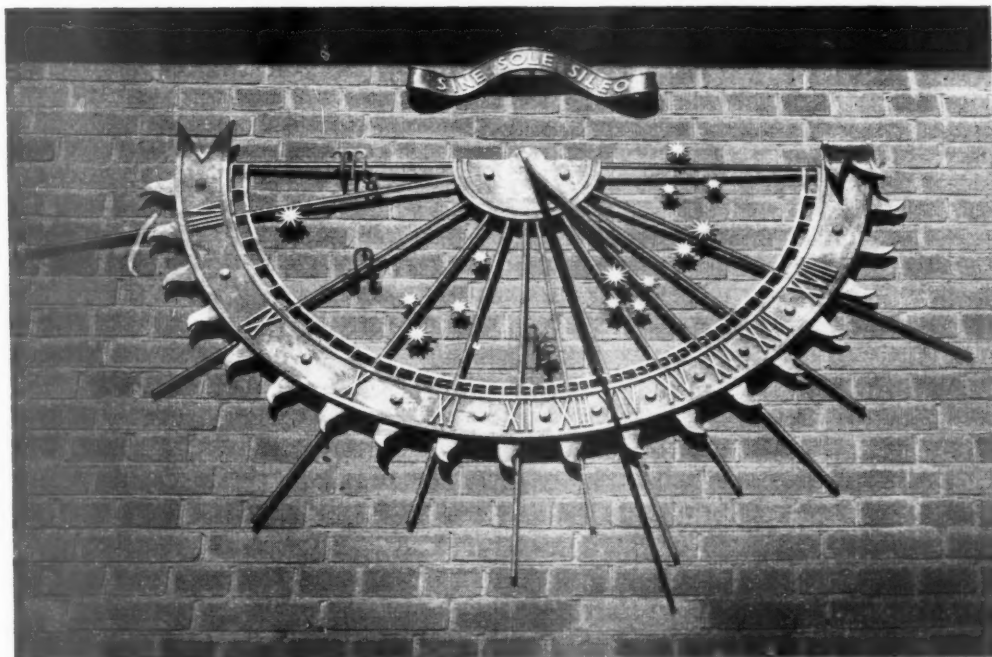
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Section

Below  
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The cast lead sundial on the south wall of the assembly hall.



Section C-C (Scale:  $\frac{1}{8}'' = 1' 0''$ )

## SCHOOL EXTENSION

at RUSTHALL, TUNBRIDGE WELLS,  
KENT

designed by PITE, SON AND FAIR-  
WEATHER

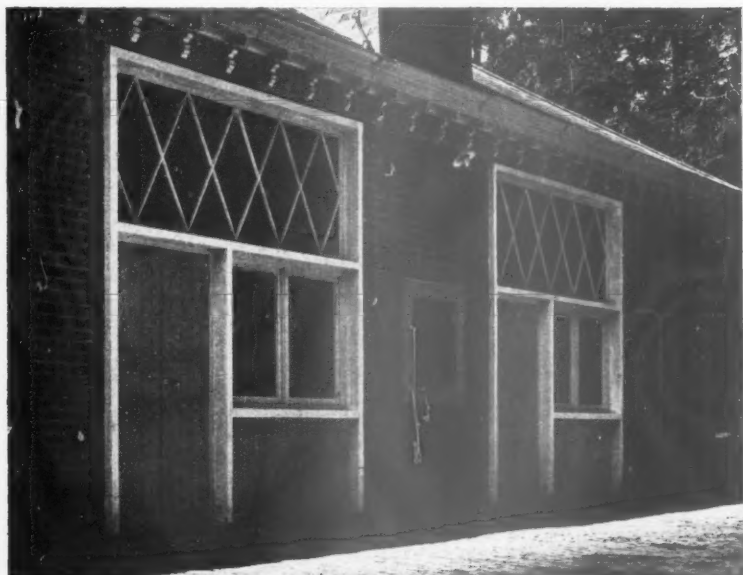
panels. Stone groins have been formed to bond the new brickwork into the existing stone walls at each end. The chimney stack is new, but the original roof, cornice and plinth are retained.

**FINISHES.**—The trusses of the assembly hall roof carry 2-in. woodwool slabs, cement slurry and 24-gauge soft copper. Flat roofs are insulated on the underside with 1-in. woodwool slabs acting as permanent shuttering and covered with screed,

built-up roofing felt and insulating tiles. The brickwork is in buff-coloured sand-lime bricks to tone with the colour and texture of the stonework in the original buildings, and the pointing has been tinted to match the colour of the brickwork. The windows are wood or steel set in wood frames. The cast-lead sundial on the south wall of the assembly hall was designed by the architects. The new wall of the boilerhouse is faced with golden-brown sand-faced bricks. Between the precast concrete panels is

Below, the assembly hall, looking towards the entrance doors. Below, right, the practical room.





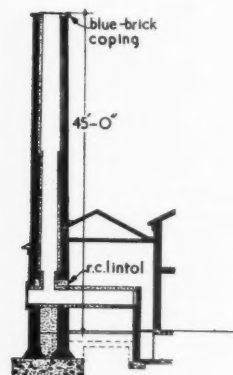
a soot door consisting of an old cast-iron fireback dated 1643 which has been set in a steel frame with corner cleats. Internally, the assembly hall and practical room are plastered, but elsewhere walls are of fair-faced buff-coloured brickwork with plastered ceilings. The assembly hall has a strip floor of Siamese kwao, the foyer has 9-in. square heather-brown quarry tiles with wide joints. The end wall of the assembly hall is covered with perforated acoustic tiles, all walls are white and the ceiling is pale blue. The walls in the practical room are dove grey, the ceiling white, doors blue-grey or silver-grey with white frames.

The contract price was £16,366, plus engineering services, part of which are for future extensions. The price per cube foot is 2s. 6d.

The general contractors were F. J. Moreton & Son, Ltd. For sub-contractors, see page 784.

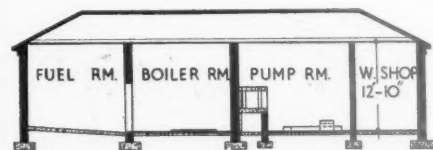
## SCHOOL EXTENSION

at RUSTHALL, TUNBRIDGE WELLS, KENT  
designed by PITE, SON AND FAIRWEATHER

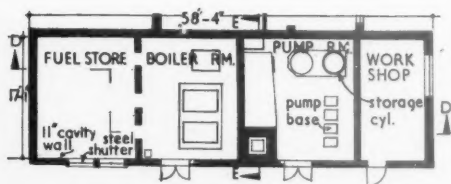


Section E-E

*Above, the east facade of the converted boiler house. Right, steps leading to the back stage entrance to the assembly hall.*



Section D-D



Plan of boiler-house (Scale:  $\frac{1}{4}$ " = 1' 0")



*Chance*  
GLASS

FOR SCIENCE, INDUSTRY AND THE HOME

## CROSS REEDED

Cross Reeded has two reeded patterns at right angles to each other on opposite sides of the glass. The reeds are convex (as distinct from the concave flutes of Reeded and Reedlyte glasses) and form a series of lenses which give almost complete obscuration and at the same time permit a very high light transmission. Cross Reeded is used in bathroom and lavatory doors and windows, and in all kinds of partitioning where privacy is an essential.

Other Chance decorative glasses include Narrow & Broad Reedlyte, Narrow, Broad & Major Reeded and a variety of figured glasses. Besides their normal architectural uses they are employed in lighting fittings, diffused lighting panels and decorative lighting schemes. Special lighting glasses such as 'Luminating' (which has a very narrow convex, reeded pattern) are also available.

### TECHNICAL DETAILS

#### FOR CROSS REEDED GLASS

Width of reeds  $\frac{1}{2}$  in.

Light Transmission 85 per cent.

Thickness and  $\frac{1}{8}$  in. (36 oz./sq. ft.)  
weight  $\frac{1}{16}$  in. (44 oz./sq. ft.)

Maximum size of sheets 100 x 42 in.

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Glass Works, Smethwick 40, Birmingham.  
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# Floor Finishes

## ...for under floor heating



*The Domestic Science  
Kitchen at Longcroft School.*

The selection of a floor covering suitable for use over radiant heating installations need present no difficulty to the architect using modern invisible panel warming. Semastic Decorative Tiles meet all the requirements. With an average K figure of 3.5 Semastic Decorative Tiles may be described as a floor covering of medium thermal conductivity. Hence radiation is neither impeded nor does the floor feel unduly cold during non-operational periods of the heating system. The photograph illustrates a portion of a large-scale installation recently carried out for the County Architect of the East Riding of Yorkshire, Mr. K. F. Giraud, A.R.I.B.A. In addition to being completely suitable for use over radiant heating installations, Semastic Decorative Tiles possess all the properties architects demand of floor

surfacings—great durability in service, decorative appeal, initial economy and ease and inexpensiveness of upkeep. Descriptive literature, samples and estimates are available upon request from any of the Approved Contractors undertaking Semastic Decorative Tile installation as listed below.

## SEMASTIC

*Decorative Tiles*

*a product of a Dunlop Company*

Countrywide installation is provided by the following floor laying specialists who represent the highest standard of experience and workmanship available in the country.

- ALBA FLOORING CO. LTD. • J. A. HEWETSON & CO. LTD. • HOLLIS BROS. LTD. • HORSLEY SMITH & CO. (HAYES) LTD.
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## TECHNICAL SECTION

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

### THE INDUSTRY

By Brian Grant

#### WINDOW FANS

Hotpoint Ltd., has introduced recently the "Vecta" fan—a 7-in. diameter fan for fitting in the glass of an ordinary window. Fans of this kind provide a well-established means of ventilating small rooms with humid atmospheres, such as kitchens, and are quite simple to fix. This type needs only an 8½-in. diameter hole in the glass and extracts 17,500 cu. ft. of air per hour. This is equivalent to 12 changes of air per hour in a room 14 ft. by 12 ft. Made almost entirely of light alloys, the complete unit weighs only 8½ oz., the price is £8 15s. (no purchase tax) and the rating, only 32 watts. The external louvres slope downwards, so that any rain that may penetrate should drain out again, along the curved body of the casing. (The Hotpoint Electric Appliance Co. Ltd., Crown House, Aldwych, London, W.C.2.)

#### LIGHTING FITTINGS

Pretty unusual in these times is the announcement by Courtney Pope that they have reduced the prices of many of their commercial and display series of lighting fittings and, at the same time, added some new models to their range of multi-light fittings. The photograph shows ceiling type C36, a 3-ft. 6-in. square fitting designed to take six 3-ft. tubes. The tapered sides are in metal and a similar fitting is also produced for recessed mounting, only the egg-crate louvres being visible. (Courtney, Pope (Electrical) Ltd., Amhurst Park Works, Tottenham, London, N.15.)

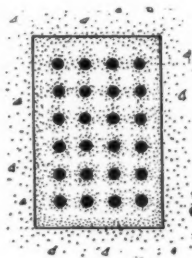
#### RAILWAY SIDINGS

Architects, perhaps, are not concerned often with the layout of railway sidings, but there are, occasionally, factory jobs when a knowledge of technical terms comes in useful. So, if you want to know about the different types of chair for flat-bottom and bull-head rails, or if you can't remember the difference between a similar flexure turnout and an outside single slip, write for a copy of Ward's *Rails and Rail Accessories*. This firm sells new and used equipment of all kinds, as well as having a design section to advise on layouts. (Thomas Ward Ltd., Albion Works, Sheffield.)

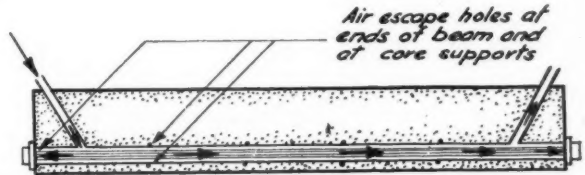
#### PRESTRESSED CONCRETE

Stressed Concrete Design Ltd. has just produced an interesting manual on the Magnel-Blaton system for post-tensioning prestressed

concrete. The system is a relatively simple one and, like all post-tensioning, is particularly suitable for site work. It is claimed that average workmen, with little or no specialized knowledge or equipment, can fabricate a tensioning cable of any size direct from the coil of wire on any construction site. The wire pattern is maintained throughout the length of the cable by means of spacing grilles at regular intervals. These have comparatively little frictional resistance and the wires are free to move in relation to each other during the tensioning process. The space between the wires also allows them to be completely enclosed when the



Left, typical section of Magnel-Blaton cable after grouting. Below, diagram showing flow of grout through the cable duct.



final grout is injected. The manual is well illustrated with drawings of the equipment used and photographs of work under construction. A sensible production, agreeably free from high pressure salesmanship. (Stressed Concrete Design Ltd., Lynton House, 54, South Side, Clapham Common, London, S.W.4.)

#### TIMBER PRESERVATION

Jenson & Nicholson have recently issued a revised edition of *Enemies of Timber*, which was first published something like fifteen years ago. Two useful new features are the tables showing how to identify the various fungi which attack timber and how to distinguish between the various types of wood-boring beetle. As most readers will know, this firm distributes "Cuprinol" preservatives and insect destroyers and, I find, somewhat to my surprise, that there are now

no less than ten different grades, from "SQD" green, a general preservative against all fungi, including the arch enemy *merulius lacrymans*, to "Micronil" for canvas, felt and hessian. In between come the various beetle killers, "FBD"—a general purpose type—and "Special A"—for use against death watch beetle—though this should be used only in well-ventilated buildings.

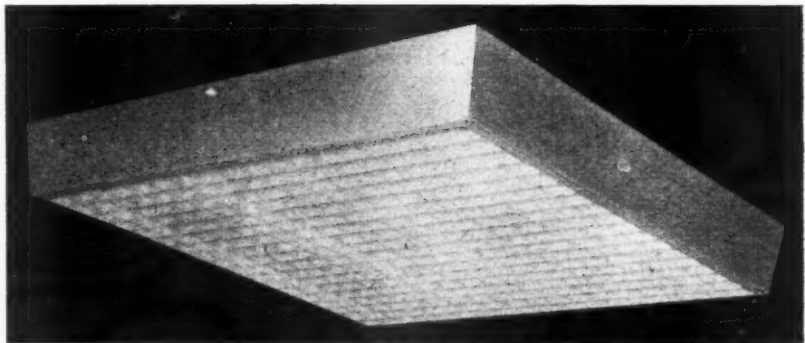
A legal acquaintance of mine once remarked that there were only two certain cures for dry rot—a seven-year lease and a good fire. There is a certain amount of truth in this, but I suspect that the real reason for failures is not that the fungicides are no good, but that it is all too easy to try to save money and not cut back the infected wood far enough. Unless this is done properly one cannot expect much success.

Incidentally, I hope you saw Jenson & Nicholson at the Building Exhibition, where there was a framed notice warning of the dangers of Lyctus beetle. Untreated, the frame had been attacked by the subject of the warning, who (or should I say which?) had given quite a pretty demonstration of wood-destroying technique. (Jenson & Nicholson Ltd., 36, St. James's St., London, S.W.1.)

#### SMALL GENERATING PLANTS

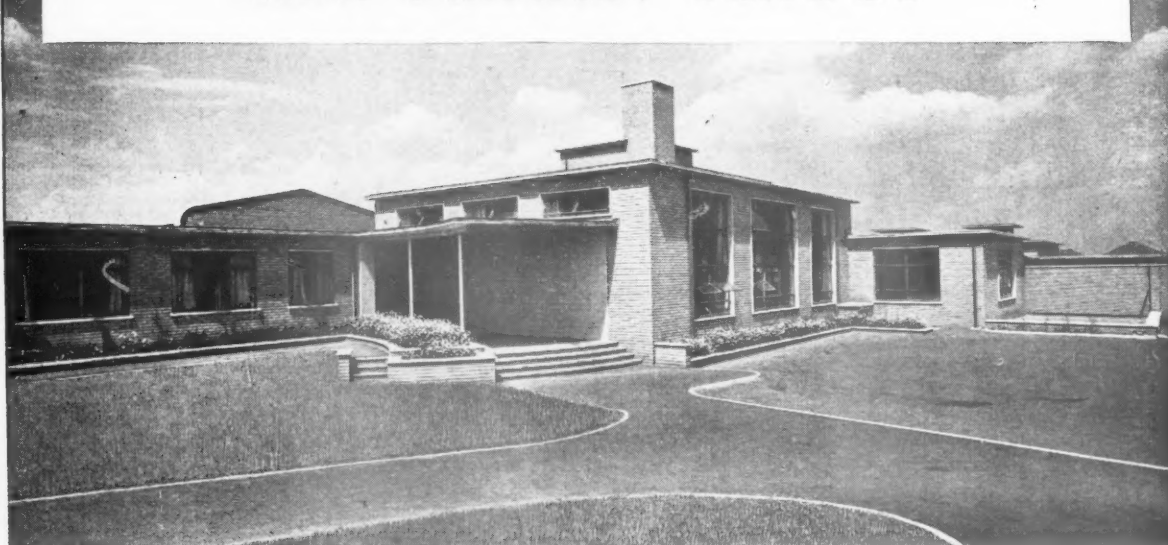
Now that the season of power units is back again it is, perhaps, worth mentioning that quite a number of small generating plants are on the market. A private plant large

enough to provide power for cooking or water heating for a house would be extremely expensive to install, but there are other jobs, such as emergency lighting, which are well within the capacity of a comparatively small plant. There are, too, essential services in experimental laboratories which may have to be maintained at all costs, and for these purposes a range of diesel generators in sizes up to 10 kilowatts has been introduced recently by Diesel Equipment Ltd. All the sets are powered by air-cooled diesel engines made by Armstrong Siddeley. The sets are made for battery charging and normal starting, or with automatic starting so that they take over at once if there is a mains failure and close down again as soon as the mains supply is restored. The engines are air cooled by a fan incorporated in the flywheel, so there need be no trouble in cold weather. (Diesel Equipment Ltd., Uxbridge, Middx.)



A Courtney Pope egg-crate ceiling lighting fitting, designed to hold six 3-ft. tubes.

## AN INTERESTING NEW PRIMARY SCHOOL



**Wentworth Drive County Primary School, now completed, has some novel and interesting features:**

"A primary school to accommodate 320 pupils. A school that is practical, pleasing to see, and one that the ratepayer can afford. A school, above all, to be built quickly." These were the broad terms of the brief given to Mr. S. H. Loweth, F.S.A., F.R.I.B.A., M.I.Struct.E., Kent County Architect. Only 16 months later, pupils began taking their first lessons in Wentworth Drive School.

Speed of erection was a prime consideration. Wentworth Drive thus became one of the first schools in Britain to incorporate aluminium construction. Although the front of the building, as seen from the road (i.e. the Admin. Wing, Assembly Hall and School Meals Unit), is constructed of yellow stock brick in traditional style, the two long classroom-wings—which stretch out behind—were brought on site in the form of pre-fabricated aluminium units four feet wide, ready clad both outside and inside, and supplied by the Bristol Aeroplane Company. The result is a good-looking combination of old and new.

Classrooms and corridors were both con-

structed on direct-to-earth concrete, thereby saving time and expense. The flooring material used was Accotile (thermoplastic tile made by Armstrong Cork Company).

So satisfactory has the architect's design proved, that a second and adjoining school is shortly to be built next-door to the existing building, on similar lines. Wentworth Drive's heating-chamber and meals-unit are, therefore, double-sized. They will, eventually, serve both schools.

There are many modern features in the new school. It is, for instance, wired throughout for radio and gramophone reproduction. Perhaps, however, its most interesting facet is the quality of its interior decoration. A great deal of thought was devoted to this, in order to give pupils a pleasant place to work in, with no lack of variety. The colour-schemes, particularly, have been carefully devised, and have won praise from high authority.

Every classroom has a different colour-scheme—set off by the tile floors. Here, the architect was helped by the wide range of

*This new school in Dartford, Kent, was built in little over a year. The architect—Mr. S. H. Loweth, F.S.A., F.R.I.B.A., M.I.Struct.E.—went to some trouble to see that only building materials in full supply were specified. It is interesting to note that he used the same flooring material, in a variety of forms and colours, for well over half the ground-area of the building. He chose Accotile, the new asphalt-tile flooring made by the Armstrong Cork Company.*

colours in which Accotile is available.

All in all, a not-unimportant part in the project was played by Armstrong's Accotile. The decorative qualities of the tiles have given the floors an appearance of near-luxury. It is quiet to walk upon, and even in the corridors, where the hardest wear is expected, it will last well. It is very easily cleaned and—most vital—its extremely low price has helped to make Wentworth Drive School not only a first-class building but "one that the taxpayer can afford."

For full information about Armstrong's Accotile, architects and builders are invited to telephone or write to Armstrong Cork Company Limited, Flooring Department, Bush House, Aldwych, London, W.C.2. Tel: Chancery 6281. Scottish Branch: 5 Oswald Street, Glasgow, C.1. Tel: Central 5703.

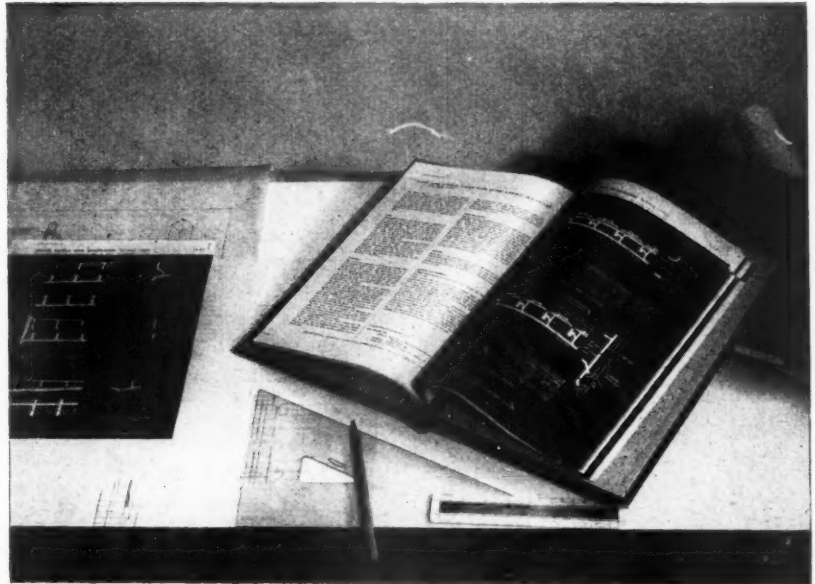
*The following were responsible for Wentworth Drive County Primary School: S. H. Loweth, Esq., F.S.A., F.R.I.B.A., M.I.Struct.E., County Architect; R. T. Green, Esq., F.R.I.B.A., Deputy Architect (in charge of Schools); R. C. Passmore, Esq., A.R.I.B.A., Principal Assistant; C. B. H. Cremer, Esq., A.R.I.B.A., Architect in Charge; Messrs. Gilbert Ash Ltd., 2 Stanhope Gate, London, W.1, General Contractors.*

### ACCOTILE\*

*"The low-cost floor with the luxury look"*

\*British Registered Trade Mark 663698, Armstrong Cork Company Ltd., Registered Users.

# THE LIBRARY OF INFORMATION SHEETS



This week part of the Technical Section is devoted to the customary annual review of the Library.

From time to time, and regularly each December, all Sheets are examined and checked, and where a manufacturer's products form the subject of a Sheet the manufacturer in question is asked to certify that the data are still current. Where a Sheet is found to require considerable modification, it is cancelled and readers should remove such Sheets from their collections. Where only small variations are involved, revision notes enable the Sheet to be corrected.

The Sheet 46.Z (A-F) published in the issue of 13.12.51, and the two Sheets 46.Z (G-P) and (R-Z) published in this issue, give an up-to-date index cancelling all previous indexes.

On the following pages will be found a list of the revisions and cancellations which have become necessary during the year and a statement of the contents of the Library with all Sheets current at this date in correct sequence. For the benefit of new subscribers we also give information on the method of filing Sheets.

## REPRINTS

To enable new subscribers to complete their Library all Sheets published since the inception of the new series in October, 1947, have been checked and reprinted. Readers requiring sets or individual Sheets should fill in the form printed in the adjoining column. Sets are available as follows:

Oct., 1947-Dec. 22, 1949, inclusive	.....	£2 7s. 6d.
Oct., 1947-June 8, 1950	„	£2 16s. 6d.
Oct., 1947-Dec. 27, 1951	„	£3 6s. 6d.

Specially designed binding cases to hold approximately 100 Sheets may be obtained at the price of 5s. 0d. each (Postage 6d.). Individual Sheets may be ordered at the price of 3d. each.

## ORDER FORM

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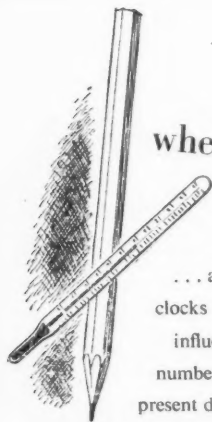
*"I cannot...make shoes  
like a shoemaker..."*

Wellington's reply to the praises of  
a flattering admirer claiming that  
he was superior only in his own field.

**WELLINGTON**  
TUBE WORKS LTD

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wherever people *'work to time'*

... as in factories, schools or hospitals — it is essential that all  
clocks should be synchronised, accurate and unaffected by outside  
influences — such as power cuts. A master clock controlling any  
number of slave clocks and time recorders is the ideal system for  
present day needs.

The Gibson electric clock photographed here is an example of a clock  
planned at the 'blue print' stage. It was constructed by us to a specific design,  
and has white Roman chapters on an orange vermillion ground, satin-finished  
brass hands and white moulding round the dial. It is erected in the assembly hall  
of the Crofton Town Court Lane County Primary School, Orpington.

The architects of this school were: E. D. Lyons, A.R.I.B.A., L. Israel, A.R.I.B.A. and T. B. H. Ellis,  
A.R.I.B.A., A.R.C.A., in collaboration with S. H. Loweth Esq., F.S.A., F.R.I.B.A. County Architect, Kent.

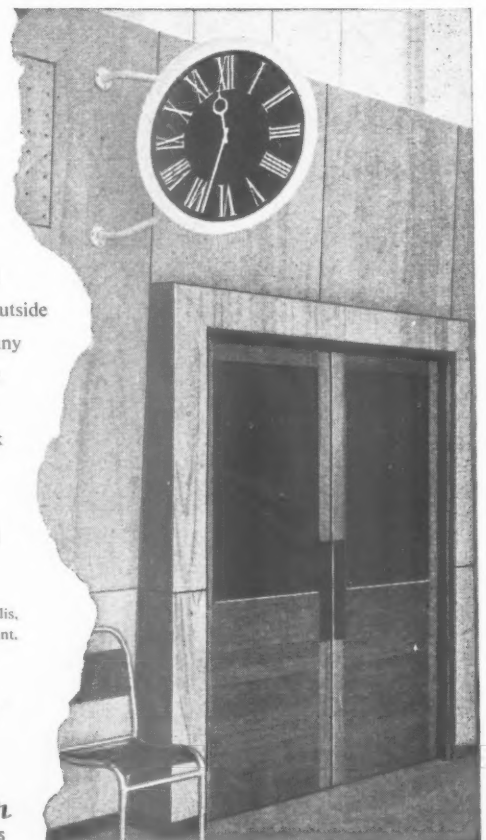
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TIMERS





## REVISIONS

During the last few weeks all published Sheets have been carefully examined to bring the information up-to-date, and, with the exceptions noted below, are certified as current and correct.

The following list sets out revisions to the Library for the year ending December 27, 1951. A record of the revisions for 1948, 1949 and 1950 was published in the JOURNALS for December 23, 1948, December 29, 1949, and December 21, 1950, respectively.

**1.B18.**—Face of Sheet—The invert levels shown are incorrect. For 381.00 read 371.00, for 380.00 read 372.00, for 382.00 read 370.00, for 381.50 read 370.50 and for 383.00 read 369.00.

**1.B32.**—Face of Sheet—The note at the bottom left of the Sheet reading "vanishing *parallel* for descending planes" should read "vanishing *level* for descending planes."

**7.C1 and 2.**—The name "Stonite Colorcast" has now been replaced by the name "Stonite Spatter Finish."

**7.C2,** see 7.C1.

**10.B1 and 2.**—Face of Sheets—Alloy designations have been revised in accordance with British Standards for General Engineering Purposes 1470 to 1477 and 1490.

**10.B2.**—Reverse of Sheet—Under heading "Manufacturers" delete Reynolds Light Alloys, Ltd., and Reynolds Rolling Mills, Ltd. Add: Aluminium Wire & Cable Co., Ltd., Port Tennant, Swansea, Glam.; William Mills, Ltd., Friars Park Road, Wednesbury, Staffs.; T.I. Aluminium, Ltd., Redfern Road, Tyseley, Birmingham, 11. See also 10.B1.

**13.C11.**—Face of Sheet—Brick number 39: Amend upper dimension to 7 in. and lower dimension to  $6\frac{3}{4}$  in.

**13.C12.**—Face of Sheet—Brick number 78 only: Amend  $6\frac{1}{2}$  in. dimension to  $6\frac{3}{4}$  in.

**14.L4.**—Reverse of Sheet—At the end of the paragraph headed "Construction" the last line should read "ceiling without an aluminium head rail" and not "with" as printed.

**15.C1 and 2, 22.D1 and 2, 27.F1, 28.D1 and 28.E10.**—Reverse of Sheets—The address of Bowaters Building Boards, Ltd., is now: Harewood House, Hanover Square, London, W.1. Telephone: Mayfair 9266.

**15.C2,** see 15.C1.

**18.F1.**—Face of Sheet—The name "Durex" in the centre right-hand diagram has now been replaced by the name Heavy Density. Reverse of Sheet—Delete paragraph under heading "Grades" and insert the following: The tiles are available in four grades—Medium Grain, Fine Grain Standard Density, Fine Grain Special Density and Heavy Density. The Standard Density and Medium Grain are recommended for areas likely to receive normal traffic; for areas likely to receive heavy or exceptionally heavy traffic Special Density and Heavy Density qualities are recommended.

The address of the Flooring Department, Armstrong Cork Company, is now: Bush House, Aldwych, London, W.C.2.

**18.G1.**—Face of Sheet—In the lower left-hand drawing the height of the "Accotile" skirting given as "4 in. or 6 in." should be amended to 4 in.

**19.G3.**—Face of Sheet—Reference to the anhydrous copper sulphate test in note 4 should be deleted and the following note substituted: "Existing solid concrete floors should be tested for dampness with a small pocket hygrometer."

**21.G1, 22.E1 and 2, 22.F1, 26.J3 and 27.B9.**—Reverse of Sheets—The telephone numbers of the London and Glasgow offices are now Whitehall 8073-4 and Govan 2141-3, respectively. There is now a Midland office at East Leake, near Loughborough, Leicester. Telephone: East Leake 231. Telegrams: Gyproc, East Leake.

**22.D1 and 2,** see 15.C1.

**22.E1 and 2.**—Face and reverse of Sheets—"Gyproc" plaster-

board panels are now supplied in  $\frac{3}{8}$  in. thickness only. See also 21.G1.

**22.E2,** see 22.E1.

**22.F1,** see 21.G1.

**23.C1.**—Face of Sheet—Delete base ties on elevation and upper right-hand section. Reverse of Sheet—Under heading "Ordering" add "(g) For folding or double doors the position and details of type of bolts to be used."

**23.C1, 2 and 3.**—Add to the list of manufacturers: Williams and Williams, Ltd., Rofton Works, Hooton, Cheshire. London Office: Victoria House, Southampton Row, W.C.1. Telephone: Holborn 9861.

**23.C2.**—Face of Sheet—Delete base ties on elevation. In the two "Angle Thresholds" details the door frame now finishes flush with the bottom of the angle. In the first detail the dimension of  $\frac{1}{2}$  in. should be deleted and a figure of  $\frac{7}{8}$  in. inserted, giving the height from the bottom of the door to the top of the angle threshold. Reverse of Sheet—Add footnote: "Profiles A, B and C are now available for external use." See also 23.C1.

**23.C3,** see 23.C1.

**24.C1, 2, 3, 24.D1, 2, 3, 4 and 8.**—Reverse of Sheets—The address of The British Metal Window Manufacturers' Association is now Burwood House, 16, Caxton Street, London, S.W.1.

**24.C2.**—Face of Sheet—The top-hung ventilators to windows type NC11F, ND11F, ND11F/S and NDV11F/S now extend the full width of the centre section instead of as shown. See also 24.C1.

**24.C2 and 3.**—Reverse of both Sheets—Owing to the present restrictions on the use of copper and zinc the handles and stays are now of pressed steel or malleable iron and the paragraphs headed "Fittings" should be amended accordingly.

**24.C3.**—Face of Sheet—The top-hung ventilators to windows type HC11F, HD11F, HD11F/S and HDV11F/S now extend the full width of the centre section instead of as shown. See also 24.C1 and 2.

**24.D1, 2, 3, 4 and 8,** see 24.C1.

**26.J3,** see 21.G1.

**27.B9.**—Reverse of Sheet—The opening sentence under the heading "Sound Absorption" should be amended to read: "This ceiling provides a surface with an average sound absorption coefficient of 65 per cent. over the range of frequencies 250 to 4,000 cycles per second." See also 21.G1.

**27.F1,** see 15.C1.

**28.D1,** see 15.C1.

**28.E10,** see 15.C1.

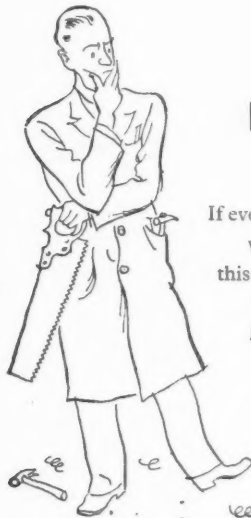
**29.J4.**—Face of Sheet—The dimensions for hopper feed models 2A to 3 are now A: 7 ft.  $2\frac{7}{8}$  in., B: 3 ft.  $1\frac{1}{8}$  in., and for model 4 are now A: 8 ft.  $1\frac{1}{8}$  in., B: 4 ft.  $0\frac{5}{8}$  in.

**29.J5.**—Face of Sheet—In the table giving sizes for chain-drive models—cross tube boilers, an additional model is now available, ALC4B (capacity 1,125) of the same dimensional requirements as ALC4 (capacity now 1,460). Sizes A and B for models CLC5, CLC5A are now 9 ft. 3 in. and 7 ft., respectively.

**32.C3.**—Face of Sheet—Overall sizes of No. 2 heater are now  $11\frac{1}{8}$  in. wide by 2 ft.  $0\frac{3}{8}$  in. high. Width of No. 15 heater is now 2 ft.  $0\frac{3}{8}$  in., depth 1 ft.  $0\frac{1}{2}$  in. and vertical distance between fixing bolts 1 ft.  $6\frac{3}{4}$  in. Reverse of Sheet—Under heading "Characteristics"—Type No. 2—Amend sub-heading "Recovery rate" to "Recovery time." Under heading "Components" the type No. 2 outlet spout is now standard 7 in.

**35.B1.**—Face of Sheet—Dimension of 6 ft. 9 in. from datum point to centre line of joist should be amended to 6 ft.  $6\frac{1}{2}$  in. from datum point to near edge of joist.

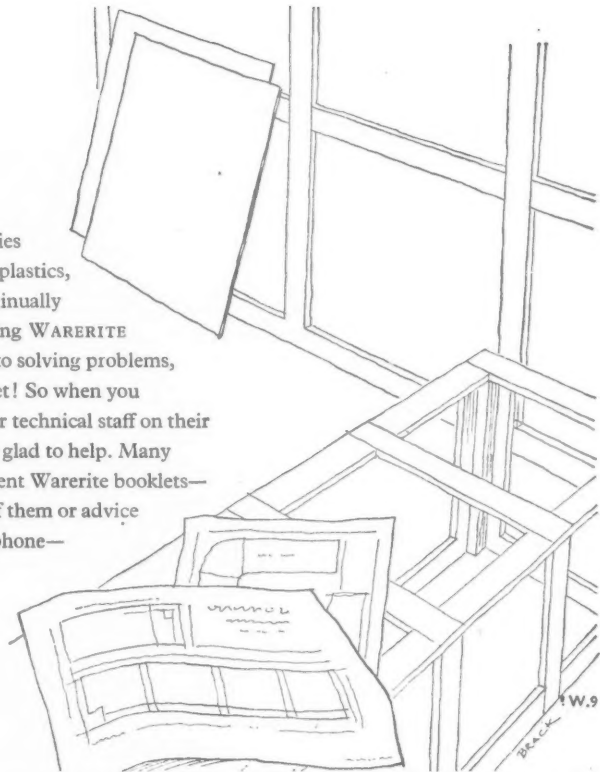
**36.B1.**—Face of Sheet—The back wall of the recess to which the "Everyway" hose-reel brackets are fixed should be  $4\frac{1}{2}$  in. minimum thickness brickwork. Reverse of Sheet—Amend



## Puzzled?

If ever you find yourself in difficulties when working with laminated plastics, this may interest you. We are continually developing better ways of fixing WARERITE Materials, and when it comes to solving problems, we haven't been beaten yet! So when you strike any tricky snags put our technical staff on their mettle—they're only too glad to help. Many useful hints are given in recent Warerite booklets—if you would like copies of them or advice don't hesitate to write or 'phone—

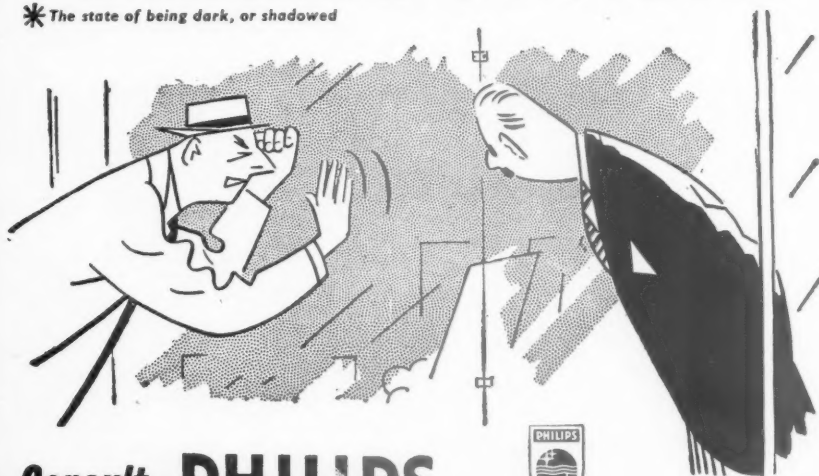
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**LAMINATED PLASTICS**



MADE BY WARERITE LIMITED (UNIT OF BAKELITE LTD) · WARE · HERTS · TELEPHONE WARE 502  
*Manufacturers of Decorative Laminates for over 20 years*

# TENEBOUSNESS\*

\*The state of being dark, or shadowed



**Consult PHILIPS  
ELECTRICAL  
LIMITED**

**on all lighting problems**

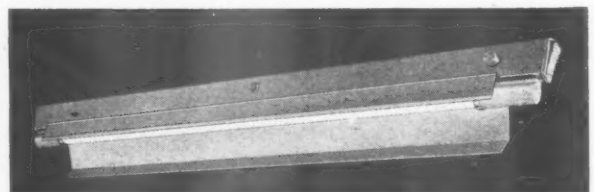
Light Group, Century House, Shaftesbury Ave., London, W.C.2.  
MAKERS OF: RADIO & TELEVISION RECEIVERS · "PHILISHAVE"  
ELECTRIC DRY SHAVERS, ETC.



**in a shop window  
causes  
POOR DISPLAY  
LACK OF ATTENTION  
LOST CUSTOMERS**

**N**O MATTER how clever a window display may be, or how good the products featured, potential customers will not be stopped if the lighting is dull and uninspired. In the customer's mind an uninteresting window means an uninteresting shop. Philips fluorescent lighting does so much to improve a shop's reputation and its business — by providing warm, bright, pleasant light that enhances the appearance of any display.

For shop windows: the "Ardan" fitting for Philips 80W. 5 ft. fluorescent lamp, in conjunction with the "Weymouth" spot-light. Other suitable fittings are "Ashcroft" and "Aberford".



text under heading "Construction": Side discs are now aluminium not moulded Bakelite.

**43.E1.**—Face of Sheet—The Type 1 floor unit only is fitted with a hardboard division. Reverse of Sheet—Under heading "Construction": Units may now be either of plywood or hardboard. Under heading "Fittings": Handles are now in hardwood.

**43.E13.**—The Warwick range of equipment has been redesigned and the information given is no longer accurate in detail. A single unit floor cabinet is now available measuring 1 ft. 9 in. wide by 1 ft. 9 in. deep by 3 ft. high. Both floor cabinets and sink units are now supplied 1 ft. 9 in. deep only. All wall cupboards are now 11 in. deep by 2 ft. 1½ in. high and the single unit wall cupboard has been reduced in width to 1 ft. 9 in.

**43.E14 and 16.**—The Flavel gas cooker has been redesigned but the overall dimensions remain as given on the Sheet. The refrigerator has been superseded by a larger model—5½ cu. ft. capacity—which measures 1 ft. 9 in. wide by 1 ft. 11 in. deep by 5 ft. 6 in. high.

Pending republication of revised versions of these Sheets and Sheet 43.E13 full details of the new designs may be obtained from the manufacturer.

**43.E16,** see 43.E14.

**44.D2.**—Face of Sheet—Bracket for fixing to steel is now 2½ in. and not 1½ in.

*NOTE: Revised copies of Sheets may be obtained on application to the manufacturer concerned.*

## CANCELLATIONS

Sheets **15.B1, 15.Z1, 19.G1** and **42.B2** were cancelled, revised and republished this year. Sheets **8.E1, 14.B1, 28.H1** and **32.D8** are being revised and will be republished. Sheets **43.E10** and **43.E11** have been cancelled and should be withdrawn from the Library.

## FILING INSTRUCTIONS

Every Information Sheet is perforated so that it may be readily removed from the JOURNAL and has a classification symbol printed in the top corner, for example, 32.C20. The key to the classification system is contained in Sheet 1.A1, reference to which should make filing a simple matter.

The first number of the symbol, 32, refers to one of the 46 main subjects into which the Library has been divided (in this case, Water Heating): the letter that follows refers to the section, C (in this case, units: gas), under subject 32: the final number indicates the position in which the Sheet is to be placed in the appropriate section.

Every December a check list of the contents of the Library is issued showing the correct sequence of all Sheets published to date. Throughout the year, any revisions to or cancellations of Sheets are noted in the JOURNAL and the Editor will always be pleased to assist if any difficulty is encountered in keeping the Library in order.

## CORRECT SEQUENCE OF COMPLETE LIBRARY AT DECEMBER 27, 1951

1.A1	1.A2	1.B1	1.B2	1.B3	1.B4	14.N5 (R'49)	14.N6 (R'49)	14.N7 (R'49)	14.N8 (R'49)	14.N9 (R'49)	15.B1 (C.R.'51)	29.A1	29.C1 (R'50)	29.C2 (R'50)	29.C3	29.C10	29.G1
1.B5	1.B5a	1.B6	1.B7	1.B8	1.B9	15.C1 (R'51)	15.C2 (R'51)	15.R1 (R'50)	15.S2	15.T1	15.T2	29.J1	29.J3	29.J4 (R'51)	29.J5 (R'51)	29.J6	29.J10
1.B10	1.B11	1.B12	1.B13	1.B14	1.B15	15.Z1 (C.R.'51)	15.Z2	16.J1	17.B1	17.B2	18.F1 (R'51)	29.J11	29.K1	30.B1	30.B2	30.C1 (R'49)	30.C2
1.B16	1.B18 (R'51)	1.L19	1.B20	1.B21	1.B22	18.G1 (R'51)	19.F1	19.F2	19.G1 (C.R.'51)	19.G2	19.G3 (R'51)	30.D1	30.D10	30.D11	31.B1	31.B2	31.C1
1.B23	1.B24	1.B25	1.B26	1.B27	1.B28	19.G4	19.Z1	19.Z10	20.C1	20.Z1	20.Z2	31.C2	31.C3	32.B1	32.C1	32.C2	32.C3 (R'51)
1.B29	1.B30	1.B31	1.B32 (R'51)	1.B33	1.B34	20.Z5	20.Z6	20.Z12	20.Z13	21.G1 (R'51)	22.D1 (R'51)	32.C10	32.C11	32.C20	32.C21	32.C22	32.C23
1.B35	1.B36	1.B37	1.B38	1.B39	1.B40	22.D2 (R'51)	22.D3	22.D11	22.D12	22.D13 (R'50)	22.D14	32.C25	32.C26	32.C27	32.C28	32.C29	32.C30
1.B41	1.B48	1.B49	2.A1 (R'49)	2.A2	2.A3	22.D15	22.E1 (R'51)	22.E2 (R'51)	22.F1 (R'51)	23.B1 (R'49)	23.B2	32.D7	32.D9 (R'49)	32.D10 (R'49)	33.B1	33.B2	33.C1 (R'49)
2.A4	2.B1	2.B2	2.B3	2.B4 (R'50)	2.H1	23.C1 (R'51)	23.C2 (R'51)	23.C3 (R'51)	23.H1	23.H2	23.H3	33.C2 (R'49)	33.C3 (R'49)	33.C4	33.C5	33.C6	33.C7
2.H2	4.A1	4.A10	4.A11	4.A12	4.A20	23.H4	23.H5	24.C1 (R'51)	24.C2 (R'51)	24.C3 (R'51)	24.D1 (R'51)	33.C8	33.C9	33.C10	33.C11	33.C12	33.K1
4.E1	4.E2	4.L1	4.L2	4.L10	4.L11	24.D2 (R'51)	24.D3 (R'51)	24.D4 (R'51)	24.D8 (R'51)	24.E1 (R'50)	24.J1	33.P1 (R'50)	33.Q1 (R'49)	33.Q2 (R'50)	33.Q3	33.Q4	33.U1
4.N1	6.A1 (R'50)	7.C1 (R'51)	7.C2 (R'51)	8.F1	10.B1 (R'51)	24.M1	24.M2	24.N1	21.N2	24.S1	25.A1	33.U10	35.B1 (R'51)	35.B2	36.B1 (R'51)	36.D1 (C.R.'50)	36.D2
10.B2 (R'51)	10.B3	10.E1	10.F1	10.G1	10.G2	25.A2	25.A3	25.A4	25.A5	25.A6	26.A1	37.C1 (R'50)	37.D1 (R'50)	37.D2 (R'50)	37.D3	37.H1	37.H1
10.G3	10.G4	10.G5	10.G6	10.G10	10.G11	26.C1 (R'50)	26.D1	26.D2	26.E1 (R'50)	26.E2	26.F1 (R'50)	37.H2	37.H3	37.H4	38.B1	38.C1	38.D1
10.G12	10.G13	10.G14	10.G15	10.G20	10.G21	26.F2 (R'50)	26.F3 (R'50)	26.F4 (R'50)	26.J3 (R'51)	26.J4	26.J5 (R'48)	40.B1 (R'49)	40.B2	42.B2 (C.R.'51)	42.C1	42.C2	42.C3
10.G22	10.J1	10.J2	10.J3	12.F1	13.C10	26.J6	26.J20	26.M1	27.B9 (R'51)	27.C1 (R'48)	27.F1 (R'51)	42.C4	42.C5	43.E1 (R'51)	43.E2	43.E12	43.E13 (R'51)
13.C11 (R'51)	13.C12 (R'51)	13.H1	14.L1 (R'50)	14.L2 (R'50)	14.L3 (R'50)	28.A1 (R'50)	28.A2	28.A3	28.D1 (R'51)	28.E10 (R'51)	28.E20	43.E14 (R'51)	43.E15	43.E16 (R'51)	43.Z2 (C.R.'49)	43.Z3	44.D1 (R'50)
14.L4 (R'51)	14.M1 (R'49)	14.N1 (R'49)	14.N2 (R'49)	14.N3 (R'49)	14.N4							44.D2 (R'51)	44.E1	44.E2	44.J1	46.Z (Three Sheets)	

The letter R after the number of the Information Sheet indicates that the Sheet has been revised and is followed by the year in which the latest revision was made. The letters CR indicate that the Sheet has been cancelled and republished and are followed by the year of re-issue.

## Buildings Illustrated

*House in Penhurst Gardens, Edware, Middlesex.* (Pages 768-769.) Architects: David & Ruth Stern, A./A.R.I.B.A. General contractors: G. V. & E. Conway. Sub-contractors: damp courses, The Ruberoid Co. Ltd.; bricks, Ibstock Brick & Tile Co. Ltd.; tiles (fireplace) Malkins, (entrance) Carter & Co. (London) Ltd.; copper roof, Brodericks Insulated Structures Ltd.; radiators, Ideal Boilers & Radiators Ltd.; boilers, "Janitor" Boilers Ltd.; electric light fixtures, Merchant Adventurers Ltd.; sanitary fittings, Twyford Ltd.; door furniture, Yale & Towne Manufacturing Co.; casements, Crittall Manufacturing Co. Ltd.; garage door, Acrow Engineers Ltd.

*Houses and Flats at Brynmawr, Breconshire, South Wales.* (Pages 770-774.) Architect: F. R. S. Yorke, E. Rosenberg and C. S. Mardall, F./F./A.R.I.B.A.; associate partner in charge, J. Penoyre, A.R.I.B.A.; quantity surveyor, Davies, Belfield & Everest; structural consultant, O. Arup & Partners; landscape architect, G. P. Youngman; heating consultant, Varming & Partners. General contractor: W. & A. Davies Ltd. Sub-contractors: roads and sewers, Davies, Middleton & Davies; asphalt, Neuchatel Asphalt Co. Ltd.; bricks, Coleford Brick & Tile Co. Ltd.; damp courses and roofing felt, Ruberoid Co. Ltd.; patent glazing to kitchen yards and steel door frames, Williams & Williams Ltd.; wood-block flooring, Campbell Marson; rubber flooring, Brynmawr Rubber Co.; central heating, G. N. Haden & Sons Ltd.; electric wiring, fixtures and bells, Troughton & Young Ltd.; ventilation, Vent Axia Ltd.; plumbing, Beavan & Sons; sanitary fittings, Stitsons (Sanitary) Fittings Ltd.; door and window furniture, Renniss Ltd.; casements, E. W. King & Son Ltd.; balcony railings,

Hill & Smith Ltd.; joinery, Bilt-In Fixtures Ltd.; wallpapers, Arthur Sanderson & Sons Ltd.; signs, Dryad Metalworks Ltd.

*Broomhill Bank (Special) School for Girls, Rusthall, Nr. Tunbridge Wells, Kent.* New Assembly Hall, Practical Room and Boiler House. (Pages 775-778.) Architect: Pite, Son & Fairweather in collaboration with S. H. Loweth, F.R.I.B.A., county architect; quantity surveyor, A. J. Willis & Thompson. General contractors: F. J. Moreton & Son Ltd. Sub-contractors: asphalt, Oddi Asphalt Ltd.; hollow tile floors and roofs and reinforced concrete, The Kleine Co. Ltd.; buff sand-lime facing bricks, Ryarsh Brick & Sand Co. Ltd.; special facings, High Broom Brickworks; selected hard pressed bricks below D.P.C. level, Sussex & Dorking Brickworks; structural steel, Boulton & Paul Ltd.; steel catwalk, Haywards Ltd.; copper, Frederick Braby & Co. Ltd.; bituminous felt and thermotile, D. Anderson & Son Ltd.; glass lenses, J. A. King & Co. Ltd.; dome lights, Pilkington Bros. Ltd.; cast lead sundial, Stoner & Saunders Ltd.; Kwao strip flooring, Hollis Bros. Ltd.; patent flooring, stairtreads, The Granwood Flooring Co. Ltd.; central heating, Dennis Paine & Co. Ltd.; electric wiring, Gilbert & Stamper Ltd.; electric light fixtures, The Merchant Adventurers Ltd., Holophane Ltd.; plumbing, J. V. Geer & Sons Ltd.; sanitary fittings, Associated Clay Industries Ltd.; door furniture, Yannedis & Co. Ltd.; casements, window furniture, Mellows & Co. Ltd.; Arens Control Gear; rolling shutters, Denison, Kett & Co.; fireproof doors, Veneer-craft Ltd.; plaster, W. A. Telling Ltd.; suspended ceiling, Gyproc Products Ltd.; metalwork, Bayliss, Jones & Bayliss Ltd.; tiling, Carter & Co. (London) Ltd.; paints, Wm. Harland & Son Ltd.; Cement Marketing Co. Ltd. (Snowcem); shrubs and trees,

Kent County Council Estates Dept.; school fittings, Kent County Council Supplies Dept.; water supply, Tunbridge Wells Water Co.; perforated acoustic tiles, May Acoustics Ltd.

*Remedial Bath at Harlow Wood Orthopaedic Hospital, Nr. Mansfield, Notts.* (Page 705.) Architects: Bromley & Cartwright. General contractors: Greenwoods (Mansfield) Ltd.; general foreman: A. Shooter. Sub-contractors: reinforced concrete, Greenwoods (Mansfield) Ltd., reinforcement by Twistee Reinforcement Co. Ltd.; rustic facing bricks, London Brick Co.; Annesley common bricks, National Coal Board; artificial stone, Evans Bros. (Concrete) Ltd.; structural steel, Moreland, Hayne & Co. Ltd.; thermal insulation, Turners Asbestos Cement Co. Ltd.; roofing felt, The Ruberoid Co. Ltd.; flush doors, Leaderflush Ltd.; central heating, John Hughes & Co. (Heating) Ltd.; electric wiring and special lifting apparatus, W. J. Furse & Co. Ltd.; ventilation, British Trane Ltd.; plumbing, Cooper & Berry Ltd.; sanitary fittings, Builderwares (Derby) Ltd.; door furniture, Lewis & Grundy Ltd.; metal casements, Henry Hope & Sons Ltd.; chromium plated handrails, The Dryad Metalworks Ltd.; bath tiling, Carter & Co. (London) Ltd.; tiling to walls and lavatories, Clumber Builders Supplies; curtains of rubberised material, Frederick Harrington; curtain rails & cubicle fittings, Harrison's (Birmingham) Ltd.; filtration plant, Bell Bros. (Manchester 1927) Ltd.

## Announcements

Mr. C. Y. Dawbarn, A.R.I.B.A. and Mr. R. C. Blair, A.R.I.B.A. have entered into association and will practise under the style of Dawbarn and Blair, A./A.R.I.B.A., 8A, Rumbold Place, Liverpool 3. (Tel: central 8757.)

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**DOORS • COUNTERS  
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**INSULATING PANELS  
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has grown faster than  
the capacity to supply

## *A Power Crisis threatens this winter*

A MILLION MORE consumers are being supplied with electricity now than three years ago. And individual consumers require much more electricity than they used to.

Industrial consumption has also increased rapidly. British Industry is today using more than twice as much electricity as before the war, and substantially more than this time last year.

The war left Britain sadly short of generating plant. Now the new rearmament drive calls for still more power. Export demands more again. That is the background picture.

Existing power stations could supply the demand — on one condition. This is that too many users of electricity do not switch on at the same time of day. When "Peak" demands go over a certain mark, power cuts become unavoidable.

The public is being asked to help. We are saying to them "Please don't switch on your electric fires during peak hours. If domestic users, shops, hotels and offices sacrifice a little comfort and leave the electricity to the factories during peak hours, we might get through this winter without power cuts at all. We would certainly manage it with greatly reduced interruptions."

Industries, in addition to their load-spreading arrangements, must use electricity with extreme efficiency and economy. Above all, there must be

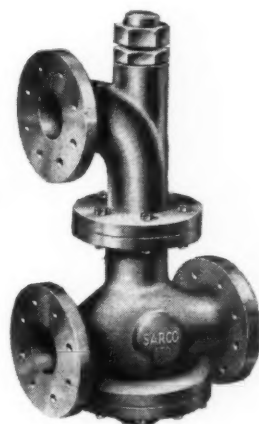
**NO WASTE**

BRITISH ELECTRICITY



## ADVANCE CONTROL OF TEMPERATURE ON H.W. HEATING SYSTEMS

**SARCO 'E.T.O.'**  
**CONTROLLER**  
(NON-ELECTRIC)



The Sarco E.T.O. Controller **anticipates** the effect indoors of any external temperature change.

*It is a self-contained fully-automatic control for accelerated hot-water heating systems, providing equable indoor temperature under conditions of changing outdoor temperature.*

*It controls heat supply at the minimum required to balance heat losses whatever the outside temperature conditions, giving maximum fuel economy.*

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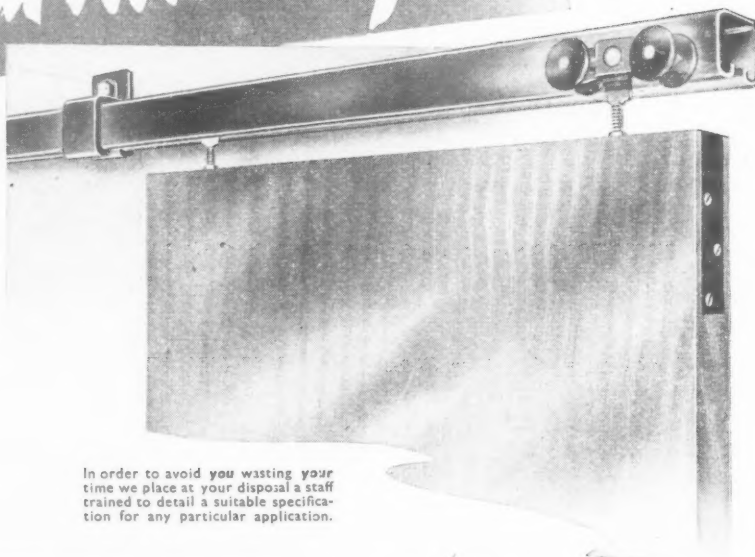
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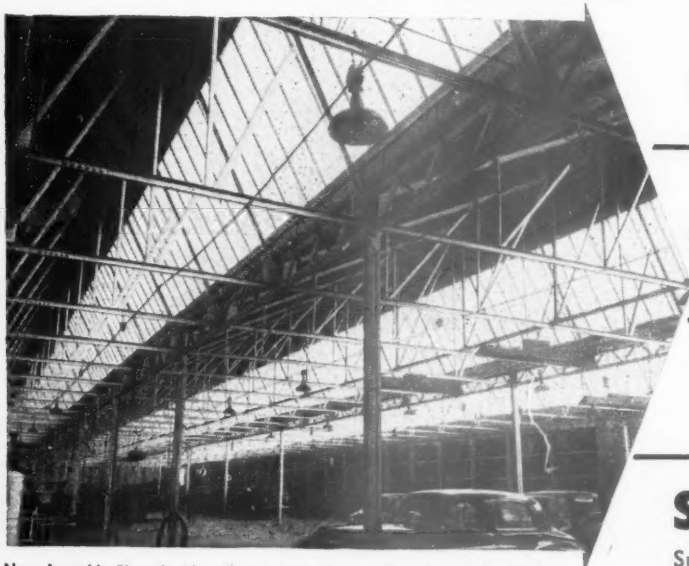


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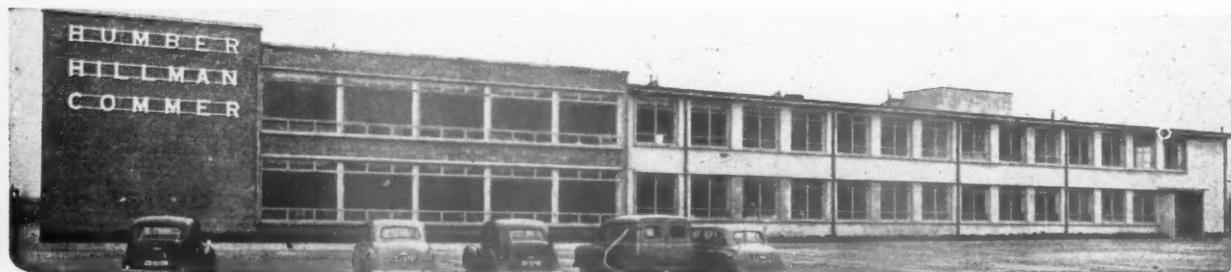
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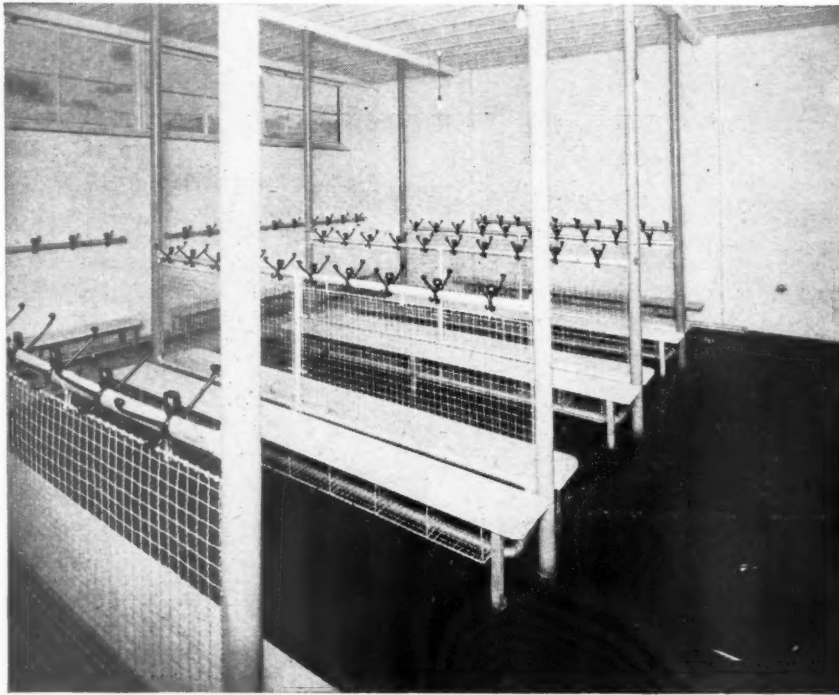
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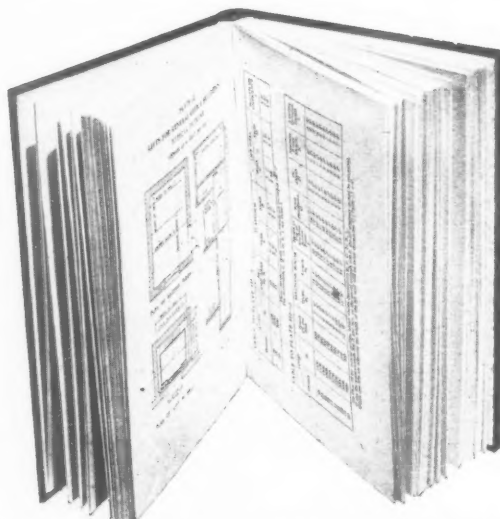
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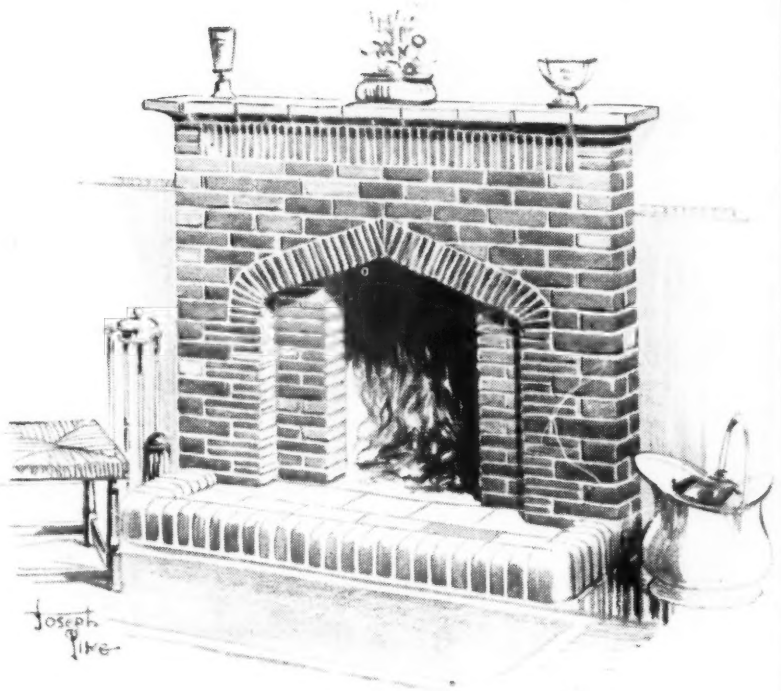




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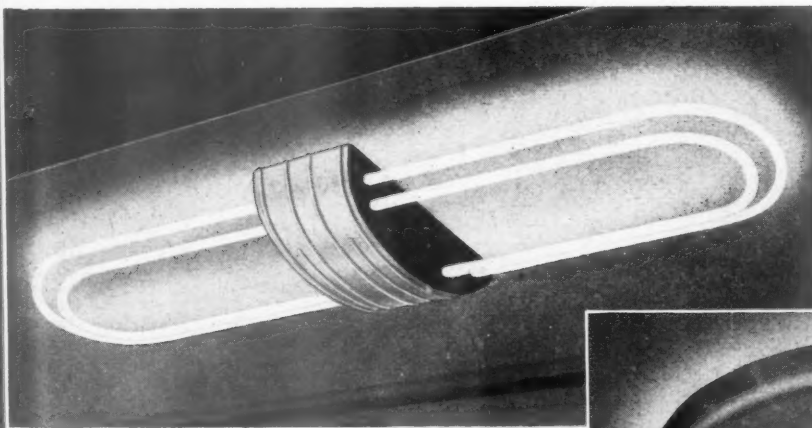


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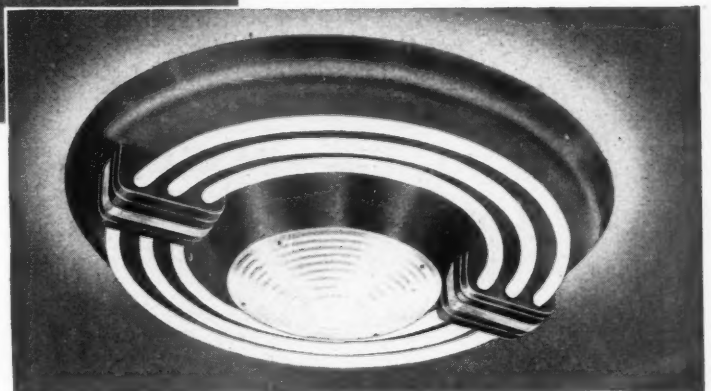


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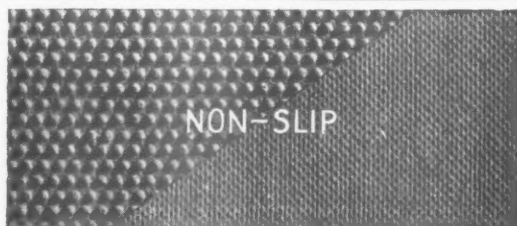
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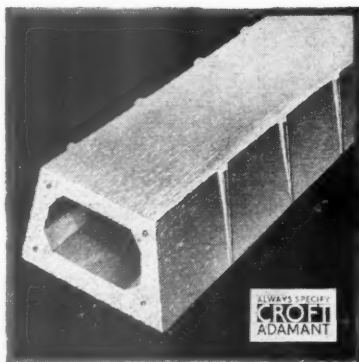
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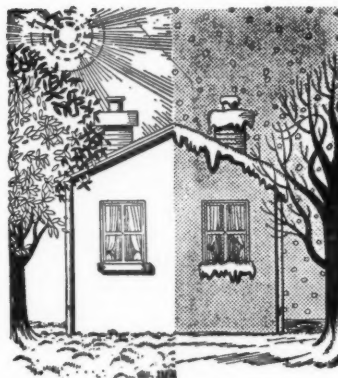
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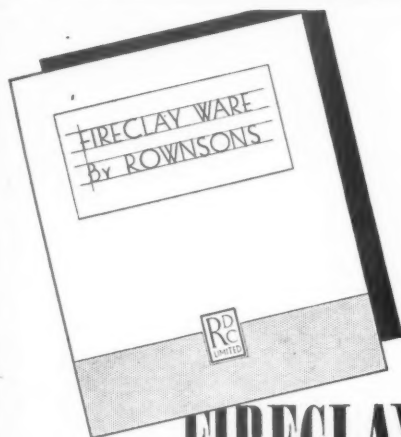
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A. STEPHENS,  
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10th December, 1951.

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A. STEPHENS,  
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22nd November, 1951.

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W. G. STONE,

Education Officer.

54, Old Steine, Brighton.

5101

**CANNOCK RURAL DISTRICT COUNCIL.**

Applications are invited for the undermentioned appointments in the Department of the Engineer and Surveyor:—

(a) **ARCHITECTURAL ASSISTANT** (Grade A.P.T. VI-VII). Applicants should be Chartered or Registered Architects with A.R.I.B.A. qualification, with experience in housing work, preparation of working drawings, estimates, quantities and specifications and the handling of contracts, preferably with a Local Authority. The post will be graded within the range A.P.T. VI-VII according to qualifications and experience.

(b) **ENGINEERING ASSISTANT** (Grade A.P.T. IV). Applicants should have passed at least the Intermediate Examination of one of the recognised professional Institutions and have sound experience in the preparation of drawings, specifications, engineering works, measurement for interim and final certificates, and handling contracts, preferably with a Local Authority.

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

The Council will endeavour to assist selected applicants, if married, in the provision of housing accommodation.

Applications, giving particulars of age, qualifications, experience, etc., together with the names and addresses of two persons who are willing to act as referees, should be sent to the undersigned so as to be received not later than Monday, 7th January, 1952.

Canvassing will disqualify.

JOHN P. ROBERTS,

Clerk of the Council.

Council Offices, Penkridge,  
Stafford.

13th December, 1951.

5104

**MIDDLESEX COUNTY COUNCIL COUNTY  
PLANNING DEPARTMENT.**

**JUNIOR PLANNING ASSISTANT/  
DRAUGHTSMEN (A.P.T. I)** required. Duties include preparation of plans and maps, planning surveys and general planning work. Experience of town planning desirable, but related experience considered. Established, subject to medical assessment and prescribed conditions. Applications, stating age, experience, full details to the Clerk of the County Council (C/P), Middlesex Guildhall, Westminster, S.W.1, by 4th January, 1952 (quoting K.266, A.J.). Canvassing disqualifies. 5106

**ABERDEEN HARBOUR COMMISSIONERS.**

**HARBOUR ENGINEER'S DEPARTMENT.**

Applications are invited for the post of **ARCHITECTURAL ASSISTANT or BUILDING SURVEYOR** in the Harbour Engineer's Office, Aberdeen. Applicants should have experience in structural steelwork, reinforced concrete and general building design and construction. Preference will be given to candidates with some experience of property procedure and the preparation of reports. The salary, £435-£620, according to qualifications, rising by annual increments of £15. Applications, stating age and qualifications with full details of experience, together with copies of recent testimonials, should be lodged with the Harbour Engineer, 15, Regent Quay, Aberdeen, not later than 19th January, 1952. Harbour Engineer's Office, Aberdeen. 5103

12th December, 1951.

**COUNTY BOROUGH OF BLACKBURN.**

**ARCHITECTURAL ASSISTANT AND**

**ASSISTANT QUANTITY SURVEYOR.**

Applications are invited for permanent appointments as Architectural Assistant, Grade V (£570-£620), according to experience and qualifications, and Assistant Quantity Surveyor, Grade VI (£645-£710) in the Borough Engineer's Department. Architect applicants must be Registered Architects and have good experience in design and construction of schools and municipal buildings, and preference will be given to Associates of the R.I.B.A. The Quantity Surveyor must be experienced in preparation of Bills of Quantities, Specifications, Estimates and settlement of final accounts, preference being given to Professional Associates of Chartered Surveyors' Institute.

Applications, stating age, qualifications, experience, present and past appointments, should be submitted with not more than three recent testimonials, to the Borough Engineer and Surveyor, Town Hall, Blackburn, by 5th January, 1952.

CHAS. S. ROBINSON,

Town Clerk.

5102

**THE ROAD HAULAGE EXECUTIVE** invite applications for an **ARCHITECTURAL DRAUGHTSMAN**'s post in London. Applicants should have passed the Intermediate Examination of the R.I.B.A., be capable of preparing working drawings and details, and be neat and accurate draughtsmen, with a minimum of five years' experience in drawing offices. Some school training will be an advantage. Salary within the range £520-£550 per annum. Applications in duplicate, giving date of birth, qualifications, experience, present post and salary, should reach the Chief Staff and Welfare Officer (S.219), Road Haulage Executive, 222, Marylebone Road, London, N.W.1, within seven days of the appearance of this notice. Selected candidates will be required, if eligible, to join a contributory superannuation scheme. 5119

**COUNTY OF CORNWALL.**

**DEPUTY COUNTY PLANNING OFFICER.**

Applications are invited for the above-mentioned post. The salary will be on a grade of £1,200-£1,350. The successful candidate will have direct charge of the work relating to the Development Plan (including County Map and Town Maps). He must have a sound knowledge of practical problems of urban and rural planning, as well as of local government. Candidates must possess one or more of the following qualifications:—A University Degree in Civil Engineering, A.M.I.C.E., or A.M.T.P.I. The customary service conditions of the Local Government Service will apply.

Further details of the post may be obtained from the County Planning Officer, County Hall, Truro, to whom applications, together with the names of three persons to whom reference may be made, should be received not later than 14th January, 1952.

E. T. VERGER,

Clerk of the County Council.

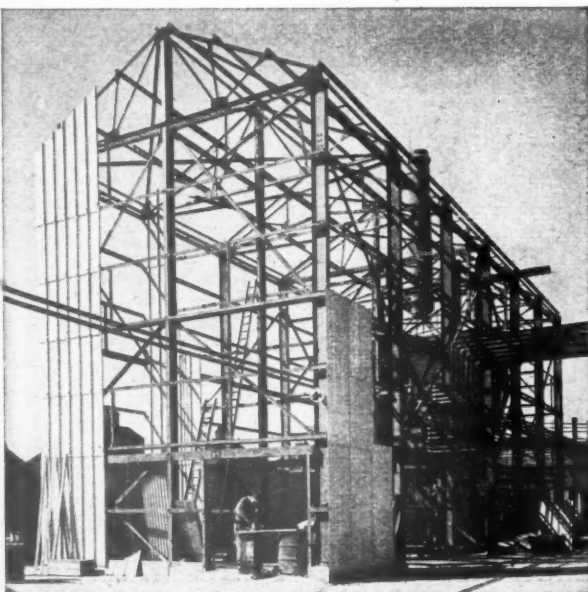
5115

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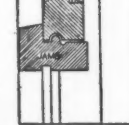
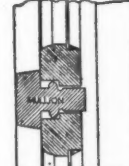
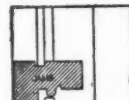
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**ARCHITECTURAL ASSISTANT** of Intermediate R.I.B.A. standard required. Interesting work including Housing, Hospitals and Schools. Reply with particulars and salary required to Ruddle & Wilkinson, F/L/A.R.I.B.A., Chartered Architects, Long Causeway Chambers, Peterborough. 5087

**LIVERPOOL** — **SENIOR ARCHITECTURAL ASSISTANT** required, fully qualified, experienced, capable of taking charge of jobs through all stages. Salary commensurate with ability. Full details to G. de C. Fraser, Son & Gearey, F/A.A.R.I.B.A., 27, Dale Street, Liverpool. 5077

**SENIOR ARCHITECT'S ASSISTANT** required in Architect's Department, F. W. Woolworth & Co. Ltd., 56/60, Dudley Street, Birmingham. Varied and interesting work, good salary offered to capable assistant, 5-day week, pension scheme. Write, stating age, qualifications and experience. 5107

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**SEVEN ARCHITECTS** required as Assistants or Branch Managers for various offices in East Africa. Salaries from £660-£900, plus bonus. Free passages both ways on 2-4 year contracts. Write with personal and professional details for further particulars to Overseas Technical Service, 5, Welldon Crescent, Harrow. 5121

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**LAND SURVEYOR** for Architects' office in Tanganyika. Must be A.R.I.C.S. (Land Surveying Sub-division), or have considerable experience in Government Survey Office or R.E. Ordnance Survey Department. Write with details, to Overseas Technical Service, 5, Welldon Crescent, Harrow, quoting OSS.42/3. 5122

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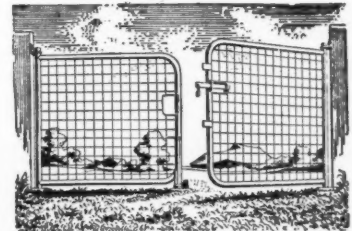
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M.T.P.I. County Architect.

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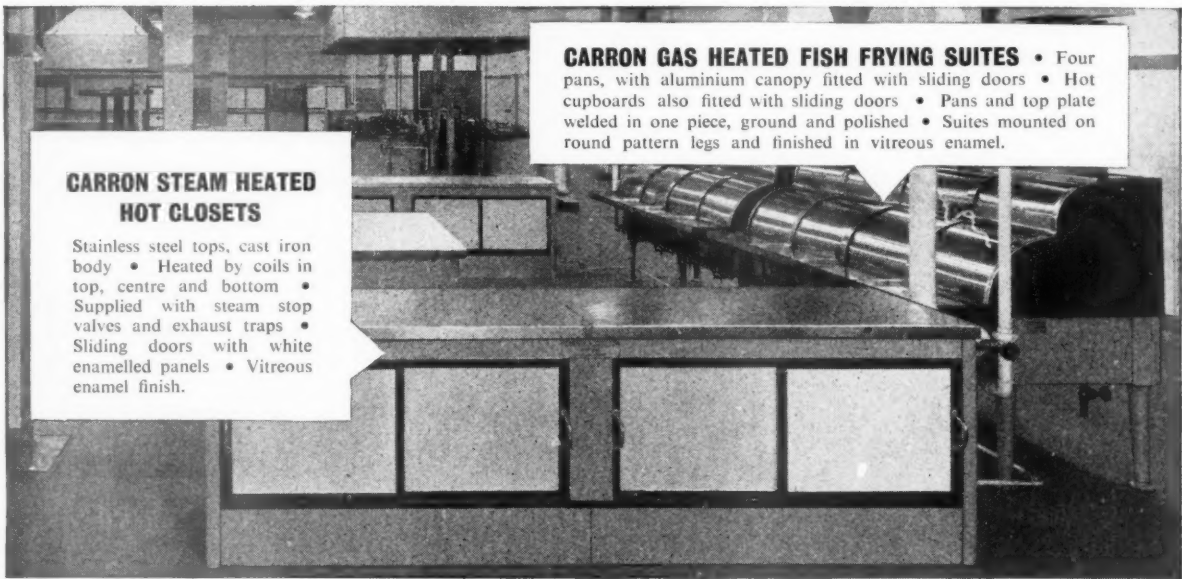
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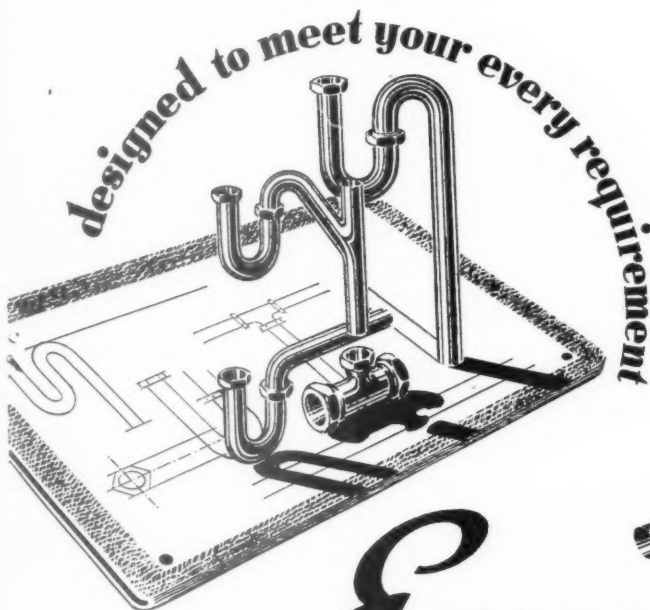
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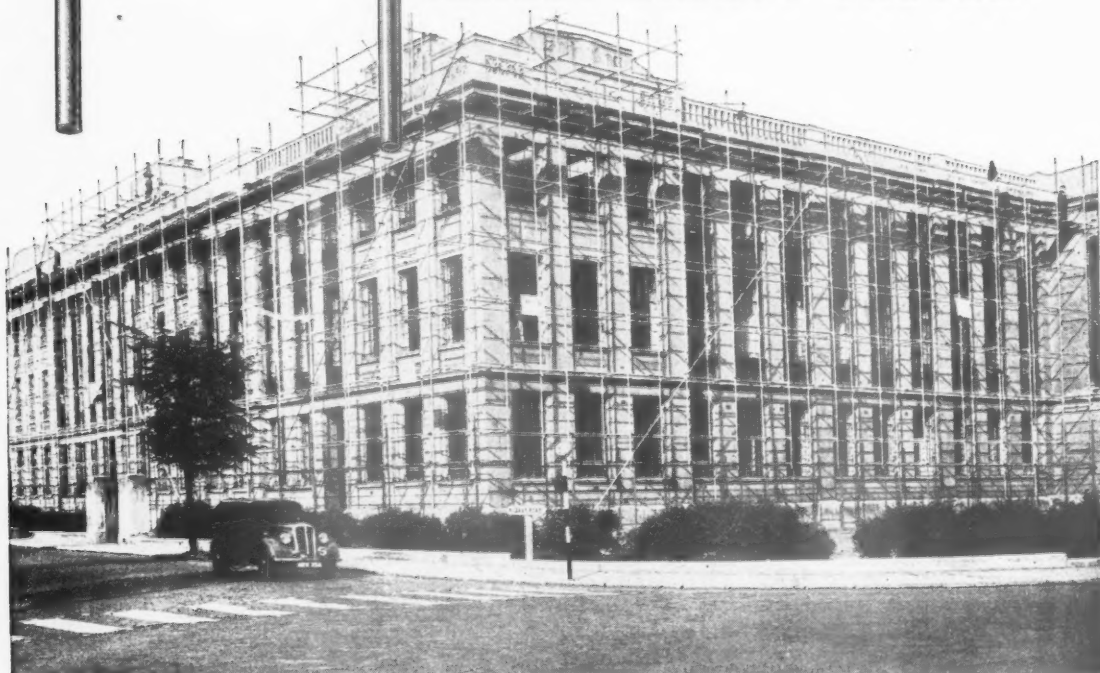
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