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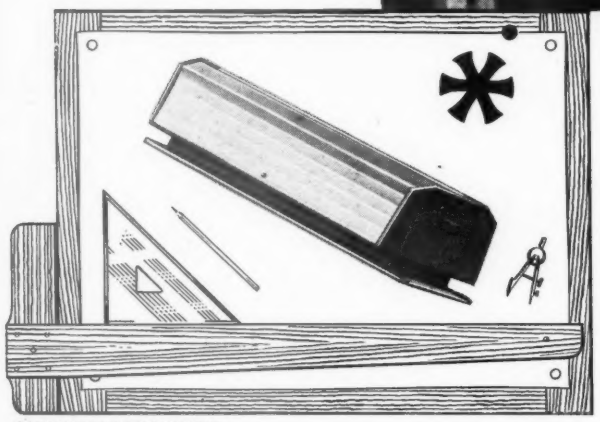
★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ig to Z the next. In all cases where the town is not mentioned the word LONDON is implicit 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	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
IWA	Inland Waterways Association. 14, Great James' Street, W.C.2.	Chancery 7718
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	Modern Architectural Research Group (English Branch of CIAM) Secretary : Gontran Goulden, Building Centre, 26, Store Street, W.C.1.	Museum 5400
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 Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James' 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 Asphalte 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.	Molesey 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 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SCR	Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8.	Western 1571
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3.	Mansion House, 3921
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1.	Langham 7616
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	Langham 1984
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 75, Cannon Street, E.C.4.	City 5051
WDC	War Damage Commission. 6, Carlton House Terrace, S.W.1.	Whitehall 4341
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988

Put COLT in the picture



At the Royal Doulton Pottery

COLT'S were called in at the planning stage to advise on the ventilation of a new extension to The Whieldon Pottery for Doulton & Company, the world-famous Potters.
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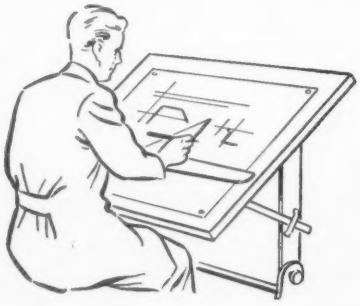

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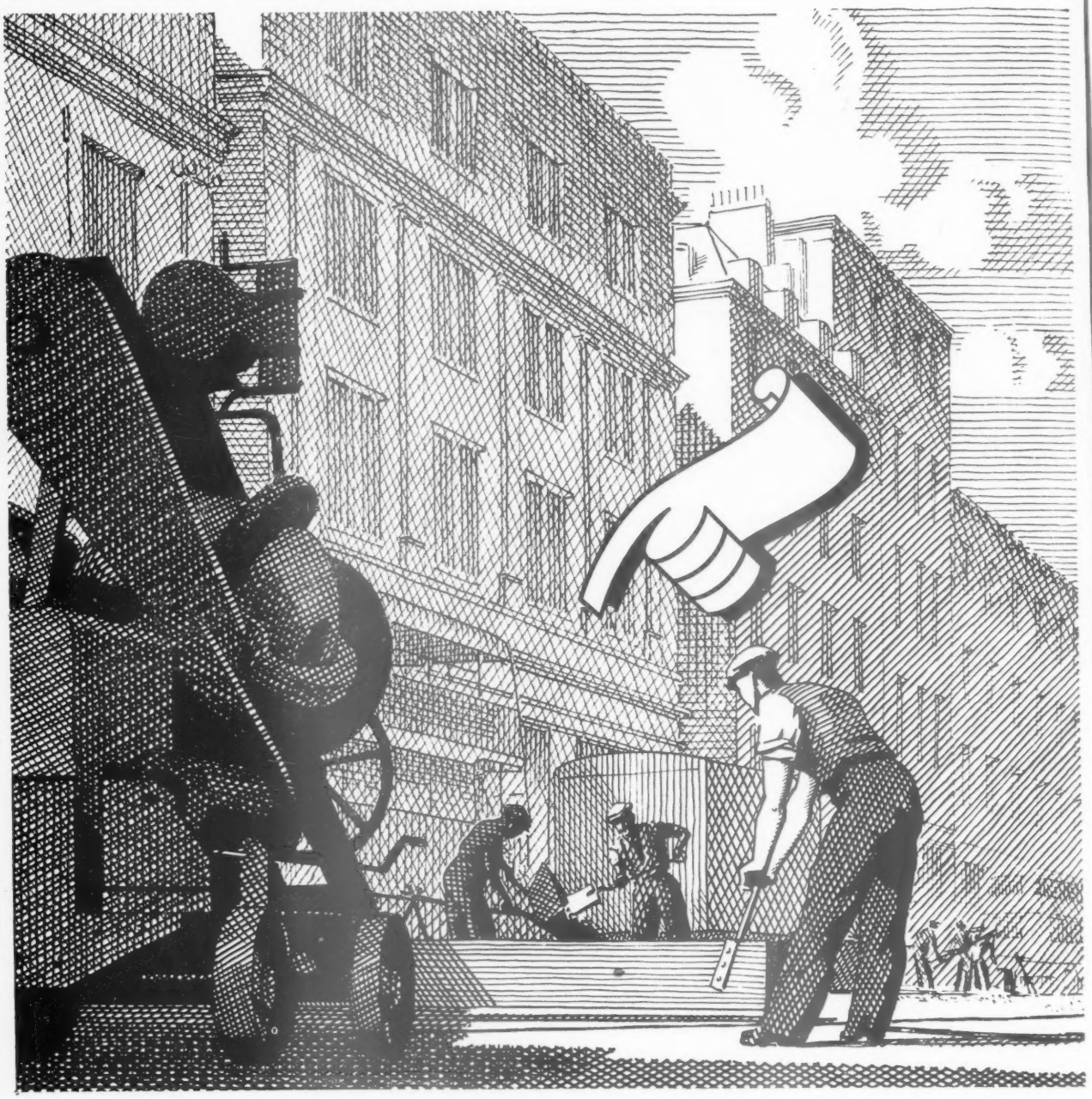

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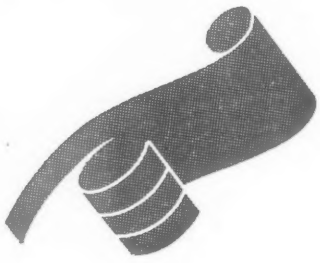

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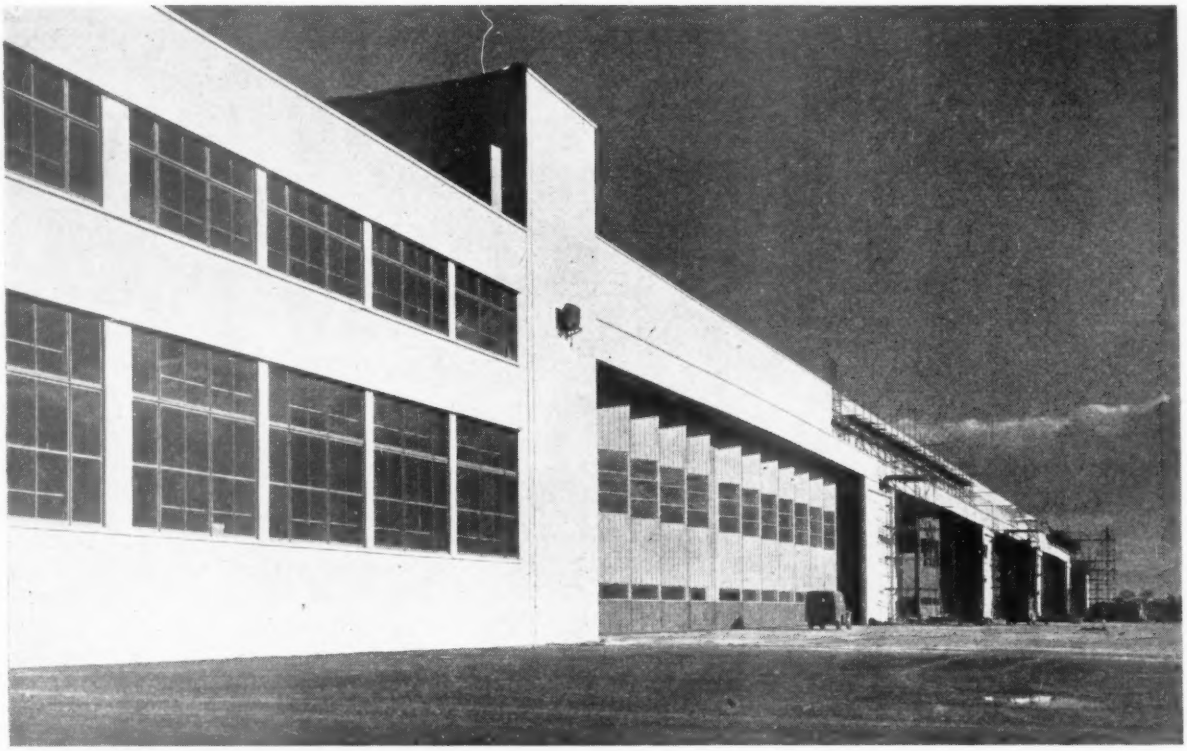

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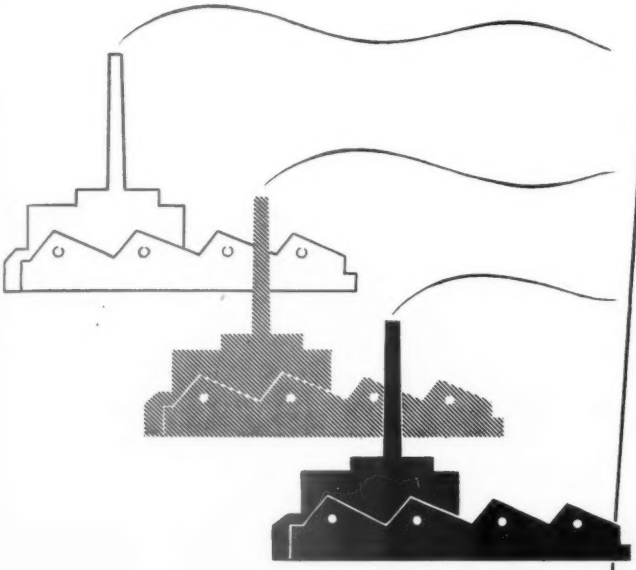

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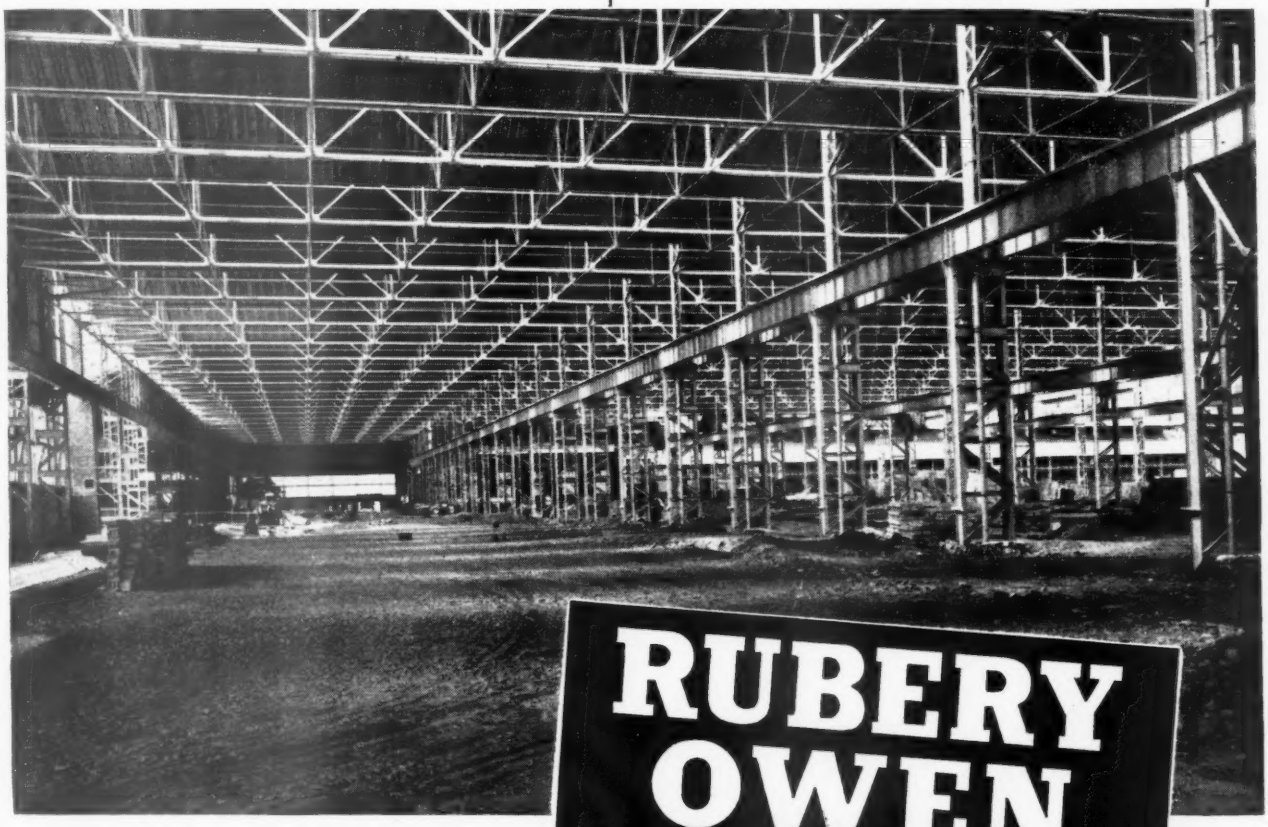

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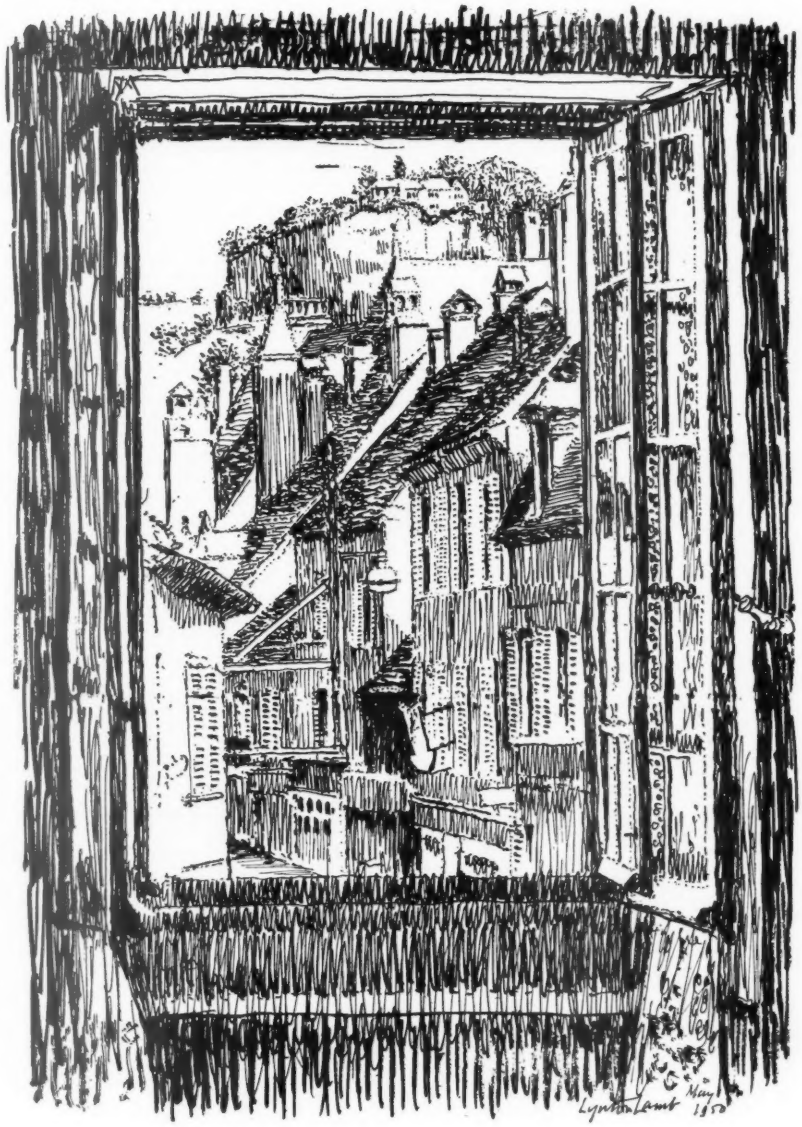
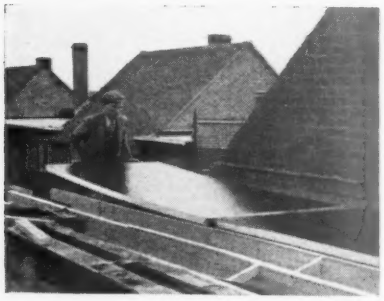


Ornans from the Hôtel du Jura

BY LYNTON LAMB

Lynton Lamb's drawing was done from a window of the Hôtel du Jura at Ornans. It evokes memories of a drowsy afternoon in this little French town, when apart from an occasional strident note from the klaxon of the inevitable 'Quatre Chevaux' or the bark of a dog, all was quiet as the town slept off the effects of the wines of the Moselle and the Jura.

SC233



Stramit for HOUSING

RAMSGATE'S BOROUGH ARCHITECT (W. W. Garwood, A.R.I.B.A.), leads the way with Stramit decking—under asphalte—for the flat roofs to these terraced houses at Newington Housing Estate, Ramsgate.

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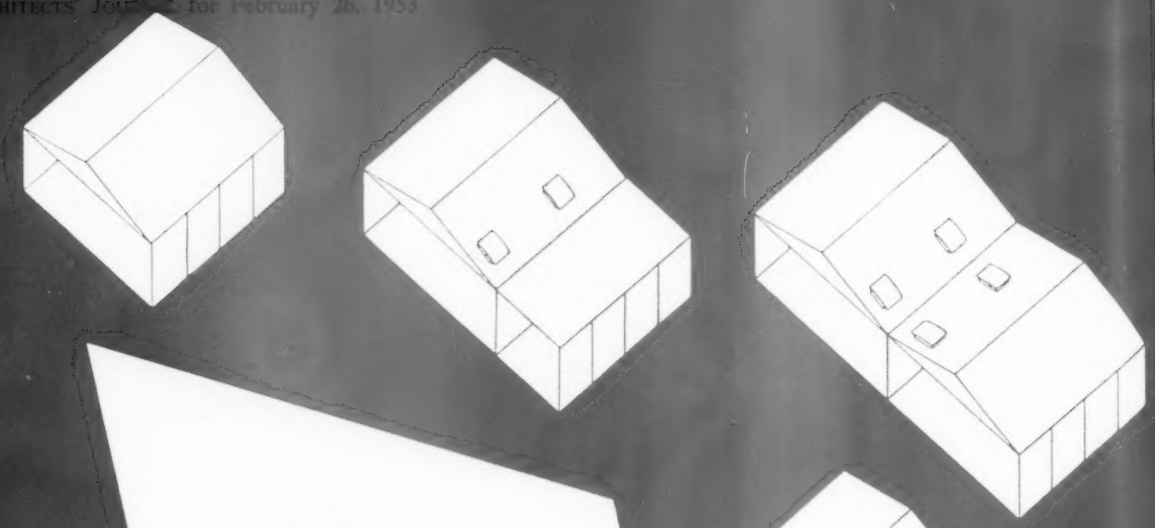


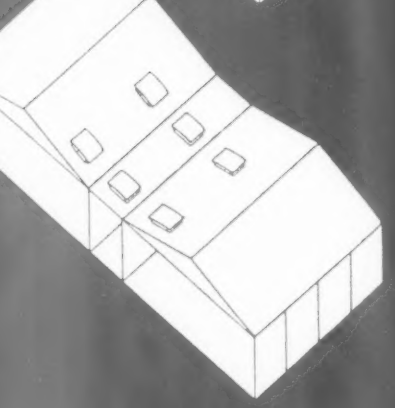
Variations on a theme

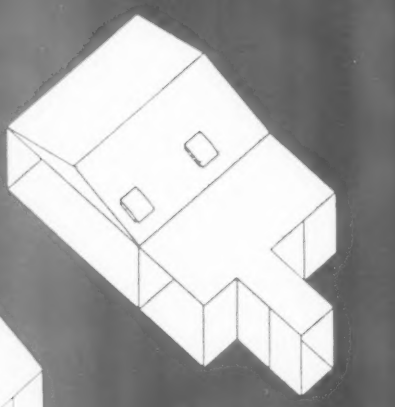
A few of the many ways in which different roof spans of the Medway Mark IV design can be grouped when planning individual school buildings.

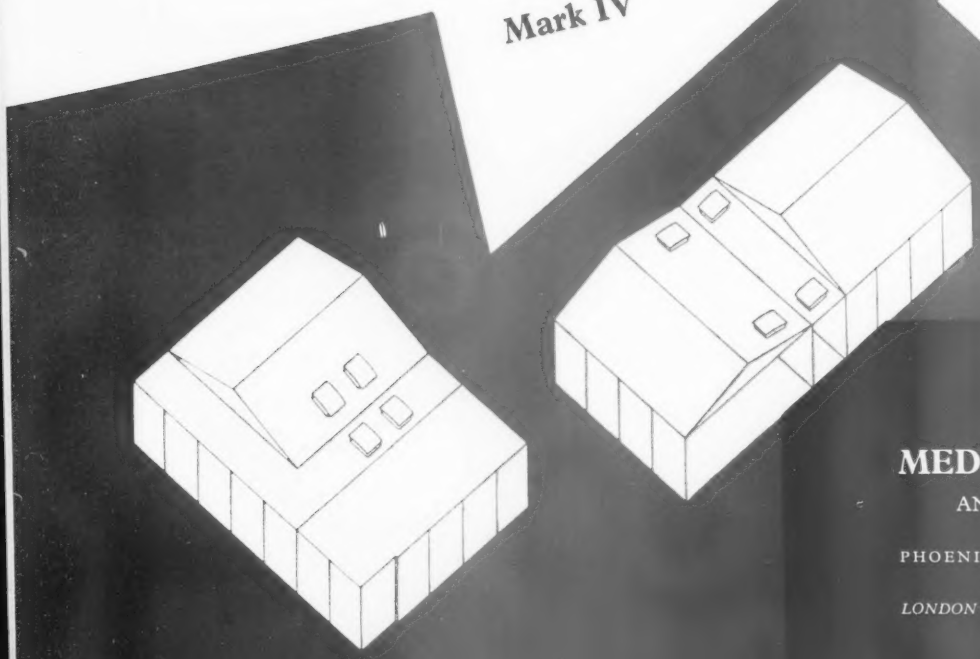
Mark IV is the unit system of prefabricated timber construction based on a 6′ module. Basic roof spans are 6′, 12′, 24′ and multiples. The 24′ span has a low pitched roof, the others a flat roof. Curved "Perspex" ventilated rooflights are standard.

Using the Mark IV system, permanent schools can be built at a cost appreciably lower than by *any* other method of construction.

Medway School Buildings Mark IV







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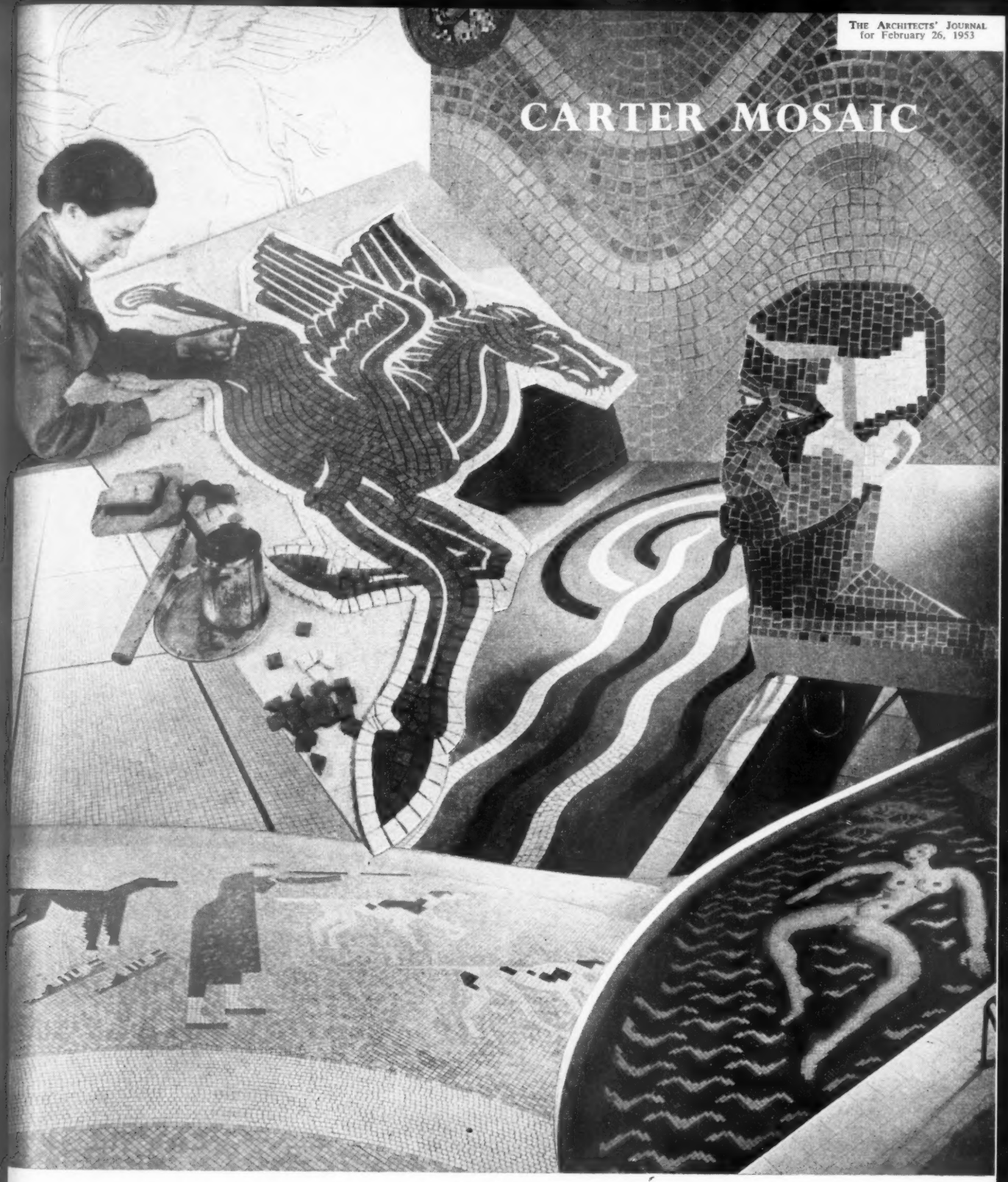

Photographs: D. B. Whitfield, Nairobi.

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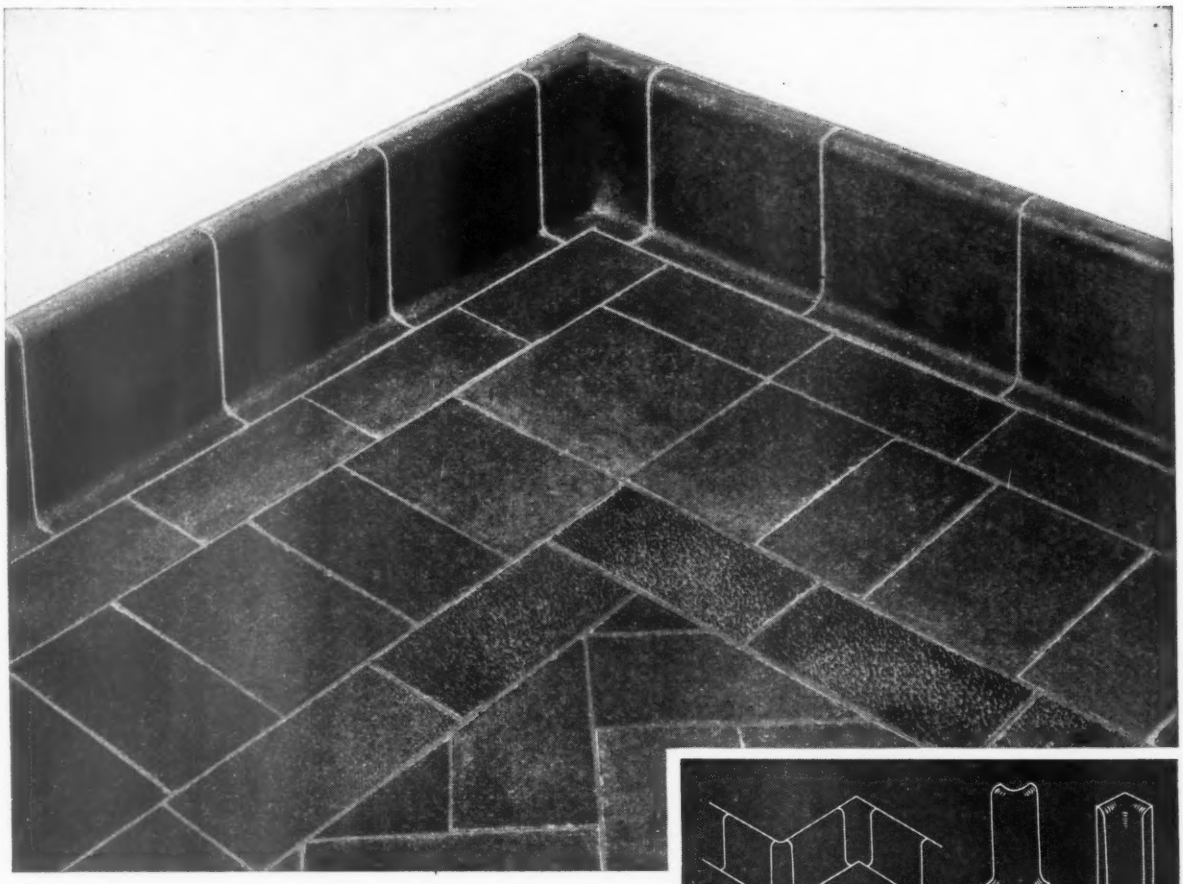

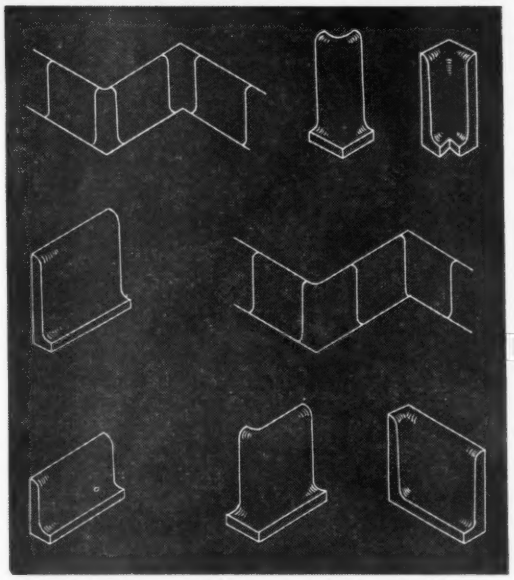

A few of the fittings available for use with Clay Floor Quarries

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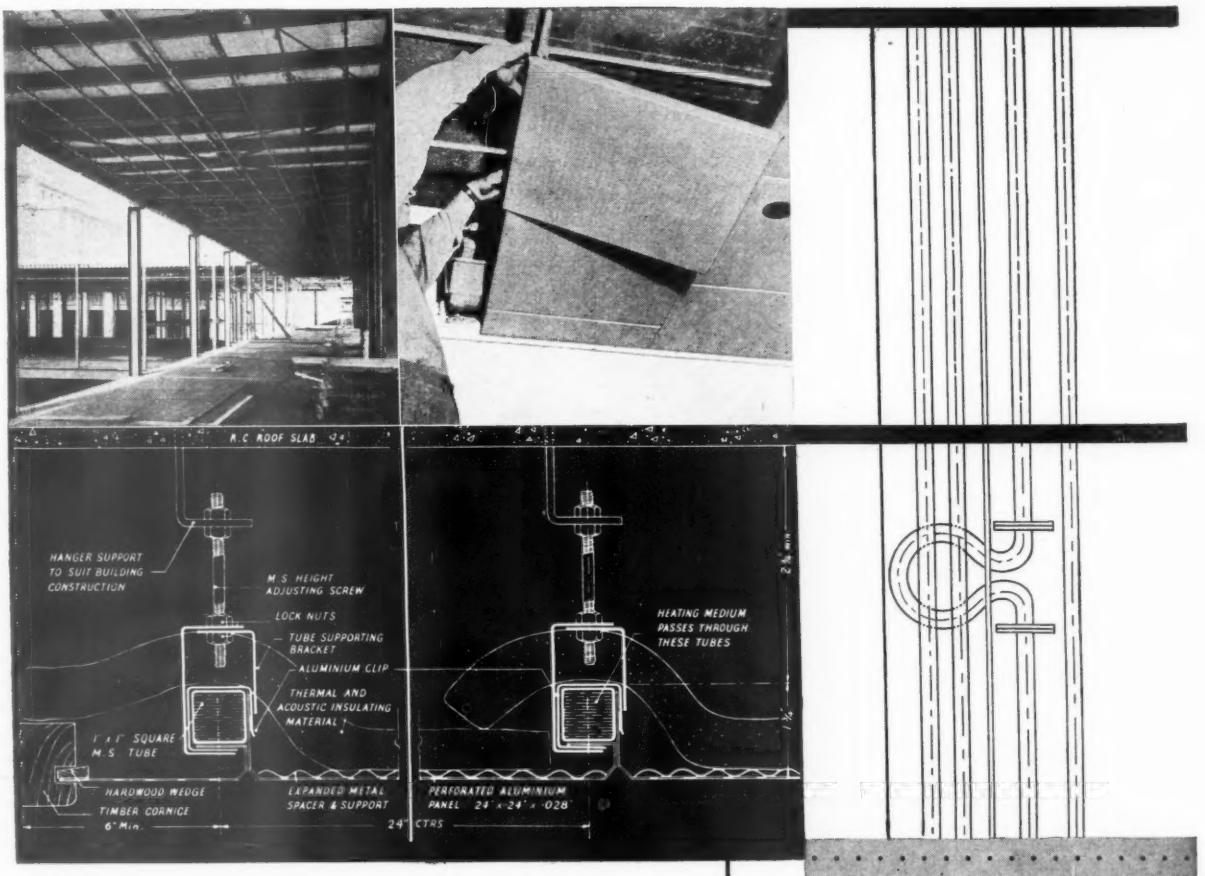

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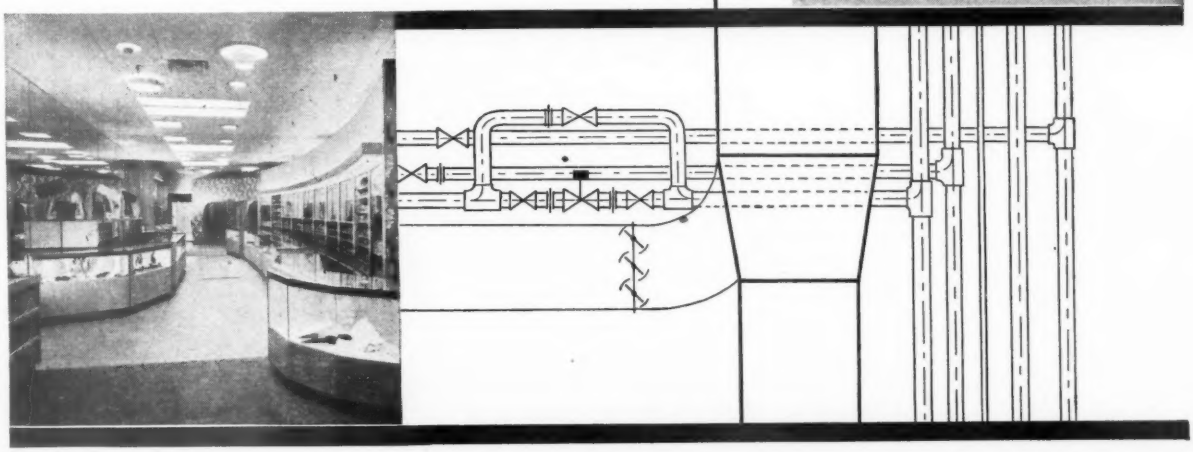

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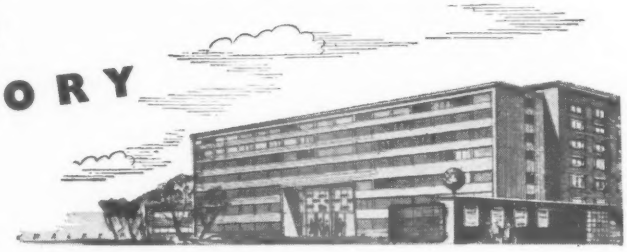

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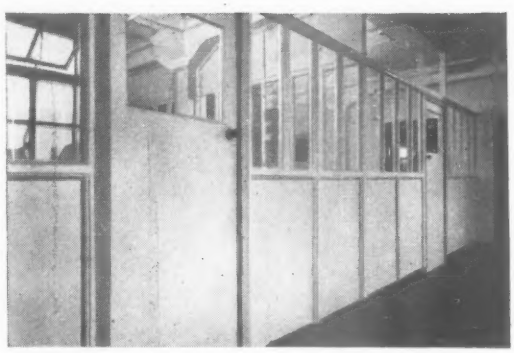

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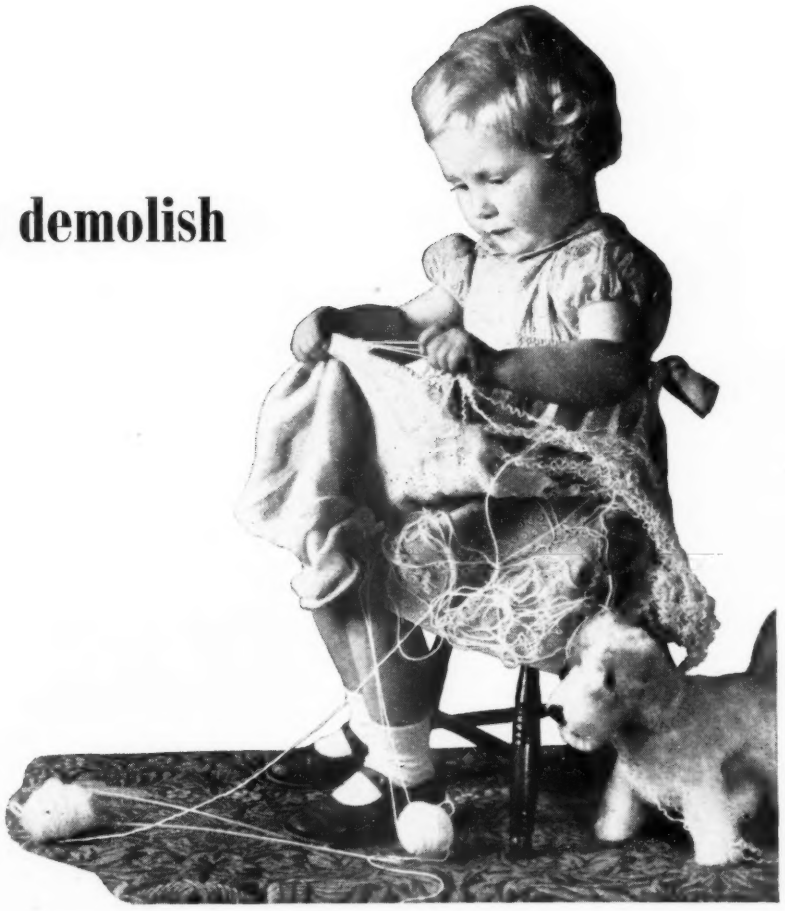


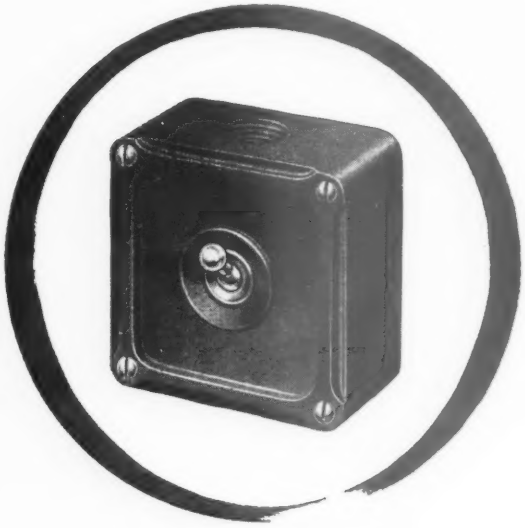
Drilling machines at Banister Walton's works, Trafford Park, Manchester.

In the course of a minute, simplicity can demolish the achievement of years. It is not enough to be able to construct, we must safeguard our work against the zeal of simple-minded unpickers of industry, no matter how well-intentioned they are.

★

Banister, Walton build in steel

LONDON, S.W.1.—82 Victoria Street. MANCHESTER 17.—Trafford Park. BIRMINGHAM 18.—61-63 Western Road.



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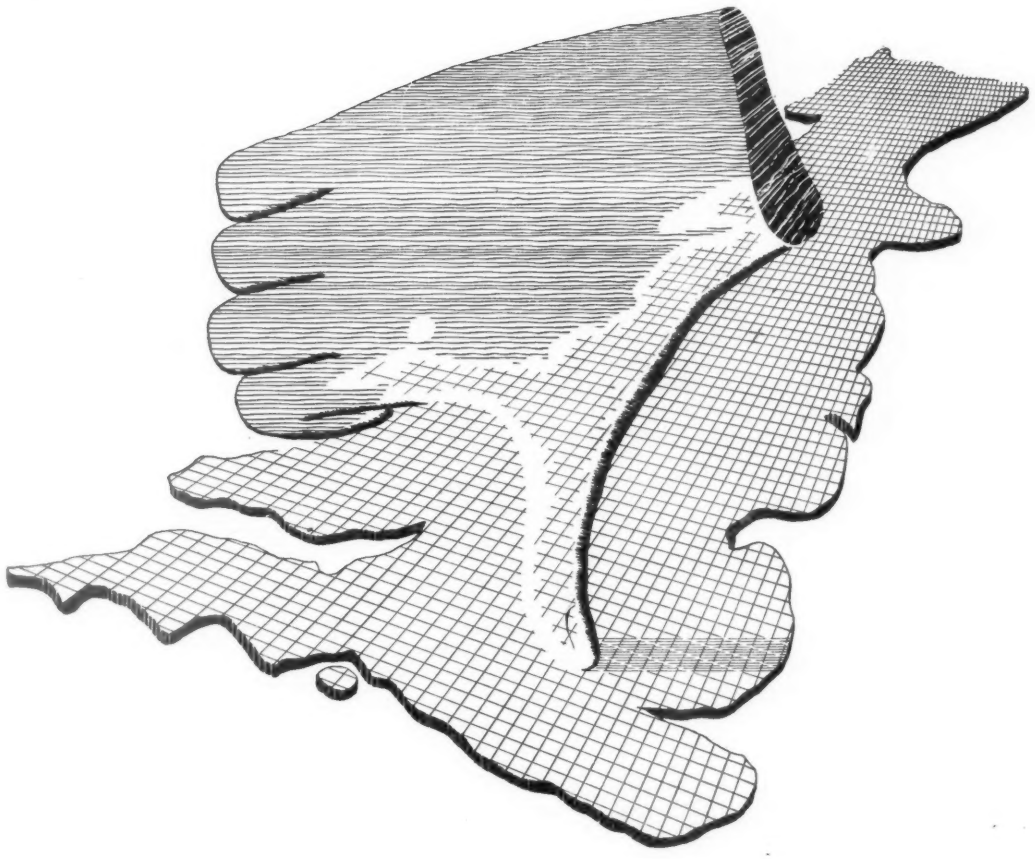

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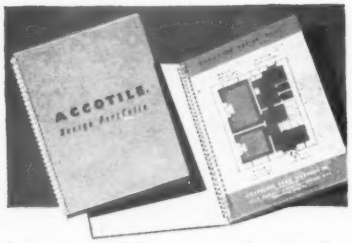

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The opposite page shows two interesting examples of the application of zinc weatherings.

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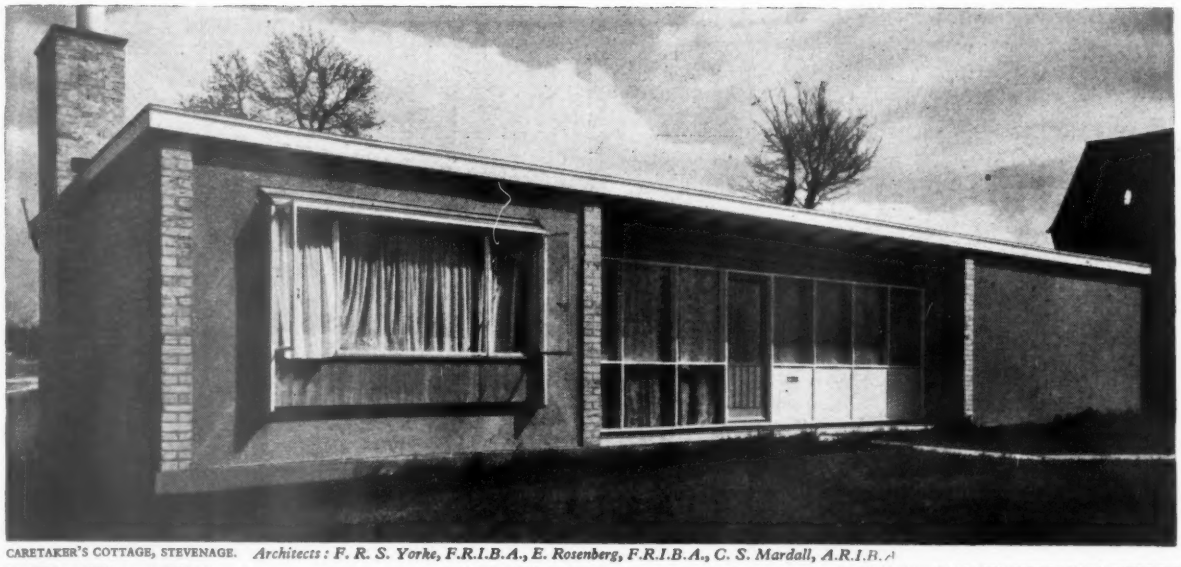
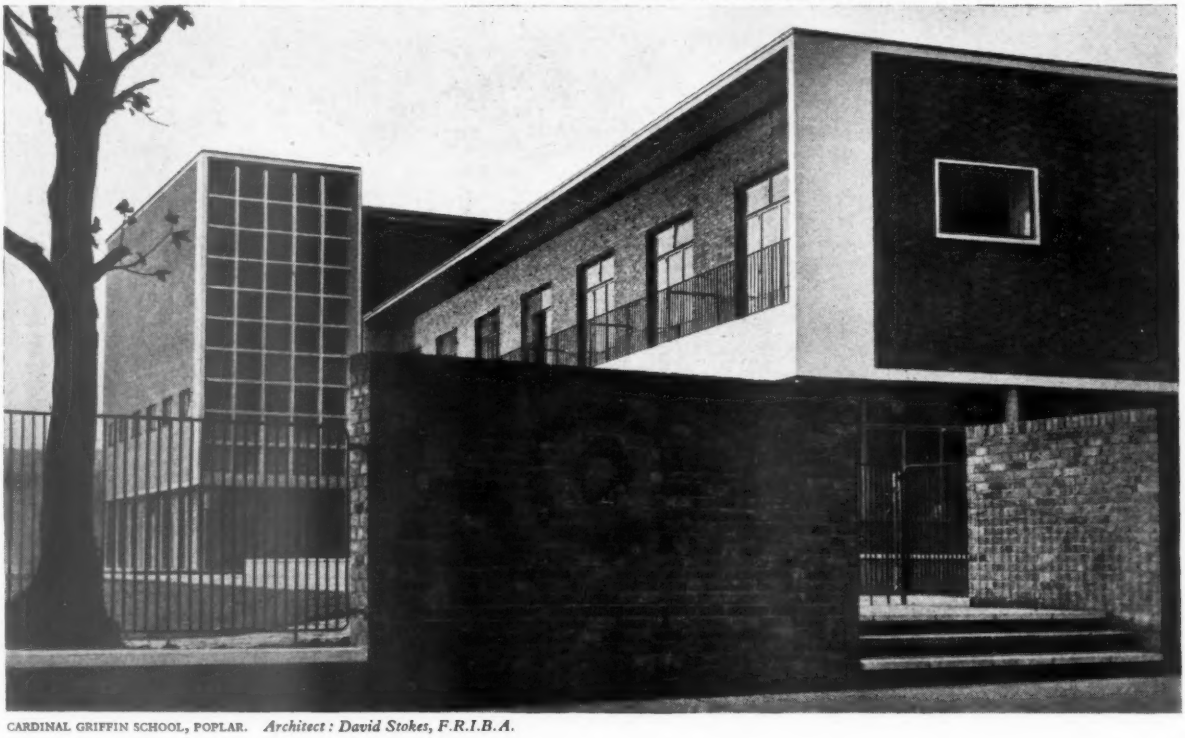
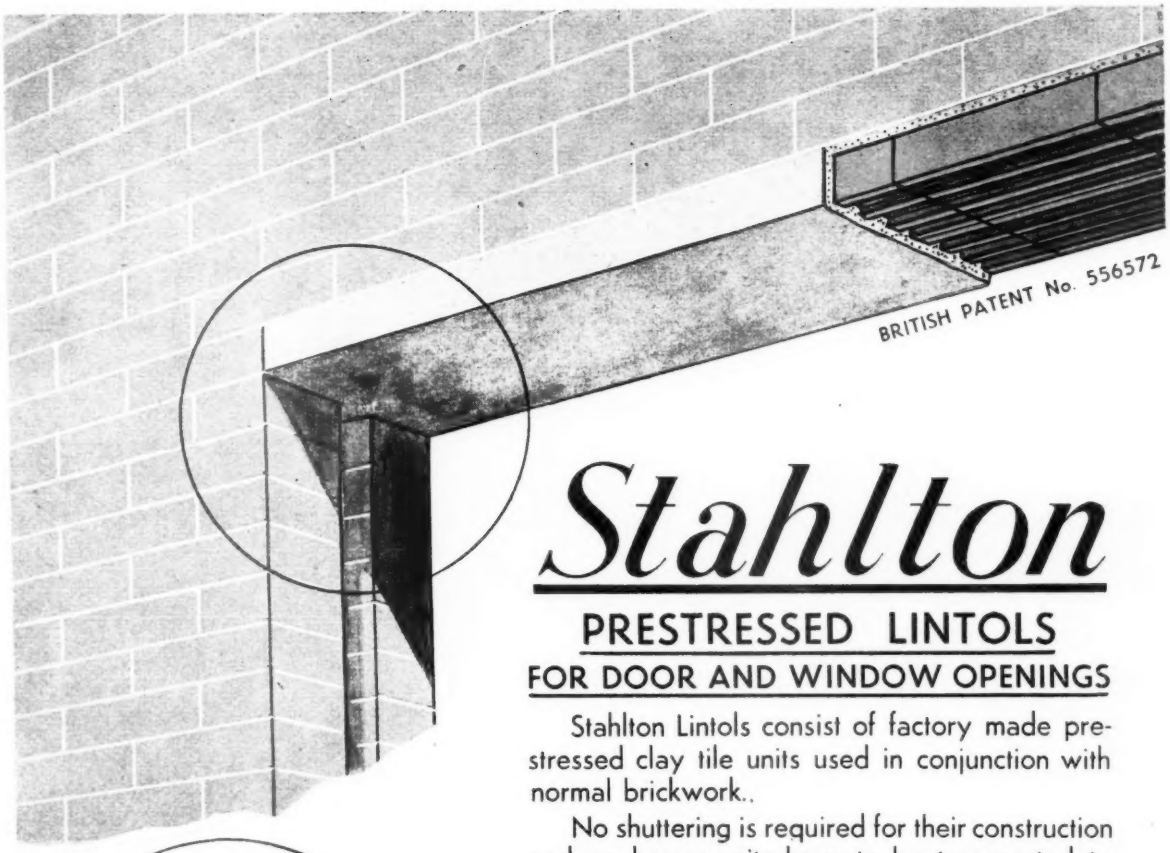


CARETAKER'S COTTAGE, STEVENAGE. *Architects: F. R. S. Yorke, F.R.I.B.A., E. Rosenberg, F.R.I.B.A., C. S. Mardall, A.R.I.B.A.*



CARDINAL GRIFFIN SCHOOL, POPLAR. *Architect: David Stokes, F.R.I.B.A.*



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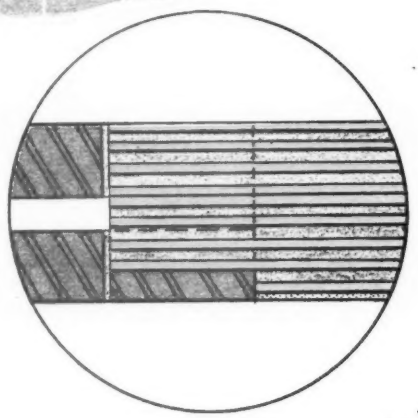
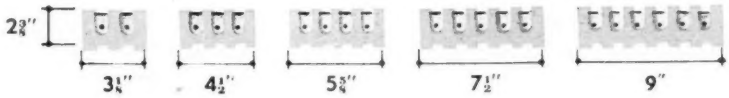


PLAN



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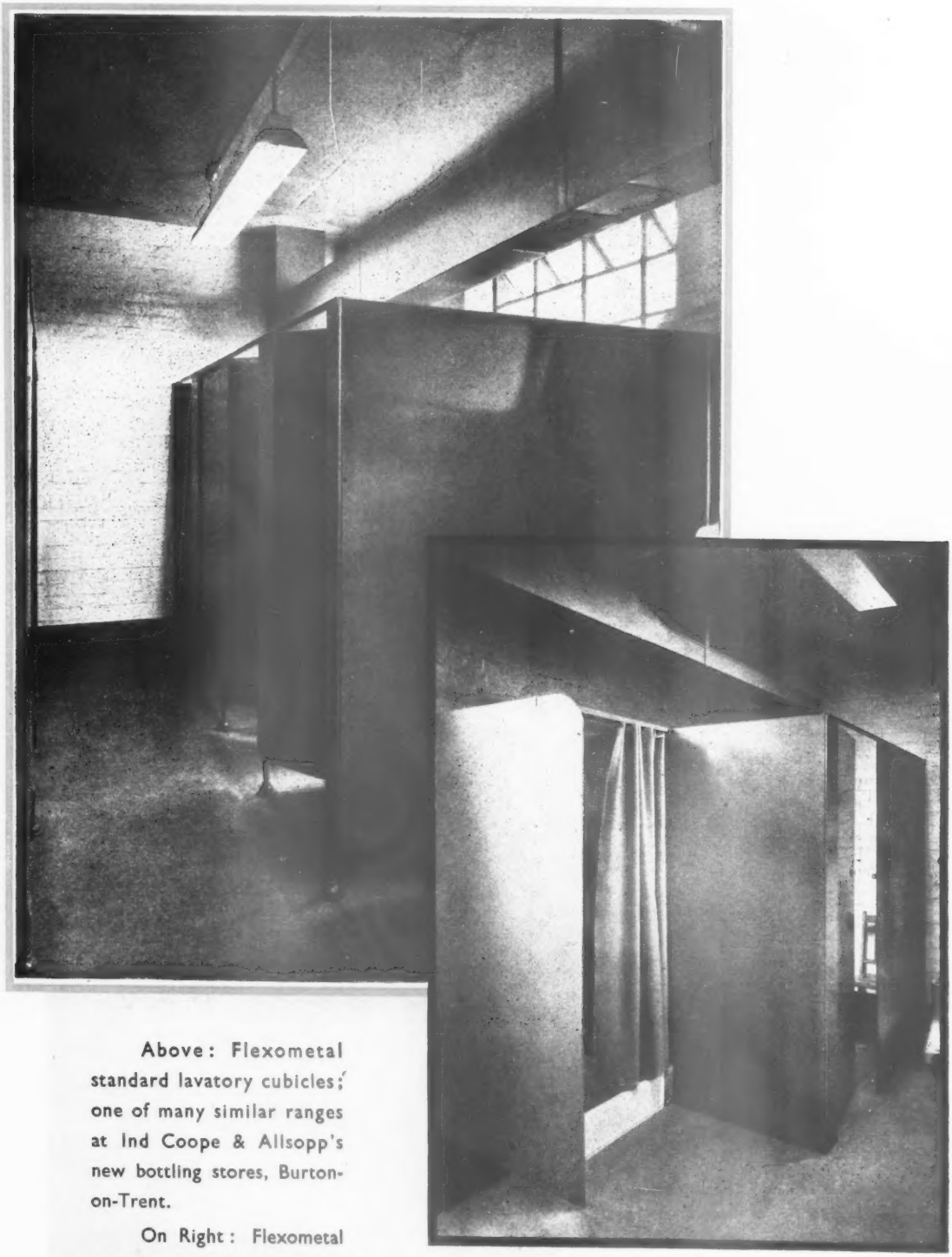

Above: Flexometal standard lavatory cubicles; one of many similar ranges at Ind Coope & Allsopp's new bottling stores, Burton-on-Trent.

On Right: Flexometal combined bathroom and shower bath cubicle at above.

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THE ARCHITECTS' JOURNAL

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MOW'S CORONATION DECORATIONS

That mysterious lattice structure which has stood, for a month or two among the trees in Regent's Park like the abandoned landing gear of some Wellsian visitation from outer space, has now been revealed as the prototype for the four floodlit arches under which the Coronation Procession will pass on its way down the Mall. This, and other revelations of decorative jollifications, were made known at a Press conference given by the Minister of Works last week—you may have noticed something about it in your evening paper.

*

These prettily spangled lattice arches, true descendants of the South Bank's poetic structures, and a bold departure from precedent, practically stole the show, both from the Minister himself, and from an enormous and very handsome model of the entire processional route, with every flag, stand and coat of arms shown in position. On looking closer at this model ASTRAGAL couldn't help wondering if the buildings of England's better architects were not being asked to bear more than their fair share of dressing-up. Though the Banqueting House is to be left relatively un-cluttered, and lip service (" finest building in Whitehall needs only a touch of white and gold," etc.) was paid to Inigo Jones, Adam's Admiralty Screen is to be smothered in wicker sea-horses, William Kent's Horse Guards forecourt is—inevitably I suppose—to be filled with stands (a sketch appears, with other pictures, on page 272), and Henry Holland's Dover House façade is to be smothered too. Since Whitehall is not overstocked with good architecture it seems a pity to bury these pieces in bunting, instead of showing them off, while the nineteenth century barracks at the lower end of Whitehall are to have their aridities hardly even adorned.

*

Mr. Eccles took up a good deal of time with matters of cost, explaining how much the taxpayer would get back from recoverable materials after the show, until ASTRAGAL began to wonder, rather sourly, very irrationally and only for a moment, if the answer would be, not to put up a lavish splurge of temporary prettiness, but to seize the opportunity to endow London with a fresh amenity of a permanent kind, such as a new fountain somewhere, or to repair the suspension bridge in St. James's Park, which is in a dangerous condition anyhow, instead of just shoring it up with temporary timbers. This argument can, of course, be quickly shot down because the crowds who come to London for the Coronation are entitled to see a show and a setting appropriate for that show, and most of them—not being Londoners—would rightly feel cheated if all they saw was some more modest amenity—however permanent—which had little to do with the occasion, and had been slipped in on a Coronation budget. This device, in fact while superficially attractive and admirable, of course, as a supplement to the general scheme of decorations, is no substitute for it, and smells faintly of cant—rather like, as somebody said the other day—giving a child goloshes for Christmas. On the whole, MOW and its architect can be congratulated upon putting up a brave and elegant show, and if the reactions of the public to the designs are as kindly as those registered at the Press conference then they can feel pretty satisfied.

BORAX AND JELLY-MOULD

Less visually rewarding was my annual pilgrimage to the British Furniture Manufacturers' Exhibition—as much of a penance as ever. The exhibits fell, as usual, into the categories of Contemporary, Reproduction and Jelly-Mould Modernistic; and, as usual, Jelly-Mould carried all before it.

*

To ASTRAGAL'S penetrating eye, indeed, both Contemporary and Reproduction had lost ground and seemed to account for barely two per cent. of the exhibits between

them. What worries ASTRAGAL is that properly done, with the courage of its vulgar convictions, Jelly-Mould could be a valid popular style with virtues of its own. Its bulging curves, dazzling finishes, plum-duff veneers, and generous, space-destroying proportions, could add up to something convincing and satisfying; but when one sees it continually compromising with the splay-legged spindliness of Contemporary, and displayed on stands of the most refined South Bank Elegance, one is inclined to wonder if the manufacturers aren't suffering from some kind of stylistic schizophrenia, or, what is worse from the point of view of the appearance of the finished product, from complete commercial cynicism about what the public like.

CORONATION SEATS

There's bound to be a lot of heart-burning between now and June about who gets seats at the Coronation and who doesn't; in fact it has started already, with peers declaring themselves affronted at having to ballot for places in the Abbey. But we must hope it does not produce real ill-feeling, and the only way to avoid this, it seems to me, is a fair chance for all.

*

Thirty seats, I am told, have been allotted to the RIBA, as representing the architectural profession. The AA gets none, I imagine because its members are presumed also to belong to the RIBA. The profession will be eager to know how these tickets are to be distributed. There are ugly rumours that they are simply to be shared among the members of the Council; that I can hardly credit. Nevertheless, rumours will grow, until the Institute settles them by an official announcement.

CHALLENGE TO PADDINGTON

Feliks Topolski has lost the battle for his canal-side studio in Paddington and is now holding a valedictory exhibition* there before demolition begins. It is an exhibition not to be missed for two separate reasons: first because it offers a rare opportunity to see, in a pleasantly informal way, the complete range of techniques employed by an astonishingly versatile artist; and secondly because the site is unique in London and its special flavour should be sampled now as a preliminary to watching what the Borough Council make of it.

*

The studio occupies a piece of open land, down on the canal level in that romantic though somewhat decayed stucco-built territory between Maida Vale and Paddington. Two obsolete houses alongside it are to be pulled down, and Paddington Borough Council announced their intention to pull down the studios too and convert the whole into a small water-side park.

*

No one denies the need for new open spaces hereabouts, but Topolski, remembering the recommendation in the County of London Plan that public open spaces should be enlivened where possible by being put to some positive use, asked to be allowed to stay along with other artists, if necessary in rebuilt studios (which would only occupy a fraction of the ground and could be planned informally among the trees), providing Paddington with an artists' colony and its new open space with a focus of activity.

*

There was an inquiry and the idea was turned down. That is now past history, but it will be some consolation to those who favoured the idea if the public park, though without the studios, preserves and enhances the qualities that gave the studios their charm. All the essential elements are here: trees, water, a romantic London view. Real imagination is wanted to make the most of them. The conventional style of municipal park lay-out will not do. All London will be anxious to see how Paddington meets this challenge.

CAMPDEN HILL

After London's little Venice in Paddington, London's owl-haunted groves in Kensington — another threatened area recently " enquired " into. Again is the choice here really between " open space " and " development "?

*

Must the controversy be fought on those lines? It is a poor compliment to architecture (as Osbert Lancaster and John Betjeman, who gave evidence, pointed out) that it should be assumed that a building must, of necessity, be a blot on the landscape. Nearly every great park one can think of contains a few buildings—usually to the park's advantage. Campden Hill could become the great example of modern landscaping—primarily a park with the old trees left intact, but with a few low buildings, and—just possibly—one or two high ones, deftly disposed amongst the foliage. It could become the most fascinating open space in London.

*

Part of the trouble implicit in this solution perhaps lies in the fact that a school (or similar group of buildings) does not consist only of architecture. By the time asphalte playground, service roads, coke dumps, railings, lamp standards, cycle sheds, and all the other filthy paraphernalia of urban life have been emptied over and around the main buildings, the open space ceases to be worth preserving in its original and romantic form.

*

One of the most interesting points in the enquiry was that produced by Osbert Lancaster—who with his unerring sense of the appropriate—launched his attack not on grounds of nostalgia but of demography. " Build a school by all means " he said virtually—" if it is needed. But don't forget that if population graphs continue as expected, that school will be quarter empty in twenty years and half empty in fifty. Therefore, make it a temporary school." As it is some weeks since ASTRAGAL glanced through the Registrar-General's last report, he cannot confirm or deny these population tendencies, but he considers Mr. Lancaster is dead right to make the point—a much more sensible one, incidentally, than that made by Mr. Betjeman whose " cri de cœur " for the destruction of Barkers was understandable but irrelevant.

RIBA EXHIBITION

The Minister of Housing & Local Government officially opened the RIBA's first touring exhibition last week. Already over fifty towns have applied for this exhibition—the first in a series entitled *Home & Surroundings*. The show consists of thirty panels mounted on light metal stands and is

* At 3, Warwick Avenue, W.2; open until March 15.

MOW's Coronation Designs

One of the most effective contributions to the Coronation street decorations will be the series of arches designed for the Mall by Eric Bedford, the MOW's chief architect. As the "night" view of the model above shows, these arches will dwarf the trees and span the processional way. Each of the four arches, whose twin spans will intersect 65 ft. above the ground, will be of tubular steel, latticed in places with fan-shaped designs of gold cane. They will be surmounted by two lions and two unicorns of steel tubing filled in with wire mesh. These figures will add 20 ft. to the height of each arch. A princess's coronet will be suspended on gold wires from the centre of each arch, and the wires will be threaded with aluminium spheres. The four arches will be linked by 40-ft. standards. These standards, which will tower above the trees, will be surmounted by crowns and hung with four banners bearing the royal monogram. They will be illuminated at night, and the wires should then be invisible. Other MOW designs are shown on pages 272 and 273, and ASTRAGAL writes about them on page 265.

entirely self contained (requiring no building work), and very adaptable to different shapes and sizes of rooms.

*

Though in no way startling, it is a thoroughly sensible, simple and sensitive affair clearly expounding the visual problems arising from low cost, high density housing and showing solutions. There are no plans except site layouts—a daring but, I think, correct omission; this is essentially a layman's show. But there are some exceedingly fine photographs of Pimlico, New Hatfield and the like, which have almost convinced ASTRAGAL that Professor Richardson was not so wrong when he said the other day that British post-war housing is the finest in the world. The RIBA is to be congratulated on this modest but much needed venture and we look forward to many more of the kind.

*

A few days ago there was a public exhibition at the Imperial Institute put on by the British Council—a new departure for them, incidentally, isn't it?—of the British Industrial Design Section collected by them for the UK pavilion designed by the Design Research Unit for the forthcoming Rhodes Centenary at Bulawayo. The normal impression of high finish, good taste and faint boredom was gained—and there were no surprises. ASTRAGAL found himself continually avoiding the coronation souvenirs (though he nearly snatched the charming Doulton "Lambeth" Tankard), the furniture, with its beautiful but inevitable Arts and Crafts hangover, and the pottery (which sells like hot cakes everywhere abroad anyway!), and looking with gratitude at those things which designers (with a capital D) never get at—the laboratory equipment, fishing rods and fly boxes, tennis racquets, leather luggage, etc. These things are still done well, and their designers seem to manage it without any lectures, summer schools, pamphlets or FSIAs. What, I wonder, is the reason for this? Were the organizers of the British Pavilion in Paris, 1937, so absurd as we thought they were at the time in concentrating almost entirely on these items? How disturbing are these second thoughts of middle-age.

ASTRAGAL

POINTS FROM THIS ISSUE

The Editors

A BABY MODULE

IT is not surprising that the manufacturers of factory-made building components are strong supporters of the Modular Society, which was formed after Mark Hartland Thomas's recent lecture to the Royal Society of Arts on Modular Co-Ordination. But manufacturers have been peculiarly perverse in refusing to adopt another form of standardization, which was initiated by architects, *i.e.*, the standardization of size of building catalogues.

The architect has the JOURNAL's Information Sheets in their specially designed cases, and other bound works of reference. But although these satisfy a need on a long-term basis, there is no doubt that there is an equal need for trade catalogues that are easy to file. Some time ago, as readers will remember, a few enthusiasts succeeded in obtaining a British Standard for the size of catalogues. These enthusiasts may have been uncertain as to whether or not the sizes agreed on were ideal. But at least they had some confidence that they would eventually find it easier to file the trade literature that accumulated in their offices.

What has happened? Many manufacturers have ignored the British Standard; they have continued to produce catalogues of every possible size and shape. And it seems that we cannot do anything about it. We cannot even frighten these firms with the waste-paper basket; they know that their catalogues may be so valuable that they will be tolerated, however much they may clutter up office shelves.

It has been suggested that architects should make a point of returning all catalogues which are not of standard size, in the hope that unco-operative firms might be persuaded to see the error of their ways. One reader has even suggested that the JOURNAL should issue printed "boycott slips" to architects willing to do this, so that secretaries could simply enclose them when returning catalogues. It is certainly time that some concerted action was taken. But let us ask nicely once more: will manufacturers please conform to BS 1311, even at the risk of losing their cumbersome individuality?

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YOU

A study of the number of architects entering the profession follows last week's article by the JOURNAL'S *Guest Editor for* 1953, *Professor Ian Bowen, on the rate of withdrawals from the profession. In three articles, therefore, Professor Bowen has presented a picture of the strength of the profession as it stands today, as far as is ascertainable from existing facts and figures. The title piece, above, is reproduced from a page chosen at random from the Architects' Register, and the names have no direct connection with the article.*

Guest Editor:
Professor IAN BOWEN

The Rate of Entry to the Profession

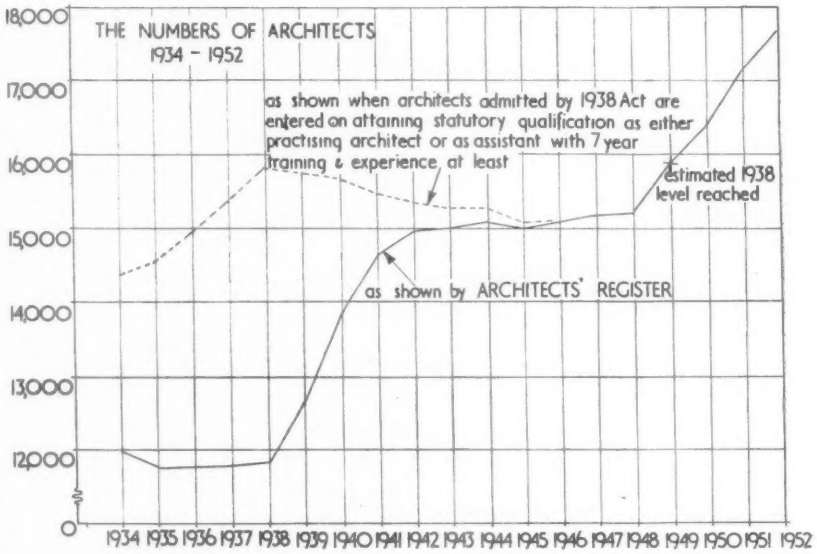
So far I have shown the *net* rate of growth of the profession and the rate of withdrawals from it. This week I deal with the rate of entry.

Graph III depicts the two main channels of entry to the register. The dotted line represents the total gross new admissions to the register. These reached an exceptionally high figure in 1939 and 1940 as a consequence of claims to admission made under the 1938 Act. The firm line represents the number qualifying for admission to the register by way of examination.

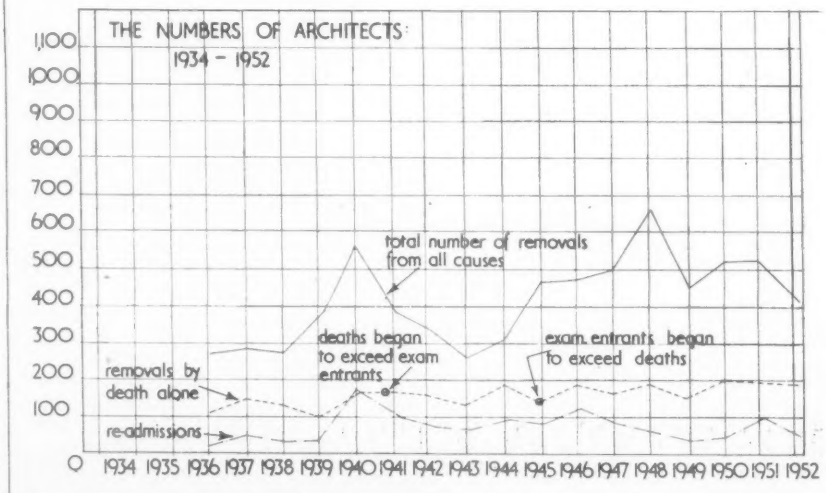
First, the number of new entries to the register each year may be compared with the number of removals (Graph II). New entries were slightly below removals in each of the years 1936 to 1938; then, following the 1938 Act, came the great bulge of entry to the register, which persisted until 1942, but which caused new entries to exceed removals only until 1943 (the removal rate, it will be seen, rose from 1943 to 1947). Only by 1947, when entrance by way of examination had begun to pick up, did the annual rate of new entries and re-admissions once more exceed the number of removals.

By the end of the period shown entries by way of examination accounted for all entries (in 1952 the total was 934). In the highest post-war year of entries, the total was 1,062, *i.e.*, in 1951, that is about double the number necessary to replace those leaving the register. In the exceptional years of the extraordinary bulge created by the 1938 Act gross entries reached in the peak year of 1940 a total of over 1,500, but this, of course, meant the official recognition of the existence of architects as well as the coming into existence of new architects at the outset of their careers.

Secondly, it may be useful to look at the post-war years as a whole—in other words, at what has happened after the temporary bulge ended. Considering entry by examination alone, we find that some 4,900 persons obtained entry to the profession by this means from 1946 to 1952 inclusive. This is, of course, a far higher rate of entry by examination than obtained in any seven-year period before the war (in the seven pre-war years the total was 1,800). But in the pre-war years the



The graphs above and below have appeared with earlier articles. We publish them again so they may be compared with the graph on the next page. Above, Graph I, showing the number of architects on the Register from 1934 *to* 1952. *The dotted line gives an estimate of the numbers if all architects had registered as they became eligible to do so.*



Graph II shows the number of architects removed, and the number of architects re-admitted to the Architects' Register in each year from 1936 to 1952

profession was being swelled by those entering by way of experience and not by examination. By means of sample figures relating to 500 architects qualifying under the provision of the 1938 Act relating to experience, it has been possible to calculate the approximate total of those who qualified by experience alone from 1933-38. This amounts to 2,000, and we may estimate from this that the pre-war gross rate of entry was 550 to 650 a year. That is, if the figures out of the bulge are allocated back to the years in which adequate experience was obtained.

Thirdly, it will be noted that the rise in the total numbers on the register in the years from 1950 to 1952 has been accentuated by the fact that the increase in successful examinees has been accompanied by a decrease of over 100 in the number of persons leaving the register during the same period (see Graph I).

To sum up the effect of all these changes, the following totals from 1946 to 1952 inclusive are interesting:—

TABLE SHOWING CHANGES, 1946-52 INCLUSIVE.

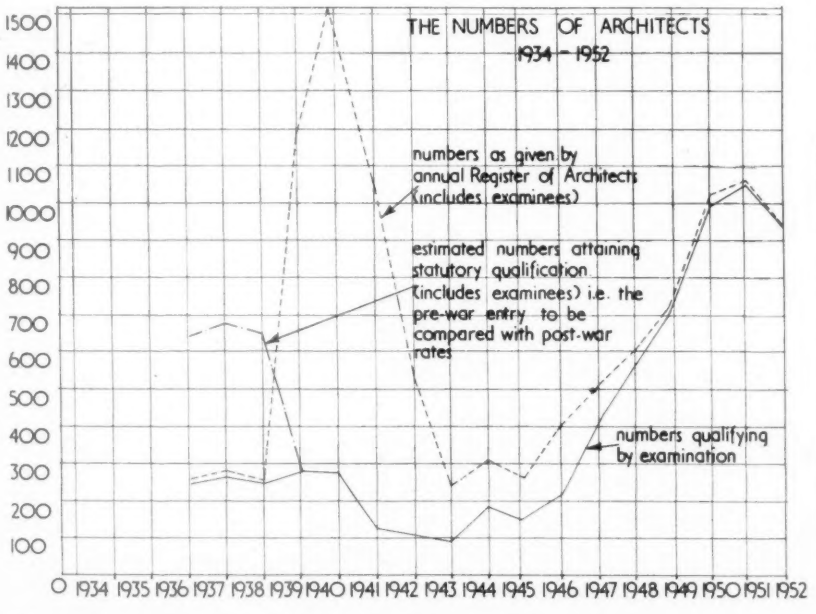
Admissions.		*Removals.*	
By examination ..	4,793	By death ..	1,278
By re-admission ..	518	By other causes ..	2,193
	5,311		3,471
Less—Removals	3,471		
Net increase	1,840	i.e. 263 per year average	

The great endeavours to educate a new generation of architects resulted, in these years, in a gross intake of 5,311 new (or re-admitted) names to the register, but this was offset by a substantial rate of removal.

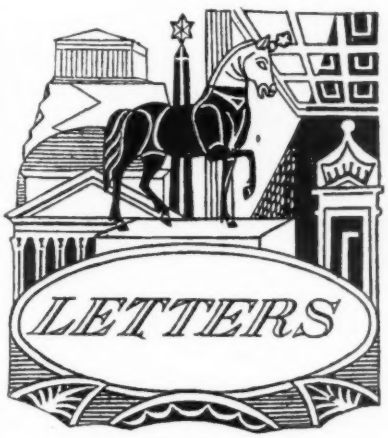
It has already been observed that not all those taking their examinations are subsequently entered on the register. The short fall since the war appears to be of the order of some 900 names. The current enforcement of a rule that one year's experience is required before registration will have the certain effect of introducing (*a*) a lag between examination, completion and registration; (*b*) a short-term drop in the rate of increase of registration, and (*c*) the possible effect of postponing registration indefinitely in some cases.

THE PROFESSION'S AGE-STRUCTURE

In attempting to assess the future numbers coming into the profession, and their effect on its total size, the background of its *present* size and composition is extremely important. Ideally we ought to know the age-structure of the profession. It is self-evident, from the figures already discussed, that its age-structure is unlikely to correspond to that of the population as a whole. But unless the age-structure is known the future rate of retirement and death cannot be even guessed at. The next point to investigate is the number of students taking full and part time courses at recognized schools, universities, technical colleges and evening institutes.



This graph shows the number of architects registering for the first time in each year, together with the actual numbers of architects qualifying by examination. It also shows an estimate (dot-dash line) of the probable rate of numbers registering (including examinees) if those admitted by the 1938 Act had registered as soon as they were able to do so.



R. F. Jordan, F.R.I.B.A.
G. F. Cole, Secretary of IES
Geoffrey Maddison, A.R.I.B.A.

"Time-Life"

SIR,—I was interested in ASTRAGAL'S comments on the review of the "Time-Life" Building which I contributed to *The Observer*. One or two of the points raised were dealt with by Hugh Casson and Lionel Brett in letters published in *The Observer* the following week. We would all agree that the more genuine architectural criticism we get the better. Unfortunately it must remain limited. The legal position is such that patrons and architects must either consent to criticism or invite it—as do publishers and theatre managers—and few are prepared to do this. "Time-Life" must at least be congratulated on holding a Press-view. I have a sneaking feeling that both they and their principal designers were so bemused by the sheer lushness of their achievement that there was a slightly shocked surprise when some of the criticism turned out to be adverse. However—as in the literary and theatre worlds—a column of abuse is, I imagine, worth more than a brief note of praise, and "several hundred visitors a day" worth even more.

I do not think for one moment that criticism of this kind—whether in the public Press or on the radio—is likely to lose good designers jobs. The whole history of criticism in all spheres proves otherwise. However, since my strictures seem to have attracted more attention than my praise may I, in this connection, reproduce here the final paragraph of my *Observer* article: "I have been critical. I think it worth while—worth while because the modern movement, both in architecture and decoration, is as important as almost anything else in the story of art since the end of the eighteenth century. My criticisms are at that level."

R. FURNEAUX JORDAN.

London.

Floodlighting

SIR,—Though, as Maurice Jay says, architects should not be surprised at finding an entire issue of the ARCHITECTS' JOURNAL devoted to floodlighting, I have no doubt that many were. Three years ago R. O. Ackerley gave a paper on floodlighting at the IES summer meeting in the discussion on which Grenfell Baines took the author to task for assuming that the art of floodlighting would continue to be the practice of the engineer; to which Ackerley replied that he had begun to despair of architects, to use Mr. Baines's words, "bestirring themselves to acquire a proper understanding of artificial lighting."

The "bestirring" which your issue suggests is therefore welcomed by the engineers.

The first large-scale floodlighting in this country (probably in any country) was in 1931 for the meeting of the International Commission on Illumination and was brought about only by the efforts of lighting engineers and the generosity of firms in the lighting industry. Even at that time lighting engineers invited the co-operation of architects; after 22 years it would seem that this might become possible.

Maurice Jay refers to electrical engineers (though he no doubt means *lighting* engineers) and implies that those in this country are not as skilful as their continental colleagues. I doubt very much if this is true; some of the continental countries are more floodlighting conscious than we are, but their lighting work is probably no better than ours. If architects want advice on the technical problems there are plenty of lighting engineers in this country well qualified to give it.

G. F. COLE.

London.

Modernising Victoriana

SIR,—The two letters published in the JOURNAL for December 4 entitled "Housing Standards: An Appeal to the Profession" and "Let's Modernize Victoriana?" provide a damning commentary on the position into which the nation in general and the profession in particular is being forced.

On the one hand we are being called upon to devise increasingly ingenious solutions to the problems of ever decreasing standards, while on the other, we have to plead for the modernizing and preservation of our slums because the new homes that we are building are barely fit to live in.

Peter Hampton is correct in calling for the modernizing of Victoriana (and why not late Georgiana and post Victoriana as well?) in so far as the room sizes in these older houses are far preferable to the contemporary dog kennels of our creation, though I would regret the raising of the rents in such houses as this would merely take them out of the possession of those most in need who would be forced into other dilapidated property and to overcrowding.

But how long will it be before the MOHLG standards of planning have been reduced so far that we are able to reprieve all our slums as being within the required standards?

Is it not time that we made our voice heard in this matter, and heard where it will have some effect?

GEOFFREY MADDISON.

Hampstead.

DIARY

Home and Surroundings. The first in a series of travelling exhibitions under the general title of *The Architect and You.* At RIBA, 66, Portland Place, W.1. Weekdays: 10 a.m.-7 p.m.; Saturdays: 10 a.m.-5 p.m.

UNTIL FEBRUARY 28

Building in the Netherlands. Exhibition at RIBA, 66, Portland Place, W.1. Weekdays: 10 a.m.-7 p.m.; Saturdays: 10 a.m.-5 p.m.

UNTIL MARCH 28

The Future of the Past: Some Thoughts on Preservation. Osbert Lancaster. RIBA, 66, Portland Place, W.1. 6 p.m. MARCH 3

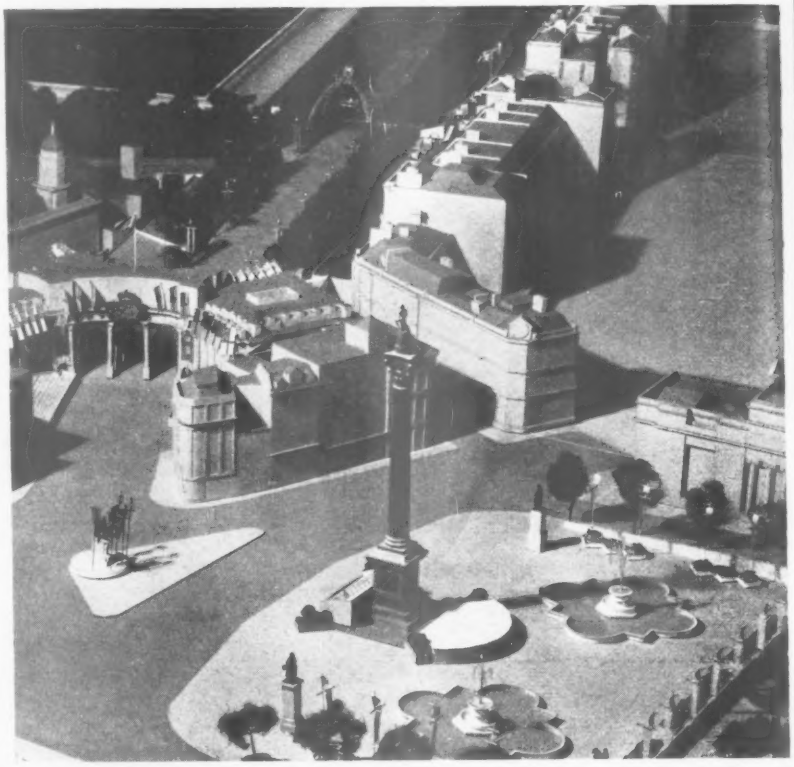
The Role of the Sociologist in Planning. Dr. Coolie Verner. Student Planning Group, 28, King Street, W.C.2. 6.30 p.m. MARCH 5

Ideal Home Exhibition. Olympia.

MARCH 3-28

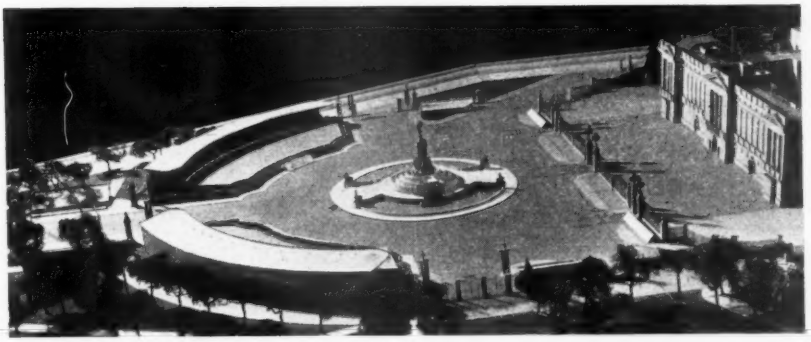
Time-Life Building. Discussion on interior decoration, led by Misha Black and Sir Hugh Casson. ICA, 17-18, Dover Street, W.1. 8.30 p.m. MARCH 4

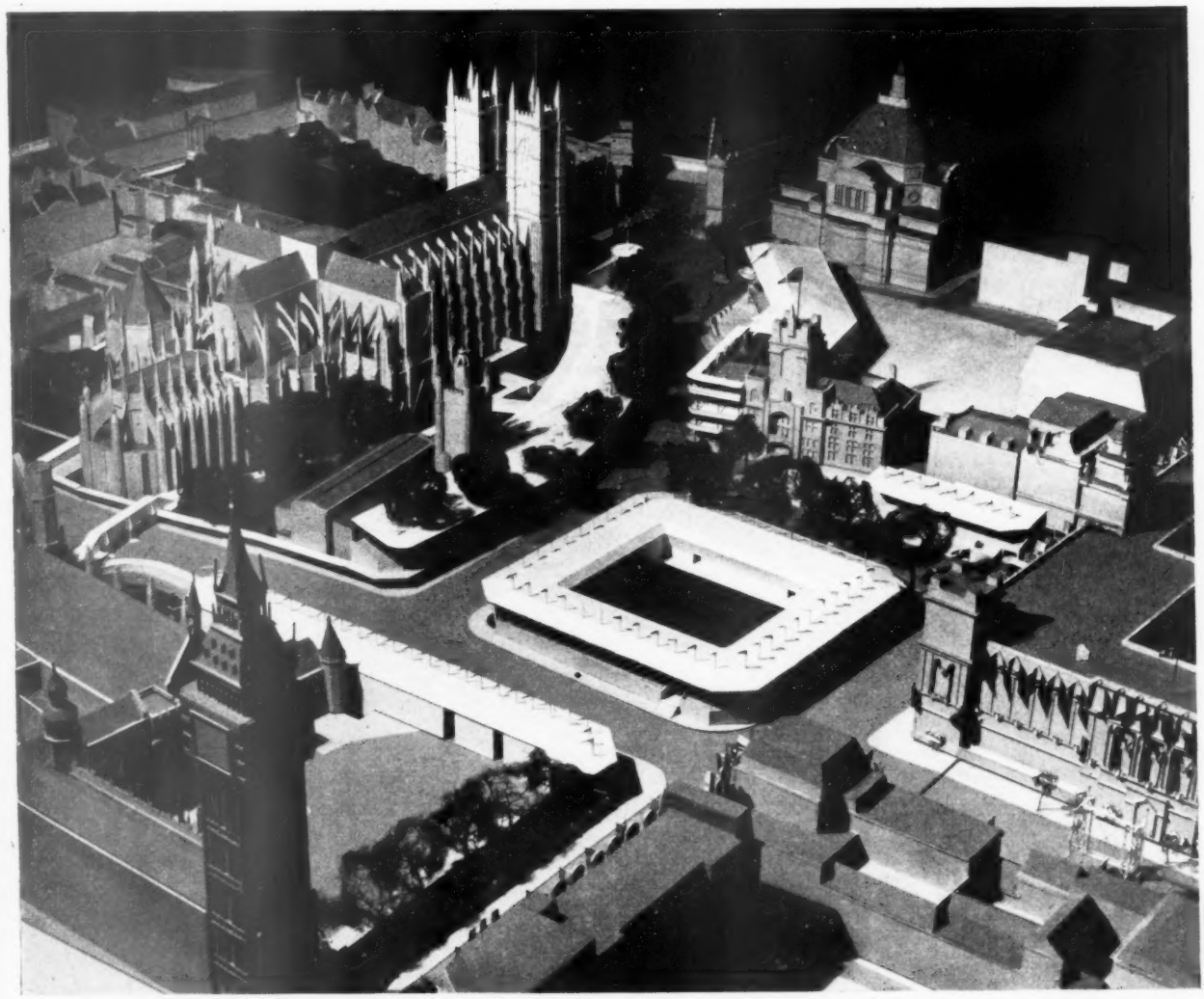
CORONATION DECORATIONS IN LONDON:



DESIGNED BY MOW

The decorations shown on these models were designed, as were the models themselves, in the MOW's architectural department (chief architect, Eric Bedford). Left: Trafalgar Square will be decorated simply, because of the large crowds that gather there on special occasions. Right: stands outside Buckingham Palace will be lined in front with a great display of geraniums. The middle of Parliament Square will be covered by a quadrilateral group of stands (right); these are also seen in the view of that area below. Opposite, bottom: the stands to be built in front of Horse Guards Parade, which are commented on by ASTRAGAL *on page* 265. *(See also designs for the Mall, page* 268.)





N E W S

COMPETITION

"News Chronicle House"

The *News Chronicle* invites designs from architects for one- and two-storey dwelling houses from 800 square feet to a maximum of 1,000 square feet of floor space within the main containing walls.

As already announced the architectural competition assessors are: Louis de Soissons, A.R.A., F.R.I.B.A., Herbert Tayler, A.A. DIPL. (HONS.) A.I.L.A., F.R.I.B.A., and J. Lewis Womersley, A.R.I.B.A., A.M.T.P.I.

The assessors will select five designs from the entries submitted which shall include not less than two one-storey and two two-storey houses. The competitors submitting the designs selected will each receive an honorarium of 150 guineas.

In the event of the *News Chronicle* building a house to one of the selected designs, the architect responsible will supervise the erection of the house in the normal way and will be paid at full RIBA scale of fees in addition to the honorarium already received.

The above honoraria and fee will be the sole payments made by the promoters in connection with this competition.

The *News Chronicle* reserves the right to publish and charge for a pamphlet or book discussing and reproducing any of the plans submitted in this competition. The authors' names will be mentioned on all published reproductions.

Designs should be for one-storey and/or two-storey houses from 800 square feet to a maximum of 1,000 square feet of floor space within the walls. If competitors wish, advantage may be taken of the recent waiver of the bye-law governing the maximum height of ceilings. The competition is for a detached house, on a level site, capable of being erected on its own but special consideration should be given to the possibility of its being architecturally linked with houses of similar character to form a pleasing and unified group.

Competitors can submit a design for *either* a one-storey house *or* a two-storey *or* one design for each.

The house should be capable of being built in an A graded district for labour rates, as a detached dwelling at not more than 50/- per super foot of floor area measured within the main containing walls: this cost to be inclusive of drainage and connection to sewers in the frontage road as well as the necessary approach paths. The site itself, garden layout, its fencing or hedging, the garage and its approach road are not included in the cost.

The house must be capable of accommodating a family unit of four including a child of each sex. Favourable consideration to be given to the additional use of bedrooms for other purposes.

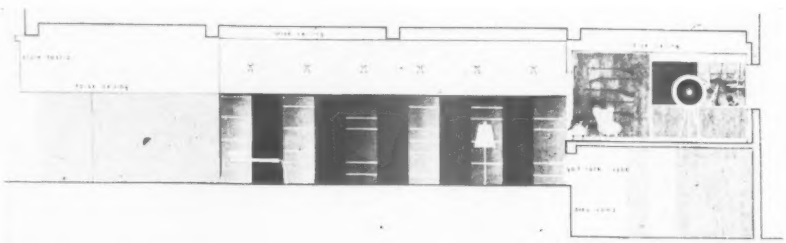
Each design in the competition and the report accompanying it must be sent in without name, motto, or distinguishing mark of any kind, and must be accompanied by a letter signed by the competitor, containing in an official envelope issued with these conditions, properly sealed, stating that the design is his, or her, personal work. Successful competitors must be prepared to satisfy the Assessors that they are the *bona fide* authors of the design(s) submitted.

The design, report, and sealed envelope (enclosing declaration form) of each competitor are to be contained in one package endorsed "Open Architectural Competition" and to be sent, carriage paid, addressed to *News Chronicle*, 12-22, Bouverie Street, London, E.C.4, to arrive not later than *Monday, April* 13, 1953, after which no design will be received, accidents in transit excepted.

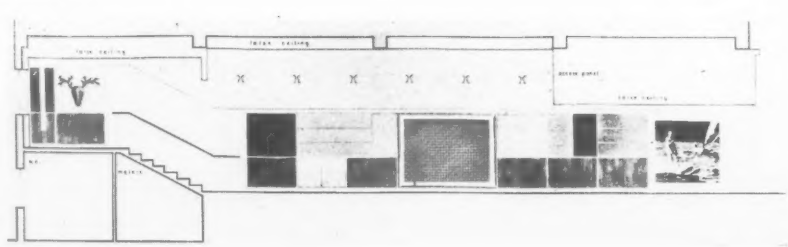
ARCHITECT—ENGINEER TEAM WINS

A competition for the layout, lighting and decoration of a sports shop, held by the IES—in memory of John Stewart Dow—with the purpose of encouraging collaboration between engineers and architects, was won by the following team :—W. D. Tyrrell, Croydon Polytechnic (illum. engr.); T. A. D. Bindon, S.E. London Technical College (elect. engr.); E. W. Uglow, Regent Street Polytechnic (architect); Miss S. M. Gray, Regent Street Polytechnic (architect); C. G. Crowfoot, Regent Street Polytechnic (architect); and R. G. Smith, Regent Street Polytechnic (architect). The shop is divided into three basic areas : front display, main sales and mezzanine. Front Display Area : subdued lighting of front shop to emphasize interior, but strong local lighting can be used for special displays anywhere in this area. Front display emphasized at night by pattern of 25-watt lamps piercing ceiling. Main Sales Area : lighting beams using 4 ft. 40-watt hot cathode fluorescent lamps are employed. The aim was to provide a lighting system "completely integrated with the interior," a

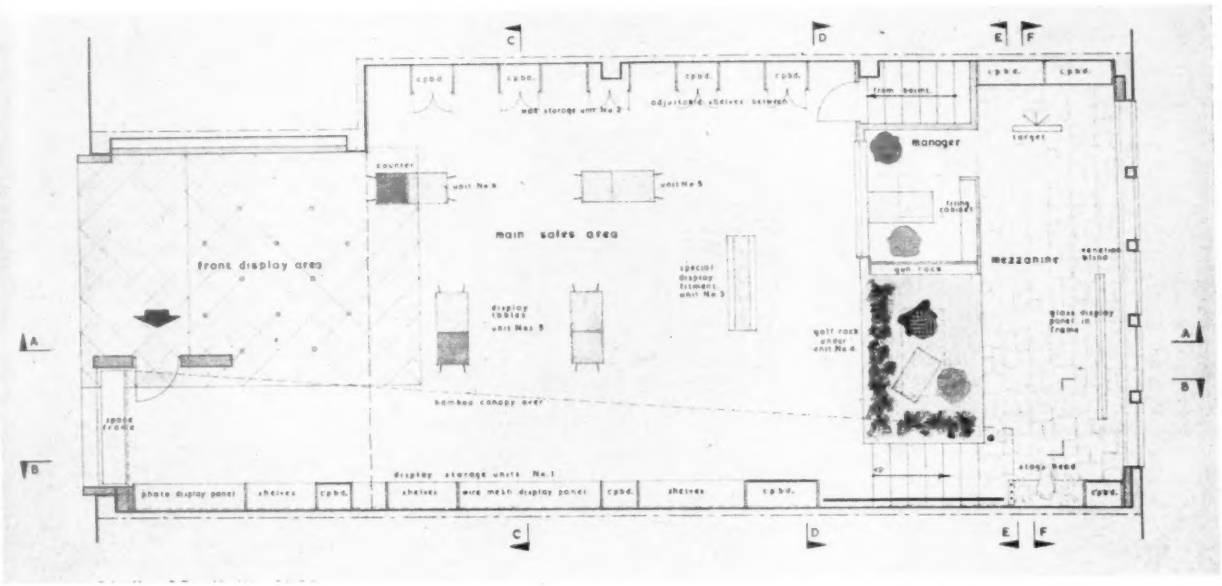
Section A-A



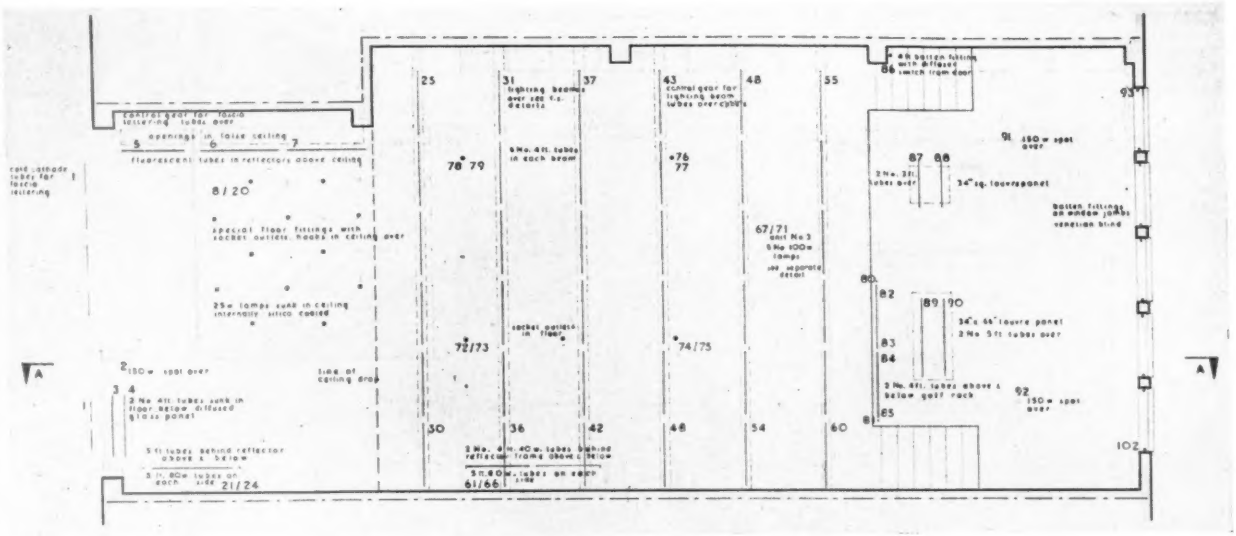
Section B-B



LIGHTING AND PLANNING COMPETITION: SPONSOR, IES



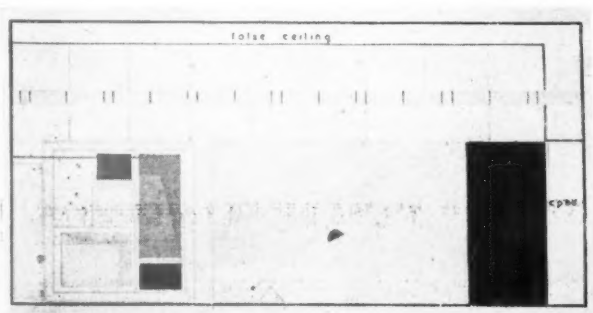
Plan of main shop area



Plan of main shop area, showing lighting layout

low brightness installation and an effect of spaciousness above the lighting system. Mezzanine Floor : lighting in this sports equipment section is designed to harmonize with the restful outdoor character of the surroundings, louvred panels being recessed into cavities in the false ceiling. Panels are formed of prismatically moulded polystyrene strips, the lower edge of which is set 1 in. below the ceiling line so that a certain amount of light is reflected on to the ceiling, lessening the brightness contrast.

Section C-C



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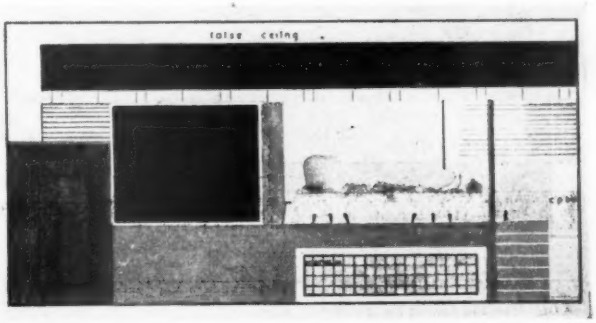
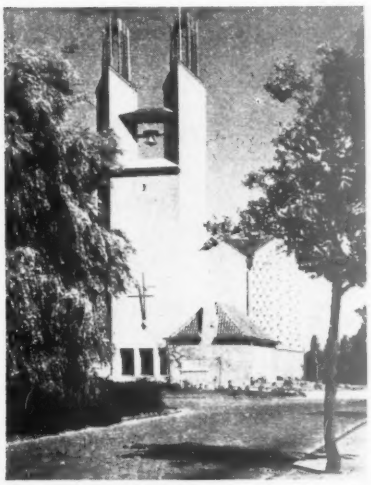




This picture of a Protestant Church at Amstelveen comes from a display panel at the Dutch exhibition which opened on Tuesday at the RIBA.

COMPETITION

Kitchen Design

Following are the winners of Thomas De La Rue & Company's *Daily Mail* Ideal Home Exhibition competition for kitchen designs suitable for a small house on an average housing estate.

1st Prize (£150). Joint entry: Percival Howells, A.R.I.B.A., Kenneth G. Dines, STUD. R.I.B.A., Peter J. Ball, DIP. ARCH. (LEICS.), A.R.I.B.A., Godmanchester, Huntingdonshire.

2nd Prize (£75). J. C. Tilley, A.R.I.B.A., London, S.W.1.

3rd Prize (£50). Charles Caffrey, Torquay.

Six Consolation Prizes of £10 each. R. Crookes, A.R.I.B.A., and M. M. Crookes, M.A., London, W.2; Robert Watkin Warner, Oxford; Gordon and Eleanor Michell, A/A.R.I.B.A., A.A. DIPS. (HONS.), London, W.11; Derek Ware, Norbury, S.W.16; G. M. Broad and R. Farmer, Ilford, Essex; Irene and Leslie Eckersall, of John A. Strubbe & Partners, A/A.R.I.B.A., Southall, Middlesex.

MODULAR

Three Open Meetings

The newly-formed Modular Society is to hold three open meetings for general discussion on modular co-ordination at 7.30 p.m. at the Royal Society of Arts, John Adam Street, Adelphi, London, W.C.2.

The first, on Wednesday, March 4, will be introduced by W. A. Balmain, D. Fraser, S. Johnson-Marshall and F. J. Samuely.

OBITUARY

H. A. Welch

Herbert Arthur Welch, whose death was announced last week—just as we went to Press—was born in 1883. Before he started to practise in 1911—the year in which he became an A.R.I.B.A.—he was with Raymond Unwin at Hampstead Garden Suburb. He became an F.R.I.B.A. in 1924. In 1930 he was joined by F. J. Lander and Cachemaille-Day (who left in 1935). For some years he was a member of the RIBA Council; he was chairman of the Practice Standing Committee and a member of the Competitions Committee. He was awarded the RIBA London Architecture medal for St. Saviour's Church, Eltham.

John Early

A correspondent writes:—

It will bring a sudden and sharp sense of loss to the friends and professional associates of John Early, A.R.I.B.A., to learn that he died last Friday, after being laid up with influenza for less than a week. Although still a young man he had made three distinct contributions to architectural planning practice; firstly in private offices, secondly, in a large organization building wartime hostels and factories for the Ministry of Supply, and lately as a valued member of the Planning Technique section of MOHLG.

He was one of the most dependable, straight thinking and level-headed colleagues that any head of an office could wish for; and his cheerfulness and vigour were as unfailing as his judgment.

His services, though neither highly paid, nor in the public eye, were of the kind that raised, unnoticed, the value and the prestige of the whole technical administration with which he was concerned.

L. W. Elliott

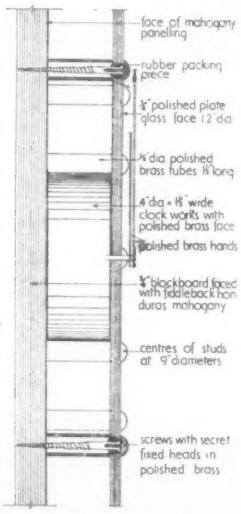
A correspondent writes:—

The sudden and tragic death of Leonard W. Elliott at the age of thirty-four has come

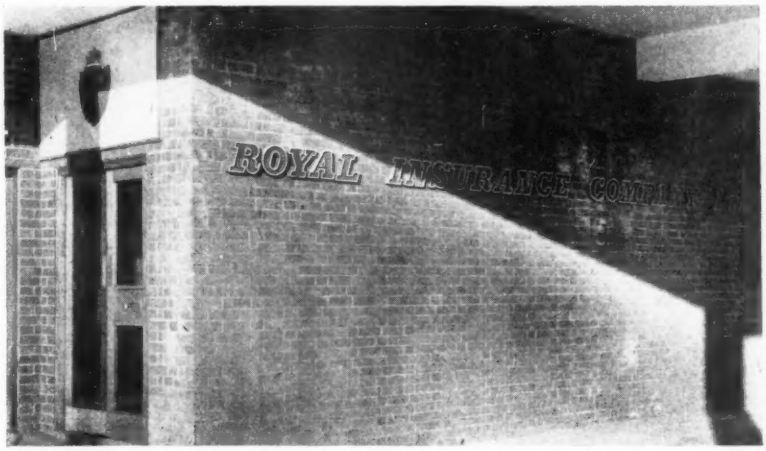
This BOAC headquarters under construction at London Airport was designed by Sir Owen Williams and Partners.

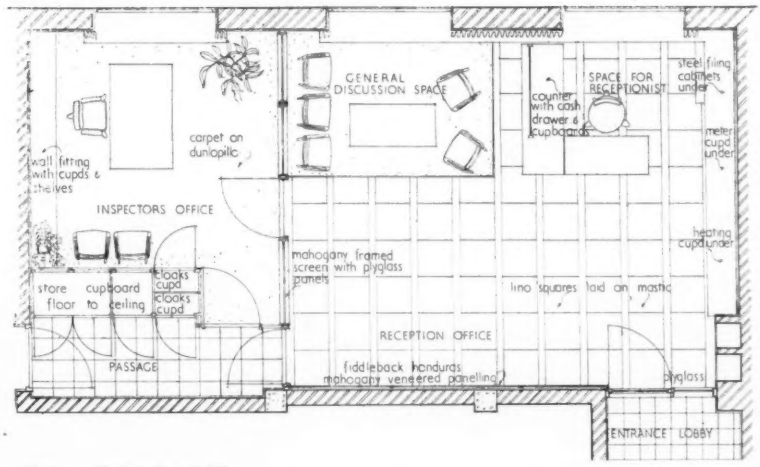
OFFICES AT THE STOW, HARLOW NEW TOWN, ESSEX

These premises, comprising 580 sq. ft. of office space, together with toilet accommodation and an entrance lobby have been designed for the Royal Insurance Co. Ltd., by Frank Booth, and are the first new offices to be occupied by an insurance company in a New Town. The site lies in the north-west corner of the new shopping centre known as The Stow. There is a crest over the outer entrance doors, seen right, and the company's name in blocked-out letters 8 in. high. The main office, a room 21 ft. by 17 ft., is seen on the left and right (bottom.) On the left is the discussion space, with imported Danish furniture, and part of the curtained north window. On the right are the reception desks, which are faced with polished mahogany veneer (drawer fronts are sycamore). The clock, (left) designed by the architect, has a plate-glass face and polished brass studs forming the figures. It is fixed on a background of figured fiddleback Honduras mahogany veneer on ¾-in. blockboard. Between the main office and the inspector's office is a glazed screen consisting of glass ply, formed by two sheets of plate glass and glass fibre between, held in mahogany frames. The general contractors were Courtney, Pope, Ltd. For sub-contractors, see page 294.

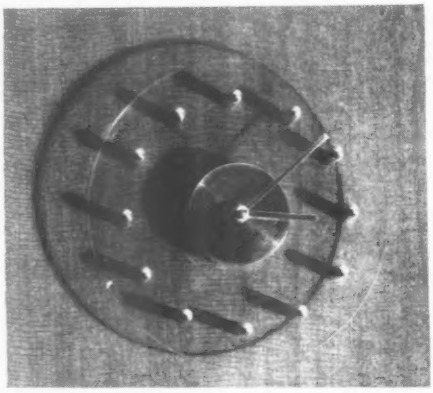


Section through clock
[Scale : 3" = 1' 0"]





Plan [Scale : ¼" = 1' 0"]



as a great shock, not only to those who were associated with him in his work, but to all who had come into contact with him. It was impossible to know him, however slightly, without valuing his friendship and his integrity. Leonard Elliott, killed in a motor accident in the Gold Coast on February 17, was recognized as a brilliant engineer whose broad approach and clear vision took him far beyond the field of structural engineering. He was never at a loss for a solution to a problem, and his sympathetic understanding of the architect's difficulties could only be achieved by one who was himself an architect. His versatile mind quickly grasped the implications of a problem, and at an early age he appreciated that the work of an engineer could not be divorced from that of the architect; he himself became a civil as well as a structural engineer, and was also a practising architect.

Leonard Elliott was born in Canning Town, London, in 1918, and at the age of eleven gained a scholarship from the Star Lane Elementary School to the Russell Secondary School, where he won a scholarship in Art. He left school at sixteen to earn his living. He was almost entirely self-taught, and studying day and night from text-books he qualified in the space of three years as ARIBA, AMICE, and AMI Struct E. He worked for the London Electricity Board, the LCC and the Finsbury Borough Council, and then moved to the Admiralty, working on D-day installations. After this he went to the MOW, working on temporary housing schemes. In 1946 he worked in association with Denis Clark Hall, mainly on the design and structure of schools, and in 1950 he started his own practice. Since then he worked with his previous associates and such distinguished architectural firms as Easton and Robertson.

MOTCP

Quicker Completion of House Interiors

The report to MOHLG on the quicker completion of house interiors by a committee under the chairmanship of Sir Donald Bailey was published yesterday. The nine-man committee included the following architects; S. Bunton, J. H. Forshaw and Dr. F. M. Lea. The 63-page booklet includes chapters on design, with illustrations of "recent housing schemes of distinction"; materials and components; organization; comparisons of manhours and costs for various materials and methods of interior construction and finishes.

The conclusions the committee reached are summarized as follows: (*a*) That house building to a smaller number of interior plans will make the greatest single immediate contribution to speed, efficiency and lower costs; (*b*) British Standards products ought to be more widely used in house building; (*c*) British Standards should be examined with a view to a further co-ordination of dimensions; (*d*) it is urgently necessary to press on with the BSI's study of modular co-ordination; (*e*) there are many new and alternative materials which, if properly used, can save substantial time and labour—and sometimes cost as well; (*f*) good organization from start to finish is essential and in the long run can make the greatest contribution to speed and efficiency.

In support of the views expressed in (*a*) and (*d*), the booklet contains a number of designs, based on a three-foot grid, for two-storey terrace and semi-detached houses, flats up to three storeys and four-storey maisonettes. Also included are copies of memoranda by the RIBA and RICS in answer to a questionnaire which was sent to over 100 persons and bodies concerned with house building.

**Quicker Completion of House Interiors.* HMSO, 1953, 3s. 6d.

Following are the views of a planner, a consulting engineer and four architects on building high—a subject that is very much in the news. These views were extracted from reports of a series of discussions sponsored by the JOURNAL *some time ago.*

VERTICAL LIVING

Dr. T. Sharp : The land requirements according to the regulations of the late MTCP and the MOE are, so Professor Dudley Stamp tells us, as follows:—For each thousand of the population, housing requires 24 acres; school sites, 1·65 acres; school playing fields, 5 acres; public playing fields, 6 acres; parks, 2·5 acres; allotments, 2 acres; main roads, 3·5 acres; shops, offices, churches and public buildings, 6·2 acres; and industry and transport, 4·15 acres. Therefore, of the 55 acres required for 1,000 of the population, 24 are used for housing purposes, and the remainder for general urban purposes. I have tried to ascertain how these figures were arrived at, but no one seems to know. They are laid down by regulation. Planning authorities are required to incorporate these standards in their development plans, yet it seems impossible to find out how they came about. The MOE may have reasons, but they refuse to divulge them.

Is it possible or desirable to reduce the amount of ground used in housing? The difficulty is to measure the *acceptable* size of garden. Looking at it "scientifically," for adequate daylight, and so on, the appendix in the Dudley Report shows that you could get 32 houses to the acre. But that would only allow 42 ft. between houses, which is almost certainly insufficient. It gives adequate daylight, but inadequate garden. The Dudley Report took the view that 70 ft. between the backs of buildings was perfectly adequate; and that would give about 24 houses per acre. That is with the two-storied house with a moderate frontage of 20 ft. But there was a marked tendency after the war to go in for wider frontages—up to 30 and even 35 ft.—and that was one of the features which lowered the density. Surely, it is desirable to go in for as short a frontage as will give a reasonably well planned house. And then there is the further point of how far housing in 3 storeys, with much narrower frontages, helps to increase density. The last Housing Manual gave frontages for this type as low as 15 ft. 6 in. and 18 ft.

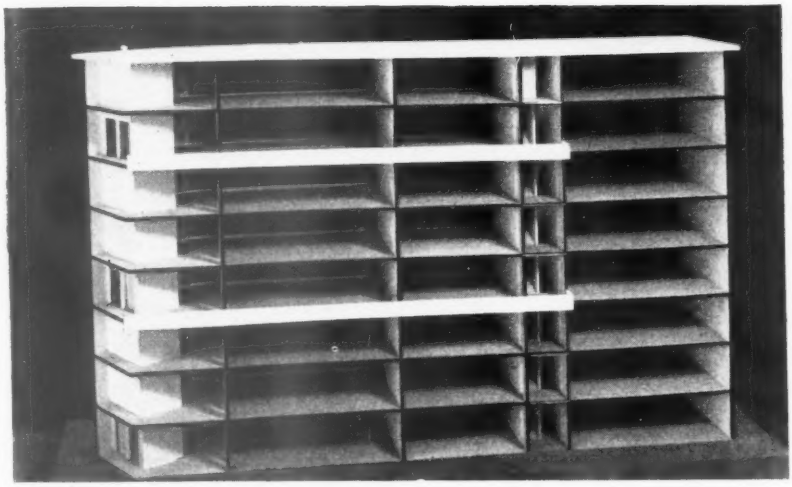
ONLY SMALL PROPORTION OF FLATS NEEDED

Ideally, it seems to me, the flat ought to be provided only as a kind of dwelling in which certain people, certain kinds of families, can live happily—not as a dwelling for every kind of family merely because of difficulties of space. I have found that with quite high densities you can get schemes which involve only a small proportion of the people living in high flats. If I may quote the figures for a neighbourhood in Kensington which I planned, with net residential density of 124 and an overall density of 75, I found I could accommodate 3 per cent. of the people in two-storied houses; 43·7 per cent. in three-storied houses; 42·4 per cent. in three-storied flats; 4·6 per cent. in four-storied flats with maisonettes; and 6·1 per cent. in eight-storied flats. So the number of people required to live in really high flats need only be small.

When talking about higher densities, I think chiefly about London and the large cities. While there may be room for occasional flats in new towns, I think they will generally be the exception. As architects, there is one thing we have to be careful about. We should not advocate the building of high flats merely because we like the look of them æsthetically. We have to measure the sociological, economic and æsthetic problems all together. It's that which makes housing such a tough problem.

E. C. Tory, of Coventry City Architect's Department, spoke about the work of his department.

E. C. Tory : In Coventry we used no-fines construction purely and simply for three-storey work. That was very satis-



A model of the 8-storey flats block mentioned below by E. C. Tory.

factory and we built quickly, but the eight-storey project we are working on is not technically pure no-fines construction. We have a traditional reinforced concrete structure. The no-fines serves as permanent shuttering, and enables the structure to be built very quickly. By using a tall tower crane in the centre of a wide block, we are able to swing shutters from one wing round to the next, and to work round in circles. The shuttering on this block of eight storeys will only be one storey high, whereas on a three-storey block the shuttering was three storeys high. Traditional machinery is very efficiently used.

We regarded the use of a balcony and the use of a staircase serving two flats as being extravagant and tried to combine the two methods. As a result, we have accepted the principle that people could walk up or down one flight of stairs to get to their flats. That meant that we could have a balcony on every third floor. As the cost of lifts depends to a great extent on the number of openings and the switch gear involved, we have our lift stops in three places. By using this method of circulation, we have cut down our floor area of access per flat to some of the lowest figures yet obtained for flats with dual access and balconies. For the fire escape we use an inter-lacing staircase. Each flat has two doors, and each door leads on to one of the staircases so that there would be adequate means of escape.

We are going up 8 storeys. At the moment the constructors are inclined to stick at about this height. I think we could go up higher.

An important point is the necessity to build quickly. In Coventry we have a big problem because the motor industry absorbs all the skilled craftsmen and pays rates of wages well above those paid by the building contractor. We must limit our height and build with a maximum speed at the smallest cost.

Philip Powell, of Powell and Moya, made the following point about costs.

Philip Powell: So far the indication appears to be that at up to 7 storeys building costs increase. They go down for 9 to 11 storeys, and after that it appears that they might go up if extra money has to be spent on fire precautions. The pioneers of 15 and 20-storey blocks may be discouraged because contractors do not know what they are tendering for beyond 10 or 11 storeys, and prices may be artificially high. It will be difficult to tell whether the contractor is insuring against something about which he does not feel sure, or whether the designer has designed an uneconomic building.

Ove Arup, the consulting engineer, had something to say about the economics of high building.

Ove Arup: The question of whether or not it is economic to go high depends on the method of construction employed. With height certain items would be more economic, while others would be more expensive. Obviously, lifts are cheaper per flat in a high building, and there is a saving in access roads and land. Certain constructional costs increase.

WIND FORCES

Wind forces are increased in a 20-storey building, and the question of shape arises. In the case of a narrow block, the question of wind force is most important. The workers have to climb up the building, or they have to be lifted up. They may even want height money. A system which obviously would be suitable would be one of load bearing walls with shutters lifted mechanically by hydraulic jacks. Then there is a lot of apparatus and expensive machinery. It would be more economic to use such a system on a 20-storey rather than on a six-storey building. Then there is the question of the foundations, which depends upon the ground and may make it most expensive to build high. If one is thinking of going very high one would probably want a steel frame with other light prefabricated materials. One can find methods suitable and cheaper for higher building unless other factors are introduced, such as fire regulations. If you want many more staircases as you go higher, that may spoil a scheme. Perhaps we increase our cost of building by so many millions a year to save life

"We should not advocate the building of high flats merely because we like the look of them æsthetically," says Dr. Thomas Sharp. At the beginning of this series of comments is an example of building high with a purpose—the Kadleigh-Horsbrugh "High Paddington" project. On the right is a point block in Stockholm. which may or may not be justifiable in its height, but is certainly æsthetically pleasing.

and property, but there must be a proportion between the premium and the sum assured. We can easily pay too high a premium in order to save two lives in 100 years. Perhaps it would be better to invest that money in better roads to bring the accident risk down.

Is there a saving in cost through building high? I would rather make a scheme, do some calculations and find out the real answer than guess at it. If you do not increase the number of staircases as you go higher, I think that it would be cheaper to go up to 20 storeys rather than to stop at 6. In building up to 20 storeys, would not the main problem be that of getting equipment and materials up to the top? One must make the construction incorporate means of getting the material up.

One must distinguish between having plenty of time for research and then devising a quick method of building. Obviously, the most economical scheme is, in a way, the quickest. But quickness does not matter very much. Often a point is made about houses being erected in three days. That does not matter, because a lot of the work is done beforehand by way of prefabrication. Houses consist of materials which can be broken down to man hours in manufacture and man hours in labour of erection. If the total man hours are down, that means that the cost of the houses is less. It may be that a house which is built by a slow process takes up fewer man hours in the aggregate. The speed of the individual unit does not matter. It is the total economy in man hours which is important.

J. B. Bickerdike, who was a member of the BRS at the time the JOURNAL'S *discussions were held, spoke of the daylight factor.*

J. B. Bickerdike : Generally speaking, I think that the daylight problems in high blocks are less than those in low blocks. It depends on the lay-out. Parallel blocks are not as good as those with other lay-outs.

Is there any need to modify daylight requirements for rooms in flats? There may be a need to increase requirements in kitchens, but there is no need to do so in any other rooms. There may be a case for reducing daylight requirements in bedrooms.

Better daylight can be obtained in the higher blocks. The worst type of development is that found in London and other cities where an enclosed courtyard has streets running between. One of the considerations which influences planning is the depth of the rooms. There could be deeper rooms because there could be deeper penetration of light. The only room which is critical is the kitchen. A lot of work is done there and the housewife depends on decent light for efficiency. In fact, it is usually the worst lit room in a flat.

A. A. Bellamy, speaking as a member of the Ministry of Local Government and Planning told why he thought it difficult to justify the building of many high blocks.

A. A. Bellamy : A matter for consideration is the amount of local open space in new housing. I am thinking of verges, greens and so forth. I have measured some of those in layouts of a density of between 30 and 35 persons per acre, and it comes to the staggering figure of 6 acres per thousand people. Different use of that space would mean that you could have larger gardens or a tighter density. Planners have always said that it is necessary to include local open space in the housing area, and that brings me to the question of London, because there you do not get local open space which is equivalent to the six acres in low density development. I have always been keen, in doing housing for the high density areas, on the provision of local greens of a certain minimum amount concurrently with the housing. I advocate this because of the remoteness of the possibility of public open spaces materialising. Unless you provide them as you build the houses, you will never get them at all.

HOUSING MANUAL RECOMMENDATIONS

There is a recommendation in the Housing Manual that the minimum provision for local open space in high density areas should be 1 acre per thousand of the population, and that is in contrast with what is happening in outer development of something up to 6 acres.

Assuming a minimum garden depth of, say, 50 ft. (100 ft. between backs)—not taking account of losses due to irregular boundaries—you could get up to 70 per cent. and 80 per cent. of the dwellings in houses, and the balance in an inexpensive form of flat construction at densities of up to 70 persons per acre. That figure is considerably in advance of what is happening in most of the housing development outside the County of London. All over the country the new densities are in the neighbourhood of 30 to 35. So that if small gardens are acceptable, the prospect is that we could begin to double our present densities if we were to accept the urban type of development in place of the suburban type common at present.

THREE-STOREY HOUSES

I have always claimed that the density, in terms of rooms per acre, of the three-storied house is the same as three-storied flats measured per acre. But there is one problem attached to three-storied houses at the moment, so far as legislation is concerned. They are not eligible for the flat rate of subsidy on expensive sites because they do not come under the definition of "flat" according to the Housing Acts. They are houses. If two-storied maisonettes are built with flats above, both types of dwelling rank for the special subsidy.

Ordinarily, families with small children should not be asked to live in flats if it can be avoided. But I think that we must have regard to densities. Accepting the planners' figures of densities it is up to me, as a housing architect, to get as many houses into a mixed development as I can, because I shall never reach the point where the demand can be satisfied at the redevelopment densities which the planners are having to fix. They are anything from 70 in the outer areas to 200 persons per acre in the centre.

I would say that the best mixture is the two- or three-storey house in contrast with the eight- or ten-storey flats. There is, perhaps, a warning note to be sounded with regard to cost. At 136 persons per acre it is possible to pack in four- and five-storey flats the appropriate number of dwellings to achieve that density. If, however, instead of that, we give people as many houses as possible, the average cost per person housed may be increased. Therefore, if this is so and people are to have a mixed development, the community as a whole must be prepared to pay for it either by rent or a special subsidy devised to enable the LCC, for example, to change their policy. I think the facts are that the LCC have built only a very few houses in the County of London since the end of the war, but outside the County their policy is absolutely the reverse. I should like to see a complete change round so that we built as many houses as possible in the County, with high flats and increased densities on cottage estates.

VERY HIGH BLOCKS NOT WORTH WHILE

There are twelve-storey blocks going up in Birmingham; they have a central staircase and lifts serving three flats per floor. I think a point to remember is that as you go higher the graph of increase in density shows a diminishing return. If you go beyond three storeys to ten the curve is so flattened out at the top that it seems hardly worth while considering, so far as density is concerned, anything more than ten- or twelve-storey blocks.

I think the real question is one of cost in terms of lifts. I think that the days are over when you could have a lift serving two flats only on each floor. I do not think that we have explored sufficiently the question of lift and staircase economy.

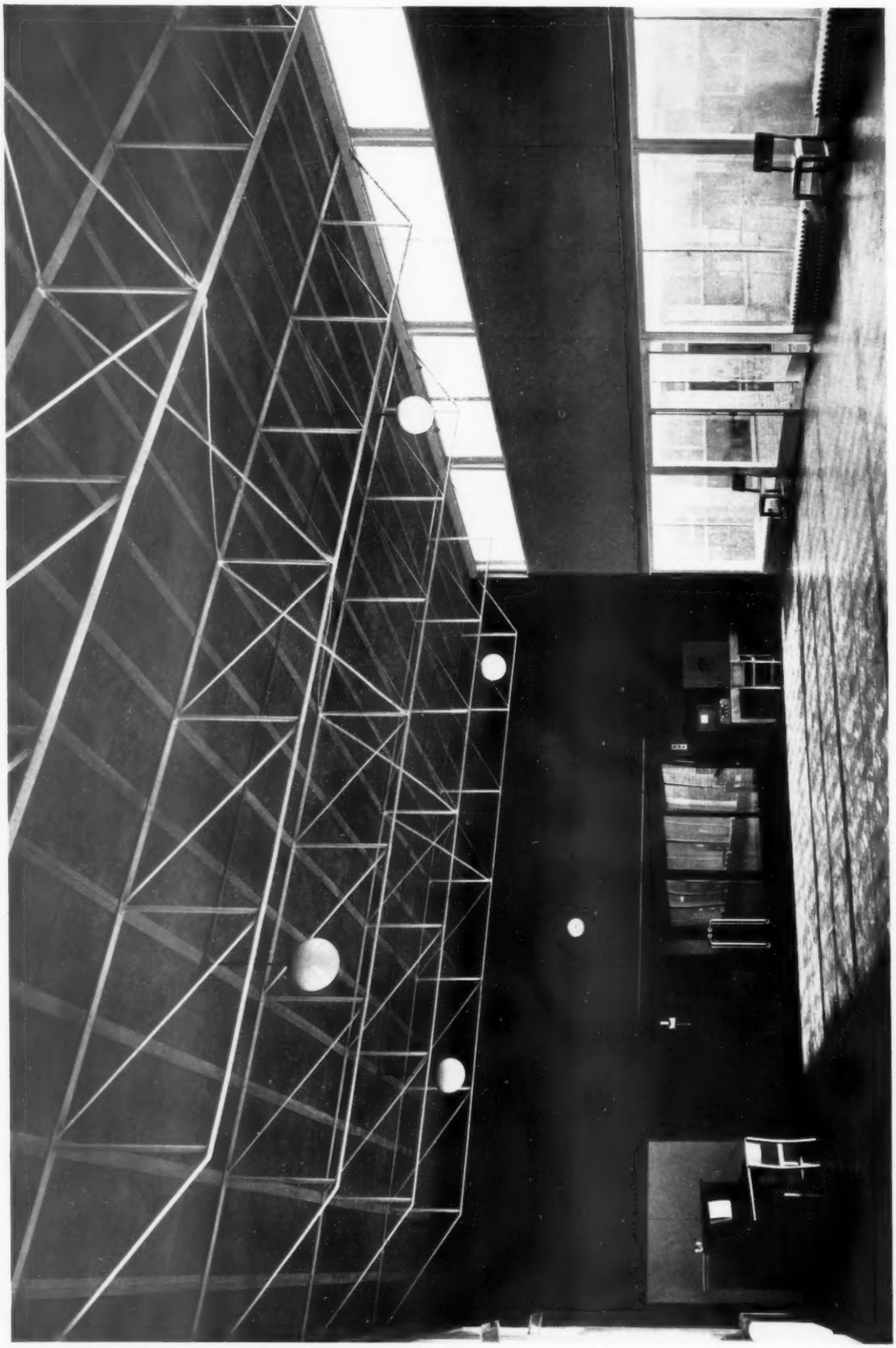
It is not necessary from the point of view of density to use higher blocks. Therefore, although it is probably very good architecturally, it is going to be very difficult to justify very many blocks of this type on economic grounds.

WORKING DETAIL

ROOFS AND CEILINGS: 6

ROOF TO ASSEMBLY HALL: SCHOOL AT ST. PAUL'S CRAY

Elie Mayorcas, architect, in collaboration with S. H. Loweth, Architect to the Kent County Council



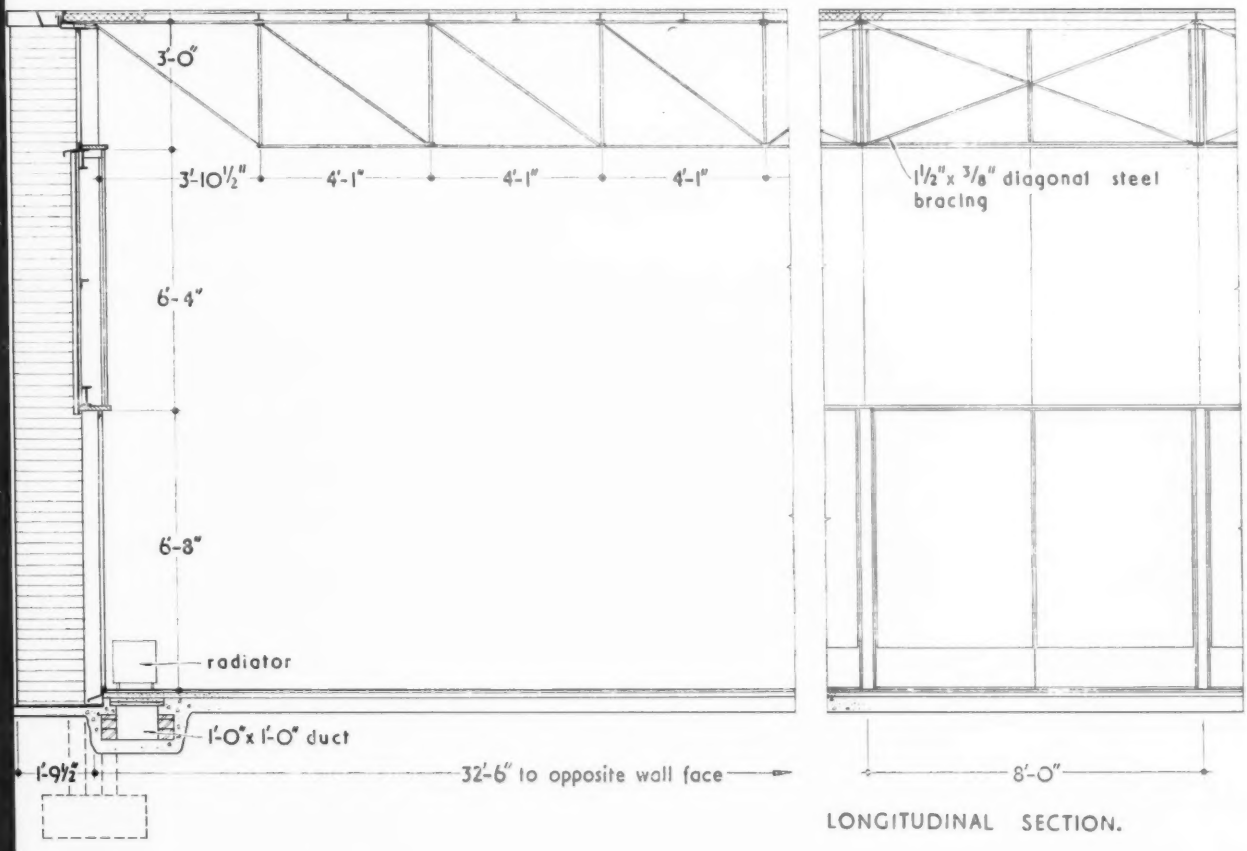
The light steel trusses with lattice bracings support a roof of woodwool slabs.

WORKING DETAIL

ROOFS AND CEILINGS: 6

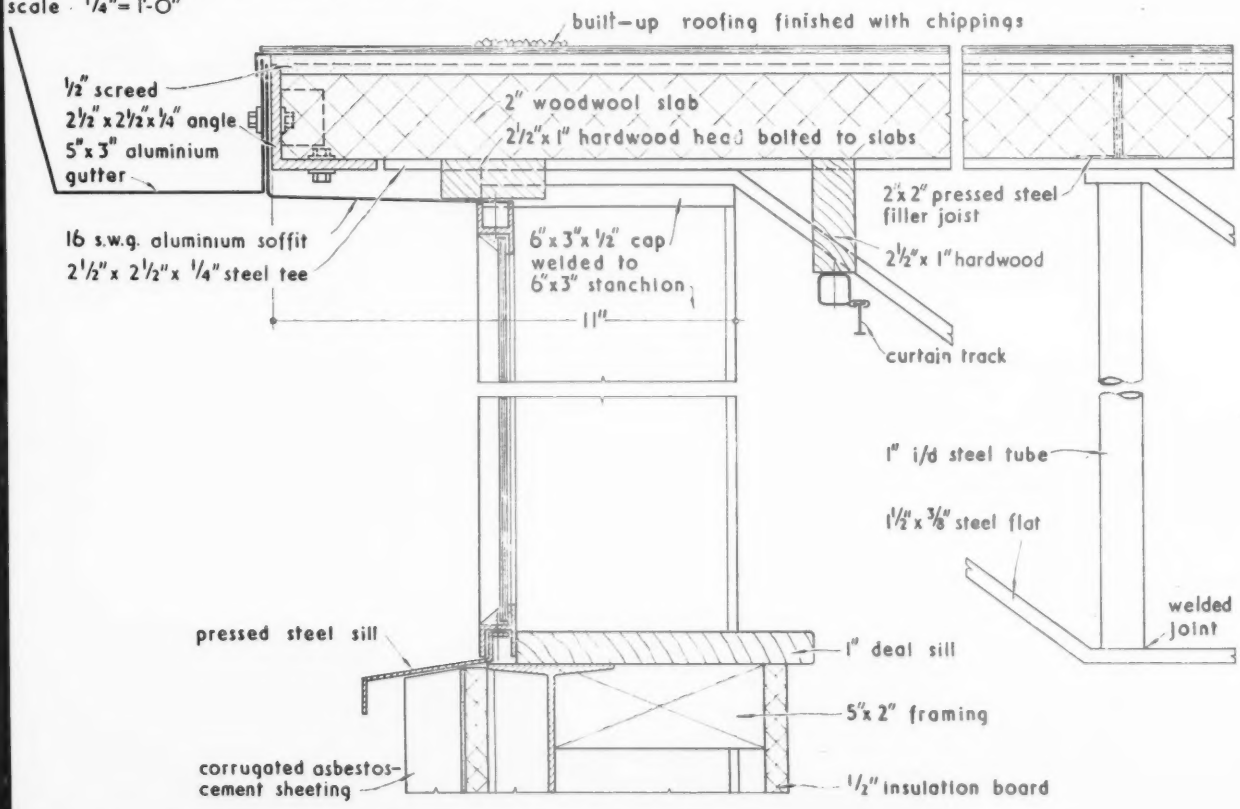
ROOF TO ASSEMBLY HALL: SCHOOL AT ST. PAUL'S CRAY

Elie Mayorcas, architect, in collaboration with S. H. Loweth, Architect to the Kent County Council



LONGITUDINAL SECTION.

CROSS SECTION OF ASSEMBLY HALL
scale ¼"= 1'-0"



DETAIL OF CLERESTORY scale ¼ full size

WORKING DETAIL

FIREPLACE: HOUSE IN LONDON N.W.8

A. V. Pilley, architect, in collaboration with Steven Sykes, potter

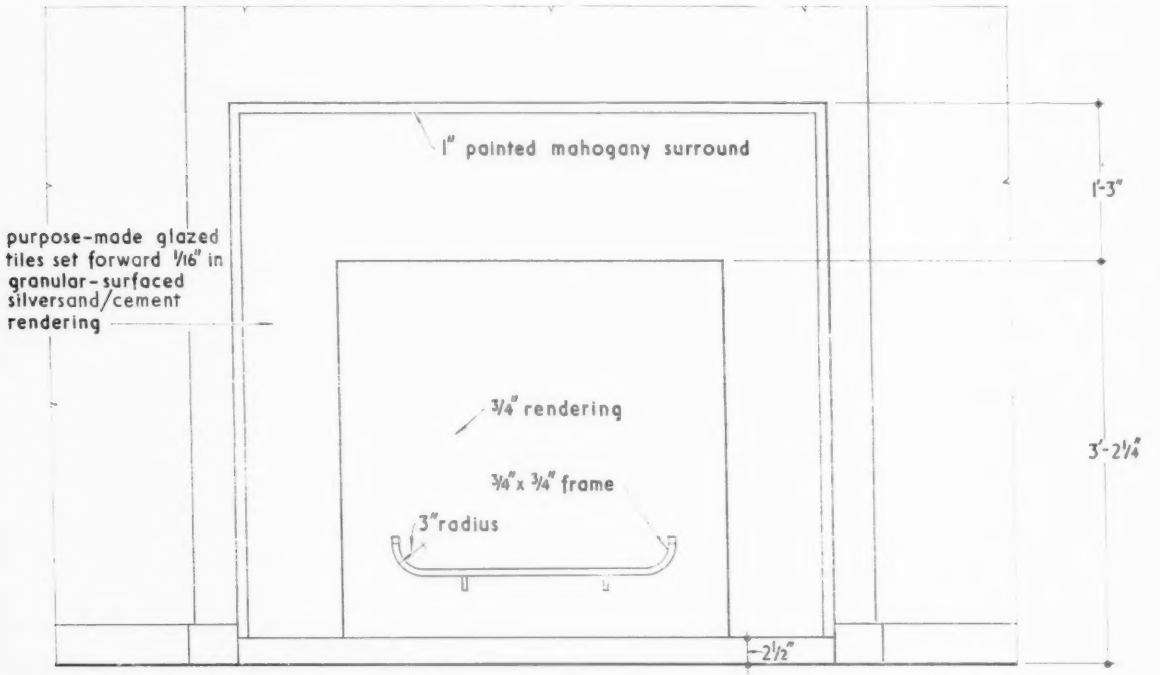
The tile shapes, designed and made by Steven Sykes, are set in rough-textured rendering.

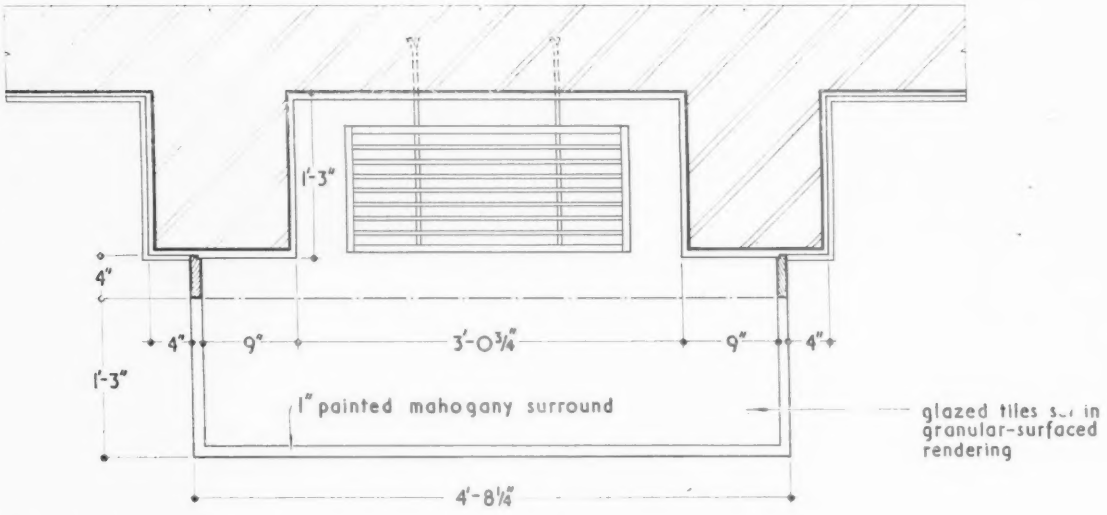
Architects' Journal 26.2.53

WORKING DETAIL **HEATING: 7**

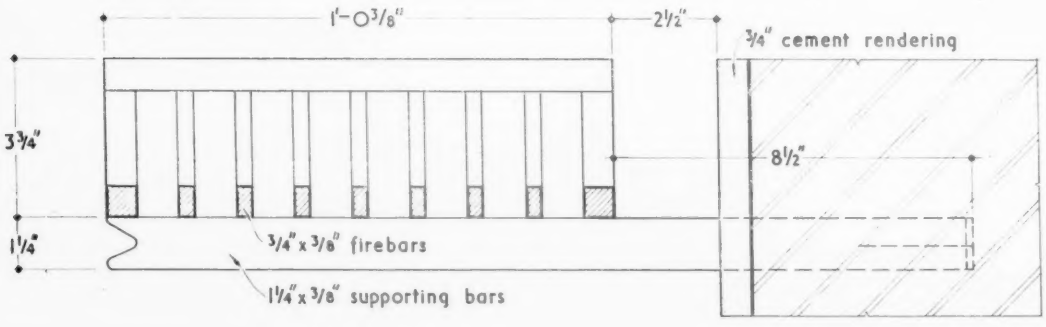
FIREPLACE: HOUSE IN LONDON N.W.8

A. V. Pilley, architect, in collaboration with Steven Sykes, potter





PLAN AND ELEVATION. scale 3/4" = 1'-0"



SECTION THROUGH GRATE scale 1/4 full size

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HOUSE

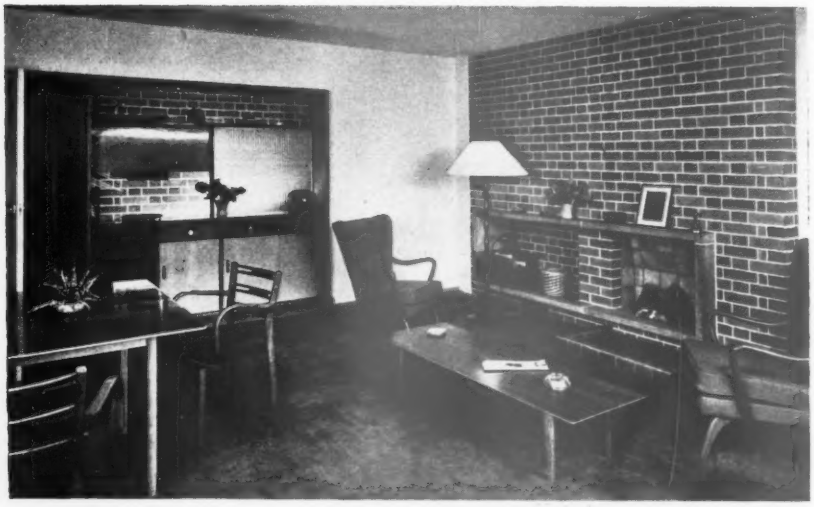
at MOUNT EPHRAIM, TUNBRIDGE WELLS, KENT

designed by BRIAN PEAKE

assistant-in-charge M. E. WOODFORD

The house was designed for a doctor and his wife, to serve as both living and consulting accommodation. The ground floor is given over entirely to garage space, doctor's surgery, cloakroom and patients' waiting room, which is one of the reasons for the three-storey design. The garage has no doors so as to make easy access for trolleys to a market garden at the rear of the property.

The entrance front from the south-east.

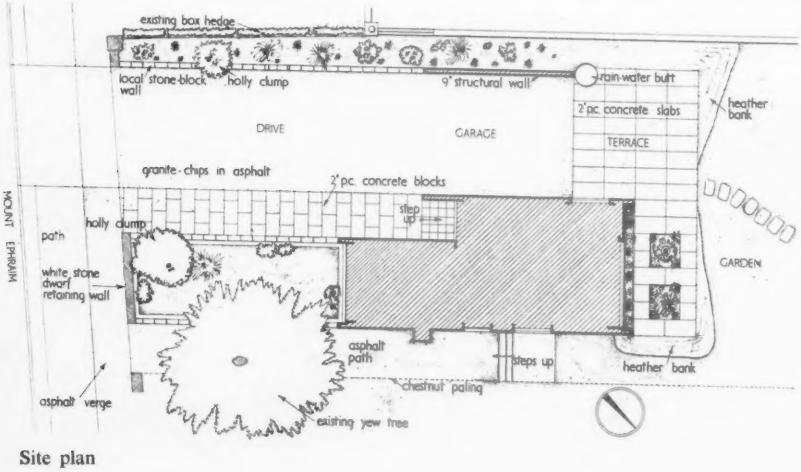


HOUSE

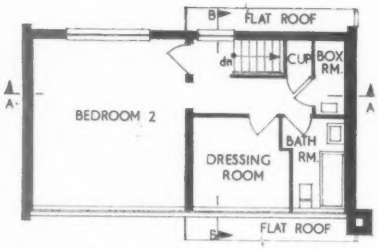
at TUNBRIDGE WELLS, KENT

designed by BRIAN PEAKE

Two views of the first floor living room. Top, looking south towards the common land. Above, the fireplace and built-in fitting of mahogany, glass and blue plastic.

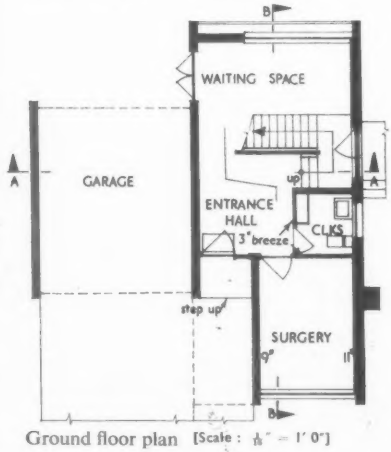


Site plan

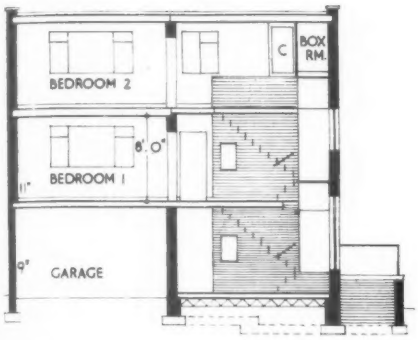


Second floor plan

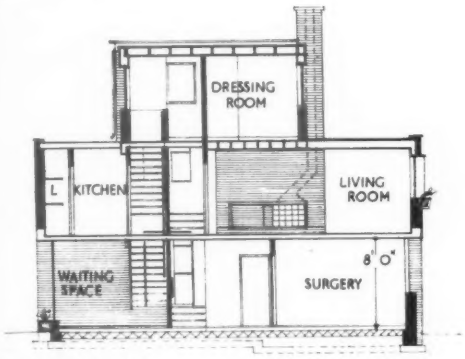
First floor plan



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



Section A-A



Section B-B [Scale : $\frac{1}{8}$" = 1' 0"]

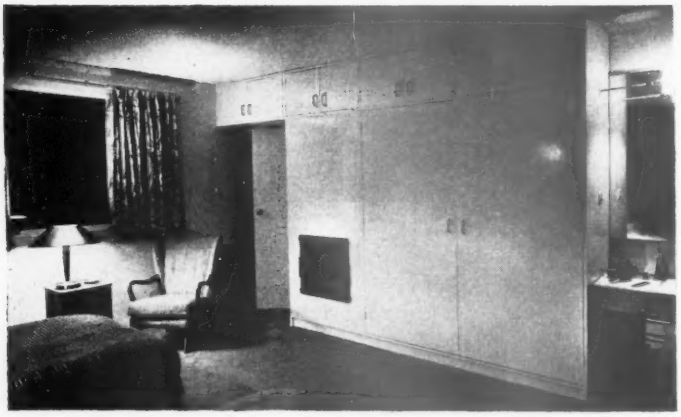
SITE.—The site is part of a fairly large plot of land with only a narrow 40-ft. frontage to the road ; the ground is high and commands fine views to the south-east over common land. These points influenced the decision to have three floors.

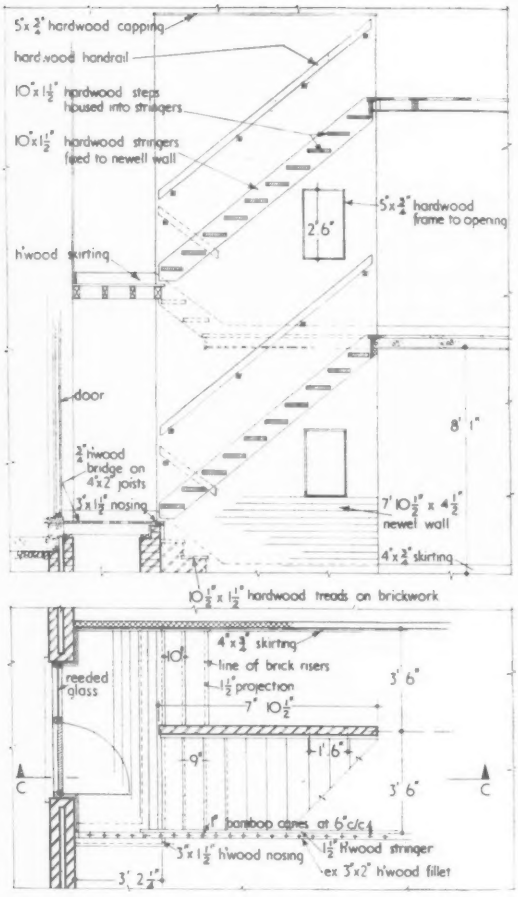
PLAN.—The ground floor, which is devoted entirely to the doctor's working space, has a secondary entrance on the north-east giving access to the living quarters above, when surgery is in progress and also acting as a back door. The first floor consists of a living-dining room, kitchen and spare bedroom. The living room is built forward to take advantage of the views to the south and east, and gain the maximum sunshine. The top floor contains the owner's bedroom, dressing room and bathroom. The planning generally is as open and free as possible.

CONSTRUCTION.—There are 11-in. cavity brick outer flank walls, 9-in. brick centre spine walls and cross walls of 4½-in. brick outer skin and 4-in. thermal block inner skin. The ground floor is concrete and the first and second floors and the roof are of timber construction. Partitions are of breeze blocks.

FINISHES.—Externally, walls are of fair faced grey brickwork with white cement jointing or pale grey cement rendering. The front door is painted pale yellow and there is a rich red panel forming part of the large living room window. The flower box on the front elevation is cantilevered on mild-steel brackets and is of polished hardwood The marble column was rescued from scrap. Internal wall finishes include fair faced brickwork, painted fair faced fletton brickwork, painted plaster and wallpaper. All exposed hardwood is wax polished Honduras mahogany. The staircase is open-tread in hardwood with bamboo balusters between the stair well and ground floor waiting space. One wall of the living room contains a fitting in mahogany and beech, with a plate glass hatch and panels of pale blue plastic. Wardrobe units in the bedrooms are painted white gloss outside with mahogany finish inside: there is a sycamore dressing table at one end. Floors are carpeted except in the waiting space, where thermo-plastic tiles are used, and in

Below and opposite, view of the first floor, showing the kitchen, left, the staircase well and the living room, right.





Plan and section through staircase [Scale: 1" = 1'0"]

Top, the ground floor waiting space and staircase, which has bamboo balusters. Above, wardrobe and dressing table fitting in the owner's bedroom. Below right, the garden façade from the west.

HOUSE

at TUNBRIDGE WELLS, KENT

designed by BRIAN PEAKE

the kitchen, which is cork tiled. The roof is finished with 3-ply roofing felt on ¾-in screed.

SERVICES.—Heating is provided by an open coal fire in the living room, a built-in electric convector heater in the main bedroom and two portable convector heaters. All service runs are hidden as far as possible behind fittings, etc., but in the corner of the living room there is a service duct with removable panel which contains most of the vertical services.

The contract price was £3,675 (excluding fittings); the price per foot cube was 5*s*.

The general contractors were Frank W. Clifford, Ltd. For sub-contractors, see page 294.

TECHNICAL SECTION

Two subjects are dealt with in this week's enlarged Technical Section : Town and Village Design, and Industrial Lighting. Starting below, Specialist Editor No. 9 reviews two important and recently-published books,* the first, an HMSO publication, being mainly a summary of existing practice and previously-stated ideas, serves as an excellent introduction to the second, an *Architectural Press* book, in which Frederick Gibberd presents some new and original ideas on a subject which is itself new—Town Design. These reviews are supplemented by short Information Centre reviews of three other recently published books on allied subjects (page 289).

On pages 290 and 291 is a report of a recent meeting of the IES, at which were presented three short papers on different aspects of industrial lighting. Two Information Centre items on this subject appear on pages 290 and 291.

This week's special feature

4 PLANNING: URBAN AND RURAL
town and village design

The number preceding the week's special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant Information Centre items. Further and earlier information can be found by referring to the index published free each year.

There have just been published, practically simultaneously, two books important to architects and planners alike in that they cover most competently ground which all too often is the weakest element in contemporary planning and architecture: Civic Design, practised as an art, or, as it is now more aptly called, Town Design. They are reviewed below by Specialist Editor No. 9 (Planning).

Design in Town and Village, the latest addition to the series of books published by the "planning ministry," now, of course, MOHLG, is the promised companion volume to the handbook *Density of Residential Areas* (reviewed in the JOURNAL for October 23, 1952). The Ministry deserves praise for having produced *Design in Town and Village* so soon after its forerunner. Was this made possible, however, only by passing on the responsibility for the ideas expressed in the text to three private practitioners and inviting them each to contribute an essay and thus write the book for the Ministry? Dr. Thomas Sharp opens

* *Design in Town and Village* (HMSO, 1953, 7s. 6d.), 120 pp., over 200 photographs and diagrams.
Town Design, Frederick Gibberd (Architectural Press, 1953, £3 13s. 6d.), 300 pp., over 720 photographs and drawings.

the book with an essay on "The English Village": Frederick Gibberd writes on the "Design of Residential Areas," and Prof. William Holford concludes the book with an essay on "Design in City Centres."

Frederick Gibberd is also the author of the latest volume published by the Architectural Press. An intriguing case-book as well as a fully comprehensive source of reference, *Town Design*, as to be expected, is a handsome volume.

The significance of these two volumes is that, jointly, they provide a fair and discerning assessment of present trends in civic design in this country.

"TOWN DESIGN"

Town Design is one of the most important and welcome books to be published in recent years: important because it is an admirable exposition of Gibberd's personal interpretation of urban design and planning, formulated as a conscious *art*, and doubly to be welcomed in as much as its message—and it *is* a message—is directed to architects and to the wide range of people with allied interests.

The outstanding keynote of the book is that of co-relationships—a fusion of architecture and planning whereby the problems of landscaping, the siting of housing, industry, civic buildings and road layout are combined as an interdependent whole, rather than as a separate functions which happen to be grouped together.

In the theory put forward, the different elements are each viewed not as an end in themselves but as a means to an end; the whole implication being extroversion as opposed to the trend towards introversion, so noticeable in modern architecture, that has been commented on by Gibberd.

THE AUTHOR'S ATTITUDE TO TRADITION

The strength of the author's attitude to design is the recognition in his writing (and in his own work) of all the constants, such as climate, landscape and humanity which dictate living; too often architectural theorists have airily dismissed these fundamentals. Gibberd's designs and theories all show an acute awareness of the value of tradition allied with contemporary application. By showing, in particular, how there is a place within the contemporary idiom for formal and informal design, Gibberd has made a very valuable contribution towards establishing, once again, in this country a common tradition of town design.

This book is, obviously, the result of years of work collecting and reflecting upon actual and imaginary examples of town design. It opens with a short preface, in which the author describes his purpose in writing the book—how there has been a spate of books on town planning, which after all is but a prelude to town design; there are excellent books on civic design, but they all fail to deal with such vital contemporary problems as the placing of factories in the urban scene; then there are innumerable books on such subjects as houses, flats, and roads, but these consider their subjects in isolation rather than as integral parts of town design.

In plan, *Town Design* is simple; it consists of four parts, each of which follows the same pattern—a commentary, followed by analyses of typical compositions, shown for their intrinsic interest and as examples of theories.

DESIGN OF THE COMPLETE TOWN

This is the title of Part One of the book; it is a guide to the elements which make up a complete town. It starts with the "raw materials"—a rather woolly omnibus term to cover all the physical objects in a town and proceeds to relate these to all the activities and movements which occur in a town and to the effects of the passage of time.

As to the latter, Gibberd believes in the soundness of conventional planning; he has little patience with Le Corbusier's proposals for concentrating people in vertical cities, or with Frank Lloyd Wright's ideas for spreading them out over one-acre holdings. Gibberd's own contribution to the town master plan is undoubtedly his use of natural land forms, as in his plan for Harlow New Town which was the outcome of a thorough preliminary landscape survey by a landscape consultant. The towns analysed are a smaller English town—the theorists ideal town of 50-60,000 population—Guildford, Exeter, Harlow and Crawley. The fearsomely larger towns and mammoth cities do not come within Gibberd's scope; perhaps wisely in a book of these dimensions.

CENTRAL AREAS

In this, the second and longest section of the book, the author writes on that part of a town where a town designer finds his greatest scope. In three chapters, dealing respectively with town centres, civic spaces and shopping centres, Gibberd outlines his own rational approach as a planner and then proceeds to discuss spatial relationships in their many different forms. As a planner he is an advocate of the precinct, and considers that its formation is essentially a planning problem—it is within its boundaries that the buildings can be grouped round a series of spaces to form a cellular structure like "a cellular biological tissue." The outcome of the development of the precinct and the cell leads to the road ceasing to be the element about which the buildings are composed.

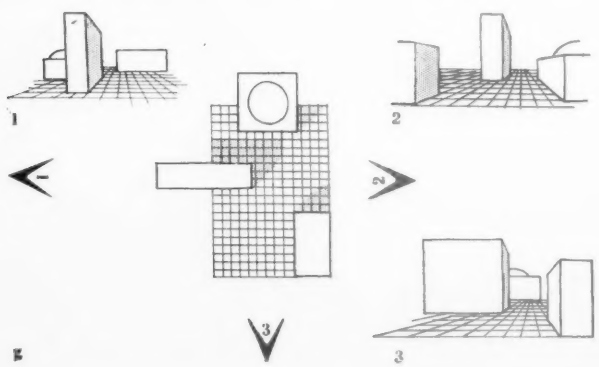
INDUSTRY

After a brilliant analysis of the intricacies of "spatial orchestration" Gibberd turns, in Part Three of the book, to those elements of a town which, less amenable to layout design, call for an essentially bold and clean treatment—industrial buildings and their siting. Through a descending order of scale—large industrial groups, light industry, service and workshop areas—each industrial area is considered in turn. The analyses which follow concentrate on the layout of estates for the lighter grades of industry, as at Team Valley, Knutsford and Crawley, but they are sufficient to demonstrate the *sine quâ non* of industrial layout—an ordered layout.

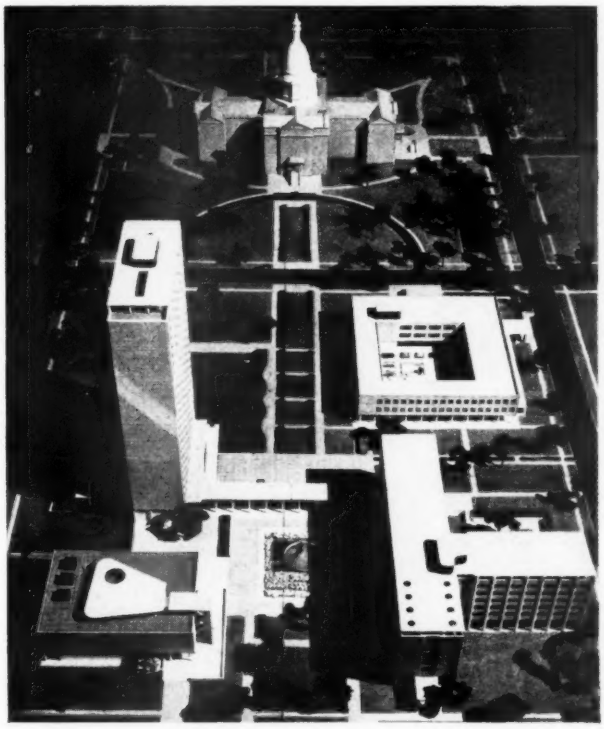
The illustrations, also, show that there is probably no more difficult form of industrial group to design than the large mixed light industrial estate. It lacks the "splendid scale and almost savage grandeur" of a large industrial plant, and offers instead a monotonous repetition of workshops and their attendant office blocks. The ensuing conflict in building forms which arises through the union of the workshop and office elements is the subject of a series of pen and ink sketches on the lines of the numerous sketches in Part Two of the book.

HOUSING

In the final section of the book—Part Four—devoted to housing, Gibberd writes on the neighbourhood; he describes the variations which are possible in neighbourhood grouping—they are more numerous than sometimes sup-



The purpose behind much of Gibberd's work in Town Design *is to train the reader, who may be an interested layman, to think of a design in 3 dimensions and to think of it not merely from one viewpoint but from many. To this end, Gibberd shows a great number of excellent diagrams, such as the one reproduced left—an imaginary group of civic buildings.*



When so little civic building is being done, it is a pleasure to be stimulated, as one is in Town Design, *to think about central areas. One of the most controversial schemes analysed in the book is the project for a state capitol at Lansing, Michigan, first published in 1945. This is contained within a gridiron plan, its outstanding feature being the relationship between monumental and dissimilar forms, so well brought out in this photo of a model, right. After his study of civic buildings, Gibberd turns to industry, giving particular attention to the "super-block." He finishes this section of the book with an analysis of the Crawley industrial estate, where the special factory group is one of the very few factory groups in existence which, by their neatness and general finish, really look like a model trading estate (see photo above). The illustrations on housing also give the reader much to think about, but it is disappointing to find that while housing and flats are amply illustrated individually, mixed schemes of houses and flats are rather too summarily dealt with; for instance, there is not even a photograph of the important LCC scheme for Wimbledon (below). This is surprising, for Gibberd is himself an exponent of this line of development.*

posed—and he emphasizes the importance of establishing the character of the neighbourhood through the medium of the housing group of two to four hundred dwellings.

On housing layout Gibberd constantly sounds a warning note to those who think that they may have found a standard formula for layout. All the common tricks—footpath access, rear access, old people's bungalows at corners of blocks, etc.—fall within his purview.

Of flats, Gibberd thinks that much of the prejudice so often encountered is due to the way flats have been grouped into blocks and the way they are so often sited.

DWELLINGS ON STEEP SITES

In a chapter on Dwellings on Steep Sites, Gibberd aptly demonstrates how layout types most suitable for flat land are the least satisfactory for a slope. For instance, the very last illustration in the book shows a group of Y-shaped Swedish flats on a sloping site; they appear to have so much more style than a similar group on a level site in one of our new towns.

Gibberd winds up with a chapter on mixed housing development. It is a short chapter of only six pages which succeeds in arousing, but not in satisfying, one's curiosity to learn more of Gibberd's views on the form of housing and flat development which is still in an experimental stage. It is his view that the principle of mixed housing development probably offers greater opportunities than any other form of development for devising new methods of layout and new kinds of visual experiences.

The production of the book is pleasing; text, diagrams and photographs are happily balanced, and it is a relief to find a layout in which the text and the relevant illustrations are on the same page. Some of the captions to the groups of photos, however, might have been more self-explanatory. In short, *Town Design* is a book which should be bought, studied, re-studied and always kept handy.

"DESIGN IN TOWN AND VILLAGE"

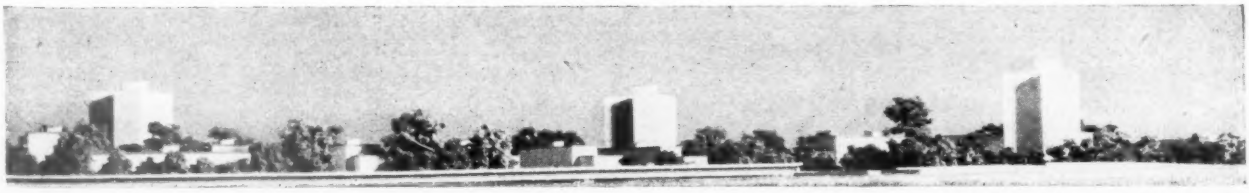
THE ENGLISH VILLAGE

In his essay on *The English Village*, Dr. Thomas Sharp, in his downright north-country manner, is really preaching. His theme is that the essence of true village character and good design is simplicity. His essay is the shortest of the three and it is made clear that it is largely based on previously published writings.* He begins by describing the social structure of a village and the difference between a village and a small country town. In his view: "It is the villages of about 300-450 inhabitants (the commonest size) that hold the pure spirit of the true English village. Above this size their form begins to get complicated: at a population of more than about 1,000 the complication becomes so marked that the true village character becomes increasingly compromised and soon disappears altogether." Essentially, the people of a village are single-minded in their interests. As to the village's character, the ground plan of a true village, he says, is so elementary that it is immediately comprehendable.

FREE PLANNING IN THE VILLAGE

There follows an analysis of the village as a *place*: its traditions, both old and new; and its plan and form. And,

* *The Anatomy of the Village* (Penguin Books, 1946) and a paper *Village Design* (Journal of the Town Planning Institute, May, 1949).



in the following section on free-planning. Dr. Sharp delivers possibly the most important lesson in his essay: "I have spoken of 'free' planning in contrast to 'rigid' planning. Since I believe that plan-form is the most important single consideration in achieving village character, I must try and make clear the difference between these two kinds." He is not apparently thinking of the difference between *informal* and *formal* planning so much as the difference between a *technique* and a *concept* of planning. "What I mean is letting the plan-form evolve out of the conditions and disciplines of the site rather than dragooning it into either formal or informal shapes according to preconceived notions." After stressing how the technique of design taught in most architectural schools—preparing a small scale esquisse leading to the finished design at a larger scale—can be a considerable handicap to the village planner, the author declares: "I believe that the way to design a plan for a new village" (and additions to an old village, he later adds), "is first to consider in one's own mind the main determining factors (*i.e.*, the levels of the site, the approximate positions of roads, etc.) and then to proceed straight away to design to a fairly large scale (such as 1/500), and to work with fair precision in set-squares and curve, outwards from the position where one has decided the village centre should be." In other words, to let the design itself grow, freely and gradually, as villages have themselves grown in the past.

THE DESIGN OF RESIDENTIAL AREAS

As an architect, Frederick Gibberd requires no introduction to readers of the JOURNAL, although as a writer he may be less well known. There is, however, probably no one better qualified to write on the different facets of town design. Gibberd has probably done more than any other man today to create, in terms of bricks and mortar, the 1950's equivalent of the tradition of modern town building established by Unwin and his contemporaries in the 1920's.

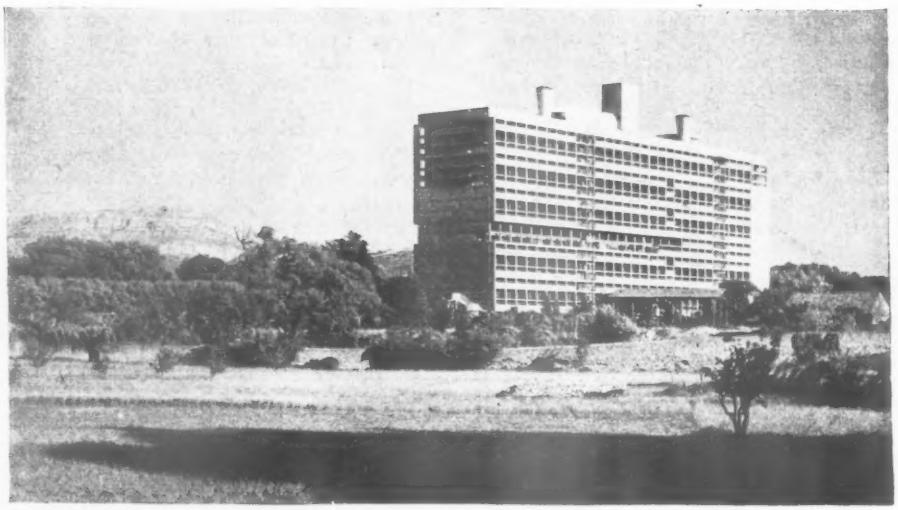
REFLECTIONS OF A PRACTISING ARCHITECT

Frederick Gibberd's writings seem like the reflections of a practising architect who is not concerned with putting over a pet theory, but is offering, in a gentle way, hints on building for today. This essay is in the same vein as that fascinating paper on "Expression in Modern Architecture" which Gibberd read to the RIBA about a year ago.*

Since it follows so soon after the Ministry's handbook *The Density of Residential Areas*, one would naturally expect that this sequel would deal comprehensively with the problem of designing residential areas according to the standards imposed by different densities. Unfortunately, Gibberd's essay contains very little on this aspect

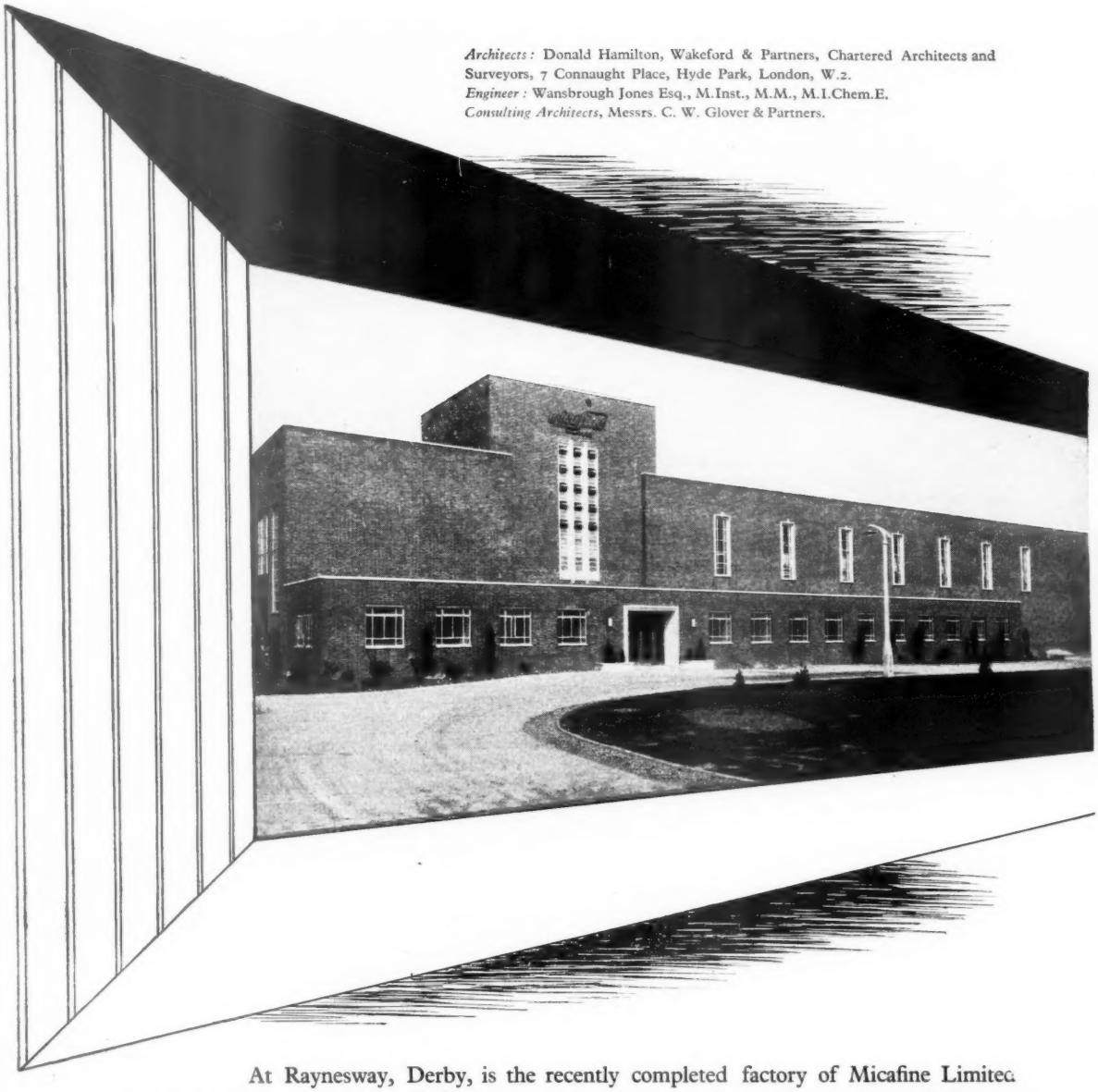
* See JOURNAL for January 24, 1952.

Illustrations from Design in Town and Village: *Right, "rural housing with attractive simplicity of plan and form." This photo of Tayler and Green's work at Ditchingham, Norfolk, is the solitary example of post-World War II (it would even be true to say post-Battle of Waterloo) building accompanying the text of the essay, "English Village." Inevitably, there is a series of views of traditional old-world villages; true, there is a photo of a model of a large new village which is being built by the Forestry Commission in Northumberland; and there is a series of nicely drawn plans showing how villages can be extended; but, good as they are, these plans and views cannot alone offer hints on how to build villages. Illustrations to the subsequent essays prove the value of showing perspective diagrams and views of contemporary work.*



Far more enterprise has been used in compiling the illustrations for the essay, "Design of Residential Areas." The result is a well-balanced selection of photos—historical and contemporary, English and foreign. The diagrams illustrate individual points made in the text and the plans are generally of "live" examples of layout. Gibberd's first illustration, left, is of a cottage in open country—"a single building standing by itself in the landscape . . . in rural design one of the major problems is to relate the mass [or the building] to the landscape. In town design the problem is to relate many buildings to one another . . ." Top right, is the now well-known view of how Gibberd has solved this problem in one particular corner of Harlow. This is a type of modern design which looks well from many angles (see report on Harlow in JOURNAL for December 18, 1952), and in his choice of illustrations the author does not bring out this point nearly strongly enough. After covering thoroughly suburban and urban design, Gibberd concludes by returning, with the illustration, above, of Le Corbusier's Unité d'Habitation, Marseilles, to the point from which he started—buildings in the open landscape. Gibberd appears to favour real urban building.

Architects: Donald Hamilton, Wakeford & Partners, Chartered Architects and Surveyors, 7 Connaught Place, Hyde Park, London, W.2.
Engineer: Wansbrough Jones Esq., M.Inst., M.M., M.I.Chem.E.
Consulting Architects, Messrs. C. W. Glover & Partners.



At Raynesway, Derby, is the recently completed factory of Micafine Limited —the only factory in the United Kingdom manufacturing Wet Ground Mica. This raw material is used extensively in many and varied industries throughout the Continent, the Dominions and the Commonwealth. 'PUDLO' Brand Waterproofer was specified for the concrete mix in the construction of many items of plant and the dust extractor basement, as well as in the screeds to the barrel vault roofing to the main factory, and the flat roofs to the office block.

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of design, and this omission is bound to be a disappointment to many people. After the fiasco of the diagrams which accompanied the very able text of the "density manual," however, it was perhaps better that Gibberd should not have attempted to present type layout plans. Instead, Gibberd explains how he sees the different elements in the total design—"The Raw Materials and their Arrangement"—again a rather woolly title for some introductory remarks on the nature of a residential area and the form of the site. But full marks to him for writing: "One of the chief reasons why so many residential areas are unsatisfactory in appearance is because the different aspects of the problem have become departmentalized. A scientific survey is first made of the site, a road pattern is then superimposed upon it, standard house types are erected on the road frontage and, finally, some trees and verges are planted in the vain hope of "beautifying the result.'"

THE VALUE OF THE TERRACE

After some more passages on the "Influence of Dwelling Form on Layout" and "Urban Spaces," he describes "The Sense of Urbanity" and "Mixed Development." He will obviously please the Minister by noting that if "houses are built in terraces and grouped so as to form designed spaces we can recapture the lost art of town building, and, just as important in another context, the higher density of development will result in saving many acres of land."

The next section, entitled "The Arrangement of the Area," deals with the work of the architect-planner; after it, Frederick Gibberd reaches the heart of his subject in the sections on the "Street Pattern and Picture," "Spatial Layouts" and "Layout and Landscape."

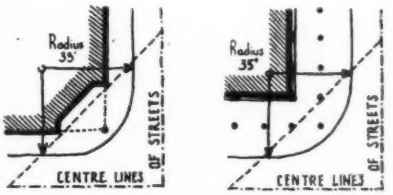
DESIGN IN CITY CENTRES

Professor Holford makes a lucid contribution with his essay on "Design in City Centres." It was in the days when Holford was head of the Technical Section of the former MOTCP that possibly the only recent significant advance in modern theory on the planning of central areas was made—by the development of the "floor space index" theory. And it was in his period of office that most of the preparatory work was done on the now classical "Redevelopment of Central Areas" handbook.

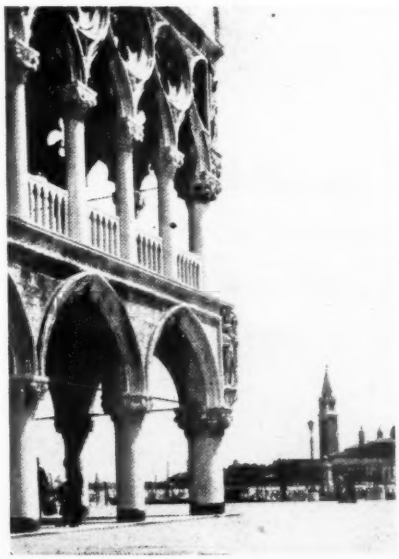
THE PROCESSES BEHIND PLANNING

The distinctive contribution which Holford makes to the present publication is that he expresses himself as freely on the processes which lie behind the planning of city centres, as he does on the forms and layouts which they take as a consequence.

Holford introduces his essay by explaining that "For the competent designer a handbook on design is unnecessary, and for the incompetent it is almost useless as a medium of instruction. Yet, because the design of city centres has so often gone by default; because the building programmes were not properly drawn up, nor properly co-ordinated; and because designers, clients and administrators have all in effect been talking different languages, it serves a useful purpose merely to set out the problems in an orderly way, and unite those who design and those who commission designs to think about them and to offer their solutions." Holford then goes on to describe the special problems of central areas and follows this with an analysis of "The Street" and its complement, "The Enclosed Space." He continues with a discussion on that vital detail, "Street Furniture," and concludes with some views on "Open Planning."



The illustrations to "Design in City Centres" are also a well-balanced series, in which diagrams complement the photographs. A typical group is a series of diagrams analysing corner treatments at street junctions. We show here two of these treatments and a complementary photo—the Doges Palace Venice. This must be architecturally one of the most treasured "corners" in the world.



INFORMATION CENTRE

A digest of current information prepared by independent specialists; printed so that readers may cut out items for filing and paste them up in classified order.

2.125 planning : general
AUSTRALIAN PLANNING

Town and Country Planning. A. J. Brown and H. M. Sherrard. (Melbourne University Press [Agents in UK, Cambridge University Press], 1952. 63s.)

Quite the best of recent general books on town and country planning. 382 pp., illustrated with interesting series of photographs, diagrams and maps.

Sir Patrick Abercrombie, in his foreword to this well-produced book, outlines the background of planning in Australia, describes why a book was needed and how this book, in spite of its Australian slant, will be considered useful in this country for, he says, "I cannot call to mind any existing volume that quite covers the same ground and is so up to date."

It is refreshing to find a general guide which synthesizes history, practice and *design* into a well-balanced whole.

2.126 planning : general
PLANNING LAW

Modern Town and Country Planning. James W. R. Adams (J. & A. Churchill Ltd., 1952. 42s.)

History and introduction to the study of the law and practice of modern town and country planning in Great Britain. 234 pp., illustrated by plans and photographs; bibliography and index.

This is a new edition of Thomas Adams's well known *Recent Advances in Town Planning*, first published in 1932. It now deals primarily only with the position in the UK. The author's aim has been "to present a just idea of what town planning is and what advances it has made in law and practice between 1909 and the middle of 1952." This is a sound middle-of-the-way guide.

2.127 planning : general
LAND PLANNING

Principles and Practice of Town and Country Planning. Lewis Keeble. (The Estates Gazette Ltd., 1952. 47s. 6d.)

A quasi-textbook dealing with the essence of town planning—aspects of planning concerned with the planning of land usage. 594 pp., illustrated with black and white diagrams. Good index.

This is a long and somewhat rambling book covering the subjects of planning machinery, technique and administration. The author's style veers towards chattiness, but he describes factually current techniques

A recent meeting of the IES was devoted to a discussion on factory lighting. Among the contributions were two papers of interest to architects, "Blended Light" by S. Anderson, and "Lighting in an Explosives Plant" by R. Middleton and Dr. W. E. Harper. Below is a report of the meeting with comments on one or two salient points from the discussion which followed the presentation of the papers. On the right are two Information Centre reviews of recently published books on factory lighting.

FACTORY LIGHTING

T. S. Jones commenced the meeting by reviewing past and present factory lighting practice. He emphasized that an increased knowledge of the many visual problems common to industry now enabled the lighting to be correctly designed and applied to the particular tasks involved. He also mentioned that avoidance of direct glare is now widely accepted as an elementary principle and that the significance of reflected glare is much more widely studied in problems of industrial lighting.

With regard to the use of colour in factories, he recognized that some interesting experiments had been made to prove the psychological value of strong primary colours, but thought these measures might be carried too far. In mentioning the use of new materials, he showed a reflector of "rigid" PVC sheet which could be bent and struck but always returned to its original shape. This fitting, he thought, would have a wide application in atmospheres which were destructive to metal reflectors.

"BLENDED" LIGHT

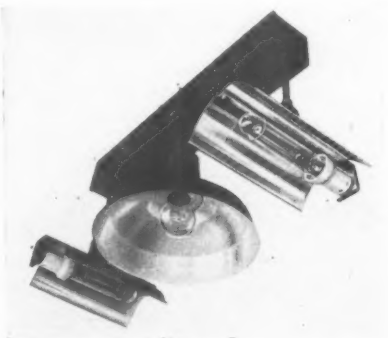
S. Anderson in his paper dealt with the use of "blended" light, referring mainly to methods of mixing the light from tungsten filament lamps with that from high-pressure, mercury-vapour lamps. The latter were liked by lighting engineers on account of their high efficiency, but when used alone the colour of the light emitted, although useful for certain specialized applications, was now generally agreed to be unsuitable for interiors. Mr. Anderson discussed also the advantages of various methods of using the two types of lamp, both in composite fittings and in separate fittings. The fittings he showed were rather crude in design but were obviously in the early stages of development. The exact proportion of the mixture had to be left to individual preference; Mr. Anderson inferred that it usually varied from an equal wattage from each of the two sources to an equal luminous output from each source.

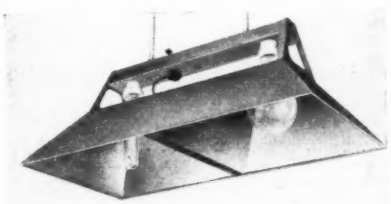
Dr. Harper presented the paper by Mr. Middleton which described the problem of lighting a large factory where a wide range of industrial explosives and associated chemicals is manufactured. After referring briefly to the layout of a typical factory site, the segregation into "safe" and "danger" areas, etc., Dr. Harper described the main types of explosion hazard. It appeared that industrial explosion hazards were varied and complex, but in the main they comprised hazards in buildings where gases, vapour or volatile liquids were present, or situations where dusts were in explosive mixture with air.

FITTINGS FOR EXPLOSIVE ATMOSPHERES

After mentioning the regulations governing the installation of electrical

Below, a composite lighting fitting for 1 tungsten and 2 tubular mercury-vapour lamps. The channel above the reflectors houses the chokes.





Above, a compact lighting fitting for blended light, containing 1 tungsten and 1 mercury-vapour lamp, and providing some upward light. The choke is housed between the reflectors.

(continued from page 289)

and data, and comments on their value and their origins; in doing so he gives interesting inside information of local and central government offices. The black and white diagrams, many in map form, are shown as examples of the town planner's cartography; they cover a useful range of subjects, but as examples they are not wholly successful.

10.102 design: building types
FACTORIES

Higher Industrial Production with Electricity. (British Electrical Development Association, 1952, £1 19s.)

General review of wide variety of modern electrical production methods. Introductory volume of BEDA series of eight books under general title of "Electricity and Productivity." (The second volume, *Lighting in Industry*, is the subject of Information Centre item 24.162 : 26.2.53.) 146 pp., 104 illustrations.

Chapter 3 of this book gives a useful summary of the purpose of artificial lighting. Lighting as "a necessary but expensive 'on-cost' should be replaced by the true conception of it as a significant factor in higher productivity in the widest sense" involving "good working conditions, maximum speed and efficiency of all processes involving vision and inspection, lower labour turnover and sickness rate, better housekeeping and safe, healthy and cheerful operatives." It stresses the indirect benefits, *e.g.*, comfortable lighting conditions may produce higher productivity, even where the visual effort is small—as in rough work.

Reduced errors, increased safety and increased acuity are shown to be the benefits of higher illumination. Simple sound rules for the avoidance of discomfort are also given and the chapter concludes with notes on the merits of fluorescent lamps and of reflectors with open or translucent tops to avoid strong contrasts. For fuller information there is the second volume in the series, but for the layman this book places lighting in its proper economic perspective.

24.162 lighting
INDUSTRIAL LIGHTING

Lighting in Industry. (British Electrical Development Association, 1952. 8s. 6d.)

Second volume in the "Electricity and Productivity" series. 154 pp., 85 illustrations, mainly photographs. Lighting and productivity; lighting and factory management; some particular factory lighting applications; lighting in various industries; use and maintenance of factory lighting; colour in factories, and lighting design.

The book is intended to help managers and industrialists, and contains a useful questionnaire-survey method of assessing the lighting of factories. Typical questions are: (*i*) "Are all lamps adequately shielded?" Unfortunately the book accepts the 20° minimum angle of cut-off laid down in the Factory Act as being all that is desirable and no reference is made to BRS or other bodies whose recommendations are more severe, *e.g.*, 40° or more. Consequently the Standard Industrial Dispersive Reflector (only 20° cut-off) is said to give all the shielding necessary. (*ii*) "Is there enough upward light to reduce contrast between sources and ceiling?" This is excellent, and the book throughout refers to the need for upward light though no specific recommendations are made. (*iii*) "Are local lights properly shielded?" This is good because they seldom are in fact.

Other questions in the survey concern the general appearance of a factory, *i.e.*, cheer-

equipment in the danger areas of an explosives factory, the authors described types of lighting equipment which may be used in the three main groups of dangerous buildings, classified according to the hazards involved.

Class 1 buildings.—(*a*) External fittings, suited to the particular operating conditions, lighting through fixed windows or roof-lights; or

(*b*) Wall-mounted flameproof fittings, installed so that only the wall plate and glass are within the building, lamp renewals and maintenance being effected from outside.

Class 2 buildings.—(*a*) Pendant flameproof well-glass fittings; or

(*b*) Wall-mounted bulkhead flameproof fittings.

Class 3 buildings.—Pendant dust-tight fittings.

IMPROVED LEVELS OF ILLUMINATION

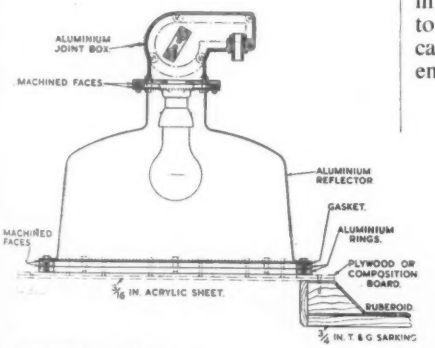
In discussing the design and installation of the equipment in detail the authors showed how research had made possible lighting far better than that provided by the original type of flameproof bulkhead fitting. Whereas, in 1937, illumination in dangerous buildings rarely exceeded 1 Lumen/sq. ft., the average illumination in many dangerous buildings was now 6-8 Lumen/sq. ft. (as a result of the use of dust-proof type equipment inside the building). Levels of illumination between 11 and 12 Lumen/sq. ft. could be obtained with special fittings mounted outside glazed openings in the roof.

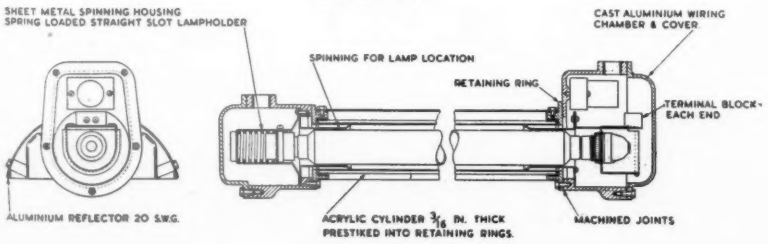
The discussion was opened by Mr. Phillips, who emphasized the fact that the well-being of factory workers was as important as the well-being of the machines. He thought that the most notable step forward in lighting research in recent years was the emphasis that was being given to the lighting of the whole environment, rather than the working plane alone. He suggested that we should nowadays be ashamed of installations of "raw" discharge lamps, and said that he looked forward to seeing a well-designed fitting for blending tungsten and mercury light. He did not see why factory lighting could not be made as attractive as office lighting.

FACTORY LIGHTING IN AMERICA

W. A. Allen, of BRS, gave a brief summary of his impressions of American factory lighting. His view, which seemed to be endorsed by others present, was that the American lighting journals gave an exaggerated impression of the general standard of factory lighting there. Fluorescent lighting was used almost universally, but he had seen no installations where ceilings were adequately illuminated by upward light from the fittings. He thought, however, that this omission was likely to be remedied in the future, as it had been found that fittings with open ventilation at the top stayed cleaner and allowed the fluorescent lamp to operate nearer its optimum temperature. He said that, contrary to the impression created by the spate of literature reaching this country, colour schemes hardly appeared to exist.

Other speakers stressed the need for guidance on the correct proportions of the mixture where mercury-vapour and tungsten lighting were used together, but there was not complete unanimity on the necessity to lower the efficiency of a discharge lamp installation by adding filament lamps. One speaker felt that in heavy-duty industries, for instance, the colour of the light source was not important. Dr. Greenslade mentioned the desirability of using some filament lighting in conjunction with fluorescent sources, to avoid the focusing difficulties caused by the discontinuous spectral emission from fluorescent lamps.





Left, 200-W. externally-mounted fitting for dangerous buildings. Below, dust-tight fluorescent fitting. Right, experimental fitting for lighting through roof of dangerous building.

(*continued from page 290*)

fulness, the influence of decoration, the relationship of lighting and plant layout, the colour of sources and their effect on decoration and, in the assessment of daylighting, the correct use of supplementary artificial lighting, window glare, and the control of sun glare by blinds and curtains.

On the whole, the survey is a sound one and would reveal many weaknesses; but the remedies advocated are not well thought-out or in line with modern recommendations.

The book seems wholly biased towards fluorescent lighting as, except in the first few pages, tungsten is hardly mentioned and no direct comparison is made between the two sources. No mention is made of the advantages of combining tungsten and fluorescent sources.

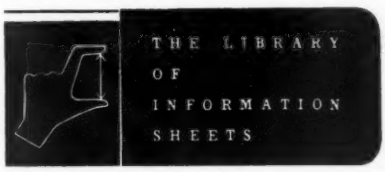
Fluorescent tubes are diffuse sources; tungsten are point sources; the need for both is becoming increasingly apparent for many situations (*e.g.*, in weaving sheds, fluorescent light alone tends to destroy the textural characteristics of cloth and point sources are needed to give highlight and shadow). Point sources also give sparkle, which helps to maintain alertness.

The chapter on colour is brief, arbitrary and not very informative. It stresses the need to avoid "tunnel effects" by painting the ceiling a light colour. Such recommendations as are made for machines are ill-considered and ill-founded. Thus, the colour of all factory plant and furniture is recommended to be as light as possible. No reason is given and it could mean white or cream are best. The section on colouring of service pipes and danger points is sound.

The last 50 pages give design procedure and calculation, lighting design tables, IES recommendations and legislation.

REFERENCE BACK

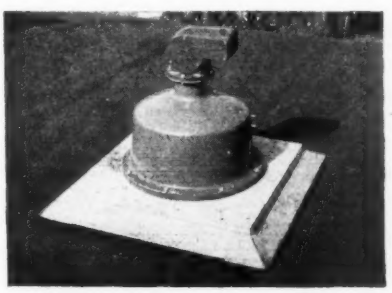
Item 18.113 (JOURNAL for Jan. 29, 1953) (*The Collapse Method of Design* should be numbered 18.119.



38.D1.—*Readers are asked to note that the classification number of this Sheet should be* 38.C2.

46.Z (R-Z) *REFERENCE BACK*

Readers are asked to note the following addendum and to include this on their copies of the Sheet in question: Under Tentest Fibre Boards Co., Ltd., the following entry should be added. "Composite building board partitions . . . 21.E1."



THE INDUSTRY

From the Industry this week, Brian Grant reports on a process for "flame-proofing" wallboard, an unusual electrically-operated door installation and two useful recently-published booklets—one on plumbing; one on insulation.

FLAMEPROOF WALLBOARD

Messrs. Southerns are now concessionaires for the "No-Ignite" process for flame-proofing wallboard and insulating board. The process also renders the board immune to attacks by fungus or insects and has no effect on the surface from the point of view of subsequent plastering or decoration. The thermal conductivity remains almost unaltered. Boards of all makes can be treated, and any size up to a maximum of 12 ft. by 4 ft. Under test at the Elstree research station the "No-Ignite" treated boards were placed in Class I—surfaces with a very low flame spread of 6 in. or less. (*Southerns Ltd., 32, Store Street, Manchester.*)

ELECTRICALLY-OPERATED DOORS

The photographs, right, show a set of electrically-operated doors in a Manchester warehouse which has just been re-built after war-time bombing. The warehouse consists of four bays, each 200 ft. long, 44 ft. wide and 35 ft. high. Overhead cranes unload from a pair of railway tracks at the end of each bay, and each end wall had to have a T-shaped opening, the upper part, 44 ft. wide by 4 ft. 10 in. high, to take the crane beam; the upright of the T, 12 ft. wide by 9 ft. high, to allow for the passage of the crane cabin and load.

To close the openings, electrically-operated doors and flaps were installed, the lower door sliding vertically and being hung on counterbalance weights, the upper door consisting of a flap hinged at the top and raised by cables, so that when open it lies parallel to the warehouse ceiling. The door and flap are worked by electrically-driven winches with various limit switches so that the whole sequence of operations is controlled by a single push button. From "closed" to "open," the time taken is about 40 secs., and, as one might expect, there are various interlocks to prevent the crane from approaching if the doors are closed. Emergency hand operation is also arranged for use if the current should fail. (*James Booth & Sons (Bolton) Ltd., Bolton.*)

PLUMBING FOR HOSPITALS

The Lead Industries Development Council has just issued a new bulletin on the use of lead pipe for hospital plumbing. The amount of plumbing in a hospital is apt to be considerable, since there are so many specialized fittings, and the pipework tends to become very complicated. Moreover, it generally has to be concealed, at least in wards, treatment rooms, and in the operating theatre and its ancillary rooms. The bulletin contains a useful series of diagrams showing economical and neat layouts, and includes a series of suggestions for the plumbing of the experimental ward plans put forward in the Nuffield Trust report. (*The Lead Industries Development Council, Eagle House, Jermyn Street, London, S.W.1.*)

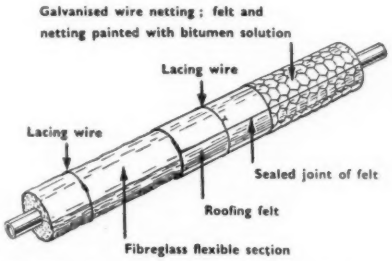
FACTORY INSULATION

Not so very long ago Fibreglass Ltd. produced a booklet on the insulation of houses which showed how much heat can be saved by even a comparatively small amount of insulation. They have now done the same thing for factory plant and buildings, and have provided a lot of useful information and tables, and repeated the figures which the makers of nearly all insulating materials quote when arguing in favour of their products. There is no mystery about them, for they are the result of quite simple calculations, but the results are so striking that perhaps not all factory owners believe them.

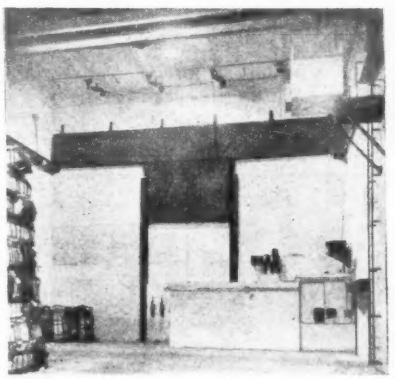
In a 10,000-sq. ft. factory, a roof of corrugated sheeting will waste 80 tons of coal a year, but 1 in. of "Fibreglass," or its equivalent, will save 70 of them. Somebody said not so very long ago that if the government were to give insulating materials away free to factory owners, they would make a fine profit by having several million tons of coal a year available for export. This may not be completely true, but proper insulation will, as a rule, pay for itself in about two years, and is always an extremely profitable investment for the owner of an existing factory, while for new work there are also savings to be made in the capital cost of the heating installation.

The "Fibreglass" booklet deals with the insulation of pipework by means of standard rigid sections, flexible quilted sections and the flexible strip which is supplied in 9-ft. lengths and is applied like a bandage. The insulation of both flat and curved surfaces, tanks, ducts, etc., is also dealt with, and there is a further section on the insulation of the buildings themselves. The tables giving recommended insulation thickness for pipework are based on BSI figures, which assume that the cost of heat (in *factories*, remember) is about 4d. per therm, but many factory owners will now be paying more than this, and the thickness suggested should be looked upon as a minimum.

This is a useful booklet, with plenty of drawings to show how insulation can be applied to various different jobs, both internally and when the insulation must be exposed to the weather. (*Fibreglass Ltd., St. Helens, Lancs.*)

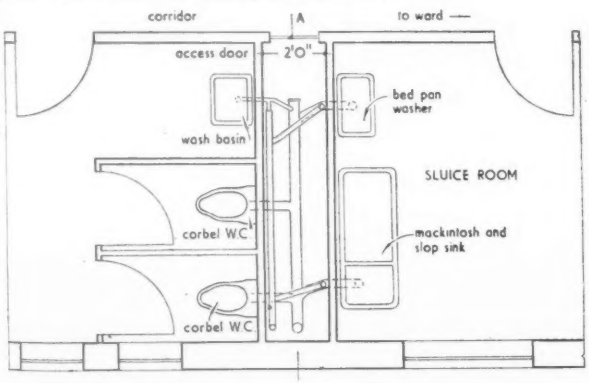


"Fibreglass" flexible section insulation; method of protection against weather.



Electrically-operated door and flap for crane and overhead rail. Above, closed; below, open and in use.

Below, illustration from the LIDC booklet showing plumbing to ward W.C's and sluice room.



ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal." (BLOCK LETTERS, and list in alphabetical order of manufacturers' names please.)

.....

.....

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Please ask manufacturers to send further particulars to:—

NAME.....

PROFESSION or TRADE

.....

ADDRESS.....

.....

AJ 26.2.53

Buildings Illustrated

Offices for the Royal Insurance Co. Ltd., at The Stow, Harlow New Town, Essex. (Page 277.) Architect: Frank Booth, A.R.I.B.A., A.M.T.P.I. General contractor: Courtney Pope Ltd. Sub-contractors: electric wiring and fittings, Courtney Pope (Electrical) Ltd.; furniture and furnishings supplied and fitted by Heals Contracts Ltd.; curtains, Tibor Ltd.; heaters, E. K. Cole Ltd.; flooring, Cellulin Flooring Ltd.; plastering, Tomei & Sons Ltd.; ironmongery, Dryad Metal Works Ltd.; glazing, Plyglass Ltd.

House and Doctor's Surgery at Mount Ephraim, Tunbridge Wells, Kent. (Pages 281-284.) Architect: Brian Peake, F.R.I.B.A. Assistant-in-charge: M. E. Woodford. General contractor: Frank W. Clifford Ltd. Sub-contractors: dampcourses, Ruberoid Co. Ltd.; bricks, Stonehenge Bricks Ltd.; fireproof construction, Cape Asbestos Co. Ltd.; roofing felt, Permanite Ltd.; partitions, sanitary fittings, Broad & Co. Ltd.; glass, Chance Bros. Ltd.; patent flooring, Semtex Ltd.; gas fixtures, Ascot Gas Water Heaters Ltd., De La Rue & Co. Ltd.; gasfittings, South Eastern Gas Board; electric wiring, South Eastern Electricity Board; electric light fixtures, Troughton & Young Ltd.; electric heating, Thermovent Ltd.; plumbing, Messrs. Fairs & Green; door furniture, Baldwins (Birmingham) Ltd.; casements, Henley's Metal Windows Ltd.; plaster, Messrs Mitchel; antique marble column, J. Crowther & Sons; furniture, textiles, Dunns' of Bromley; wallpapers, John Line & Sons Ltd., Arthur Sanderson & Son Ltd.; shrubs and trees, Arthur Charlton & Sons Ltd.

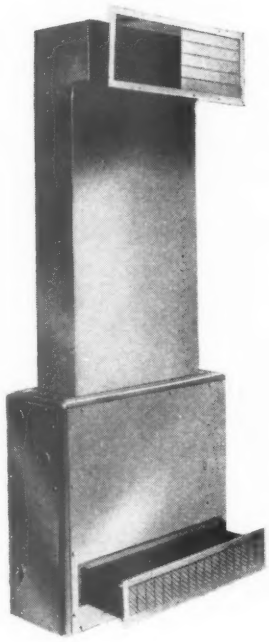
Announcements

The annual dinner of the Canterbury Chapter of the South Eastern Society of Architects was held at Herne Bay, recently. In proposing the toast of "Architecture," R. W. Whittington, president of the Southern Counties Federation of Building Trades Employers, welcomed the closer liaison that had arisen between builder and architect as a result of the newly established joint consultative committees. The advent of new materials and the intensive research into practical planning had often led to the neglect of the external appearance of our buildings. It was to be hoped that the relaxation of so many of the building regulations would lead to an improvement in this direction. In his reply, R. W. Paine, the president of the South Eastern Society of Architects, said that an architect was either an artist trying to look like a businessman or a businessman trying to look like an artist. In either case he was happy in his work because he thought he was being successful either way. Proposing the toast of "The Guests," L. Hugh Wilson, Canterbury City Architect and deputy chairman, said that since the war there had been a great change in the architectural profession. The private client had been largely replaced by the municipal and government authorities with their extensive school and housing programmes. A high standard had been set and it was to be hoped that it would be reflected in the work of private enterprise with their newly found freedom from building licences.

The *Daily Mail*, Northcliffe House, E.C.4, has issued its annual book of "12 attractive houses for discriminating people—including all the houses shown in this year's *Daily Mail* Ideal Home Exhibition at Olympia." The price is 2s. 6d.

Correction

On February 12 we published a picture of the science block for Leicester University, which had been awarded the RIBA Bronze Medal for the period 1948-52 "for the province of Rutland and Leicestershire." We stated that the building was designed by Messrs. Pick, Everard, Keay and Gimson and that the consulting architect was T. S. S. Worthington. Messrs. Pick, Everard, Keay and Gimson now tell us the information we had received and printed was inaccurate. The design was, in fact, the work of Mr. Worthington in collaboration with them. And the province is that of Leicestershire and Rutland—not as above.



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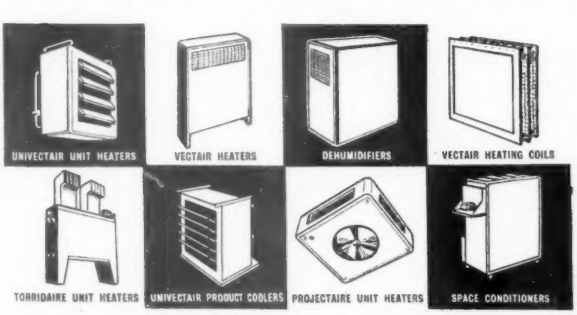

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CLASSIFIED ADVERTISEMENTS

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

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

Public and Official Announcements

25s. per inch; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952

ANGLESEY EDUCATION COMMITTEE.
NEW COUNTY SECONDARY SCHOOL AT LLANGEFNI.

Applications are invited from suitably qualified candidates for the appointment of a resident CLERK OF WORKS to supervise the construction of a new County Secondary School at Llangefni, Anglesey.

The inclusive salary will be £575 per annum. The appointment will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination.

Candidates should have a practical knowledge of all branches of the building trade and be experienced in the supervision of the erection of large buildings, including setting-out, levelling, measuring-up and keeping records.

Membership of the Incorporated Clerks of Works Association of Great Britain will be an advantage.

Applications, stating age, qualifications and experience, and giving names of two persons to whom reference can be made, and accompanied by copy of one testimonial, should be sent to the undersigned not later than Monday, 2nd March, 1953.

E. O. HUMPHREYS,
Director of Education.

Education Offices,
Shire Hall, Llangefni, Anglesey.
10th February, 1953. 8205

SALOP COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF SENIOR ASSISTANT ARCHITECT, A.P.T., GRADE VIII.

Applications are invited for the appointment of a Senior Assistant Architect, on A.P.T., Grade VIII (£760 to £835 per annum).

Applicants should be Registered Architects, preferably Members of the R.I.B.A., with a sound training and experience in the design and construction of modern buildings.

It may be possible to assist the successful candidate if there is any difficulty with regard to housing, and in any case a separation allowance of not exceeding 30s. a week will be paid to a married officer taking up the appointment, together with third-class return railway fare once a month to visit his family, such allowances to be limited to a period of six months or until such time as the officer is able to obtain accommodation for himself and his family in Shropshire, whichever is the earlier.

Application forms and conditions of the appointment may be obtained from the County Architect, C. H. Simmons, A.R.I.B.A., Dip.T.P., Column House, London Road, Shrewsbury, to whom they must be returned, accompanied by copies of three recent testimonials, not later than Tuesday, 10th March, 1953.

G. C. GODBER,
Clerk of the Council.

Shrewsbury.
February, 1953. 8224

COUNTY BOROUGH OF DERBY.
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointment on the permanent staff, in accordance with the National Scale of Salaries:—

ONE JUNIOR QUANTITY SURVEYOR, Grade I/II, £465—£540. Commencing salary £465 per annum.

Applicants should have passed the R.I.C.S. First Examination, be not less than 21 years of age and be experienced in working up bills of quantities and measuring up on site.

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

Form of application may be obtained from the Borough Architect, The Council House, Corporation Street, Derby, and should be returned when completed, together with a copy of one testimonial and the names of two persons to whom reference may be made, to arrive not later than Monday, 9th March, 1953.

Canvassing directly or indirectly will be a disqualification.

E. H. NICHOLS,
Town Clerk.

8214

LINDSEY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Vacancy on the permanent staff for JUNIOR ARCHITECTURAL ASSISTANT, A.P.T., III, commencing salary £525, rising to £570 subject to satisfactory service. Applicants should have passed Intermediate Examination of R.I.B.A. or equivalent. N.J.C. Conditions of Service. Canvassing will disqualify. Any applicant related to member or senior officer of Council to disclose that fact.

Applications, stating age, qualifications and experience, with copies of two recent testimonials, to be sent to the undersigned not later than 6th March, 1953.

A. RONALD CLARK, A.R.I.B.A., A.M.T.P.I.,
County Architect.

County Offices, Lincoln. 8264

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE.

Applications are invited for the following appointments in the City Architect's Department, arising out of the re-grading of certain posts in the Establishment:—

(*a*) PRINCIPAL ASSISTANT QUANTITY SURVEYOR. A.P.T. Division, Grade IX (£815-£935).

(*b*) SENIOR QUANTITY SURVEYOR. A.P.T. Division, Grade VIII (£760-£835).

(*c*) SENIOR ASSISTANT QUANTITY SURVEYOR. A.P.T. Division, Grade VII (£710-£785).

(*d*) SENIOR ASSISTANT QUANTITY SURVEYOR. A.P.T. Division, Grade VI (£670-£735).

Candidates for the above appointments should be thoroughly experienced in the preparation of Bills of Quantities, Specifications and Estimates for Housing, Flats and Building Work of a general character, and the settlement of final accounts.

Preference will be given to professional Associates of the R.I.C.S.

Candidates for appointment (*a*) must be fully qualified and experienced, and capable of assisting the Contracts Officer and Chief Surveyor in the organisation of the Quantity Surveying Section of the Department.

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

Applications, stating position applied for, age, particulars of training, qualifications, experience, present and past appointments, together with copies of two recent testimonials or the names and addresses of two persons to whom reference may be made, should be addressed to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18, Cloth Market, Newcastle-upon-Tyne, 1, not later than Tuesday, 10th March, 1953.

JOHN ATKINSON,
Town Clerk.

Town Hall, Newcastle-upon-Tyne, 1.
18th February, 1953. 8265

BOROUGH OF BRENTFORD AND CHISWICK.
APPOINTMENT OF JUNIOR BUILDING INSPECTOR AND TOWN PLANNING ASSISTANT.

Applications are invited for this appointment, at a salary according to the Miscellaneous Division, Grade III (£375 to £440 p.a., plus London weighting), commencing first year. Appointment subject to (*a*) provisions of National Scheme of Conditions of Service, (*b*) Local Government Superannuation Act, 1937, and (*c*) passing of a medical examination.

Applicants must possess good knowledge of building construction, and preferably have had experience in a Building Inspector's office, whilst a general knowledge of Town Planning would be a desirable qualification.

Written applications, stating age and detailing experience, etc., with names and addresses of two referees, to reach undersigned not later than the 9th March, 1953.

W. F. J. CHURCH,
Town Clerk.

Town Hall, Chiswick, W.4.
19th February, 1953. 8266

LEICESTERSHIRE COUNTY COUNCIL.

BUILDING ASSISTANT required by County Land Agent, 7, Victoria Parade, Leicester, for agricultural building work. Applicants must have passed the Intermediate Examination of the R.I.B.A. or R.I.C.S., or hold the City & Guilds Higher National Certificate in Building, or equivalent, and have thorough knowledge of building construction, be skilled draughtsmen, and be capable of preparing specifications and working drawings for small houses, farm buildings, farm roads, drainage, electricity, and water installations.

Salary: £525×£15 to £570. Post pensionable.

Motor car an advantage (N.J.C. mileage allowance).

Consideration given to registered disabled persons.

Applications in full detail, stating names of two referees, to above address by 14th March. 8254

COUNTY BOROUGH OF SOUTHAMPTON requires under N.J.C. service conditions:—

ARCHITECTURAL ASSISTANT. Salary: £555-£600 (A.P.T., IV). Must have had suitable experience in Local Authority Housing, and have passed the R.I.B.A. Intermediate examination.

Apply, with copies of two testimonials, to the Borough Engineer, Civic Centre, Southampton, by Tuesday, 10th March, 1953. 8275

BRITISH ELECTRICITY AUTHORITY.
EAST MIDLANDS DIVISION.
CIVIL ENGINEERING DRAUGHTSMEN, CONSTRUCTION DEPARTMENT, NORTH WILFORD. Vacancy No. 22/53.

Candidates should have experience in design and detail of reinforced concrete structures, piled and slab foundations for heavy plant, culverts, cable subways, etc., or general building construction, drainage and sanitation schemes, associated with offices and administrative buildings.

The salary will be in accordance with Grade V (£567-£671 per annum) or Grade VI (£433-£567 per annum), of Schedule D of the National Joint Board Agreement.

The above positions will be pensionable under the British Electricity Authority and Area Boards Superannuation Scheme.

Applications should be submitted on Form A.E.6/ACT, which may be obtained from the Divisional Establishments Officer, British Electricity Authority, Barker Gate, Nottingham, and returned to the undersigned.

L. F. JEFFREY,
Divisional Controller.

8277

WALTHAMSTOW COMMITTEE FOR EDUCATION.
ARCHITECT'S DEPARTMENT.

Applications are invited for the following permanent appointments in the office of the Architect to the Committee, Mr. Frank H. Heaven, A.R.I.B.A., A.R.I.C.S.:—

(*a*) ARCHITECTURAL ASSISTANT, at a salary of £555 per annum, rising by increments of £15 to £600 per annum (Grade A.P.T., IV, National Scales).

(*b*) ARCHITECTURAL ASSISTANT, at a salary of £495 per annum, rising by increments of £15 to £540 per annum (Grade A.P.T., II, National Scales).

In addition a London weighting of £30 per annum if 26 years of age and over, or £20 per annum for age 21 to 25, is payable.

Forms of application should be obtained from and returned to the Borough Education Officer, Town Hall, Forest Road, Walthamstow, E.17, within three weeks of the appearance of this notice. 8267

SURREY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of ASSISTANT ARCHITECT, Grade VII, at a commencing salary of £710 per annum, rising by annual increments of £25 to a maximuh of £785 per annum, plus London allowance of up to £30 per annum, according to age.

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

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

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, not later than the 7th March, 1953.

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

The Council will be unable to provide any housing accommodation, and the successful applicant will be expected to make his own arrangement in this direction.

W. W. RUFF,
Clerk of the Council.

County Hall, Kingston-upon-Thames. 8255

CRAWLEY DEVELOPMENT CORPORATION require: (*a*) ARCHITECT, Grade III, salary scale £850-£1,100 p.a.; (*b*) ASSISTANT ARCHITECT, Grade IV, salary scale £630-£850 p.a.; (*c*) JUNIOR ASSISTANT ARCHITECT, Grade V, salary scale £465-£605 p.a., and (*d*) DRAUGHTSMAN, Grade V, salary scale £465-£605 p.a.

Appointment (*a*) needs ability in architectural design and wide experience of architectural practice. Qualifications or experience in town planning would be a recommendation.

Appointment (*b*) needs qualifications and good general experience in design, construction and planning.

Appointment (*c*) needs R.I.B.A. Intermediate Examination standard and experience in architectural practice.

Appointment (*d*) needs a capable draughtsman with structural knowledge and experience in presentation technique.

Contributory superannuation.

Application forms from Chief Architect (Vacancy), Broadfield, Crawley, Sussex, are returnable by 16th March, 1953.

C. A. C. TURNER,
Chief Executive.

8249

METROPOLITAN BOROUGH OF FULHAM.
SENIOR ASSISTANT ARCHITECT.

Housing and Public Buildings Department. Salary: A.P.T., VI, £670-£735, plus London weighting, £30 p.a. over 26 years. Applicants must be Registered Architects, capable of planning and designing large schemes of flats and experienced in handling large jobs in progress and in dealing with contracts. Application forms from me. Closing date: 10th March, 1953.

CYRIL F. THATCHER,
Town Clerk.

Town Hall, Fulham, S.W.6. 8257

ROYAL BURGH OF KIRKCALDY.
Applications are invited for the post of temporary JUNIOR ARCHITECTURAL ASSISTANT, on J.I.C. Salary Grades I/IV (£460-£595), according to qualifications and experience.
Applications, giving full details and testimonials, should be lodged with the Burgh Engineer, Osborne House, East Fergus Place, Kirkcaldy, on or before 7th March, 1953. 8241

MANCHESTER CORPORATION HOUSING COMMITTEE. Applications are invited from suitably qualified persons for the following positions:—
ASSISTANT ARCHITECT, Grade A.P.T., VI. £670-£735 p.a. Must be a Registered Architect, and preference will be given to an Associate of the R.I.B.A.
ASSISTANT ARCHITECT. Grade A.P.T., I. £465-£510 p.a.
Candidates should forward particulars of age, qualifications, and experience to the Director of Housing, Town Hall, Manchester, 2, to be received by Saturday, 14th March, 1953. Canvassing is prohibited. 8234

NORTH-EASTERN TRADING ESTATES, LTD., TEAM VALLEY ESTATE, GATESHEAD, 11.
PROPOSED NEW FACTORY M.160, KINGSWAY, TEAM VALLEY ESTATE.
North-Eastern Trading Estates, Ltd., will be issuing invitations to tender for the construction of a new factory of approx. 30,000 sq. ft. on or about the 1st April.
Contractors who wish to submit a tender should make written application to the Secretary, North-Eastern Trading Estates, Ltd., by not later than the 14th March, 1953. All such applications must be accompanied by a deposit of 3 gns., payable by cheque, which will be refunded on receipt of a *bona fide* tender.
R. M. PERCIVAL,
Secretary.
8247

CORPORATION OF THE CITY OF ABERDEEN.
TOWN PLANNING DEPARTMENT.
Applications are invited for the posts of (*a*) ASSISTANT (ARCHITECTURAL), and (*b*) ASSISTANT (PLANNING), both in the salary grade £675 to £740 per annum.
Further particulars and forms of application obtainable from the Director of Town Planning, 5, Bon-Accord Crescent, Aberdeen, to whom applications should be returned by 7th March, 1953.
J. C. RENNIE,
Town Clerk.
Town House, Aberdeen.
13th February, 1953. 8239

UNIVERSITY OF NOTTINGHAM.
SURVEYOR'S DEPARTMENT.
Applications are invited for the appointment of ARCHITECTURAL ASSISTANT. Salary: £475 to £575 per annum, according to qualifications and experience.
Form of application and conditions of appointment may be obtained from the undersigned.
H. PICKBOURNE,
Registrar.
8238

COUNTY BOROUGH OF BLACKBURN.
ARCHITECTURAL ASSISTANTS AND ASSISTANT QUANTITY SURVEYOR.
Applications are invited for the following permanent appointments:—
ONE ARCHITECTURAL ASSISTANT. Grade VIII (£760-£835).
ONE ARCHITECTURAL ASSISTANT. Grade VII (£710-£785).
ONE ASSISTANT QUANTITY SURVEYOR. Grade VII (£710-£785).
Applicants for the Architectural posts must be Registered Architects and have good experience in the design and construction of Municipal Buildings and Schools. Preference will be given to Associates of the R.I.B.A.
The Quantity Surveyor must be experienced in the preparation of Bills of Quantities, Specifications and Estimates and the settlement of final accounts. Preference will be given to Professional Associates of the Chartered Surveyors' Institute.
Applications, stating age, qualifications, experience and past and present appointments, should be submitted with three recent testimonials to the Borough Engineer, Town Hall, Blackburn, by 7th March.
CHAS. S. ROBINSON,
Town Clerk.
8236

BASILDON DEVELOPMENT CORPORATION.
Applications are invited for the following posts on the staff of the Chief Architect planner, N. Tweddell, A.R.I.B.A. Sound professional training, with experience in house design, working drawings, and supervision of contracts is essential:—
(*a*) ARCHITECT, Grade III (£835-£1,085).
(*b*) ASSISTANT ARCHITECT, Grade IVb (£735-£835).
(*c*) ASSISTANT ARCHITECT, Grade IVa (£635-£735).
Commencing salary within the ranges stated would be in accordance with experience and ability. Applicants are subject to the provisions of the Local Government and other officers' Superannuation Act, and housing accommodation in the New Town will be available in appropriate cases. Successful applicants will be required to pass a medical examination. Applications on the form obtainable from the Chief Architect should reach the General Manager, Basildon Development Corporation, Gifford House, Basildon, Essex, by 12th March, 1953. 8276

CITY AND ROYAL BURGH OF EDINBURGH.
CITY ARCHITECT'S DEPARTMENT.
Applications are invited from fully qualified ARCHITECTS for a vacancy in the above.
Salary: A.P.T., Va (£630×£20—£690). The post is superannuable, and the successful applicant will require to undergo a medical examination.
Forms of Application may be obtained from the undersigned, to whom completed forms should be returned as soon as possible.
A. G. FORGIE, A.R.I.B.A.,
Dip.Arch.(Edin.),
City Architect.
City Chambers, Edinburgh, 1.
February, 1953. 8235

COUNTY COUNCIL OF ESSEX.
ARCHITECT'S DEPARTMENT.
TWO ASSISTANT ARCHITECTS, Grade VI, A.P.T.D., on established staff. Salaries not exceeding £735.
Candidates should be Members of R.I.B.A. Work includes schools, colleges and other public buildings.
Application forms from H. Conolly, F.R.I.B.A., County Architect, County Hall, Chelmsford, returnable with copies of three recent testimonials by 13th March, 1953.
Canvassing disqualifies. 8274

CORBY DEVELOPMENT CORPORATION.
Applications are invited for the following appointments in the Chief Architect's Department:—
(*a*) SENIOR ASSISTANT (MAINTENANCE), at a salary of £780×3 £45×£35—£950. The duties will include a considerable amount of side supervision in connection with final certificates and building maintenance. Candidates should have had considerable office and site experience, preferably with major housing schemes.
(*b*) CLERK OF WORKS, at a salary of £575×£25—£625, for the supervision of major building contracts.
The appointments are subject to one month's notice on either side, the provisions of the Local Government Superannuation Act, and to the passing of a medical examination.
Applications, stating age, education, training, qualifications, experience, past and present appointments and salaries, together with names of two referees, must be received by the undersigned not later than 6th March, 1953, in envelopes endorsed "Appointments."
Housing may be available.
R. F. BROOKS GRUNDY,
General Manager.
The Stone House, South Road,
Corby, Northants. 8278

CORBY DEVELOPMENT CORPORATION.
APPOINTMENT OF QUANTITY SURVEYOR.
QUANTITY SURVEYOR. Applications are invited for this appointment, in the Chief Architect's Department, within the scale £630×£30—£750. Candidates should have experience in "taking off" and in the settlement of accounts for large scale construction projects.
The appointment is subject to one month's notice on either side, the provisions of the Local Government Superannuation Act, and to the passing of a medical examination. Applications, stating age, education, training, qualifications, experience, past and present appointments and salaries, together with the names of two referees, must be received by the undersigned not later than 6th March, 1953, in envelopes marked "Quantity Surveyor."
Housing may be available.
R. F. BROOKS GRUNDY,
General Manager.
The Stone House, South Road,
Corby, Northants. 8279

BURGH OF PAISLEY.
Applications are invited from suitably qualified persons who have extensive experience in the Architectural Work of Local Authorities for the following vacancies in this Department:—
THREE ASSISTANT ARCHITECTS. Grade A.P.T., VI/VII (£675-£790).
ONE ARCHITECTURAL ASSISTANT. Grade A.P.T., V/Va (£600-£690).
ONE ARCHITECTURAL ASSISTANT, Grade A.P.T., II (£490-£535).
The appointments will be made subject to a medical examination and the provision of the Scheme of Salaries and Conditions of Service for Administrative, Professional and Technical Staffs, and will be terminable by one month's notice.
Applications, giving full details of qualifications and experience, and accompanied by the names of two referees, should be submitted to the undersigned not later than Monday, 9th March, 1953.
JOHN A. McGREGOR,
Burgh Engineer.
14, Gilmour Street, Paisley.
February, 1953. 8280

Tenders for Contracts

6 *lines or under*, 12s. 6d.; *each additional line*, 2s.

BOROUGH OF EALING.
ELECTRICAL INSTALLATION WORKS—SCHOOLS.
Tenders are invited for the alteration of the lighting installation at certain schools in the Borough. Full details of the work to be done, Specification and Forms of Tender may be obtained from the Borough Surveyor, Town Hall, Ealing, W.5, on deposit of £2, to be returned upon receipt of *bona fide* tenders.
Tenders in plain sealed envelopes, bearing no name or mark indicating the sender, but endorsed "Tender for Electrical Installation Works at ..... (School)," must be delivered to the undersigned not later than 12 noon on Monday, the 9th March, 1953.
The Corporation do not bind themselves to accept the lowest or any tender.
E. J. COPE-BROWN,
Town Clerk.
Town Hall, Ealing, W.5. 8251

Architectural Appointments Vacant

4 *lines or under*, 7s. 6d.; *each additional line*, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952

SENIOR ARCHITECTURAL ASSISTANT required for work first in London and subsequently in South Wales. Must be prepared to control the detailing of a large scale contemporary industrial project. Salary, £650-£750, according to ability. Box 8160.

ARCHITECTURAL ASSISTANT, with experience, required for general practice. Reply, stating experience and salary required, to Thomas Worthington & Sons, 178, Oxford Road, Manchester, 13. 8209

ARCHITECTURAL ASSISTANT, London, fully experienced in design and construction. Applicant should have passed his Associateship examination, preferably hold honours or other diplomas, age about 35/40, experience 7/10 years. Pension, etc.; benefits for permanent man. Progressive post. Apply Box 8213.

REQUIRED, in Birmingham Architects' office, JUNIOR ASSISTANT, Intermediate standard. Contemporary outlook, but interested in traditional work. Salary, age, and full particulars to Box 8229.

QUALIFIED ARCHITECT or BUILDING SURVEYOR wanted by firm of Chartered Land Agents and Surveyors in the South-West. Must be experienced and capable of assuming responsibility for preparation of plans and specifications of new cottages, farmhouses and buildings, reconditioning, water supplies, and measurement of dilapidations. Own car essential. Applicants should state salary wanted and whether married or single. Box 8268.

ARCHITECTURAL ASSISTANT required for work in drawing office specialising in timber buildings for export. Applicants should be preferably of Intermediate standard, with experience of joinery and prefabrication work. Apply in writing, stating age and experience, to Riley-Newsum Housing Department, H. Newsum, Sons & Co., Ltd., Lincoln. 8272

ARCHITECT'S ASSISTANT required in West Country practice. Intermediate standard, with experience in preparation of working drawings, etc. Essential good Draughtsman. Ability to drive car an advantage. Salary: £400-£450. Full particulars to Box 8271.

ARCHITECTURAL ASSISTANT, competent, required in office, West End of London. Not less than Intermediate standard. Experienced in commercial work. Neat and quick draughtsman essential. Salary according to ability. Box 8270.

JUNIOR ARCHITECTURAL ASSISTANT required for conversion work; experience of traditional detailing an advantage. Salary: £250/£350 p.a. Apply, giving usual particulars, to Box 8269.

JUNIOR ARCHITECTURAL ASSISTANT required in established office. Experience and salary required to A. W. Whydale, L.R.I.B.A., 2, Fish Hill, Royston, Herts. 8273

ARCHITECT, Multiple Retail Company, headquarters London — expanding — requires capable young ARCHITECT to manage numerous properties and eventually set up department. Permanent full-time position, good salary, contributory pension scheme. Replies in strict confidence. Box 88, c/o Walter Judd, Ltd., 47, Gresham Street, London, E.C.2. 8261

ARCHITECTS' ASSISTANTS required by Wallis, Gilbert & Partners, 5, Cromwell Road, South Kensington, S.W.7. Industrial design experience essential. Apply by letter in first instance. 8262

ASSISTANTS required in Architect's office of large department Store in London. Applicants should have completed National Service and be capable of measuring existing works and preparing working drawings for alteration and reconstruction of same. Some knowledge of shop fittings an advantage, but not essential. Commencing salary: £400-£450, with prospects. Write Box 8258.

ARCHITECTURAL ASSISTANT required for Salisbury firm of Non-traditional Builders. Accommodation scarce for married men. Apply, stating age, experience, and salary required, Reema Construction, Ltd., Milford Manor, Salisbury. 8246

JUNIOR ASSISTANT required for private office in Westminster area. Must be a capable draughtsman. Good prospects for the right applicant. Reply Box 8244.

ARCHITECTURAL ASSISTANT required for Architect's Department of large Maidstone Brewery. Applicants, who should be aged 30-40, must be good draughtsmen, with a sound knowledge of construction. Previous experience in the Licensed Trade not essential. The appointment is pensionable, and salary will be according to qualifications and experience. Reply with full details to Box 8248.

ASSISTANT, Inter. standard, with knowledge of surveys, working drawings and details. Particulars of experience and salary to A. H. Neave, A.R.I.B.A., 38, Mount Street, Battle, Sussex. 8252

ARCHITECTURAL ASSISTANT required, Intermediate standard, with office experience, for West London office. General practice. 'Phone: RIV. 6693. 8261

TWO ARCHITECTURAL ASSISTANTS required, about R.I.B.A. Inter. standard, for small Birmingham office. Must be good draughtsmen and capable of preparing sketches and working drawings. Write, giving details of experience, age, and salary required. Box 8242.

Architectural Appointments Wanted

ASSISTANT, available March, requires position, having prospects, with Architect, where contemporary outlook, initiative, enthusiasm and experience is appreciated and scope to design allowed. Kindly reply Box 656.

ASSISTANT R.I.B.A., Final standard, requires post with a future. Part school trained, office experience since 1947, in most types of building, including surveys, specifications, etc. Box 653.

FELLOW R.I.B.A., with wide experience, available as SENIOR ASSISTANT or JUNIOR PARTNER in London or district office. Capital available. Box 657.

JUNIOR ARCHITECTURAL ASSISTANT; 25; R.I.B.A. Inter. standard; school trained; 12 months' office experience; requires post immediately. Box 660.

ARCHITECTURAL ASSISTANT (25), Final standard, 5½ years' varied office experience, seeks position in London office. Box 658.

EXPERIENCED ASSISTANT, reading for Final, seeks free-lance work. Metropolis/North Kent. Box 664.

A. R.I.B.A. (age 37), married, 23 years' varied experience all architectural duties, seeks permanent senior situation. North London-Hertford area. Own car. Available in one month. Box 663.

TEMPORARY or part-time work required, in London, by ARCHITECTURAL ASSISTANT (Inter. R.I.B.A.), experienced in preparation of working drawings, surveys, etc. Box 8243.

ARCHITECTURAL SURVEYOR desires permanent position. Used to working on own initiative on contracts from enquiry to final account, all duties applicable. Experienced estimator and valuer. Extensive knowledge of all branches of industry, including all "paperwork." Car owner. Salary required: £650 per annum. Location City to Surrey. Box 662.

A. R.I.B.A., Dip.Arch.(Birm.), single (25), desires position in private office in Birmingham area. 4½ years' varied experience, including specifications, surveys, levelling and site supervision. Box 661.

SENIOR ASSISTANT (27), passed Final examination. 7 years' office experience of varied nature, including administration, requires position of responsibility, with opportunities for advancement. Small to medium sized office in Midlands preferred, but not essential. Box 668.

CHARTERED ARCHITECT (32) seeks responsible situation in London as CHIEF or SENIOR ASSISTANT with industrial or private Architects. 15 years' varied experience. Capable of taking charge of contracts, office administration, and staff control. Salary: £900-£1,000. Box 669.

JUNIOR ARCHITECTURAL ASSISTANT (22), R.I.B.A., Inter. standard, school trained, 3 months' office experience, requires post immediately. Box 666.

ARCHITECTURAL ASSISTANT, passed R.I.B.A. Inter., aged 22, with 6 years' office experience, requires position of some responsibility in London area for two years, until National Service. Box 667.

Other Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

DRAUGHTSMAN (detail) required by Manufacturing Company in North Kent area—experienced, and preferably with some knowledge of heating and ventilating. Five-day week. Good salary and good working conditions. Box 8253.

A VACANCY exists in substantial organisation specialising in the production of prefabricated buildings, for a regional REPRESENTATIVE. Applicants should have had successful experience in approaches to higher officials at policy level in large municipal and commercial organisations. Only those with proved experience at these levels should apply. Knowledge of building trade an advantage, but initiative and negotiating ability essential. Payment by salary with bonus incentive, plus expenses. Box 8256.

SHOPFITTING DESIGNER required. Experience in coloured perspective work. Present staff notified. State full details of experience, etc., to Box 8240.

DRAUGHTSMAN (M. or F.). Knowledge joinery or shopfitting advantageous, but not essential. Also vacancy JUNIOR DRAUGHTSMAN. Peerless Built-in Furniture, Ltd., Western Avenue, Perivale, Greenford, Middx. (Piccadilly or Central London Lines). Tel.: PERivale 1128. 8260

Services Offered

4 lines or under, 7s. 6d.; each additional line, 2s.

SURVEYING and Levelling of Building Sites and Measured Drawings undertaken by experienced Surveyor at moderate charges. Box 6583.

SENIOR EXECUTIVE seeks responsible sales and administrative position in progressive company. Extensive personal connections with architects, Government Departments, and local authorities. Excellent references. Box 7880.

SURVEYING and Levelling of Sites, Bills of Quantities, Variation Accounts, Survey of Buildings and Reports. Qualified Surveyor. LIV. 1839. Box 8195.

THESES, etc., Typed. Knowledge of Architecture. Hedgcock, 3, Purley Rise, Purley, Surrey. Uplands 9079. 8263

TYPING.—Competent Confidential SECRETARY-S/TYPIST requires evening and weekend work. Own typewriter. Box 8245.

For Sale or Wanted

4 lines or under, 7s. 6d.; each additional line, 2s.

RECONDITIONED EX-ARMY HUTS, and manufactured buildings. Timber. Asbestos, Nissen type, Hall type, etc. All sizes and prices. Write, call, or telephone, Universal Supplies (Belvedere), Ltd., Dept. 25, Crabtree Manorway, Belvedere, Kent. Tel.: Erith 2948. 6803

Miscellaneous

4 lines or under, 7s. 6d.; each additional line, 2s.

A. J. BINNS, LTD., Specialists in the supply and fixing of all types of Fencing, Gates and Cloakroom Equipment. Harvest Works, 96/107, St. Paul's Road, N.1. Canonbury 2061.

STEEL WINDOWS and Doors, Glazing Bars, p/metal sections, steel hinges. All from Stock. Illus. lists from "New" Services, 46, Westfield Road, Birmingham. 15. Phone EDG. 3723. 8117

Educational Announcements

4 lines or under, 7s. 6d.; each additional line, 2s.

R.I.C.S., I.A.A.S., and I.Q.S. Exams.—Postal Courses conducted by the Ellis School (Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A.), 103B, Old Brompton Road, S.W.7. KEN. 4477/8/9. Descriptive Booklet on request. 7020

R.I.B.A. and T.P.I. EXAMS.—Stuart Stanley (Tuton Sch. of Arch., Lon. Univ.) and G. A. Crockett, M.A./B.A., F./A.R.I.B.A., M./A.M.T.P.I. (Prof. Sir Patrick Abercrombie in assn.), prepare Students by correspondence tuition. 10, Adelaide Street, Strand, W.C.2. TEM. 1603/4.

UNIVERSITY COLLEGE, LONDON.—Candidates for admission to the Degree or Diploma courses in the Bartlett School of Architecture in October, 1953, should obtain application forms from the Registrar of the College (Gower Street, London, W.C.1), and return them by 31st March, 1953. 8250

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