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contents

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

and COMMENT NEWS

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Astragal's Notes and Topics

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TECHNICAL Information Sheets Information Centre Current Technique Questions and Answers Prices The Industry PHYSICAL PLANNING SUPPLEMENT CURRENT BUILDINGS HOUSING STATISTICS Architectural Appointments Wanted Vacant and

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STACK The Architects' JOURNAL for November 4, 1954 RC HITE * A glossary of abbreviations of Government Department and Societies and Committees of all kinds, together with their full address and telephone numbers. (The glossary) is sub-lished in two parts—A to Ie one week, Ig to Z the next. In all cases where the fown is not mentioned the word LONDON is implicit in the address. Per Al Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1. Institution of Heating and Ventilating Engineers. 19, Cadogan Square. Sloane 1601/3158 IGE THVE IIBDID Incorporated Institute of British Decorators and Interior Designers Incorporated Institute of British Decorators and Interior Designers. Drayton House, Gordon Street, W.C.1. Euston 2450 Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783 Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2. Temple Bar 4071 Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197/5176 Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3. Avenue 6851 Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172 Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128 Inland Waterways Association. 14, Great James' Street, W.C.2. Chancery 7718 Lead Development Association. 47, Bedford Square, W.C.1. Museum 3891 ILA I of Arb IOB IR IRA ISE IWA LDA London Master Builders' Association. 47, Bedford Square, W.C.1. Lead Sheet and Pipe Council. Eagle House, Jermyn Street, S.W.1. LMBA Museum 3891 LSPC Whitehall 7264/4175 Wnitenall 7264/4175 Modern Architectural Research Group (English Branch of CIAM). Secretary: Trevor Dannatt, 6, Fitzroy Square, W.1. Euston 7171 Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. Whitehall 3400 Ministry of Education. Curzon Street House, Curzon Street, W.1. Mayfair 9400 Ministry of Health. 23, Savile Row, W.1. Regent 8411 MARS MOA MOE Ministry of Education. Curzon Succi House, Called Regent 8411 Ministry of Health. 23, Savile Row, W.1. Regent 8411 Ministry of Housing and Local Government. Whitehall, S.W.1. Whitehall 4300 Ministry of Labour and National Service. 8, St. James' Square, S.W.1. Whitehall 6200 Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. Gerrard 6933 Ministry of Transport. Berkeley Square House, Berkeley Square, W.1. Mayfair 9494 Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 7611 Natural Asphalte Mine-Owners and Manufacturers Council. 94-98, Petty France, S.W.1. Abbey 1010 National Association of Shopfitters. 9, Victoria Street, S.W.1. Abbey 4813 National Buildings Record. 31, Chester Terrace, Regent's Park, N.W.1. Welbeck 0619 National Council of Building Material Producers. 10, Storey's Gate, S.W.1. Abbey 5111 National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham 4041/4054 MOH MOHLG MOLNS MOS MOT SECTION MOW NAMMC NAS NBR NCBMP NFBTE National Federation of Building Trades Operatives. Federal House, Cedars Road, Clapham, S.W.4. Macaulay 4451 National Federation of Housing Societies. 13, Suffolk St., S.W.1. Whitehall 1693 National House Builders Registration Council. 82, New Cavendish Street, W.1. Langham 4341 NFBTO NFHS NHBRC National Physical Laboratory. Head Office, Teddington. Molesey 1380 National Sawmilling Association. 14, New Bridge Street, E.C.4. City 1476 National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1. Abbey 1359 NPL. NSA NSAS National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1. Whitehall 02 Political and Economic Planning. Reinforced Concrete Association. Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. NT Whitehall 0211 PEP Whitehall 7245 Abbey 4504 RCA RIAS Royal Institute of British Architects. 66, Portland Place, W.1. Langham 5721 Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1. Whitehall 5322/9242 **RIBA RICS**

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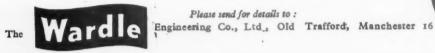


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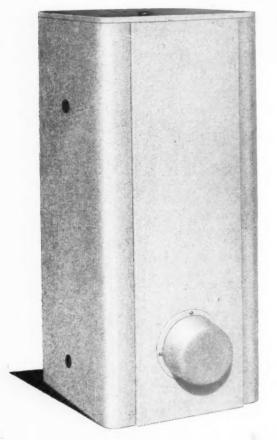


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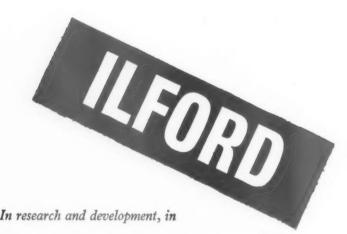
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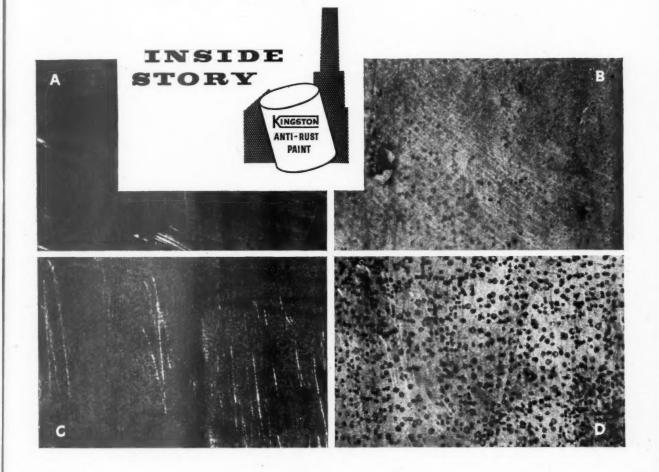
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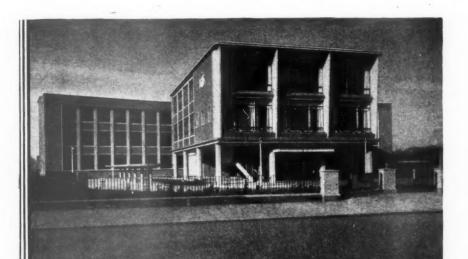
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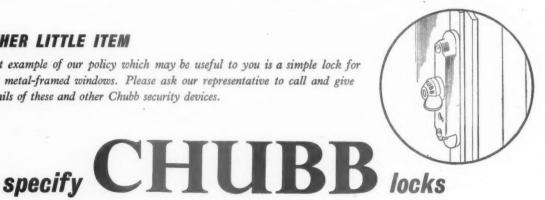
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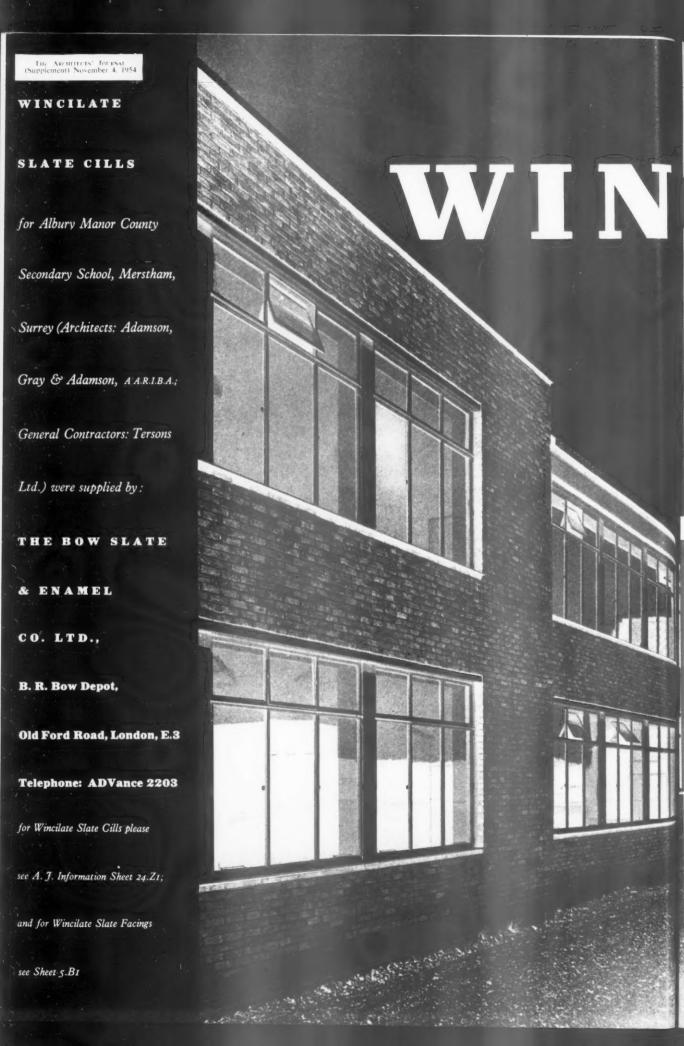
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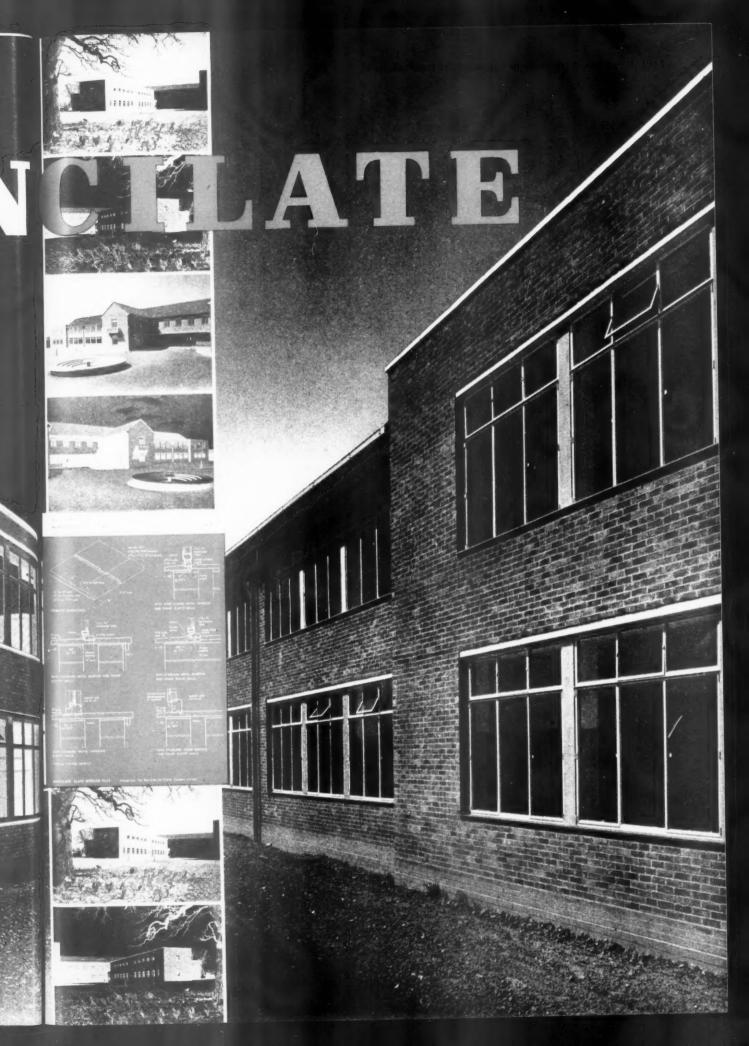
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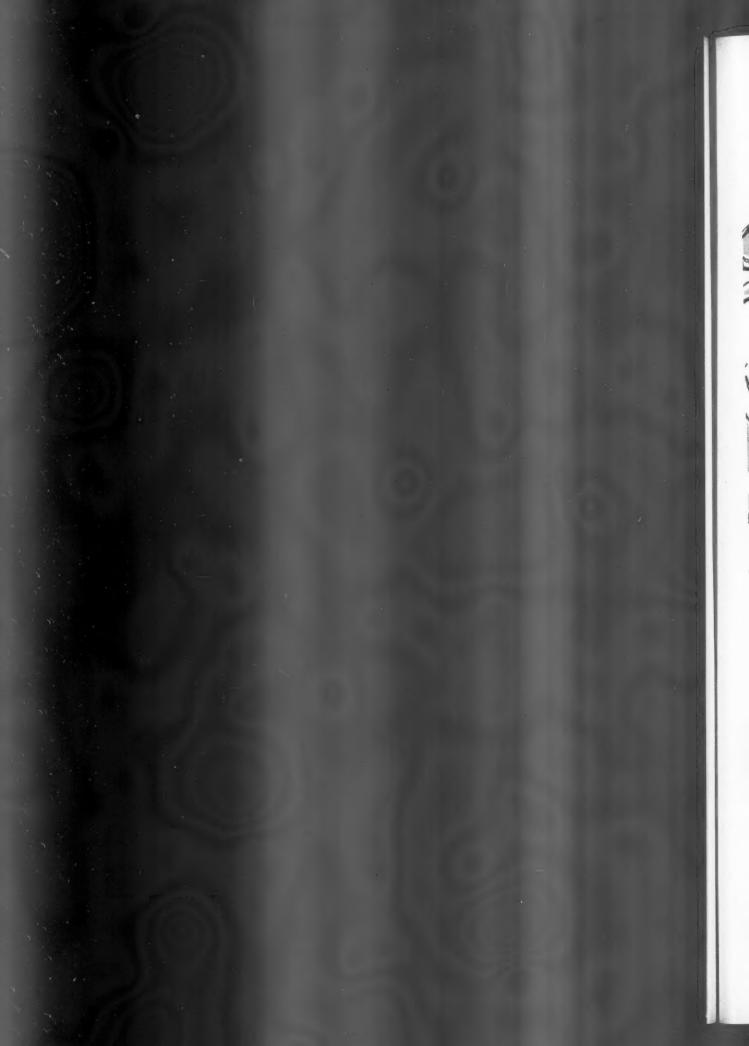
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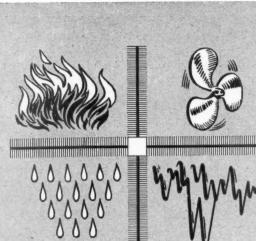


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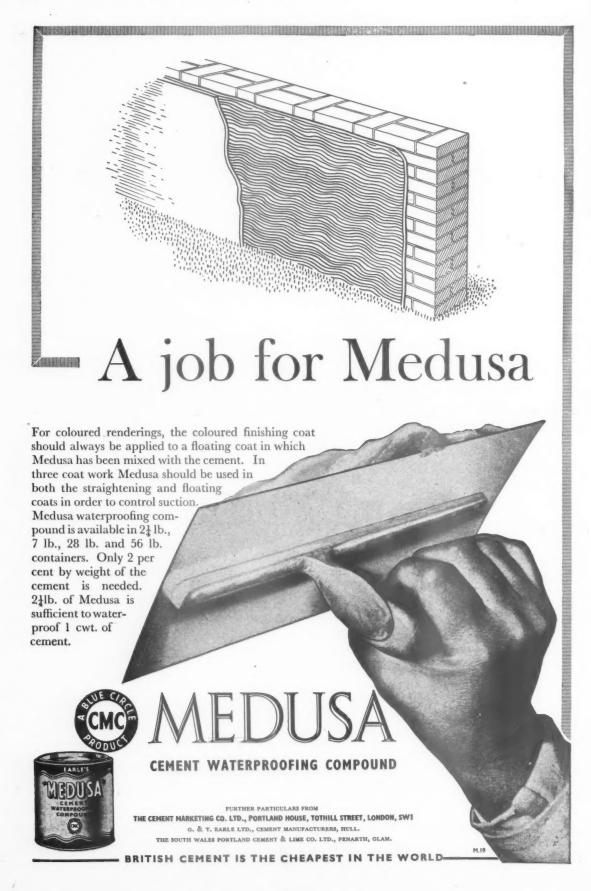
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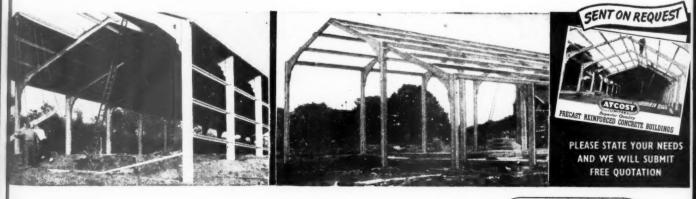
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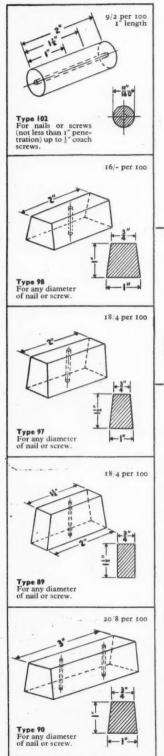
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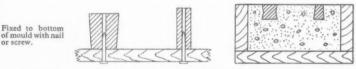


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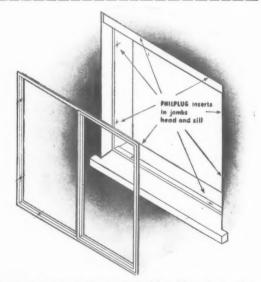
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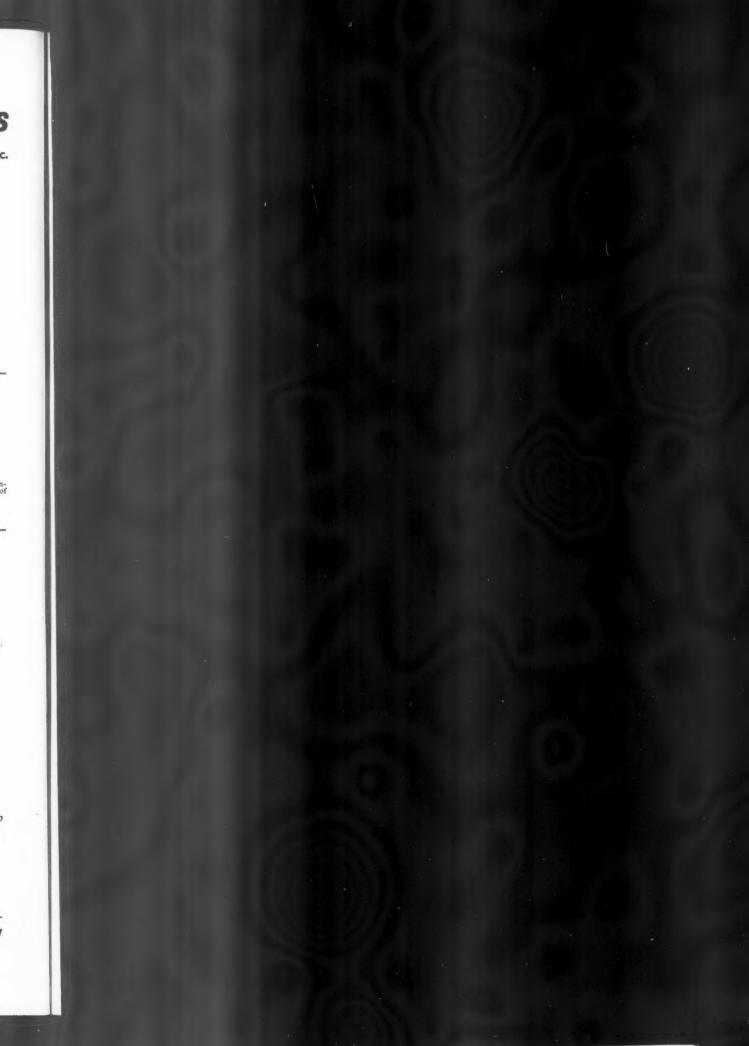
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Architect and engineer: Sir Owen Williams and Partners. Main contractors: Messrs. W. & C. French Ltd. 4 ge

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4 general view of the interior of one of the hangars.

A close-up view showing the glazing and supporting structure from underneath.

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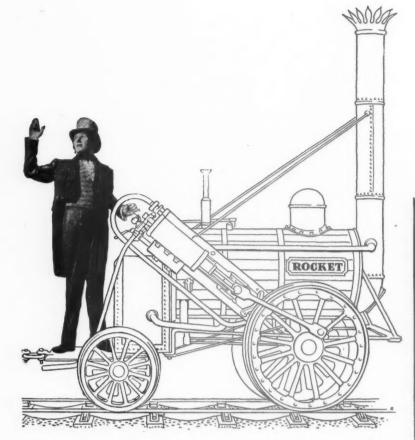
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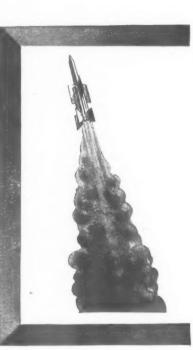
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BASIC PRINCIPLES

Artificial light is required in a building to enable the occupants to continue their activities when the natural illumination falls below a certain level. It is the function of the lighting installation to provide enough light for this purpose, in such a way that the eyes can work effectively, free from strain, and in pleasant comfortable conditions whatever the tasks they have to perform.

Illumination and Visual Response

Provided there is enough light, an object is seen by means of the light reflected from it into the eye, and distinguished from its surroundings by difference in brightness or colour or both. In general, the more light an object reflects, the easier it is seen : the darker it is, the greater the illumination required to see it.

Increasing the illumination from I to IO lumens per sq. ft. will produce as much change in visual sensation as an increase from IO to IOO lm./sq. ft. (both being increases of 1,000%) although the light added is only 9 lm./sq. ft. in the first case compared with 90 lm./sq. ft. in the second. It is a sound suggestion to increase the illumination of an apartment from 5 to IO lm./sq. ft., but pointless to raise it from say 20 to 25 lm./sq. ft. for no marked improvement would then be noticed, although the increment is 5 lm./sq. ft. in each case. This is because the first increase is 200%, the second only 25%.

Recommended Illumination Values

The illumination values given in Table 2 are minima abstracted from the most recent official recommendations, and may be exceeded with advantage in many circumstances. Sewing and similar work on dark material requires more light than reading. Seeing is quicker with increased light : if work has to be done where vibration occurs (e.g. in a moving vehicle) particularly good lighting is required. Old people need considerably more light than young people to perform the same tasks.

Reflection and Absorption of Light

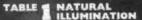
The eye receives light not only from the light source itself, but indirectly, i.e., reflected from surfaces within the field of vision. Reflection may be *specular* as from a mirror, where the incident light rays are reflected at definite angles (the angle of reflection equals the angle of incidence); *diffuse* as from a uniform matt surface where they are scattered and the reflected light is distributed in all directions in front of the surface; or *spread* which is a special form of diffuse reflection having a preferential direction, and being characteristic of the surfaces of many materials. See Fig. 1.

Only part of the light emitted from the lamps is received as useful illumination on the working plane. Walls, ceiling, furnishings, floor and the light fittings themselves absorb a considerable amount and it becomes necessary to know what proportion of the light that escapes from the fittings is reflected from the surrounding surfaces and contributes to the illumination at the required level. In the majority of cases the colours are matt, and the reflection from the coloured surfaces is therefore diffuse. Table 3 gives the Reflection Factors (i.e. the percentage of reflected to incident light) of a selection of colours.

Shadows

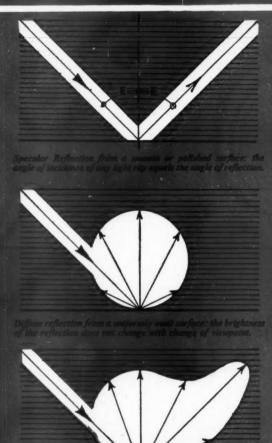
The quantity of useful light is still further reduced if obstructions are allowed to cast shadows over the work. In many cases this can be avoided by more careful siting of the light fittings in relation to the worker and the work; for example, in some commercial installations it is sufficient if the shadows are weakened by reducing the spacing between light fittings or by installing fluorescent lamps, so that a greater proportion of light flows round the obstruction.

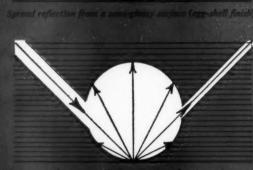
On the other hand, shadow is a valuable asset in shop window and exhibition display, and is sometimes used in some processes to pick out objects from a background of the same colour.



10,000 lunens per sq. 1,000 lm/sq. ft. 510 lm/sq. ft. 200 lm/sq. ft.







rom porcelain or synthetic enganes surfaces, a relature a iffuse and specular reflection is obtained. See footnote s

L.1

Fig. I Types of reflection



TABLE 2 RECOMMENDED STANDARDS

HE 'ARCHIFECTS' JOURNAL (Supplement) November

SITUATION			
For work involving			
	very small detail		
	small detail		
	fairly small detail		
Churches The Bar	General interior		
Drawing Offices	General		
	Drawing Boards		
General Offices		15-20	
	Operating theatre		
	Operating table		
	(plus extra bed light		
Libraries	Book backs		
	Reading rooms	7	
	Reading tables		
Schools	Assembly hall,		
	gymnasium		
	Classrooms		
	Artroom, sewing		
	General interior		
	(plus display lightin		
Waitkig, dining, writing rooms, enquiry of Been 7			

TABLE 3 REFLECTION

	White	
	Light Stone	
	Quaker Grey	
31	Battleship Grey-light	
20	dark	
32 52	Pala Cassas	
	Pale Cream	
53	Deep Cream	
55	Lemon	
56	Golden Yellow	
57	Orange	
16	Eau-de-Nil	
17	Sea green	
19	Sage green	
1	Sky blue	
2	Turquoise	
-3	Peacock blue	
10	Light brown	
11	Middle brown	
43		
38	Post Office Red	
40	Crimson	

he above table shows the percentage of incident light which a flected from coloured mait surfaces, based on the British tandard colours for Ready Mixed Paints (B.S. 361). This creatage figure is known as the Reflection Pinetor of the

White enamel, whether synthetic or porcelain, reflects from 50 to 80%, of light in a mixture of specular and illuss reflection. Suppose the figure for a particular equation of 30×10^{-50} from the perpendicular to the surface about 10%, i.g., 7%, of the incident light is reflected a secularity, the remaining 63% being reflected allowed within plantic behaviors in a similar memory white characteristics are reflected at a complete the surface behavior in the surface characteristics are the surface behavior in the surface characteristics are the surface of the surface

Glare

4, 1954

Glare is a rather vague term applied to those forms of discomfort caused by too much light entering the eyes, whether from the lamps themselves, reflections, over-bright surfaces, or excessive contrasts in relation to the object being looked at. "Glare light" is useless in itself, detracts from the value of the useful light, and provides continuous distraction. The principal causes are :

- (a) Unshaded lamps, of any type.
- (b) Excessive specular reflection from polished or glossy surfaces.
- (c) Excessive differences in brightness between objects and adjacent surfaces (e.g., background and shadows) within the field of vision.
- (d) An excessive amount of light entering the eye from sources (e.g., light fittings) other than the object which is being viewed, even though the latter may be adequately illuminated.

Light Fittings

in Relation to the Background

It is seldom that any one of these causes exists alone in a particular installation ; in most cases glare is caused by varying combinations of several causes, hence the difficulty in dealing with them adequately in practice. In this connection it is important to remember that the light fittings themselves are part of the general background, and if seen against a dark wall or shadow will cause glare. In this case the glare is largely independent of the quantity of light involved, and the area of the source. Prevention is a matter of adjustment of the reflection factors of the surrounding surfaces, and in particular the selection of a suitable light fitting mounted at such a height that its brightness is not too high in relation to that of the background against which it is seen.

Correction of Glare Defects may involve Redesign

The most difficult case to deal with is (d). Ability to see the work is reduced, involving discomfort, distraction and increased risk of accidents; serious strain is caused if such conditions are endured for any length of time or at frequent intervals. As the severity of the glare is dependent on the actual quantity of light involved, the first step is to raise the offending light source above the field of vision. The glare lessens as the height of the fitting above eye level is increased, until at more than 40° from the line of sight it may be disregarded.

When this treatment is carried out with an existing installation it will almost certainly be found that the resulting illumination is inadequate; in fact once a lighting system giving this kind of glare has been installed, little short of re-design and replacement will improve matters. Changing the size or type of lamp will make no difference.

Glare of types (a) and (b) are simpler to deal with ; they can be avoided by choosing suitable light fittings and mounting them at the proper level in relation to the working plane. Reflected glare is often overlooked ; it can even be caused by white paper on a desk with a dark matt surface, or by strong highlights on a typewriter. Avoidance of excessive contrast between the work and its immediate background (c) is essential, and the elimination of specular reflection by the use of matt finishes to all surfaces within the field of vision. If this is not possible, glare can be avoided by the careful placing of the light source relative to these surfaces and the worker.

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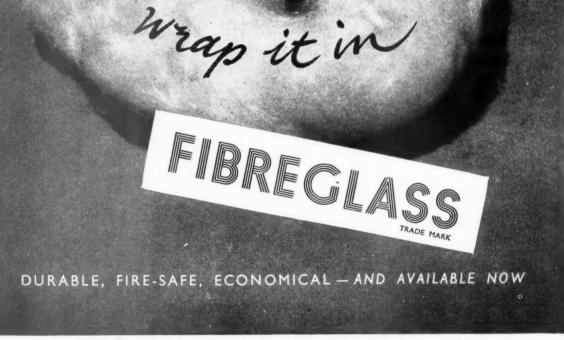


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Tony Littlewood keeps hard at it

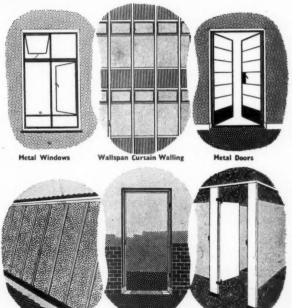
This, you might say, is Tony Littlewood* (our East and West Ridings Area Manager) getting the architect's point of view. He sees before him vast expanses of colourful Wallspan Curtain Walling, acres of Aluminium Windows, interminable rows of Roften Toilet Cubicles . . .

Walling, acres of Aluminium windows, interminate rous of Roften Toilet Cubicles ... Or this, you might say more truthfully, is Tony Littlewood, Yorkshireman, doing what comes naturally to a Yorkshireman — watching cricket. A rare occasion these days! Mr. Littlewood, who has been in windows since leaving school, is deceptively amusing and casual. But when he talks windows or Wallspan or Aluminex it is worthwhile listening. And, make no mistake, his team of representatives, draughtsmen, estimators and fixers give (like Mr. Littlewood) quite first class service.

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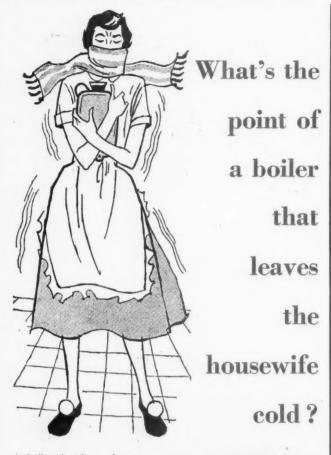




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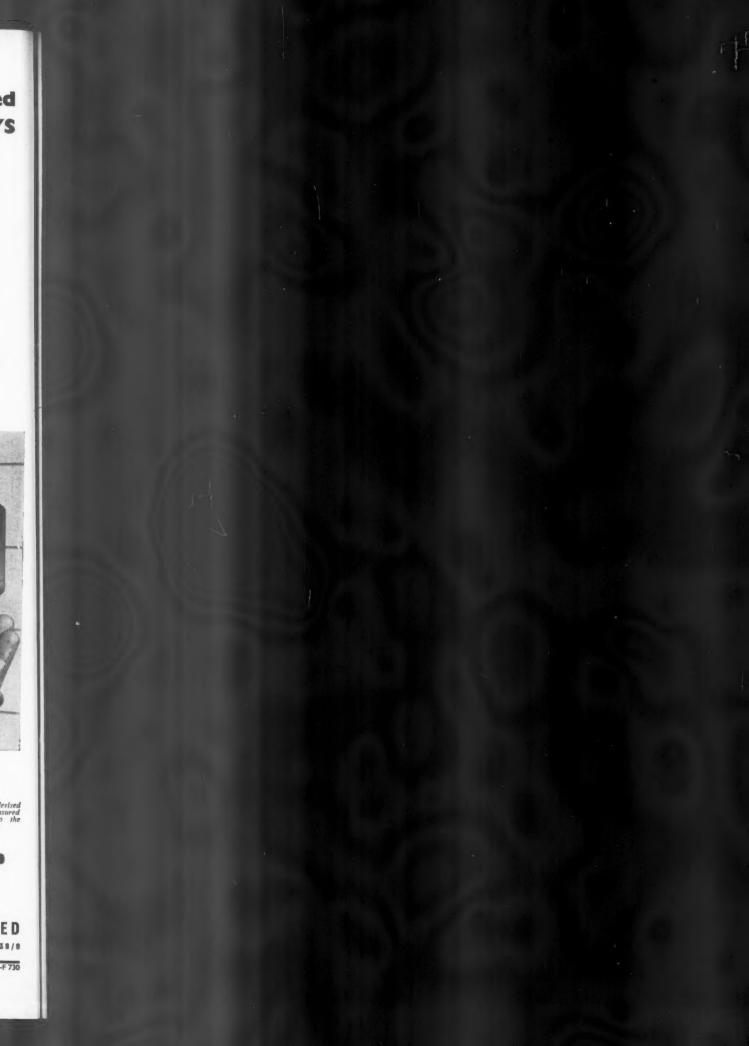
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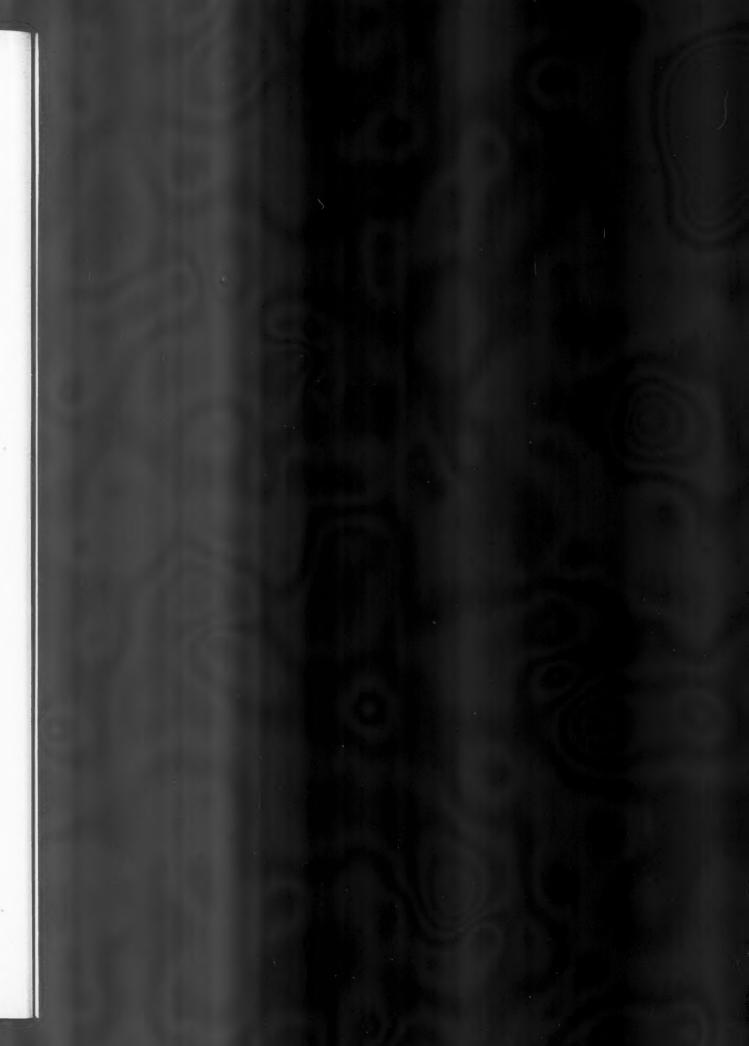
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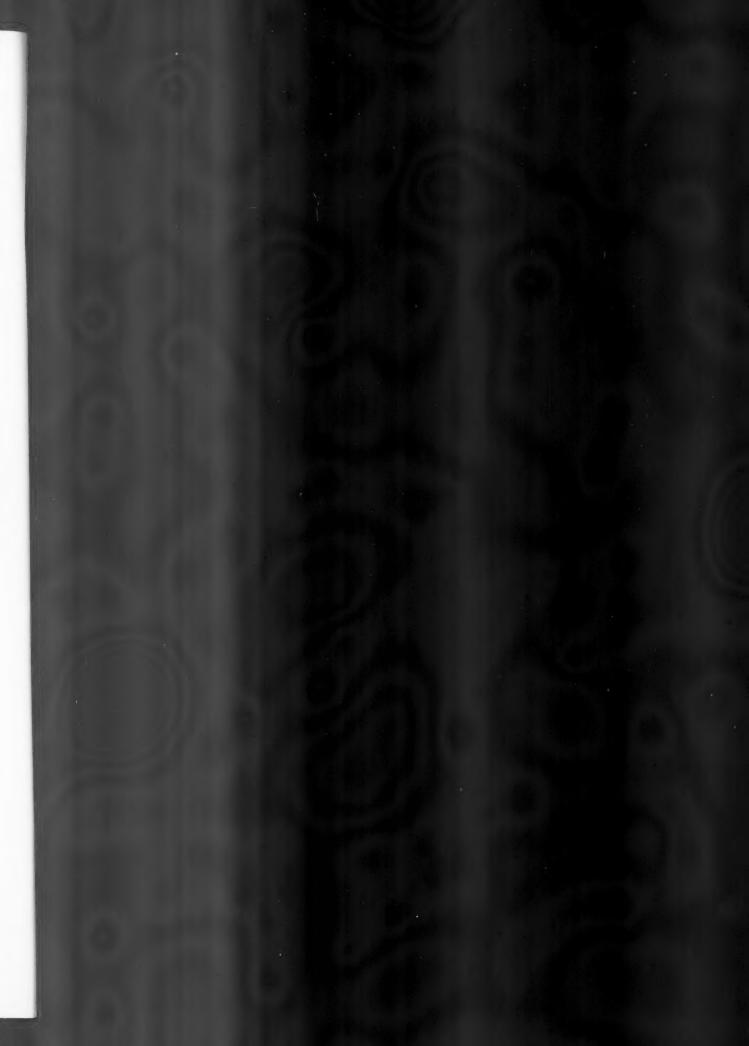
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US AND THE PUBLIC

The illustrations overleaf show a part of the RIBA's admirable little 30-panel exhibition, entitled "Your House," which is about to be sent on tour. It will first be on view at the RIBA later in the month. This is the second exhibition in the series "The Architect and You" which was launched eighteen months ago, as you will remember, to familiarize the public with the value and importance of employing you. The first of the series, called "Home and Surroundings," has been seen by 48,000 people at 57 different centres, which is not a bad record for a modest show.

The new exhibit, also produced by the Public Relations Committee, is definitely better than the first. Considerable care has been taken to show, in six panels, just what the architect does (a building by John Stillman and John Eastwick-Field neatly provides the details of clients' suggestions, choice of site, architects' sketches, etc.) and the last panel of all shows the modest slice of the building cake which is the architect's reward.

The thirty small houses which form the main body of the exhibit are tailormade jobs of different sizes and are in three price ranges: "under £2,000," "£2,000-£3,500," and "over £3,500." The choice (in style anyway) is reasonably catholic. The exhibition is probably rather short of enough period and regional trimmings to please the middle-aged and older, but it should come as no surprise to those millions of young wives who now accept Casson (and other's) Contemporary in women's magazines.

The exhibition, when ASTRAGAL saw it, just lacked enough captions to make it immediately intelligible, but assurances were given that the omissions would be repaired. The RIBA pamphlet "Before You Build" is to be handed out when the exhibition is on view, so all visitors will receive something permanent to remind them, dear readers, of your value.

If there are faults in this neatly-packable exhibit they are that the prices of the houses could have been more precise and that explanations could have been given of why houses of similar size vary so much in cost. The quality of fittings and finishes is, no doubt, the answer, but the general public should be told cost details as precisely as possible, to combat that once valid, but now out-dated, criticism that architects are vague on \pounds . s. d.

THE PRESIDENT, R.I.B.A.

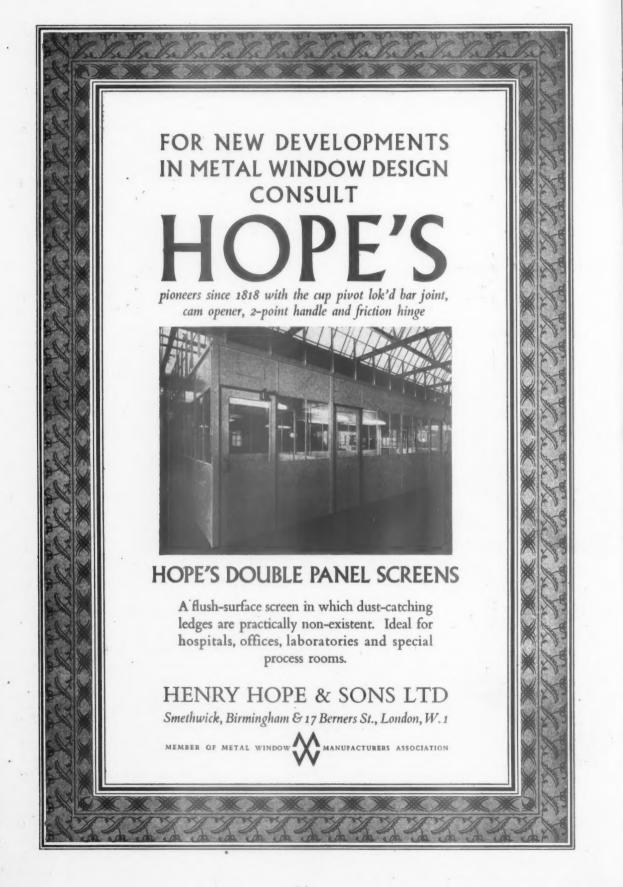
C. H. Aslin's presidential address, made last Thursday, refers approvingly to prefabrication (it would be odd if it didn't), architect-builder-engineer-client collaboration, the present methods of electing the Council, and joint training for architects and builders.

On the other hand, he comes down fairly heavily against the trade union, because he sees in it an organisation "which supported one section of members to the disadvantage of the others." This is generous indeed, for the **RIBA** Council and committees, having been largely packed with private architects, has, not always unwittingly, been liable to do just this for years. President Aslin finds it logical, however, " to suppose that a body which has, for many years, fixed the remuneration due to private architects, should at the same time have some machinery which could consider in relation to the scale of fees the salaries of members who may never become private practising architects."

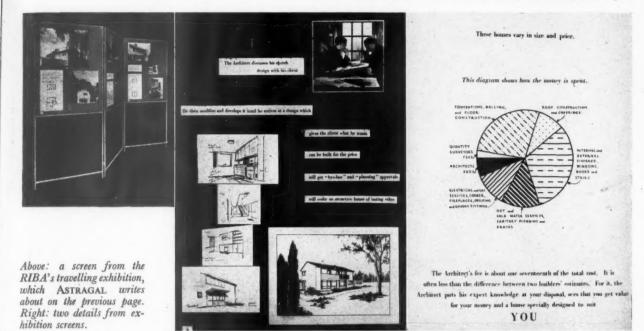
This seems a very statesmanlike, sensible approach, but it will only infuriate the 5,000-odd pro-unionists in the profession—unless a concrete proposal, which will relate responsibilities and service to income, is soon made.

HIS FLOCKS ARE THOUGHTS

The other president, Peter Shepheard, gave an excellent inaugural address at



ARuah



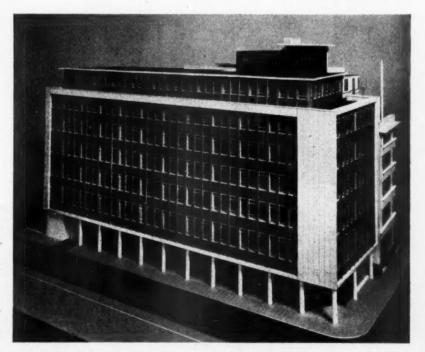
the AA last week. This is reproduced almost in full at the end of this issue. At forty, he is a young president, even younger than was the immediate pastpresident, Sir Hugh Casson, when he took office. So it was, perhaps, no surprise to find that the majority of the younger members of the audience, as well as ASTRAGAL'S old-fogey contemporaries, thoroughly agreed with all he said. Nevertheless, it must be the first time in years that an AA President's address has aroused such unanimous approval. Rapping knuckles-mine, as well as those ham-fists of brutal and acquaintances-he formalist ably pointed out the functional footpath we should follow through the lush forests of self-expression-but read it for yourself.

CITY REBUILDING

The huge gathering at the AA students' forum last week showed what an interest there is in City recon-So complex and widestruction. ranging is the subject that the discussion was bound to be somewhat diffuse. But Sergei Kadleigh gave a succinct account of his New Barbican scheme (illustrated in the JOURNAL on October 14), and Professor Holford showed himself once again a masterly expert witness. He has a genius for giving a factual answer to a question about detail that at the same time illustrates the principle involved too.

It was made very clear at the meeting that plenty of intelligent ideas for replanning and rebuilding the City are available, but the difficulty remains: how to get them across to those that have power to implement them. That is a political more than an architectural problem, but this shouldn't discourage architects—especially young architects —from perfecting their visions of what ought to be done if more progressive forces were in control. Ideas —even those that seem unpractical have influence in time. These students' forums are an admirable means of working them out.

ASTRAGAL



ASTRAGAL, who is nervous of looking at the back page of The Times, which so often features advertisements for new pseudo-Georgian offices to be erected in the City of London, is delighted to hear that the office building shown in this model is now being put up in the City. It was designed by Cecil C. Handisyde, in association with Hammett and Norton.





THE CARAVAN HAS RESTED: Since the picture on the left was taken, caravanning has come to mean something less adventurous. Most caravans are now rentable, immobile, holiday-chalets. Many suffer, like the one above, from too much care—from a pathetic, suburban hemming-in. Others suffer from too little care; they stand on disgracefully neglected sites. In this issue of the JOURNAL we ask all concerned with the tidying-up, layout and maintenance of caravan sites to see that they are given the right amount of the right kind of care.





AJ CARAVAN ISSUE

introduction by the editors

Our civilization such as it is, is urban and industrial; that is to say highly artificial. The strain this artificial civilization imposes on all its members creates tensions which can be reduced only by periodic relief from the industrial discipline. The periodic let-up has always been a feature of human activity, but in the middle ages—in a scattered agricultural community it took a getting-together form in the shape of high jinks organized by the Church, the unifying agent of Europe; hence the Holy Day. Though still referred to as such, the holy day is now associated with the exact reverse—individual relaxation, individual recreation, individual escape from the over-organized herd. Mediaeval man looked for his recreation to the town; modern man looks to the country.

Hence the hiking, the camping, the sailing, the shivering in beach huts. Essentially a flight of individuals from the herd (and the effects of over propinquity) in pursuit of psychological and physical recreation. But—and here is the dilemma—among enormous industrial populations flights of the individual quickly turn into flights of the people—mass movements herd movements. Escapist movements like caravanning, founded on the townee's nostalgia for the gipsy life, turn—before you can say jockey-wheel—into miniature mass-migrations. The gipsies fly to freedom in such multitudes as to form new settlements wherever they fly. And these settlements, acquiring—as they are bound to do—law, order and discipline, reimpose on the gipsy exactly the conditions he has been trying to escape.

The whole trend can be studied in this issue of the JOURNAL, in which experts and JOURNAL editors combine to insist (for perfectly sound reasons connected with social and aesthetic hygiene) on the need for regimentation in camps—vans all orientated one way; cars banished to a separate car-park; no boxes under the vans—and just try to empty the teapot outside and see what happens.

This is no one's fault. Our society is faced with an appalling dilemma. The question is how to resolve it. In addition to the advice given to local authorities and architects in this issue the JOURNAL puts forward the following talking-points.

- Mass-escapism is a phenomenon of our age. There is no alternative to it, so we must make a virtue of necessity. A collective determination to create the means for individual escape within the mass escape would involve certain interesting considerations.
- To find escape from the mass escape, every citizen, when he left the town, would have to become a combination of boy-scout and commando. He need not go as far as blacking his face and wearing ferns in his hair but the principle is the same: cars, caravans, clothes, shelters, road-houses, motels, youth hostels, holiday camps, would all feel impelled to imitate the chameleon and sink into their background. When nature helps with the camouflage of woodland, undergrowth or contour the whole thing can be comparatively easy. When nature does not help she can be made to.
- The bigger the camp the more important is the question of camouflage. Where nature's camouflage is not easily provided, as on a windy rocky coast, the indications are that the camp should be sited further inland. It is a victimization of the camper as well as his neighbour to use one amenity, the camp, to destroy another, the scenery.
- If the outsider has a right to demand visual protection from the camper, the camper has a right to demand the same from his neighbour camper. Remembering always the psychological motive of camping—escape—we believe that the more nearly the camp can achieve individual isolation of vans (see Gordon Cullen's scheme on page 564) the nearer does it come to the ideal. Spacing regulations should thus allow for van cover in the shape of hedges, trees, or even rank vegetation like hogweed. Partial cover is better than none. Each van should have its own reserve.

- This does not mean that each caravanner should be allowed to create within his own reserve a little Eden of crazy paving and Devon Pixies. If our argument has been followed the reason for this prohibition will be obvious. The caravanner, even though he doesn't know it, belongs to an escapers' club. To allow him to recreate a new suburbia within the wild he has fled to is to allow him to re-entangle himself in the chains he has just snapped.
- There are, of course, campers who come in search of suburbia, social life and chains—a neighbour to make easy friends with (the lonely ones), a good-time-being-had-by-all (the extraverts), or kids for the kids to play with (the parents). These are the moral Butlin-boys and Mr. Butlin has done a fine job for them. Though they can be treated as campers they must not be allowed to confuse the camping philosophy, which is a philosophy of escape—a social phenomenon.
- Once you accept escape (if only from a stiff collar and tie) as the first principle of caravanning, the analysis of the camping phenomena becomes fairly simple. Non-mobile caravan camps, whether temporary or permanent, scarcely qualify; their escape value lies merely in the release they offer from the idea of bricks and mortar. There is, perhaps, a case to be made for the genuine simple-lifer who prefers a fixed-primitive to a fixed-sophisticated holiday home, but the number of such worthwhile non-conformists is so small as not to constitute a problem. We are left with the mobile caravanner and the camp for mobile caravans. The gipsy life the caravanner artificially creates for himself should be accepted by our legislators as one of three effective forms (sailing and hiking are the others) of urban escape. That is to say, one of the three classic ways of providing recreation within an artificial environment. As such, there are no lengths to which government should not go to encourage the movement.
- However, the more vans there are on the road the more the law of the herd will operate. The danger is that mass caravanning may defeat the valuable sociological purpose of the sport which—we repeat—is intended to provide an escape from the herd. As legislation, if any, should be directed to encouraging this escapism, its object should be to make mobile caravanning not only easier but more solitary. This can be done only by making easier the lot of the lone-wolf caravanner—by encouraging "spread."

tow

2

- At present, many—perhaps most—mobile caravanners go to camps as a matter of course. They may go only for the night, but they go. And they go for a good reason. Outside the camps the elementary conveniences are in such short supply that they are driven into camps against their will. In most market towns it is still impossible to find a water tap or a litter bin. In a built-up privately-owned country the difficulty of finding a stand for the night is enormous.
- 10 Legislation, or a gentleman's agreement, that permitted the caravanner to camp without permission on any land, private or public, for (shall we say) seven days would do more than anything to encourage escape-caravanning. By reducing the demand for camps it would also force camp operators to offer better value for money. A land-owner must, of course, have the right to turn a van off if, in his opinion, it constitutes a nuisance, but for the caravanner the right to stake a claim for the night, without previous permission, would be the greatest single blessing he could have. Public bodies like the Forestry Commission should be required likewise to loosen their ban on caravan parking, and there is no earthly reason why the verges of minor roads should not be rendered suitable for vans, instead of being designed to keep them off.
- 11 Such privileges would demand a high sense of public spirit in the caravanner. It would be his duty to be an expert chameleon and camouflage artist. His reputation on sanitation, refuse, fire and so on, would have to be beyond suspicion. The solution would be for the organization to which he pays voluntary tribute, The Caravan Club, whose patron is the Duke of Edinburgh, to be invested with authority to issue to its membership what would amount to a van licence. A member of the club would be examined in the Club Code and would then be given his privileges as a camper on condition that he respected the Code. The Caravan Club, which has already gained many privileges for caravanners and is a highly-influential and respected institution, would accept responsibility for its members' conduct; and if a member were to be expelled from the club for an infringement of the Code, his licence as a free caravanner (with rights of private camping) would be withdrawn. This would mean not the withdrawal of his right to use his van but the withdrawal of the special camping privileges extended to him as a member of the Club.
- 12 By this kind of treatment the camping problems of the genuine caravanner could, we suggest, be solved. Of the three categories of non-mobile caravan camp discussed in this issue the first, the residential site, may be expected to vanish as permanent housing catches up with population increase. The second type of camp, the non-mobile holiday camp, is really a reflection on the moth-eaten customs governing the boarding-out of holiday-makers in our seaside towns. A complete overhaul of the apartment business and its vulture-landladies would reduce the holiday camp caravan problem to manageable proportions.
- 13 A great increase in lone-wolf camping would reduce the demand on camps and so lead camp site operators to take more trouble to attract customers. It is up to local authorities to insist that all camps, whatever type they belong to, should be not merely hygienic but shipshape. Camp owners must not be allowed to create rural slums. From the architect's point of view camps break down, like housing, into shelter and services. As such, they call for design, planning and administration in a degree at least as expert as is required for council housing.



Why does the " caravan problem " exist, in spite of elaborate

town-planning and public health regulations ? In this issue the JOURNAL editors-helped by

a sanitarian, A. H. V. Marsden, and an architect, Sheila Haywood, A.R.I.B.A., A.I.L.A.—try to answer that question, and to provide a solution to the problem. We hope this special issue will be of use to local authorities and architects who are concerned with the tidying

up of old caravan sites or the laying-out of new ones.

a guide to architects and local authorities on

THE CARAVAN PROBLEM

Whichever part of the country you went to for your holiday this year, it is almost certain that you came across a landscape decorated with caravans. At its best it was probably no more than tolerable. At its worst it looked something like the one in the picture above—an unplanned, overcrowded site on which almost anything that can drag along on wheels is classed as a caravan. This sort of smear on the countryside need not be tolerated by local authorities. They have powers which many of them do not use—perhaps because they are not aware of them—to tidy up caravan sites in their districts. These powers are described in this article, which also tells how popular caravanning began, how it got out of hand, and why, in some areas, it is still out of hand.



the problem and its solution

Caravan camping was once the adventurous and healthy pursuit of a few people. Those people are now vastly outnumbered by two other classes of caravandweller, people who are not genuine caravanners at all the residential caravanner and the holiday camp caravanner. People who live in caravans all the year round do so for one (or more) of three reasons: they cannot get a house; they could not afford a house even if they could get one; or they actually prefer to live in a caravan. Since more houses and flats have become available, the problems arising from residential caravanning have decreased. But the country still has many inferior residential sites which need cleaning up.

An even bigger clean-up is needed in the holiday camp caravan sites. The caravans on these sites remain in place all the summer and are rented by the week. They are, in fact, holiday camp chalets on wheels. The man who spends a holiday in one does so because (a) he cannot afford a small hotel or a boarding house, or even a larger, organized-fun camp, or (b) because he prefers a caravan holiday but cannot afford a caravan or a car to tow it with. The growth of the holiday camp which uses caravans instead of chalets is, for all its sins, fulfilling a real social need. It is enabling families to have healthy holidays which they could not otherwise afford; and it is encouraging them to be resourceful-the sort of people who are able to make their own pleasures and do not need to have them prefabricated by camp fun-organizers. The holiday camp caravan site is, in fact, a necessary evil. We cannot hope to make it less necessary; but we can try to make it less evil.

HOW IT ALL STARTED: If we are to understand why so many near-slum caravan sites are tolerated by local authorities we must look at the history of mass-caravanning. It was after the first world war that people who wanted a means of having cheap holidays and week-ends away began to set up all kinds of huts, sheds, cabins and unsightly conversions of old bus bodies, pantechnicons, and even tramcars, to serve as holiday bungalows. Unscrupulous speculators laid out whole townships of adapted railway carriages and other shacks, particularly on the Sussex coast. People with small capitals acquired shacks and then let them profitably to visitors. Genuine mobile caravans were often set up on brick piles and provided with shabby verandahs and annexes.

By 1936, this sort of thing was getting so out of hand that new powers were granted to local authorities in the Public Health Act of that year. It came into force in October, 1937. But most authorities failed to make good use of their new powers, mainly because they were given no guidance as to what standards they could expect. And so the menace grew, and the greed of many site owners led them to permit objectionable structures and deplorable overcrowding. One or two authorities made an attempt to clean up sites, but they found they were handicapped by their lack of planning powers.

RESIDENTIAL AND HOLIDAY CARAVANS: Then came the war, and with it a golden opportunity for local authorities to clear away their holiday horrors. Few of them took the opportunity—to their subsequent regret. The acute housing shortage immediately after the war drove people back to these sites—some with caravans, others with worn-out public service and goods vehicles, ex-service bodies, and even aeroplane fuselages and chicken houses. Residential "caravanning" had come back with a bang.

Local authorities reacted to this return in two ways. Some of them, such as Coventry, set up their own sites, provided them with reasonable amenities and thus attracted people living in movable dwellings in their districts. Others turned a blind eye to their new slums, for they believed that if they established decent sites for movable dwellings they would attract homeless people from other districts who would later swell the numbers on the housing lists. But the local authorities which took this risk found it worth while. If they owned caravan sites they were able—as site owners and licensing authorities under the Public Health Act—to control the use of the the g



the genuine caravanner

This is what caravanning should be: the means for a townsman to escape, not with an organized herd of fellow-escapists, but alone. The regulations that have to be imposed on camp-caravanners should not be allowed to interfere with the genuine caravanner. Indeed, he should be given more freedom, in the manner suggested in our talking-points, on page 545. And the camper who insists on the amenities offered by a commercial site could be given far more privacy than he gets at the moment if sites were planned and landscaped more intelligently. (Suggested schemes are given on pages 562-564.)

land, the nature of each structure admitted, and the behaviour of the occupiers. And they were also in a position to enforce the complete clearance of the site as soon as houses were available.

Should residential sites be completely cleared? We think that they should. The caravan provides superior camping. But if it is lived in throughout the year it cannot be thought of as anything but sub-standard housing.

Because residential caravan sites have been allowed to contain unsightly shacks, bus bodies, etc., similar dwellings have been permitted on many organized holiday sites. But local authorities have the power both to get rid of inferior movable dwellings and to do away with overcrowding.

THE POWERS OF THE LOCAL AUTHORITY: Overcrowding results always in a bad appearance and an all-round lowering of standards. It also destroys competition between site operators, and therefore kills any incentive they might have to provide worth-while amenities. If a site can be filled easily and profitably, regardless of the conditions and the service provided, simply because it is

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people set up " homes " on shack sites. Some local authorities turned a blind eye to the post-war slums on wheels in their districts; they were afraid that if they provided decent sites for

During the acute housing shortage immediately after the war movable dwellings, they would attract homeless people from other areas, who would later swell the housing lists. Others, like Coventry (above and opposite), turned their slums into prefabricated houses on wheels.

problem and its solution the

near the sea, or in some equally pleasant position, the average site owner will do as little as possible to improve his grounds. And if he permits derelict buses and other ugly movable dwellings to come on to his site he will encourage the people camping on it to make it into a slum. How can the local authority persuade a site operator to cut down on the number of mobile dwellings on his site, and to exclude inferior caravans? It has, in fact, the power to impose conditions when granting a licence under section 269, sub-section 1, of the Public Health Act, 1936. The 1947 Planning Act provides enforcement for ensuring that the planning authority conditions are observed.

THE LICENSING PROCEDURE : There are two types of licence which a planning authority may grant for caravanning. The licence may: (1) authorize people to allow land to be used for movable dwellings; or (2) authorize people to station and use movable dwellings. Both types of licence are not needed for the same use, but the occupier of the land must obtain the first type of licence unless all the occupants of movable dwellings on it have the second type. The most common form of licence for holiday camp sites is the first. To this may be attached conditions* about the number of movable dwellings allowed on a site, the kind of dwelling allowed there, the spacing between dwellings, the water supply and sanitary arrangements.

Licences are normally given for twelve months, but when a site operator is laying out considerable capital on amenities it is usual for him to be given some security of

* See page 552.

tenure. He is either given a licence for some years, or he is assured that a further licence will be granted readily if there is no breaking of conditions—the best way, perhaps, of making sure that a site is kept in good order.

Counsel's opinion is that licences given to site operators are granted for ever and cannot be revoked, but the planning authority's right to set a time limit has not been challenged. It is also counsel's opinion that there is no power to attach conditions to Public Health licences relating to anything but sanitary matters. This has not been challenged either, and authorities continue to make conditions about general amenities.

RECOMMENDATIONS FOR ACTION: We believe that county planning authorities who have neglected the caravan problem in their areas should carry out a survey of camping sites and make use of the powers already described to tidy up their worst sites. In many districts there are caravan sites which existed before the 1947 Act was passed. But there is a way by which planning authorities can sometimes get control of pre-1948 sites. Many of them never had (and indeed never could have had) permission under the 1932 or the 1943 Acts, and can therefore be brought under control now, as if they were new sites. What else should be done to ensure that holiday camp caravan sites and residential sites (while they last) are prevented from becoming (or remaining) slums on wheels. There can be few better suggestions than those put forward in the report of the Movable Dwelling Conference, which was held in 1947-49. Some of the suggestions have already been made in this article, but we print them (or, rather, a clarified version of them) as a suitable conclusion to this section of our discussion of the caravan problem.

(a) Section 269 of the Public Health Act, 1936—the section which deals with movable dwellings—needs clarification. Although many local authorities attach conditions when granting a licence, it is said that they probably have no legal right to lay down conditions about anything other than sanitation. It is also said that authorities have not the legal right either to limit the length of a licence granted or to revoke a licence. Until Section 269 is clarified by a High Court ruling, uncertainty remains.

(b) The classification "movable dwellings" should refer only to tents and *bona fide* caravans, i.e. structures which are really designed to be moved. Huts, sheds and adaptations of old road and rail vehicles not in efficient and legal running order should be grouped with temporary buildings. At the moment there is some confusion about the real meaning of the term "movable dwelling." Consequently, the genuine caravanner is officially in the same class as the shack-dweller. But pending legislation

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ital on urity of ... or sub-standard housing?

Many residential caravan sites are still in use. The JOURNAL editors believe that people should be discouraged from living in these inadequate prefab. estates. If a caravan is lived in throughout the year it can only be thought of as sub-standard housing.



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to make it quite clear what is and what is not a movable dwelling, more use should be made by licensing authorities of their power to control the types of movable dwelling admitted to licensed sites.

(c) Local authorities and the Ministries concerned should make it their business to get rid of all structures that are lived in which are not (I) bye-law buildings, (2) tents or *bona fide* caravans, or (3) cabins or similar dwellings used on authorised sites (under controlled conditions) for holiday accommodation only.

(d) People unable to get houses who have made their homes in movable dwellings on unauthorised sites, without consulting the local authority, should be moved to suitable sites where the essential minimum services can be given them.

(e) Holiday sites are becoming more and more overcrowded each year. New sites should be provided to reduce the overcrowding. They should be situated in areas which are sufficiently attractive for holiday-makers, although not classifiable as "beauty spots." If such camps were well-publicised and well-run, people would be drawn to them from crowded coastal areas.

(f) Local authorities should take over planning control of all commercial sites established before June 1, 1948, whose owners failed to obtain planning permission under planning Acts earlier than the 1947 Act.

model licence conditions

Following is a list of model conditions which many local authorities attach to licences granted to caravan site operators. The parts in brackets are comments made in a report of the Movable Dwelling Conference, 1947-9. A sanitarian's comments on sanitation appear in the article on page 556. It will be seen that he disagrees with the density standards given here.

1. For the purpose of this licence the expression "mobile caravans " means trailer caravans specially designed and constructed for drawing by private cars, and motor caravans in full mechanical order, in all cases complying with the Ministry of Transport Acts and Regulations.

(It is assumed that any buildings or temporary buildings on the site will be dealt with by planning and/ or bye-law control, controlling the actual structure.)

2. The maximum number of tents and caravans on the site at any one time shall not exceed

(In view of the marked variation in local circumstances, environment, nature of the ground, etc., no national standard of density is proposed. The maximum should be fixed for each site in the light of the local circumstances. As some guide it is suggested that density should not exceed 30 to the acre, and that a proportion of the area of the site should be left free for recreation.)

3. The minimum distance between any two caravans excluding guylines shall be 20 ft., except that at the discretion of the site operator a closer spacing may be permitted to two or more caravans occupied by a single party. 4. The site operator shall provide and maintain a constant and sufficient supply of wholesome water by means of standpipes mains taps/pump/well, as agreed with the Council.

(At sites where density is fairly high or where the tents and caravans are used for long continuous periods, attention should be given to the maximum distance between any tent or caravan and the water supply and disposal points. A suitable maximum distance in these circumstances may be 100 yards.)

5. The site operator shall provide and maintain, in clean and efficient state, the following sanitary conveniences:—(Sewage shall be disposed of in accordance with the arrangements agreed with the Council.)

(The provision of closets should be based on the permitted number of caravans, not on the number of persons, which at most sites will not be known. The only types of closet approved for licensed sites are (i) water closets, and (ii) chemical closets. Some sanitary authorities consider that the pail closet, properly serviced, is as satisfactory as the chemical closet, but the advantage of the latter provided the surface of the fluid is not broken is that it is less offensive and does not encourage flies. Sewage from water closets should be disposed of by main sewer if available, or by a separate purification plant with an approved outlet for the effluent. Sewage from chemical closets should be disposed of by removal from the site under arrangements with the Council, or, where there is sufficient and suitable land, by shallow burial.)

6. The site operator shall provide and maintain drains/soakaways for waste water as agreed with the Council.

7. The site operator shall provide receptacles with well-fitting covers for solid refuse, and shall be responsible for emptying them at sufficiently frequent intervals. The ultimate disposal of the refuse shall be effected by the site operator to the satisfaction of the Council.

(At sites much used residentially, or at which the normal number of tents and caravans approaches the maximum, a suitable standard is one receptacle for four tents or caravans. At sites where there is more fluctuating use, a smaller provision is sufficient.)

8. Adequate fire-fighting appliances shall be maintained, by the site operator, in accessible positions.

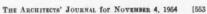
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the gipsy problem

A small off-shoot of the caravan problem is provided by gipsies. These lucky people, who have a well-earned reputation for dirtiness and untidiness, are easier to deal with when they travel in small groups than when they herd together in camps, such as the one above (at St. Mary Cray, Kent). They invariably defy any order to move, but usually just manage to get away before proceedings can be taken against them. The existence of the camp above (seen also in the picture on the left, which shows a pathetic box that is used as a family's dining-room-cum-kitchen) shows how useless any amount of planning and public health regulations can be when people with hardship pleas get together. We show these pictures as an awful warning of what can happen when existing legislation is not used. Not that we would legislate against the gipsies. We would legislate for them. They should be free to roam, for when they come together in a large camp they encourage non-gypsy hangers on.



holiday camp caravanning

It is a chancy business to rent a holiday caravan on a commercial site, for it may turn out to be like the one on the right, at Great Yarmouth. There is no point in reminding Yarmouth Corporation that all local authorities have the power to force site operators both to get rid of inferior movable dwellings, such as old bus bodies, and to cut down the number of movable dwellings on their land: this is, in fact, the Corporation's site. The picture above shows how a site benefits if vans are kept to a minimum and are partly screened from each other by trees. It is true that few sites have the advantage of such a good natural setting, but if a commercial camp operator has been given security of tenure-in the form of a licence for a long period-he can achieve a good effect with planting within a fairly short time. But there are often reasons why a site operator cannot hope to attain this ideal; he may be unable to do any planting, because of his uncertainty about retaining the land for a long period, or he may not be able to afford to keep the number of vans down to a bare minimum. How, then, can he have a presentable site? He can at least aim at the reasonable tidiness of layout described under the heading "site layout" on page 559.



the problem and its solution

(g) Although commercial site operators can be fined, under Section 269, for breaches of the Section, these fines are useless as deterrents. They should be made the maximum for each movable dwelling concerned, instead of the maximum for one offence irrespective of the number of movable dwellings for which the offender is responsible.

(h) An extensive campaign should be carried out by local authorities, with a view to securing a substantial improvement in camping site conditions. It should be effected by improved licence conditions properly enforced, improved rules for campers, and education of site operators and campers.

(i) Camping site operators who are prepared to spend a lot of money on improvements on their sites should be given assurances of reasonable security of tenure for some years so long as good conditions are maintained.

(j) A housing authority should have power to make a clearance order for an area occupied by movable dwell-

ings which are unfit for habitation, even if there are no houses in the area justifying a clearance order.

POSTSCRIPT: A PLEA FOR THE TOURIST: Before we turn from these notes on the responsibilities of local authorities to a discussion on the layout and servicing of caravan sites, we must put in a word on behalf of the genuine caravanner-the man who has nothing to do with the caravan "problem". Whatever regulations are used in the control of popular caravanning the genuine tourist caravanner must continue to be given as much freedom as possible. The friendly farmer should feel safe from official interference, control or additional taxation so long as he allows only a little casual camping from time to time, and does not develop any part of his land as a site on business lines. Although in this issue we are more concerned about the layout and control of organized caravan sites, our sympathies are principally with the genuine caravanner-as we indicated in our leading article.





design-too little and too much

On a large holiday caravan site which does not make use of planting to screen vans from each other, a fairly rigid geometrical layout of vans is essential if the camp is to look reasonably tidy. But the placing of caravans is not everything. The air-view (above) of two holiday camps makes the sites look deceptively orderly. In fact, the one nearest the sea suffers badly from too

little design (right, bottom), and the one further inland suffers from far too much design (right, top). Strict supervision of a site is necessary if residents or holidaymakers are to be prevented from despoiling the grounds or "improving" them. When a site provides such suburban fantasies as those in the top picture opposite, it is inevitable that people living there will make it a rustic home-from-home (see page 558).

THE CARAVAN PROBLEM



site design and sanitation

The JOURNAL editors asked Sheila Haywood, A.R.I.B.A. (architect to

the Caravan Club), and a sanitarian, A. H. V. Marsden, with considerable experience of the problems

of mass-caravanning, for their views on caravan site layout and sanitation.

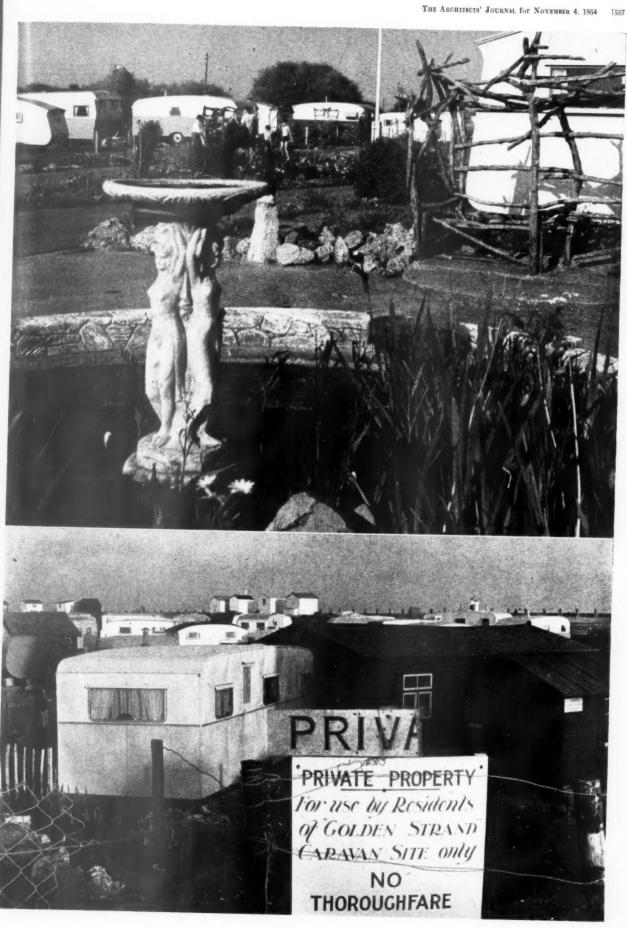
Their comments are incorporated in the following article.

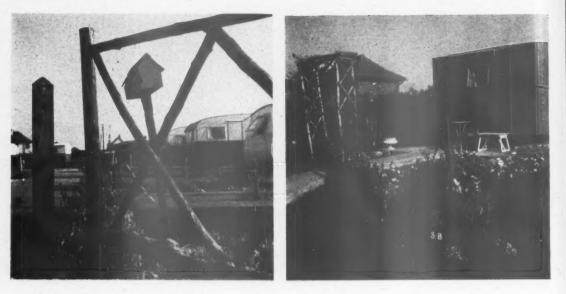
A man's habits are affected by his surroundings. Nothing could be more harmful to physical and mental well-being than a slum-like environment. No one could live for long amid a mass of unsightly shacks on a boggy caravan site, provided with the minimum of sanitary facilities, without gradually lowering his standards of living. Yet many people are living, or having their holidays, on caravan

sites where conditions are something less than substandard. The trouble is that it is so easy for a caravan camp site to deteriorate if it is not adequately supervized. One man decides to build a soap-box-and-canvas annexe on to his caravan; another follows his example; a third finds that the space under his van is getting overcrowded with stored goods, and builds himself an









the caravan as a home-from-home

Sheila Haywood, architect to the Caravan Club, whose views on site layout are incorporated in this article, toured the country last year as a judge in a competition for caravan camp design. She

found little that was exceptional, and came to the conclusion that the good sites were good by virtue of what they did not have. Too often she found the sort of thing shown in these pictures.

unsightly shed to keep things in; a water standpipe with an inadequate base is soon surrounded by churned-up mud; somebody puts up a chicken wire fence round his "garden"; cars parked beside vans reduce grass to slush ... and so on. Once the rot sets in anything can happen. And the more untidy a site becomes, the more untidy are its inhabitants; it is soon too much trouble for them to pick up that rusting tin and put it into the dustbin.

What can be done to ensure that residential or residentialcum-holiday caravan sites do not deteriorate into slumfields? The previous article told how local authorities can exercise some control over caravan sites. In addition, licensing authorities can ask people who apply for site licences if they are prepared to make and enforce certain rules. These model rules are printed at the end of this article. In the article itself we shall discuss more fully most of the points included in the list, as well as many others.

THE CAMPING SITE : First, a word about the sites chosen for caravan camping. Too often a site has just "happened" on land which is not wanted by the owner for other purposes, or on land which is not coveted by the agricultural authorities. It may be swampy land adjoining a watercourse or ditch, which is liable to flooding in the winter, or it may be a disused dry gravel pit excavated and worked out to the clay, which is of no use for anything. On swampy land, drainage and disposal of soil and wastes, particularly where no public sewer is available, is seldom practicable, and when attempted it is costly. In addition the high subsoil water table associated with a site of this nature, and the "ponding" of water on the surface of the site after rain, makes it undesirable land for caravans. Raising the site by dumping clean materials and consolidating mechanically does not often prove very satisfactory, because of unnatural compacting and settlement, and the likelihood that "ponding" of rain water will continue. In a dry gravel pit the drainage difficulties are acute, and the wet clay, when disturbed by site works, is a nightmare to the occupants of caravans. The ideal site should have a suitable ground surface (e.g. grassland) and a fair depth of gravel subsoil. If it is residential, or partly residential, it should be easily accessible from a public road or roads, and should be near the main water supply and drainage, as well as the electricity and/or gas services.

DENSITY : How many caravans per acre should be permitted ? In deciding this, it is necessary to consider the economics of the project (bearing in mind the length of planning permission granted), the number of amenities and sanitary facilities to be provided, the comfort and privacy of the caravan occupants, and finally the appearance of the site. There is no doubt that the fewer caravans there are on a site, the better it looks. But although licensing authorities have the power to limit the number of vans in a camp, they are naturally reluctant to be 'undemocratic enough to prevent the site-operator from

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While it may seem churlish to criticise something that has given so much pride and pleasure to its creators, there can be no doubt that site operators should prevent caravanners from introducing

"improvements" in the form of caravan gardens. A prettied-up caravan site can look even more depressing than a neglected one and it is contrary to the principles of true caravanning.

making a profit.

The experiences of a local authority in one of the home counties shows that the maximum number of caravans per acre should 'not exceed 15 on a residential site. This allows for satisfactory spacing and orientation of vans, and an extra piece of land for car parking, roads and pathways and a recreational area. And it makes it possible for the sanitary block or blocks to be a suitable distance from any caravans. This figure enables the site operator to make a reasonable profit (if he is charging site rentals of between 15s. to 17s. 6d. per week per caravan.) On holiday sites with amenities and sanitary facilities comparable to those of a residential site the maximum could be increased to 20 caravans per acre. But very often the rents are so large that the site operator could afford to give his tenants much more room.

SITE LAYOUT : Layout of the site needs careful thought. If the site is small and generously endowed with shrubs and trees, and its owner is prepared to take only a few holiday caravans, then the caravanners will probably disperse themselves over the area in a pleasantly informal way, each finding his own screened livingspace. But on large residential or residential-cum-holiday sites it will be necessary for the owner to lay down hardstandings for the caravans, and if he provides two parallel strips of paving-slab for each van he can virtually dictate the pattern formed by vans on his site. These standings should be set at more than a right-angle to the roadway. This not only makes it easier for the caravans to be towed on or off the standings (vans should have their tow-bar ends nearest to the road), but it also avoids a too-regimented appearance and—because of the variations of the angle of light on windows—it spares caravanners the embarrassment of being able to peer into each other's caravans.

Very occasionally, site operators insist on only one type of van being admitted to a site, and this certainly makes the appearance of the layout more attractive. Even better, perhaps, are the sites on which only the largest standard vans are admitted. The slight variation in the shapes of these large vans provides a pleasing contrast. Nevertheless, caravans were not designed to be seen in rows, and are no more beautiful in large numbers than ribbons of detached houses. As there is no hope that they will ever be combined in the form of well-proportioned terraces (although many of them move just as infrequently as the average terrace house) there is only one way of beautifying them-and that is, by hiding them. Examples of how this should be done are shown on pages 563 and 564. These are, in our opinion, ideal site-schemes. But we are only too aware that few site operators would take the trouble to put such schemes into practice. All that can be hoped for from most site operators is that they will lay down high standards for their campers, and then ensure that the standard is maintained.

DON'TS FOR CARAVANNERS: One of the site operators

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site design and sanitation

most important jobs is the discouraging of the camper from turning his own piece of rented ground into a home-from-home. The camper's desire to build himself in seems to be universal. Odd lean-to's and awnings can appear overnight, and while they may be of great use to the caravanner, they wreck the look of the site as a whole. On many sites a great deal of loving care is given to the making of gardens. It may seem churlish to criticise something that has given so much delight to its creator, but caravans do not gain anything from a garden setting. Probably because the area of ground available to each caravan is tiny, these gardens are nearly always designed on a miniature scale: rockwork, alpines, gnomes and so forth; and without even the concealment of the housing estate's privet hedges, whimsy soon slides over into confusion.

Large stretches of grass, or such carpets as heather, tie the caravan layout together, and the less they are broken up by fencing, boundary posts or other obstructions the better.

The site operator must provide his campers with one or more roomy shed, in some inconspicuous position, for the storage of deck chairs, tricycles, suitcases, tea chests, and all the other bulky articles which otherwise spread like a rash, stay out in the rain all night, bedraggled and untidy, and spoil the appearance of the site more effectively than anything else can. And if the caravanner is permitted to store groceries, tins, and so on under the van itself, he must be persuaded to provide some sort of natural screening—not trellis-work, but planting. It is probably safer to insist that nothing shall be stored beneath a van; once a caravanner is told he may do a little planting, he might immediately send out for ten shillingsworth of gnomery. What else should the site operator do? He should insist that cars shall be kept in a separate car-park—not beside the owners' vans, where they help to create untidiness. He should also provide a concealed drying ground where washing can be hung—as an alternative to the toocommon van-to-tree system. And he should make sure that solid fuel is stored well away from the vans.

So much orderliness and prohibition may sound like the negation of the camping spirit. But when so many campers are gathered in one place, the camping spirit has to give way to the town spirit. And the larger the camp, the more necessary it is to introduce to it features which belong to the town.

ROADWAYS: Concrete roads may not be the sort of thing the caravanner wants to camp beside. But on a large caravan site decent roads are essential if the whole area is not to become a mass of churned-up mud. To economize on roadway construction is foolish. Fairly heavy traffic will wear and break the surface in a very short time, and maintenance costs will be high. Concrete roadways of not less than 10 feet in width are always the best. Granted they are expensive, but for sites with a permission of 10 years or more they are to be recommended. An alternative is hoggin, with ballast topping and water-proofing with tar and sand. Road surfaces tend to deteriorate more rapidly at corners and bends, and it pays to ensure a good base at these points. Footways should be provided over the site. They need be no more than stepping stones of paving slabs; good enough to prevent people from taking mud into their vans, but not so permanent-looking that they give the site a garden-city appearance.

WATER SUPPLY: When the standpipe system of water distribution is used on a residential site, the amount of water used for each caravan averages between 8 to 10 gallons per day. This is a much lower figure than the average gallonage per day for an ordinary house. The figure may be useful in calculating daily flow of drainage where a disposal unit is installed.

The important point about the water supply is that there should never at any time be any suspicion as to its purity. Mains supply should be used if possible, but where the site is remote from this service a tube bore, driven to below the first impermeable strata and piped over the site, provides a reasonably safe alternative. Shallow wells should never be relied on unless the sides are sealed to below the first impermeable strata. Before a site is even considered for the use of caravans, a trial pipe bore should be sunk and the water chemically and bateriologically analysed. If the bore is deep it may be necessary to obtain permission from the Ministry of Health to extract water under the Water Act, 1945.

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If a main supply is available it is best distributed by standpipes, with plunger-type taps to prevent waste, and effectively protected from frost. The number of standpipes will depend upon the size of the site, but they should be located so as to be not more than 50 yards from any caravan. Access to each standpipe should be by a suitably paved and drained path, or it may be more convenient to place the standpipes just off the roadways. The base of each standpipe is usually combined with a sullage water disposal point. Its construction should be of not less than 3 ft. square raised concrete surrounds and dishing to a trapped gully to carry away water spillage with wastes to a soakaway, or where possible, connected to the soil drainage disposal system on the site.

SANITARY FACILITIES AND DRAINAGE. All sites, residential and holiday, should have a sanitary block or blocks provided in a convenient position or positions so that the distance to be traversed from any caravan is not more than 100 yards.



caravan extensions

Conditions for entry to a site should forbid the building of caravan extensions like the one above. Not that the contemporary-minded caravan owner has done anything offensive. Indeed with the minimum of alteration he has given his van a pleasing mechanistic and schematic look. But such enterprise must be stifled, simply in order that the sort of thing shown on the right cannot happen. If a site supervisor is not strict, lean-to's and awnings can appear overnight. And they can soon give a slum-like appearance to the most orderly group of vans, which stone paths and incipient rock gardens only enhance.



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562] THE ARCHITECTS' JOURNAL for NOVEMBER 4, 1954

The extent of the accommodation in each sanitary block will depend upon the total number of caravans on the site but the minimum requirements should be:—(i) I WC per 10 caravan with a minimum of 2 WC's (I for males and I for females). (ii) I Urinal for males on sites where there are 20 caravans or over. (iii) I Lavatory basin per 15 caravans with a minimum of 2 basins (I male and I female), with a reduction of this basis over 50 vans to I per 25 caravans. (iv) I Fixed bath or shower bath per 20 caravans with a reduction of this basis over 100 caravans to I per 30 caravans. (v) Facilities for laundering on sites having 20 caravans and over.

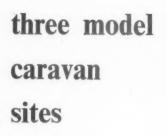
Water closets are mentioned here, as distinct from pail closets, which include earth closets, because the latter are not a satisfactory form of closet accommodation particularly where there is communal use. Chemical closets are satisfactory for multiple sites provided there is adequate supervision of them, communal sanitary services should be drained to a public sewer if available but otherwise to one of the many proprietary disposal units on the market. The final effluent must conform to Royal Commission standards. The location of the unit will depend upon the contour of the site to allow for drainage falls but preferably it should be in a secluded corner and screened. Sullage water disposal points outside the range of effective drainage falls can be drained to soakaways but care must be taken to ensure that gullies have fixed grids and grease traps and are not near any water supply bore.

Either as a separate compartment of the men's section of the sanitary block—entered directly from the open air, or at a suitable point on the length of drain leading to the public sewer or drainage disposal unit, there should be provision for the tipping of chemical closet contents from those caravans with internal chemical closets. In the sanitary block a separate and screen compartment with W.C. pan or pans and flushing apparatus is suitable, but the pan or pans must be protected against damage. If the tipping is to be done on the length of drain then all that is required is a manhole with self-cleansing cement benching, a hinged manhole cover, and a stand pipe (all screened). The waste-water disposal points should be spaced at not more than 50 yards from any caravan and should be combined with the water points.

GENERAL AMENITIES. A word on other amenities. There should be provided on all sites fire fighting equipment, and site operators are advised to consult with the Fire Prevention Department of the County Fire Services as to the equipment needed and its location. The Department will also advise on fire prevention.

On sites of 50 caravans and over and where electricity is available an adequate system of public site lighting

(continued on page 565)

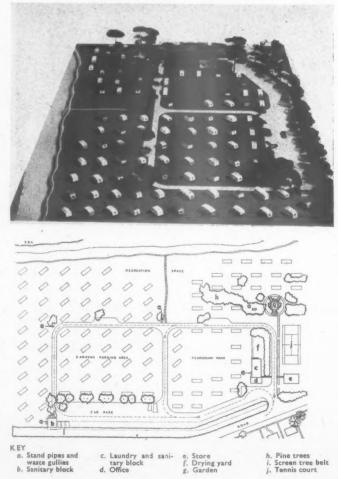


1. designed by Sheila Haywood

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This caravan site layout was designed for the Caravan Club by Sheila Haywood, who is an architect and a landscape architect. It was intended as "a realistic effort to show what can be done to produce a good-looking site . . . within the limits of practical economics." Spacing between vans is about 25 ft., corner to corner. There are two lavatory blocks, a laundry, a screened drying yard, a store for bulky equipment and a car park. Water and waste-water points and dustbins are screened by planting. In the design opposite, Sylvia Crowe shows how planting can also be used effectively to divide the site into groups of vans. And on page 548 Gordon Cullen carries her ideas a stage further.





2. designed by Sylvia Crowe

wood.

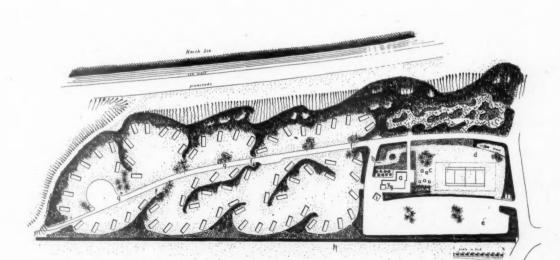
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nting 548 The caravan layout shown in the plan below, and in Gordon Cullen's drawing above, was designed by Sylvia Crowe, landscape architect, for a treeless site on the east coast. This camp, at Suttonon-Sea (for the UDC) is for holiday visitors who bring their own caravans. The establishment of single trees is almost impossible on a site which is exposed to strong NE and SW gales. Wind shelter and screening has therefore been provided by means of close-planted bands of thorn and wild plum. The higher part of the slope to the embankment wall will be planted with native sea-buckthorn, which best withstands wind and sea-spray. On the lower slope there will be grey poplar and Spanish Broom. On the banks of a drainage dyke there will be a plautation of willow. Along the access road, additional groups of shrubs are used to screen points for stand-pipes, soakaways, and litter bins. The enclosure formed by the wind-breaks will divide the caravans into colonies, facing on to a central green, while the pattern of the planting belts will tie the site into the surrounding landscape. As the site will not be used in the winter, hard standing is not thought necessary, but the use of stabilized grass on a proportion of the sites for early- and late-season use is being considered. Access is by a metalled service road. Since night-stops will be the exception, it is expected that most cars will be kept in the car park and not beside the caravans, and as other visitors also wish to leave cars while they are on the beach, a large car park has had to be provided. While the camp itself is kept unsophisticated and allied in character to the farmland which adjoins it to the North, the surroundings of a cafe, which may be used by other visitors besides the campers, are to have certain garden features, not out of keeping with the South of the site which practically adjoins the small seaside town of Sutton-on-Sea.



e. Administration building b. Rose garden
 c. Tea garden

d. Children's corner e. Car park Dust bins Water supply

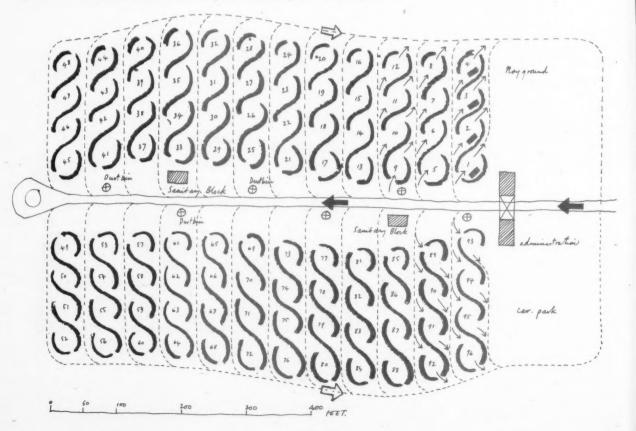
f.

h. New dyke i. Kiosks



Sylvia Crowe's ideas for "colony" layout are here taken a stage further. Designed to answer point 4 (page 545), this site provides individual privacy for an unlimited number of vans at 15 vans per acre by providing each van with its own reserve. Mixed (repeat, mixed) hedges of elder, sycamore, bramble and fast growing climbers like polygonum give protection in three years. Ornamental or evergreen shrubs like privet

or macracapa strictly prohibited as being unrural. Though deciduous so great is its production of wood polygonum will give winter cover and so will bramble. Site designed for easy handling of vans. No backing. Cars can stay with van if required. The small arrows show how cars will tow caravans into their screened positions behind the hedges, and on leaving, tow them out.





and so g. Cars nill tow eaving,

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Architects : Messrs. Challen & Floyd, A/ARIBA.

House at Woodford Green

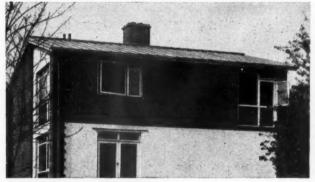
These illustrations show an interesting example of Italianized zinc roofing applied to a modern house. By this system, the sheets are factory formed: site work is cut down to a minimum, and roofs can be rapidly covered.

From roof to foundation, zinc has vitally important uses in contemporary building for gutters, pipes, weatherings, flashings and hoods. And there are now no restrictions on its use. Supplies are plentiful, and likely to remain so.

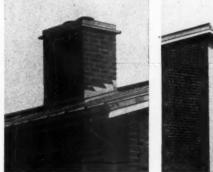
The price of zinc has dropped considerably, and it is now one of the cheapest permanent materials.

The Zinc Development Association is always prepared to give technical help to potential users. Publications, together with lists of stockists of all zinc building materials and of firms specialising in zinc work, are freely available.





View showing contour of Italianized sheets.





Flashing round chimney stack.

Detail of verge apron.

ZINC DEVELOPMENT ASSOCIATION • LINCOLN HOUSE • TURL STREET • OXFORD • TELEPHONE: OXFORD 48088

B

Swimming Pool at Roydon Hall



In the lovely grounds at Roydon Hall, Norfolk, a swimming pool has been constructed for John Alley, Esq., J.P. The pool is 34 ft. long and 20 ft. wide, one end being 3 ft. 6 ins. deep increasing in the middle to 8 ft. and decreasing at the other end to 6 ft.

'PUDLO' Brand Waterproofer was specified to render the walls and floor waterproof, the bath having been built of brickwork with an ordinary non-waterproofed concrete floor 15 ins. thick composed of 4. 2. 1.

The Waterproofing was effected by means of an internal lining of waterproofed cement and sand composed as follows :— 2 parts of coarse washed sand, I part of Portland cement, 5 lbs. 'PUDLO' Brand Powder, to each 100 lbs. of cement.

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should be provided. Overhead cables should not pass over caravans, but should follow the route of site roadways and pathways.

On fairly large residential sites remote from shopping facilities it is an advantage to have a general shop. Normally this takes the form of a lock-up for the sale of dry and packeted goods.

MAINTENANCE. We must repeat that on all sites there must be strict supervision. The lack of it causes endless complaints, particularly as facilities are used communally. Normally where the site operator himself is in control and employing whole time and part time labour for cleaning and maintenance, all works well and the site earns a good name, but far too many sites are just allowed to run themselves, with disastrous results—usually ending in the local authority employing its powers to enforce the conditions of the licence.

It is imperative that there should be day-to-day detailed attention to cleansing of sanitary blocks, repair of any damaged fittings and hygienic disposal of refuse. Wages paid to a good type of warden is money well spent.

MODEL RULES FOR SITES. Applicants for site licences are often asked if they are prepared to make and enforce the following rules. Copies are handed to users of vans. I. Campers must observe the conditions attached to the licence by the local authority in respect of the classes of movable dwellings to be used on the site and the minimum spacing.

2. Tents and caravans will be pitched in the positions indicated by the site manager. They must be moved to fresh pitches at the request of the site manager at any time when this seems to him necessary to maintain good sanitary conditions.

On this page and overleaf we illustrate a few do's and don'ts for site operators. (a) If the operator does not insist that all vans should be kept clear underneath-and this is a good rule to make-he should see that anything stored beneath vans is screened, not by trellis (as here) but by planting. (b) If footways are needed on a site-and they will be if the camp is a residential one, or if the ground is liable to be soggy, then nothing more than paving slabs is needed; these are good enough to prevent people from taking mud into vans, but not so permanent-looking that they give the site a garden-city appearance. (c) Vans should not be parked end-to-end so that they make the site look like the road to Brighton. If a site is so large that a formal layout along a service road is essential, vans should be laid end-on to the road, at more than a right angle to it. By this arrangement it is impossible for caravarners to see through each others windows, because of variations in the angle of light. (d) The hanging of washing on vans should not be permitted; separate drying grounds should be provided.











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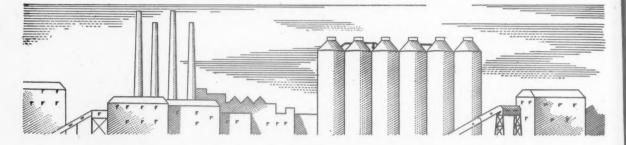
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3. No caravan shall be used for sleeping by more than a reasonable number of persons. The site manager shall be the judge of what is a reasonable number for each caravan.

4. No annexe to the caravan, other than a lean-to, or awning, shall be erected unless it forms part of the original design and can readily be dismantled and transported with the caravan.

5. No occupier of a tent or caravan shall allow waste water to discharge to the ground, but shall collect it in a pail or other receptacle, which must be emptied as often as necessary at the drain (or soak-away) provided.

6. Campers must not dispose of any contents of any sanitary pail or chemical closet except (give instructions in conformity with the undertaking to the council).
7. No solid refuse must be disposed of except in the receptacles provided, and no liquid refuse must be disposed of except (give suitable instructions).

8. Holes must not be dug in the turf without the consent of the site manager.

9. Musical instruments, gramophones, wireless sets and electric generators must not be used in an audible manner between II p.m. and 8 a.m., and at all times campers must conduct themselves with due regard to the comfort of others.

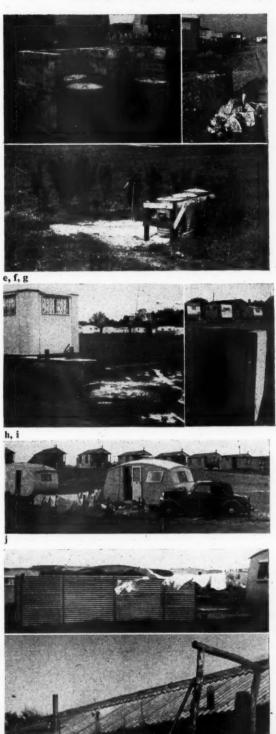
10. The speed of cars, caravans and motor-cycles on the site must not exceed 10 m.p.h.

11. Site fees are accepted on the understanding that these rules will be observed, and the refund of the appropriate portion of any site fees paid in advance shall be a sufficient discharge of all obligations to a camper who is required to leave because of any breach of these rules.

more do's and don'ts for site operators

The screening of dustbins can be a difficult problem. If the site is one that has to be completely cleared in winter months and a permanent screen of shrubs is out of the question, then at least the site operator can ensure that regular collections are made and that caravanners are not faced with such views as (f). It is better not to provide any screen than to surround dustbins with an ugly whitewashed wall, as in (e). If shrubs can be grown 'around a cluster of dustbins they should not also screen the water supply, as in (g), for obvious reasons. In any case the water standpoint should be surrounded by a hard base, or the sort of condition shown in (h) can soon arise. There is no need, however, to do anything monumental when laying on the water, as in (i). Picture (j) shows how a car parked with a caravan can add to the general untidiness of a site. Each camp should have a separate car park. One of the greatest difficulties in laying out a site is the provision of a permanent lavatory block that will not clash in appearance with the temporary-looking caravans. Such blocks should be modest, but not modest in a primitive way, as in (k), nor modest in a bashful way, as in (1) which is hiding behind rustic work and creepers.

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THE ARCHITECTS' JOURNAL for November 4, 1954

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ARCHITECTURAL ASSOCIATION

Inaugural Address by President, Peter Shepheard

The following address was given to members of the AA, at 34, Bedford Square, W.C.2, on October 27.

If this talk has a title it is "The Importance of being Serious." Not earnest but serious. I am a very serious chap myself: I look it -so much so that people come up to me at parties and say "Are you all right: sure you don't want another drink"; but in spite of my sad face, I find lots to laugh at even, no, I think, *especially*, in architecture; not quite so much perhaps as my dear friend, your past president, but still enough I hope to prevent me from being earnest; because to be earnest is to fail to distinguish between the true and the false.

An admirable example of true seriousness is that of the excellent Swiss architect, Max Bill, who recently went to Brazil; and going straight from the sober conservatism and clean mountain air of his delightful country into the rampant steaming jungle of Brazil, and being confronted with its wildly voluptuous architecture, its rapidly chaotic town development, and the impending rape of that virgin forest land, he seems to have been profoundly shocked. So much so that, in a lecture given actually in Brazil, after some forgivable dithering, he quietly told the Brazilians what, in his serious opinion, architecture was. The kernel of this lecture appears in the Architectural Review of this month, and it seems to me a very neat and beautiful example of what architecture is. Bill may have been unfair to the Brazilians, of course; what suits those scented jungles may well be incomprehensible to a Swiss, or to any of us sober and frigid Europeans. Bill said, as others, of course have said before him, that the role of the architect is " to make human surroundings habitable and harmonious." And then he went on like this:—

"But what is this new structural form we are seeking? Is it in fact a form characterized by freedom of planning, by pilotis, brise-soleils and walls of glass? Has it to be as photogenic and spectacular as all that? I don't believe it. Architecture is often destined to remain standing for rather more than a few years. It is something which outlives the generations."

He went on to say: "You may, perhaps, think my point of view too narrow, and that architecture which succeeds in being functional even in the highest sense of that word may still be over dry. You argue, maybe, that architecture, too is an art, an art moved by the urge to self expression and the urge to infuse buildings with the thought of artists.

"But such is not the function of architecture. The architect who so proceeds makes himself ridiculous. This point of view is one which springs from the mistake that the art of building must be something other than the art of playing a certain useful role in society; also from the mistake of supposing that an art, and particularly the plastic arts, ought to consist of what is so nicely designated by the phrase 'self-expression."

"That is neither art nor architecture. Art consists in making an idea as clear and objective as it can be made, through a choice of means as adequate as can be chosen. A work of art must take a form of such perfection, must be an expression of such harmony, that its author is incapable of either changing or adding a single stroke.

"In the case of architecture the result must, furthermore, be as functional as is possible to make it. Unceasingly the architect will visualize how men are going to act and behave within his building. And always he will be very severe towards himself. "He will have no thought of how he may

"He will have no thought of how he may cause a sensation among his colleagues or his public, or of how fine a publication his creation will make. No: his guiding motive will be, in all modesty, the service of mankind."

kind." Well, I find these words moving and apt for us today, and for us here in England too. Because I think that for us also, although there is no Brazilian voluptuousness about our architecture, the biggest dangers to the modern movement, which has for years been coming nearer and nearer to the rediscovery of the basic principles of architecture are formalisms of one sort or another, which ask us to force our buildings into this shape or that, instead of growing as conceptions of the mind's eye, into shapes of their own. Formalistic conceptions are to the architect what sentimentalism is to the writer. The other day I heard V. S. Pritchett on the wireless define a sentimentalist as " one who has the idea of the feeling before the feeling"; a formalist is one who has the idea of the building before the building. It seems to me to be all one whether this preconceived idea is Florentine, or Georgian, a glass walled slab, or on pilotis, or just brutal; if it prevents the building from fulfilling any one of its functions, it prevents architecture, it seems to me, is not

Because architecture, it seems to me, is not so much created as happening: when a man of a certain sensibility puts his mind to solving a building problem, without urgently seeking beauty or attempting self-expression, but keeping his mind on the solution of practical problems, then architecture happens as a sort of by-product. The architect must, of course, have sensibility; he must have looked at many buildings, and loved them, and probably designed many also; all his experience will be in the work and will make his architecture what it is; but it will do so obliquely, while his mind is on the problem. If the architectural faculty which is a special kind of visual imagination —is strong in a man, it is a passion; after all it needs not so much to be encouraged or pampered, as disciplined and channelled into fruitful work.

Architecture is a sort of large-scale sculpture; but whereas sculpture can be abstract, if you like it so, and still give an emotion to the beholder (rather a mild and puritanical one, to be sure, but still discernible by those who cultivate such delights), architecture cannot. Function is the first reason for a building coming into existence; it seems to me the very bedrock of architecture is the belief that one never needs to sacrifice function to form; it is always possible to house any activity from pigs to pantheons in a form fit and appropriate to it, and for the result to be architecture. One might go further and say that architecture can still be made, not only out of housing any activity, but out of any material, however cheap. Although here of course one must remember that cheapness may mean lack of durability; and durability is itself a minor architectural quality.

Here I think, in the responsibility of architect to client, one really must be serious; it always astonishes me to think how many architects in the last hundred years, on getting some hapless client into their clutches, have managed to sell him a miniature Palazzo Strozzi, or the top half of a chateau of the Loire, when all the poor man wanted was a bank or a pub. We now all laugh at

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that of course—although it's not so funny if you live or work in one of them—but let's keep a laugh too up our sleeve for our contemporary scene, and some pity for the client of today who may be landed with something much less solid but little less inconvenient, in the form of an abstract design of welded steel and glass, or a block of flats raised on pilotis not because they fit the case, as of course they often do, but because the architect was so sensitive about his building that he couldn't bear the thought of it touching the ground; buildings, in other words, in which some of the technical discoveries of the modern movement are used not as basic elements solving problems for which they were invented but as an embellishment, a symbol of newness and non-existent daring just as the bankers' columns were symbols of age and non-existent stability. The old fancy dress did much damage to architecture and to the reputation of architects; we must not allow a new fancy dress to make modern architecture look as silly also.

Everything depends on the architect reestablishing his reputation as a practical man, with practical solutions to offer to contemporary problems. Every time you built a flat you condemn some family to live in it, some child to grow up in it; *that* view is what you put there; you rationed their space, their sunshine, their privacy. Often too nowadays your buildings are commissioned by a mass-client—flats or schools, for example, built by a local authority but inhabited or used by people who have little or no contact with the architect; so that it is not their own choice which condemns them to be housed by you but the luck of the draw. One should never forget that these users of the building are the real clients; the architect is fast collaborating with the Committee to satisfy them; and indeed, this is one of the real rewards of the work. Many of you must have felt that, pleasant though it is to hear that the Committee are pleased with your building, it is the happiness of the flat dwellers, the teachers and the school children which really warms the heart. And conversely, when a Committee grumbles that this or that is wrong and causes trouble in management, the solution is not to draw in one's horns and build fool-proof dull flats surrounded by treeless seas of tarmac (which some, and I must say very few, housing managers seem to want) buil to re-examine one's solution to find out why ordinary people can't live in them, and their children play in them, without reaujring excessive management.

without requiring excessive management. One of the difficulties of working for these new clients is that one has so little contact with them. One has to rely on the Committee, and unless the Committee is a good one and has much experience of this kind of work in hand, there is a tendency for it to imagine a kind of lowest common denominator of client, a pair of rather clumsy humdrum individuals with a flock standard of vandalistic children. Very few families actually are like this, and enlightened authorities assume the best of everyone and get far better results. But modern architecture is so different from the majority of places in which most of these people have lived before that I do think more explanation of its possibilities is required; it would be a good thing, I think, if the architect could tell his clients how to use his buildings and their layout. Perhaps he could issue a booklet on the scheme showing how everything works, and is meant to work, and what the layout will look like when the trees have grown and so on.

But then, the architect has too little contact with everyone outside his profession. It is indeed sad that what Gordon Russell called in his Prize-Day address the "contracting out" of the 19th century architects, the deliberate leaving of housing the speculative builder, of factories to the engineer, of townplanning to the drainage man, gave the architect a reputation as an impractical æsthete; so that now, a generation of architects which is on the whole composed of practical

Just on one million square yards of **BISON** flooring have been used in Scottish housing since the war



Illustrated is an aerial view of the Pollok Housing Area-Glasgow. Architect: Archibald G. jury, F.R.I.B.A., F.R.San.I., F.I.Arb., A.I.Struct.E., Director of Housing, Corporation of Glasgow.



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men who are ready and anxious to offer practical solutions to contemporary problems is faced with the suspicion and mistrust of a public who remember the banks, town halls and railway stations that our grandfathers built. It is this which makes it so maddening to see amongst our own generation signs here and there of new formalisms, different only in appearance from the old; architecture built by architects for other architects; buildings which instead of solving a practical problem, solve a different æsthetic one, which give a client not a building but a beautiful and expensive abstract sculpture which has then to be sullied by the furniture and habits of its users.

I was criticized by that sharp fellow ASTRA-GAL the other day for dragging "gratuitously" into my talk on "An Architect and his Public," on the BBC, a reference to what he called a "minor battle of the styles." I would say, not minor, but fundamental; and not, I hope a battle of the styles. There is one style; surely, that's what a modern architect believes, and it is precisely because formalisms tend to make little styles of their own that I am against them.

If the architect is to maintain the confidence of the public, which I think he is beginning to gain, surely he must submit to criticism of his work. The present silence of the press, for which, I suppose, the law of libel and the professional status of the architect were originally to blame, is now so complete that it is the rarest possible thing for even the architect's name to be mentioned amongst the mayors and builders and everyone else at the opening of even quite an important building. One is inclined to take this for granted nowadays, and it is a shock to open old books and periodicals of a hundred years ago and find furious polemics being waged over every new building; there is one splendid guide to London of about 1830 in which, I remember, Mr. Soane's architecture is described with disgust as "mainly a system of grooves." Well, even such slanging never did architects or anyone else any harm. Another thing I want to touch on is how

architectural practice should be carried out: in public or private offices, in large or small units. There is tendency among us to emphasize the division of architects into public and private practitioners, and even to talk about *representation* of these two sections of the profession at the RIBA. This is, of all nonsense, the most poisonous; the process of architecture is the same whether it is done in a garret or in the LCC. It is the job of all of us to see that conditions are created in all offices in which architecture can occur, and it is evident from dozens of contemporary schemes that it can occur equally well in public and in private offices. What is much more important to argue about is the very real distinction between the small office and the large; and this applies to both public and private offices. A project must be conceived by one or two men and worked out by a few more; this group must see it through to completion. Within this group must be complete confidence in its leadership and interest in the work in hand. I find it impossible to conceive any building, however large or complex, which needs a group larger than a cricket or at most a football team in cases of desperate hurry, you might have a few more, but not without danger to the unity of the conception itself; and most buildings need not more than half this aumber. In larger groups, some will be doing nothing much, and others more than they need on administering the group and trying to tie its work into a unified whole. This to me is of absolutely basic importance. Public offices, which often have to be very large, can by their internal organization create such working groups; but it should be re-cognized that it is the leaders of these groups who are the real architects, and it is

It is not only as a technical instrument that the value of a small group shows itself. A friendly relationship can be maintained in the small office; christian names, no hierarchy, and a simple flexible organization, of which the importance simply cannot be overestimated. Even when a large office is organized in small groups, this easy relationship tends to disappear; and when, as in a large public office one has an establishment officer to look after the staff, things are liable to go very wrong indeed. Architecture is not a thing that can be done at a jog trot between 9 a.m. and 5 p.m. If one of your people works till midnight, he mustn't be slanged for arriving at six minutes past nine; especially must he not be told—as I have heard happen—by an establishment officer, that if he *did* work till 12 o'clock the night before, the more fool he!

Another valuable function of the small group is the training it gives to newly-fledged architects in the responsibilities of practice. Each one sees what is going on, gets his share of the site visiting, realizes what importance his work has, and becomes rapidly able to lead a group or to practice on his own. In this regard, I was horrified at a recent correspondence in the Architectural Press about whether an assistant architect should be allowed to do work outside his office. What was so disturbing was the number of people who wrote saying of course this couldn't be allowed or encouraged. Well, it may be difficult to arrange in public offices—lots of things are—and it could be argued that if you choose public practice outside work only tends to prevent your steady progress up the grades. But it is surely essential at least for private practitioners to recognize a trust, a duty to their assistants to encourage them in every possible way to become architects, and nothing is so good for a man as to do jobs on his own in his spare time or in time granted for this very purpose. I would say that public offices too should make whatever arrangements they can to this end, as I be-lieve some of them already do.

Which brings me on to training. It is natural for us at the AA, where school training as we know it was more or less invented, to hold in very high regard the school-trained architect. Recently there has been a considerable increase in criticism of one kind or another directed at the schools, the general burden of which is that school training doesn't give sufficient practical experience to turn a man into a useful assistant. That isn't quite what we are trying to do, of course (but even here I must insist, having had several people almost direct from the AA and other schools, that we have found them perfectly splendid assistants!). But what we are trying to do is to give a man at school, during the most lively and exciting years of his youth, leisure (I know that will sound a funny word to students but that's what it is) leisure to work at acquiring the knowledge of the whole field of architectural theory, without which he can never be an architect; and this involves not only history, but an introduction to the whole of modern building technique. Many of those who carp at the schools seem to echo Eric Gill's lament that the modern architect "instead of rising from the scaffold, comes down from the university" (he was obviously thinking of Liverpool) but would have thought the same of the AA. But this is mediaevalism; what can a man learn on the scaffold, or for that matter articled to an architect designing bungalows in Hogsnorton, about the complex process of modern building?

If, of course, he was articled to a busy

modern architect with a character of sufficient saintliness to spend half of each working day teaching the boy, there might be something in it. But even then I would say the school would give him broader horizons than any office; and above all, after his five years of school, he can pick up experience and make use of it so much more quickly and intensely than before, and all with reference to a known body of theory. In fact, of course, it has always been and still is the pride of the AA to make the course as practical as possible, and to have practising architects as its teachers.

In any case I think the critics are barking up the wrong tree. If the schools fall down at all, it is not on practical training but because teaching of theory is too vague. Perhaps there is something in our schools which encourages too much the desire to do something new, as opposed to better, than before. This may be a personal feeling of mine based on the idea that modern architecture has now arrived at a point where it is more important to refine and to humanize than to innovate. A good deal of crudity, of lack of careful detailing, mars many good modern buildings; almost one gets the impression that some architects consider it slightly cissy to fret too much about the profile of a cill or the thickness of a window bar, or the exact size of the beams and columns, drips and eaves on which the whole tautness and scale of the building whole tautness and scale of the building depends. It is by considering such things as these that the Greeks produced the Par-thenon; no striving for new form but all refining of their simple old barn-shaped temple, than which you could hardly imagine a duller building shape. But by an invisible curve to produce a visible tension, by weigh-ing the exact breadth and depth of each shadow, by constant collaboration with the sun, each groove and flute was made to sun, each groove and flute was made to add something to the miraculous tautness of the whole. This, it seems to me, is what modern architecture now needs, and it can only be provided by a patient study of the effects of light on textures and forms. Even a brutal building needs to be detailed, and I must say, whatever else I think about the new brutalism, its exponents do seem to give the most careful thought to refining the appearance of their buildings.

I think too that it is important to impress on a student at an early stage the central difficulty of architecture, which is the long haul to the finish: the first broad conception is vital to the result; but so is the last fraction of an inch on every window bar. Any of us can spend an hour or two with paper and pencil to create some passable ideas; but how rare is the temperament of the true architect which, through the whole long process of drawings and quantities and contracting and sub-contracting, keeps always that calm excitement which ensures that the same feeling informs the execution of every smallest detail. No other artist has to keep his fires banked for so long a period; and far more of us fail in this than in any other respect.

My time is getting past and I don't want to close without a reference to the position of the AA and its school. At the meeting of members here on June 30, at which AA policy was discussed. I reported on the situation in which we found ourselves then. I don't want again to go over the history of our attempts to get a grant from the Ministry of Education, and our suggested collaboration with Cambridge University and other bodies, you can read my remarks in the July-August issue of the AA Journal. But I do want to say a word about our recent rise in fees. As I expect you all know —although I have found some members whom it surprises—the AA is the only school in the country without financial support such as the Universities get from the University Grants Commission or the municipal schools from their authorities. The fact that we train a student for £150 per annum—far less than a University spends570] THE ARCHITECTS' JOURNAL for NOVEMBER 4, 1954

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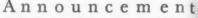
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is due in no small measure to the low rent of this building, the low costs of an independent institution, and above all the loyalty and devotion of the staff, both architects and others, and friends and helpers among the members.

After the failure of our attempts to find financial backing outside the school, we were faced with the quite simple alternatives of spending our meagre reserves until they were gone, which I hope you will agree would have been mad *policy*, or of raising fees to cover costs. Now this rise in fees does not hit so badly the student with poor parents who can get a County grant, or of course the student whose parents are rich enough to pay. But there is a middle section—earning say between £1,000 and £2,000 a year—just that region in which architects and other professional men find themselves, and a fruitful one we think from which to recruit architectural students—whose sons cannot get grants and who cannot yet be called rich enough, especially if they have several children, to pay.

recruit architectural students—whose sons cannot get grants and who cannot yet be called rich enough, especially if they have several children, to pay. We still have far more applicants than places; we still want to continue to select the best students from our entrance exam, the best students without considering their parents' finances; and we are frankly worried about this middle income group. The Council therefore suggest that the membership (and indeed the building industry too, and others) may care to band together in groups to contribute to a set of covenanted scholarships of say £75 p.a. (half fees) for the express purpose of helping this kind of student to come here. Various methods of doing this have been considered; whether members who left the AA in any one year would care to band together and give a year scholarship; whether some of the money should be in a general assistance fund, and so on. But we hope to be able to write to you all in the near future giving details of a scheme, and the Council most earnestly hopes you will join in it.



J. M. Clarke, A.R.I.B.A., has relinquished his appointment as Regional Technical Information Officer with the Ministry of Works, and his address is now 2, Pentley Park, Welwyn Garden City, Herts.



Library Group Meeting. The work of Sir Thomas Graham Jackson, introduced by Basil M. Jackson. At the RIBA, 66, Portland Place, W.1. 6 p.m. NOVEMBER 8

RICS Ordinary General Meeting. Presidential Address by C. P. Bowyer. At the RICS, 12, Great George Street, S.W.1. NOVEMBER 8

Rococo Art from Bavaria. Lecture at the Lecture Theatre, Victoria and Albert Museum, Exhibition Road, S.W.7. 6.15 p.m. November 10

Three Polish Cities—Warsaw, Cracow and Gdansk. Illustrated talk by D. M. Gregory Jones. At the AA, 34, Bedford Square, W.C.1. 6.15 p.m. NOVEMBER 10

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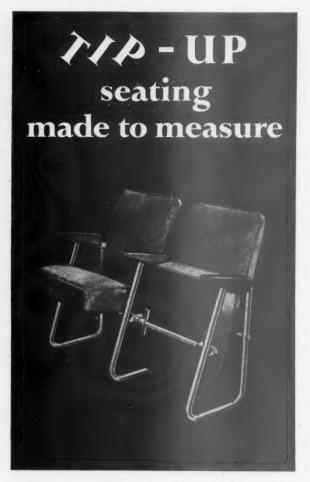
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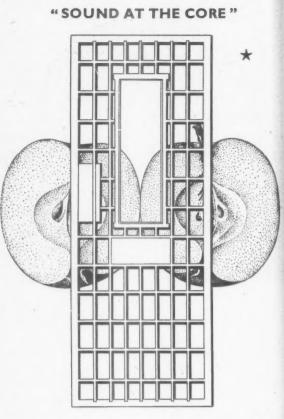
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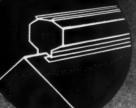
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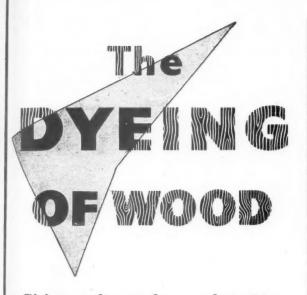
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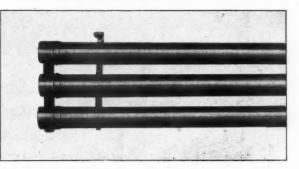
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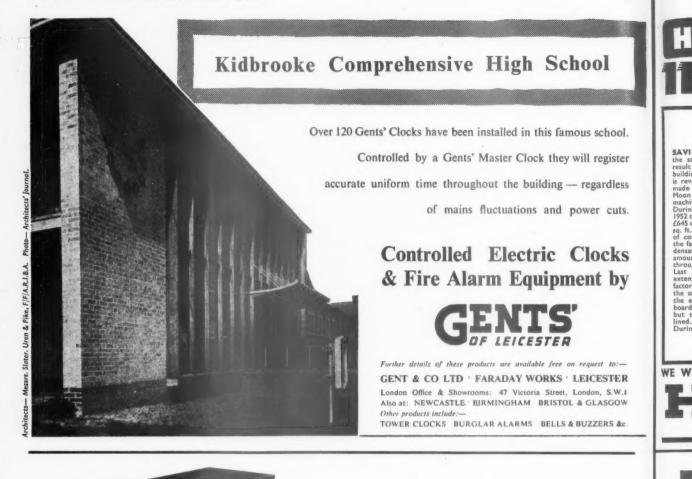


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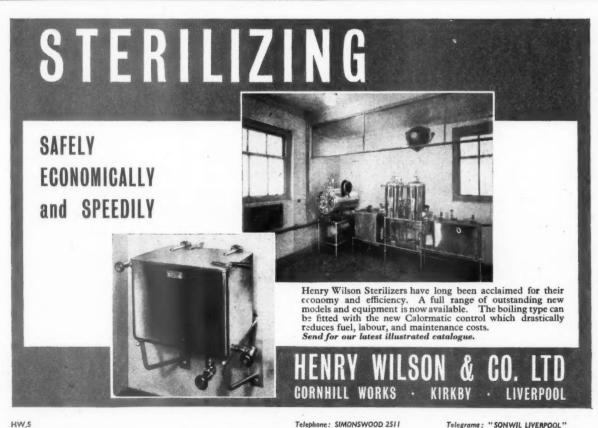
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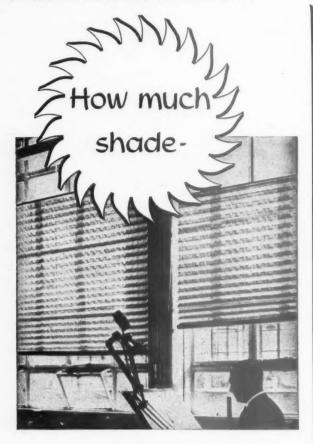
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An "Accordo" blind moves up from the bottom and/or down from the top. Guide rods at either side obviate flapping. No moving parts; all metal parts rustless. Of continuous pleated fabric; rotproof and vermin-proof; self-dusting, owing to bellows-action of pleats. Can be face-fixed or revealfixed (needing depth of only 1§in.). Suitable for horizontal lay-lights, sloping roof-lights. Widths up to 15ft.; in a range of attractive shades. Now widely installed in hospitals, schools, offices, etc., at home and abroad. Write for details of "Accordo" Sun Blinds; also of "Accordo" Dark Blinds, specially designed to provide light obscuration for laboratories, etc.

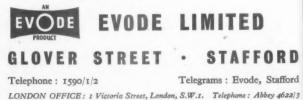


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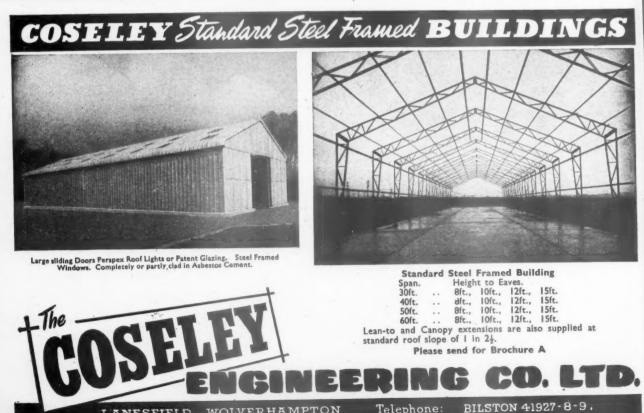
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Edited by D. A. C. A. Boyne, executive editor of 'The Architects' Journal'.

THE IMMEDIATE SUCCESS of Architects' Working Details Volume I and the enthusiastic welcome it received (it is already in its second impression) encouraged editor and publisher to follow up swiftly with the preparation and publication of this new volume, number two in the series.

The purpose of this important series is two-fold: first, to provide architects and students with easily accessible solutions to innumerable everyday design problems; and second, to record the latest stages that the study of those problems has reached, and thus provide the architect with a time-saving starting point from which he can develop his own improvements and adaptations.

The contents of this second volume are classified under the same headings as those in Volume I (WINDOWS, DOORS, STAIRCASES, WALLS AND PARTITIONS, RØOFS AND CEILINGS, BALCONIES, COVERED WAYS AND CANOPIES, HEATING and FURNITURE AND FITTINGS) and a new heading, LIGHTING, has been added. The details appearing under those headings have, as in the case of Volume I, been selected from the series of Working Details now regularly appearing in the *Architects' Journal*; they all represent recent work of leading architects and show the actual details used in the solution of a wide variety of contemporary design problems.

Future volumes will contain further examples under each of the present headings, and from time to time additional subjects will be introduced, so that the architect will be provided with a gradually accumulating and always up-to-date reference library of useful



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

seper. Replies to Box Numbers should be addressed esre of "The Architects' Journal," at the address eiven above.

Public and Official Announcements 25s. per inch; each additional line, 2s. The engagement of persons answering these elevritisements must be made through a Local Office of the Ministry of Labour or a Scheduled Imployment Agency if the applicant is a man sped 18-64 inclusive or a woman aged 18-59 isolusiee unless he or she or the employment is second from the provisions of the Notification of Yacanoise Order, 1962.

ACCHITECTURAL ASSISTANTS required for drawing office at Royal Ordnance Factory, Rans-till, near Retford, Notts. Candidates must be British and have had at least three years architectural training, experi-ence in a Architect's office, and be of Inter-mediate R.I.B.A. standard. Salary 2400 (at age 21) to £640 per annum. Starting pay according to age and experience. Prospects of promotion and permanency. Write: WG10/CA9 (G), Ministry of Works, Abell House, John Bilp Street, London, S.W.1. 4404

MINISTRY OF WORKS. ARCHITECTURAL ASSISTANTS required for drawing office at Ministry of Supply Establish-ment, Nancekuke, near Redruth, Cornwall. Candidates must have had at least three years' architectural training, some experience in am architect's office, and be of Intermediate B.I.B.A. standard.

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4313 MINISTRY OF WORKS. ABCHITROTURAL ASSISTANTS are required for drawing office work in London and various Seotish and Regional Offices. Candidates musi have had at least three years architectural training, some experience in an Architects office, and be of intermediate R.I.B.A. standard. London salaries 2420 (at age 21) to 2650 per annum. Starting pay according to age and experience. Rates in the provinces slightly less. Prospects of promotion and establishment. State age, nationality and full details of train-ing and experience to W.G.10/C.A.6(P), Ministry of Works, Abell House, John Isip Street, London. S.W.1. Support U.B. DISTRICT COUNCUL

5. W.L. 3926 SHIPLEY URBAN DISTRICT COUNCIL, ARCHITECTURAL ASSITANT required, salary within existing A.P.T. Grades V to Va (£620-£710) commencing according to experience and qualifications. Position superannuable and subject to the provisions of the National Scheme of Conditions of Service. Applications, giving age, details of training, qualifications and experience, together with the names and addresses of two referees, to the Engineer and Surveyor, Towa Hall, Shipley, York-shire, by 10 a.m. Monday, 15th November, 1954. Housing accommodation will be provided if required.

ERNEST PEARS, Clerk and Solicitor.

4492

Town Hall, Shipley, Yorkshire. 22nd October, 1954.

BOROUGH OF HARROW. BOROUGH ENGINEER AND SUBVEYOR'S DEFARTMENT. Applications are invited for the undermentioned

Town Clerk's Office, Harrow Weald Lodge, Harrow, Middlesex.

WEST SUFFOLK COUNTY COUNCIL.

WEST SUFFOLK COUNTY COUNCIL. ARCHITECTURAL ASSISTANT, salary £600 ×225-4725 (New A.P.T. III); and ASSISTANT ARCHITECT, salary £675×230-£225 (New A.P.T. IV): National Joint Council Service Conditions; posts pensionable; medical examination. Applica-tion forms obtainable from the Clerk of the County Council, Shire Hall, Bury St. Edmunds, to be returned by 16th November, 1954. 4532

NORFOLK COUNTY COUNCIL.

NOBFOLK COUNTY COUNCIL. ASSISTANT QUANTITY SUBVEYOR required -_£620--£725 p.a.; experience of taking off and working up, checking final accounts, essential. N.J.C. Service conditions; post pensionable; medi-cal examination. Applications, stating age, ex-perience, qualifications, training, present appoint-ment and salary, and the names of three referees, to the County Architect, 27, Thorpe Road, Nor-wich, by not later than November 15th. 4545

to the County Architect, 27, Thorpe Road, Nor-wich, by not later than November 15th. 4565 CITY OF PLYMOUTH. CITY ARCHITECT'S DEPARTMENT. Applications are invited for the following appointments which are subject to the Conditions of Service of the National Joint Council for Local Authorities, Administrative, Professional, Tech-nical and Clerical Services; the Local Government Superannuation Acts, 1937 and 1953; a satisfactory medical examination and one month's notice on either side for termination. (a) TWO ASSISTANT ARCHITECTS-Grade A.P.T. IV (2580-625). (b) TWO ASSISTANT ARCHITECTS-Grade A.P.T. IV (2580-625). (c) TWO ASSISTANT ARCHITECTS-Grade A.P.T. I (490-625). (d) ONE TEMPORARY ASSISTANT ARCHI-TECT (Grade A.P.T. III) (2520-2556). (For a period of approximately 18 months.) (e) ONE TEMPORARY ASSISTANT ARCHI-TECT (Grade A.P.T. III) (2520-2556). (For a period of approximately 18 months.) It is anticipated that from the 1st January, 1955, the maxima of the grades mentioned above will be as follows:-Grade II-2580. General Division Grade. Grade II-2580. Grade II-2580. Grade II-2580. Grade II-2580. The Department is normally responsible for the whole of the Corporation's Architectural work, including Housing, Education and General work, including Housing, Education and General work, including Housing, Education and General work, including Housing, Condition and be we passed the Intermediate Examination of the K.I.B.A. Applicants for (a) (b) and (c) must not be over 40 years of age but this condition may be

Preference will be given to candidates who have passed the Intermediate Examination of the R.B.A. Applicants for (a) (b) and (c) must not be over 40 years of age but this condition may be released in the case of a person up to 45 years of age employed by another Local Authority. Applications on forms obtainable from the under-signed, accompanied by copies of not more than three recent testimonials and/or names of persons to whom reference may be made, should be received at my office not later than the 15th November, 1964. The Corporation may make Housing Accommoda-tion available to the successful married candidate for items (a) and (b). Seymour Road, Plymouth 4464

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 BOROUGH OF WREXHAM. ARCHITECTURAL APPOINTMENT.

 Applications are invited for the appointment of ARCHITECTURAL ASSISTANT in connection with Capital Works at a salary in accordance with A.P.T. Grade V (6620 to £670 per anum).

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 Toron of Application and Conditions of Service surveyor, 3L, Chester Street, Wrethem, Applica-tions on the prescribed form. together with copies of two recent testimonials and the names of two referees should be delivered to the undersigned in not later than Monday 15th November, 1964.

 PHILIP J. WALTERS, PHILIP J. WALTERS, Toron Cirek.

Guildhall, Wrexham. 21st October, 1954.

COUNTY BOROUGH OF BOLTON. APPOINTMENT OF BOROUGH ARCHITECT. Applications are invited for the appointment of BOROUGH ARCHITECT at a salary of £1,750 per annum, rising, by two annual increments of 2100 and one of £50 to £2,000 per annum. Conditions of service will be in accordance with the recommendations of the Joint Negotiating Committee for Chief Officers. Particulars of the duties of the appointment, and form of application may be obtained from the undersigned, to whom forms must be returned on or before 13th November, 1954. PHILIP S. RENNISON, Town Clerk. Town Hall, Bolton COUNTY BOROUGH OF BOLTON.

Town Hall, Bolton

LONDON COUNTY COUNCIL ARCHITECT'S DEPARTMENT. Vacancies for ARCHITECTS, Grade III (up to 2092 108.), and ARCHITECTURAL ASSISTANTS (up to 2739 108.), in Schools and Honsing Dynamas.

(up to £739 10s.), in Schools and Housing Divisions. Particulars and application forms from Architect (AB/BK/A/2), County Hall, 8.B.1, (1068) 2205 BOROUGH OF HORNSEY. TEMPORARY ARCHITECTURAL ASSISTANT required for the Architects' Section of the Borough Engineer and Surveyor's Department, A.P.T. VII (£755-£340, including London Weighting). Com-mencing salary according to experience. Application Form from Borough Engineer and Surveyor, Town Hall, Crouch End, London, N.S, to be returned by 18th November, 1954. H. BEDALE, Town Clerk. 4535

4535 BOROUGH OF WIDNES. BOROUGH ARCHITECT'S DEPARTMENT. Applications are invited for the appointment of ARCHITECTURAL ASSISTANTS A.P.T. IV-V (GEOL-450)

Applications are invited for the super-ARCHITECTURAL ASSISTANTS A.P.T. IV-V (£890-£670). Commencing salary according to qualifications and experiese in accordance with the recommen-dations of paragraph 21(8)(XI) of the National Scheme of Conditions of Service. Candidates appointed on A.P.T. IV will be promoted to A.P.T. V on becoming registered architects. The appointment will be subject to the National Scheme of Conditions of Service. Scholter by the Council and to the Local Government Super-annuation Act, October, 1937, and to the success-ful candidate passing a medical examination. Housing accommodation may be provided. Applications stating full particulars of age. experience and qualifications, ct., together with names and addresses of two referees, to be sent to the Borough Architect, Brendan House, Widnes Road, Widnes, not later than 10 a.m. Monday 15th November, 1954. Canvassing directly or indirectly will disqualify. FRANK HOWARTH Toten Clerk.

Town Hall, Widnes. 18th October, 1954.

BOROUGH OF NEWCASTLE-UNDER-LYME. Applications are invited for the post of ARCHITECTURAL ASSISTANT Grade A.P.T. IV

(£580-£625). Application forms and conditions of appoint-ment may be obtained from the Borough Engineer, and Surveyor, Lancaster Building, High Street, Newcastle, Staffs, and should be returned to him not later than Monday, the 15th November, 1954.

C. J. MORTON, Town Clerk.

District Bank House, High Street, Newcastle, Staffs. 4466

COUNTY BOROUGH OF WEST HAM. BOROUGH ARCHITECT & PLANNING OFFICER'S DEPARTMENT. Applications are invited from men of enthusiasm and first class ability for the following established protect.

Applications are invited from men of chalasishin and first class ability for the following established posts:

 (a) PRINCIPAL ASSISTANT ARCHITECT/
 PLANNER: £1,100×50-£1,250 p.a.
 Must be Chartered Architect and should be A.M.T.P.I. or equivalent. Will be responsible for the co-ordination of the Housing Programme, the proparation of detailed layouts of residential areas at high densities and the supervision of large building contracts. Commencing salary within scale according to experience and qualifications.
 (b) CHIEF ASSISTANT PLANNING.
 Must be A.M.T.P.I., and additional qualifications.
 (c) CHIEF ASSISTANT ARCHITECT.
 Must be A.M.T.P.I., and additional qualifications.
 (d) CHIEF ASSISTANT ARCHITECT.
 Must be A.R.I.C.S. an advantage. Will be responsible for Planning Administration generally.
 (d) CHIEF ASSISTANT ARCHITECT.
 Most be A.R.I.B.A. Will be responsible for the Education programme. Public Buildings, and some Housing schemes. Experience in the supervision of large contracts necessary.
 The salary for posts (b) and (c) will be APT Grade X-2920-20,500 plus London Weighting.
 May be revised with effect from 1.1.55 to Amended Grade VII-=2000-21,000 plus London Weighting.

Amended Grade VII-2900-21,100 plus London Weighting. Application forms, returnable by 16th November, 1954, from Thomas E. North, O.B.E., F.B.I.B.A., Dist.T.P., Borough Architect and Planning Officer, 70. West Ham Lane, Stratford, E.I.S. 4497

Dist.T.P., Borough Architect and rising 4497 70. West Ham Lane, Stratford, E.15. 4497 ROROW-IN-FURNESS. BOROUGH ENGINEER & SURVEYOR'S DEPARTMENT. ASUSTANT ARCHITECT. ASUSTANT ARCHITECT. ASUSTANT ARCHITECT. To the successful candidate. Ti is possible that the Council will allocate a Corporation house for the post, subject to the merits of the case being satisfactory to the Inter-riewing Committee. Turther details and forms of application may be obtained from the Borough Engineer & Sur-veyor, Town Hall, Barrow-in-Furness, to whom applications must be returned not later than Monday, 15th November, 1954. Town Hall, Barrow-in-Furness. Market Market

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VII (2135-2020), HOSENEL ASSISTANT, Grade (b) ARCHITECTURAL ASSISTANT, Grade A.P.T. III or IV (£550-£595 or £580-£625), dependent upon experience. N.J.C. Conditions of Service. Applications, naming two referees, to Borough Surveyor, Town Hall, West Bromwich, by 8th November, 1954. 4473

BOROUGH OF OLDBURY. BOROUGH SURVEYOR'S DEPARTMENT-ARCHITECTS' SECTION. Applications are invited for the following appointments in the Architects' Section of the Borough Surveyor's Department: (a) 1 CHIEF QUANTITY SURVEYOR-Grade VIII:

appointments in the Architecte Section of the Borough Surveyor's Department:
(a) 1 CHIEF QUANTITY SURVEYOR—Grade VII;
(b) 1 ASSISTANT ARCHITECT—Grade VI;
(c) 2 ASSISTANT ARCHITECTS—Grade VI;
(d) 1 ASSISTANT QUANTITY SURVEYOR—Grade V;
(d) 1 ASSISTANT QUANTITY SURVEYOR—Grade V;
(e) 1 TECHNICAL ASSISTANT—Grade IV;
(f) 1 ACHITECTURAL ASSISTANT
(f) 1 ACHITECTURAL ASSISTANT ACHITECTURAL ASSISTANT
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tion. Applications, giving particulars of age, qualifi-cations and experience and the names of two referees should be delivered to the undersigned not later than Monday, 22nd November, 1954. Consideration will be given to married appli-cants with regard to housing accommodation. KENNETH PEARCE, Town Clerk. Municipal Buildings, Oldbury. 5th November, 1954. 4543

ISLE OF ELY COUNTY COUNCIL. COUNTY ABCHITECT'S DEPARTMENT. Applications are invited for the undermentioned appointments on the Staff of the County Archi-tect.

(a) PRINCIPAL ASSISTANT ENGINEER,
(a) PRINCIPAL ASSISTANT ENGINEER,
(b) ASSISTANT ENGINEER (HEATING),
A.P.T. IV, £580-£625 p.a.;
(c) SECOND ASSISTANT QUANTITY SUE-VEYOR, A.P.T. IV/V, £580-£670 p.a.;
(d) Three JUNIOR ARCHITECTURAL ASSIS-TANTS. Misc. 1/11/11, £320-£460 p.a.
All posts are permanent, subject to the National Scheme of Conditions of Service, the Local Govern-ment Supersanuation Act and to a medical examination.
Intending applicants are to apply for forms.

examination. Intending applicants are to apply for forms, stating for which post they wish to apply, to the County Architect, County Hall, March, to whom they must be returned not later than Tuesday, 30th November, 1954. R. F. G. THURLOW, Clerk of the County Council. 4544

4544 PERTH AND KINROSS JOINT COUNTY COUNCIL require a JUNIOR ARCHITECTURAL ASSISTANT for County Architect's Department. Salary 2490-2535. Applicants should have reached R.I.B.A. Intermediate standard or equivalent. Particulars and form of application from County Clerk, County Offices, York Place, Perth. Applica-tions to be lodged by 20th November, 1954. 4546 4546

COUNTY BOROUGH OF SOUTHPORT. An ARCHITECTURAL ASSISTANT is required in the Borough Architect and Town Planning. Officer's Department, salary A.P.T. Grade III (c550-c595 per anoun). Applicants must have passed the Intermediate Examination of the B.I.B.A.

 COUNTY BOROUGH OF SWANSEA.

 COUNTY BOROUGH OF SWANSEA.

 Applications are invited for the Established post of CHIEF ASSIGNATION ARCHITECT (General).

 A.T.

 Applications are invited for the Established post of CHIEF ASSIGNATION ARCHITECT (General).

 Argentiation and the Associates of the Royal matrix of British Architects and by their previous experience must be capable of organising and the subject to the Local Govern-matrix of the Boundary of the Associates of the Boundary of Associates and the successful applicant will be required to pass a media examination.

 Term of application may be obtained from the Morough Architect, Mr. H. T. Wykes, F.R.I.B.A., Suddhall, Swansea, and is to be returned to him, accompanied by three recent testimonials, not accompanied by three recent testimonials, may are the the Associate the and Friday. 19th November. 1954.

 Marchitect, Mr. H. T. Wykes, T.R.I.B.A., Bran Kidhall, Swansea.
 The MOREN.

 Marchitect, Mr. H. T. Wykes, D. B.L.B.A., Bran Kidhall, Swansea.
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 Marchitect, Mr. H. T. Wykes, T.B.C.M. The Marchitect and Friday.
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Guildhall, Swansea. 25th October, 1954. 4536

2010 October, 1909. COUNTY BOROUGH OF GREAT YARMOUTH. EDUCATION COMMITTEE. Applications are invited for the following appointment on the permanent staff in the Depart-ment of the Schools' Architect, Mr. F. Jackson, A.R.I.B.A. JUNIOR ASSISTANT ARCHITECT-A.P.T. Grade III (#550 × £15 × £595). Candidates should have had good architectural training and general experience and be capable of preparing detail and working drawings

Grade III (2550 × £15 × £595). Candidates should have had good architectural training and general experience and be capable of preparing detail and working drawings. Previous local authority experience is not essen-tial. Appointment will be terminable by one month's notice on either side, and is subject to the provisions of the Local Government Superannua-tion Act, 1937. Canvassing will be deemed a disqualification and candidates must disclose any relationship to any member of or holder of any senior office under the Council. Candidates who fail to do so will be disqualified or, if appointed, liable to dismissal without notice. Applications, stating age, qualifications, experi-ence and giving details of past and present appointments, together with copies of two testi-monials, must be delivered to the undersigned not later than the 17th November, 1954. Chief Education Officer. Education Office, 22, Euston Road, Great Yarmouth. Applicatione Country COUNCIL require TEM-poon COUNTY COUNCIL require TEM-

LONDON COUNTY COUNCIL require TEM PORARY TECHNICAL ASSISTANT (Quantities) for the preparation of bills of quantities and esti-mates and measurement of final accounts for new lay-outs, maintenance works and buildings in variation. parks

parks. Salaries up to £688 a year according to experi-ence and qualifications. Application forms from The Chief Officer, Parks Department, Spring Gardens, S.W.1 (1401). 4651

The other other, synthesis bepartment, spring Gardens, S.W.1 (1401). 4551 COUNTY OF ESSEX. 11F00E COMMUNICATION. The Essex County Council invite applications for an ASSISTANT ARCHITECT to work in the office of the Borough Engineer, to deal with work for the Committee of Education. Applicants should be Registered Architecta, and should have had experience in the planning, designing, construction and supervision of school buildings. The scale of salary will be in accordance with the National Joint Council, A.P.T. Division, present Grade V, £620 × £15 × £15 × £20 to a maximum of £570, plus the appropriate London Area allowance. There will also be paid such travelling and subsistence allowances as may from time to time be determined by the Council. Application should be made on a form to be obtained from and returned to the Borough Education Officer, Education Offices, Town Hall, Hord, togekher with copies of not more than three recent testimonials, within fourteen days of the appearance of this advertisement. 4550

appearance of this advertisement. 4530 of the COUNTY OF ESSEX. ILFORD COMMITTEE FOR EDUCATION. The Essex County Council invite applications for the post of ARCHITECTURAL ASSISTANT in the offices of the Borough Engineer of Ifford. Candidates should have passed the R.I.B.A. Infer-mediate Examination, or its equivalent, at one of the recognised Schools of Architecture and have worked in an architectural office for a period of not less than two years. The scale of salary will be in accordance with the National Joint Conneil, A.P.T. Division, present Grade IV, £530 × £15-£625, plus the appropriate London Area allowance. Application should be made on a form to be obtained from, and returned to, the Borough Education Officer, Education Offices, Town Hall, Ilford, together with copies of not more than three recent testimonials, within fourteen days of the appearance of this advertisement. 4549 COUNTY OF LINCOLM-PARTS OF

 Ine appearance of this advertusement.
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 COUNTY OF LINCOLM-PARTS OF KESTEVEN.
 COUNTY ARCHITECT'S DEPARTMENT.

 ABCHITECTURAL ASSISTANT required.
 ABCHITECTURAL ASSISTANT required.

 Present salary scale-A.P.T. II, £520 × £15-2565
 per annum. N.J.C. Conditions will apply.

 Application forms obtainable from the undersigned.
 Closing date 13th November, 1954.

 J. E. BLOW,
 J. E. BLOW,

 County Offices,
 Clerk of the County Council.

County Offices, Sleaford, Lincs. October, 1954. 4590

BOROUGH OF DOVER. SENIOR ABCHITECTURAL ASSISTANT. Applications are invited for this appointment in the Borough Engineer's Department. Salary: A.P.T. Grade V of the National Scales (£620/£670 Der annuel)

A.P.T. Grade V of the National Scales (2620) 5570 per annum). Applicants should hold a recognised architec-tural qualification, and have had practical experi-ence with a local authority on housing work. Applications, stating age, experience and quali-fications, together with the names and addresses of three referees, must be delivered to the Borough Engineer, Brock House, Dover, not later than the 19th November, 1954. The provision of housing accommodation is be-ing considered. JAMES A. JOHNSON, Town Clerk. New Bridge House, Dover. 26th October, 1954.

4549 COUNTY OF LEICESTER. (a) SENIOR ASSISTANT ARCHITECT (£735--2860) (£840-£900 from 1st January, 1955). (b) ASSISTANT ARCHITECTS (£620-£670) £625-£675 from 1st January, 1955). (c) ASSISTANT BUILDING SURVEYOR (£550 -£610). (96

(c) ASSISTANT BUILDING SURVEYOR (2000 -2610). Applicants must for (a) be Registered Archi-tects, have good experience in the design and construction of modern buildings; capable of carrying through projects from inception to com-pletion; and if necessary able to take charge of a group; for (b) be Registered Architects, experi-enced in the preparation of working drawings from sketches and capable of taking charge of smaller contracts; for (c) be capable of producing plans and specifications for minor alterations. Apply by 15th November on form obtainable from County Architect, 123, London Road, Leicester. Road, Leicester

Leicester. HERTFORDSHIRE COUNTY COUNCIL. COUNTY ARCHITECTS DEPARTMENT. Applications are invited for the appointment of ASSISTANT ARCHITECTS, Grade V (6262-6565, sub-ject to review). Previous local government experi-ence not essential. Applications, stating exactly which post is applied for, together with the names of three referees, to County Architect, County Hall, Hert-ford, Herts., not later than 15th November, 1954. 4538

4538

4538 METROPOLITAN BOROUGH OF LEWISHAM. Applications are invited from suitably qualified candidates for the post of ASSISTANT ARCHI-TECT (2). Salary within the range £500-£890 p.a. according to experience and qualifications. Further particulars and form of application from the Towa Clerk, Lewisham Town Hall, Catford, S.E.6. Closing date 20th November, 1954. 4534

454 CITY OF WAKEFIELD. THORNES HOUSE SCHOOL. CLERK OF WORKS. Applications are invited for the appointment of CLERK OF WORKS for the above project which is expected to last approximately 18 months. Applications stating experience in reinforced concrete and general building, with details of similar work on which applicant has been engaged to be sent to the undersigned with copies of testi-monials, names of two referees and personal parti-culars, not later than Friday, the 12th November, 1954.

culars, not later than Friday, the 12th November, 1954. Applicants should state salary required. Town Hall, Wakefiel. STAFFORDSHIRE COUNTY COUNCIL BDUCATION COMMITTEE. Applications are invited for the following appointments: ASSISTANT ARCHITECTS: Salary £620-£810 per sanum according to experience. Applicants must be Members of the R.I.B.A. JUNIOE ARCHITECTURAL ASSISTANTS: Salary £520-£625 per sanum according to qualif-cations and experience. Applicants should have passed the Intermediate R.I.B.A. examination. REGISTERED ARCHITECTURAL ASSIST-ANTS: Vacancies exist on the temporary Estab-lishment for Architectural Assistants, minimum salary required should be stated; sound experience necessary. JUN OR OLANTITY SUPPORE

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ECROUGH OF WORTHING. APPOINTMENT OF DRAUGHTSMAN. Applications are invited for appointment as prough Engineer's Department at a salary in scordance with the General Division grade of the National Scheme of Conditions of Service of Local Government Officers (i.e., salary according to age rising to \$470 at age 50 years). Tandidates should be good draughtsmen and training. The appointment is subject to the salary according

training. The appointment is subject to the Local Government Superannuation Acts, and to the suc-cessful applicant passing satisfactorily a medical examination.

cessrui applicant passing satisfactorily a medical examination. The appointment will be terminable by one month's notice on either side. Applications, endorsed "Draughtsman," stating age, particulars of training, experience and quali-fications, if any, and accompanied by copies of two recent testimonials, should be sent to the Borough Engineer, Town Hall, Worthing, so as to reach him not later than Friday, 26th November, 1954.

ERNEST G. TOWNSEND, Town Clerk.

Town Hall, Worthing. 27th October, 1954. 4572

(b) ARCHITECTURAL ASSISTANT-Grade VI.

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Shire Hall, Cambridge. 28th October, 1954. 4566

Agent October, 1954. Agent Oct

her, 1954. 4004 PADDINGTON BOROUGH COUNCIL require ASSISTANT ARCHITECT (c725-c840 p.s.) (subject to review on 1st January, 1955) preferably A.B.I.B.A. with experience in contem-porary design, the construction and supervision of general municipal works, particularly multi-storey flats, or should have had similar experience with architects in private practice. Commencing salary dependent upon qualifica-tions and experience of successful candidate. N.J.C. Conditions. One month's notice. Applications (quoting A.186) should state age, qualifications, experience, past and present spointment (with salary), and names and addresses of two releves, and should reach the undersigned by 15th November, 1954. W. H. BENTLEY, Town Hall,

4539

Town Hall, Paddington Green, W.2. 22nd October, 1954.

BRITISH ELECTRICITY AUTHORITY. EAST MIDLANDS DIVISION. Applications are invited for the following posi-tions within the Division:— TWO SENIOR DRAUGHTSMEN (CIVIL), CONSTRUCTION DEPARTMENT (Vacancy No. 167/54/AJ). Candidates should have experience in the pre-paration of detail drawings and in the design of one or more of the following subjects:— Reinforced concrete structures: Piled and slab foundations for heavy compo-nents;

Cable subways, Bridges and Culverts. Salary in accordance with Grade 5 (£567-£671) per annum) of Schedule D of the National Joint Board Agreement.

Salary in motion of the National Joint Board Agreement. Closing date for receipt of applications: 15th November, 1954. These appointments will be pensionable within the terms and provisions of the British Electricity Authority and Area Boards Superannuation Scheme. Applications should be submitted on the official form A.E.6/ACT which may be obtained from the Divisional Establishments Officer, British Electri-city Authority, P.O. Box 25, Barker Gate, Notting-ham, and should be returned to the undersigned by the date stated. Please que Vacancy Number. 22nd October, 1954. Divisional Controller. 4508

22nd October, 1954. Divisional Controller. 4508 GOLD COAST GOVERNMENT. XCANCIES FOR ARCHITECTS— PUBLIC WORKS DEPARTMENT. Applications are invited for vacancies in the post of Architects in the Public Works Department. Duties: The Architects will be required to carry out investigation for, plan, design and supervise the construction of new Government buildings arising in connection with the Government's development programme such as quarters, offices, hospitals, schools, halls, reading rooms, etc. They will also be responsible for the preparation of working drawings and specifications, and the administration of contracts. *Qualifications:* Candidates must be Associates of the Royal Institute of British Architects. Previous experience of Government or Local Authority work is desirable and of Hospital or Bank Build-ings an dynatage. *Terms of Service:* Some of these posts are "Development Posts" for implementation of support the range £1,630–22,020 per amum (con-solidated) according to age, qualifications and the range £1,630–22,020 per amum (con-solidated) according to age, qualifications and experience. A gratuity at the rate of £37.10s, for each completed three months of satisfactory service will be provided for the officer and his wife once and using the provided for the officer and his wife once manally be required to travel by air. Free air passages will also be provided for a maximum of the substandard (at present) partly furnished quarters are available at low rentals. Income tax to asstander are available at low rentals. Income tax to asstander are available at low rentals. The esponder math of service. Free medical and dental atten-tion provided for ficer and family. Reasonable quarters are available at low rentals. Income tax to according to salary (if no recent tropical and the substandard (at present) partly furnished quarters are available at low rentals. Income tax to each according to salary (if no recent tropical to according to salary (if no recent t

 £60-£30 according to salary (if no recent tropical experience).

 For candidates in Local Government Service, arrangements are possible for superannuation rights to be frozen.

 Intending candidates should apply to the Adviser on Recruitment, Gold Coast Office, Melbourne House, Aldwych, London, W.C.2, for a form of application.

CARSHALTON URBAN DISTRICT COUNCIL. ARCHITECTURAL ASSISTANT, to take up duties on 1st January, 1955. Must be qualified A.B.I.B.A., and have had considerable experience in design, construction and contract administra-tion. Salary within range £705 to £855 (new A.P.T. IV, including London "Weighting"). The Coun-cil cannot provide housing accommodation. Applications on forms obtainable from the under-signed must be returned with names of three referees not later than the 15th November, 1954. Canvassing will disqualify. *C.H. DUBRANT, Clerk of the Council.* Council Offices, The Grove, Carshalton. 4525

Council Offices, The Grove, BOROUGH OF REIGATE. SENIOR ARCHITECTURAL ASSISTANT re-quired. Salary scale on amended Grade III, 6675 p.a. from 1st January, 1955, with increments of £25 p.a. payable subject to satisfactory service on 1st April, 1955 and 1966. Applicants should have previous experience in design of buildings, estate development and conversion of existing properties into flats. Housing accom-modation will be provided, if necessary, for married man. Application Forms, obtainable from Borough Surveyor, Town Hall, Reigate, must be returned to him endorsed "Senior Archi-tectural Assistant" by 15th November, 1954. HEBER DAVIES, Town Cierk. 4531

BUCKS COUNTY COUNCIL. Applications are invited for the following appointments in the County Architect's Depart-enter and the county Architect's Depart-(a) SENIOR QUANTITY SURVEYOR (A.P.T. Grade VII £900-£1,000 p.a.); (b) ASSISTANT QUANTITY SURVEYOR (A.P.T. Grade IV £675-£825 p.a.); (c) JUNIOR ASSISTANT QUANTITY SUR-YEVOR (A.P.T. Grade II £560-£640 p.a.). The appointments are superannuable and subject to medical examination. The weekly allowance of 25s. 0d. and return fare forme once every two months may be paid for six months to newly-appointed married officers of the Council unable to find accommodation. Applications on forms giving further particulars of the appointments are obtainable from F. A. Pooley, County Architect, County Offices, Ayles-burg, and returnable by 2nd December, 1954.

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

The angagement 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 hs or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

R EQUIRED for Architects' office, Central London area, young qualified ASSISTANTS interested in design and construction. Write, stat-ing experience and salary required. Bex 3355.

JUNIOR and SENIOR ABCHITECTURAL ASSISTANTS and DRAUGHTEMEN for large and varied practice in Home Counties. Salary required and details of experience to Box

Figs and varied practice in Hamme Counties.
 Belary required and details of experience to Box 12.
 BUILDING SURVEYING ASSISTANT (about years practical experience required by City firms of Chartered Surveyors & Architects. 3926
 CARABLE ARCHITECTURAL ASSISTANT re-don office experience essential. Reply with fall particulars and salary required to Box 4480.
 ABCHITECT'S ASSISTANT (intermediate for work on modern industrial buildings. Wide essential buildings. Wide essential buildings. Wide essential buildings. Wide essential to box 4480.
 ABCHITECT'S ASSISTANT (intermediate for work on modern industrial buildings. Wide essential buildings. Wide essential to Box 4480.
 QUALTIERD ARCHITECTURAL ASSISTANT required for Bristol Office with extensive practice. Application to Box 4497.
 QUALTIERD ARCHITECTURAL ASSISTANT required for Bristol Office with extensive practice. Application to Box 4497.
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 TAFF Architect, Maidstone, Kent, requires tand caponsibility. Salary 2000 – 8000 per annum.

and responsibility. Salary 2700-2800 per annum. Box 4416. TAFF Architect, Maidstone, Kent, requires two ARCHITECTURAL ASSISTANTS. Preferably members R.L.B.A. 25-45 years age Pension scheme. Applicants state age, experience and salary required. Box 4413. **E DRJGHTSMAN** required, capable of pre-paring working drawings from sketch designs. Write in first instance, stating age, qualifications and salary required to Woolaway Constructions Ltd., 11, Canon Street, Taunton, Somerset. 4454 **A RCHITECTURAL ASSISTANT** required for reduction for Schools Development and actual building. Should have passed R.I.B.A. Intermediate. Considerable scope for right man. Write Box No. 320. W.B.C., 39, Cheapside, London, B.C.2. **A RCHITECTURAL ASSISTANTS** (Male of

Active Box No. 529, W.B.G., 59, Oncapsuce, London, EC.2. 4469 A RCHITECTUBAL ASSISTANTS (Male or preparing working drawings and details from architects sketches. Good working conditions, canteen and sports facilities. Apply in writing to Personnel Officer, Albert E. Reed & Co., Ltd., Aylesford Paper Mill, Larkfield, Nr. Maidstone. Kent.

EFFICIENT SECRETARY required by Archi-tect practising N.W.3 district. No Saturdays. Box 4456.

Box 4456. JUNIOR ASSISTANTS required for small con-temporary office. Salary by arrangement. C. H. Elsom, A.R.I.B.A., 44, Catherine Place, S.W.I. Victoria 4304. ARCHTECTS required with initiative and imagination for research and development of prefabricated structures destined for world markets. Apply A. M. Gear. A.B.I.B.A., at 12. Manchester Square, London, W.1.

CO-OPERATIVE WHOLESALE SOCIETY LIMITED. ARCHITECT'S DEPARTMENT, MANCHESTER. ARCHITECT'S DEPARTMENT, MANCHESTER. ARCHITECT'S DEPARTMENT, MANCHESTER. A qualified persons for positions as ASSIST-AT ARCHITECTS and SENIOR ASSISTANT ARCHITECTS and SENIOR ASSISTANT ARCHITECTS and industrial projects. Candidates for the senior positions must have had considerance experience in design, construc-tion and contract administration while those for the position of Assistant Architects should be capable of preparing working drawings and details from preliminary sketches and have sound praci-cal experience. The appointments are permanent and pension-able with prospects of promotion. Applications stating age, experience, qualifica-tions and salary required to be addressed to G. 8. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society Ltd., 1, Balloon Street, Man-chester.

chester. 4485 ACHITECTURAL ASSISTANT required (Junior or Senior), male or female, for basy country practice. Interesting work, including housing schemes, schools and industrial work. Pleasant area. Write, stating particulars and salary required, to T. R. Bateman, A.R.I.B.A., 21. Vine Street, Evesham. VACANCY occurs in a small Knightsbridge office for an ASSISTANT of Inter. or Final standard, good prospects for right man, write stating age, experience. Salary by arrangement. BOX 4475.

Stating age, experience. Salary by arrangement. Box 4475.
 A RCHITECTURAL ASSISTANTS wanted of all grades for London, Norwich and Great Yarmouth offices of private Architect. Reply in writing, giving full particulars and salary re-quired, to Box 4374.
 A SSISTANT of Inter. or Final standard for general practice in small Midland town. Yariety of work and scope for initiative. Salary appropriate to ability. Box 4377.
 S TEUCTURAL ENGINEERING ASSISTANT required, the NoINEERING ASSISTANT required in structural section of busy Archi-tect's office. First-class experience in preparing and developing schemes in struct. steel, B/C, foundations, and wall construction. Permanent Data Age 25-30. Box 4379.
 R EQUIRED, in London and at Worcester, ex-tended and and JUNIOR ARCHI-TECTURAL ASSISTANTS. There is a variety of work in hand, including Industrial, Schools and Churches. Apply in writing to Liewellyn Smith & Waters, 03, Old Brompton Road, S.W.. 4363
 J UNIOR ASSISTANT of Intermediato E.I.B.A. standard-one requiring experience con-gineted. State age and salary required. Apply:

JUNIOR ASSISTANT of Intermediate R. I.B. A. standard-one requiring experience con-sidered. State age and salary required. Apply: Chief Architect. Friary Brewery, Guildford. 4443 THREE ARCHITECTURAL ASSISTANTS are contracts. All standards up to Intermediate or equivalent. Good salaries. Travelling expenses paid to applicants selected for interview. Pension Scheme available. W. S. Hattrell & Partners. 1. Gueen's Road, Coventry. ASSISTANT for small West End office. Must be clean, neat draughte-industrial and commercial, opportunity for advancement for keen young man. Salary to start £500 p.a. Write giving full particulars. BACHITECTURAL ASSISTANTS and PULLE

A RCHITECTURAL ASSISTANTS and BUILD-ING DRAUGHTSMEN required. Replices in confidence, giving age and salary, to W. L. Jones, Architect, Great Missenden, Bucks. 4436

A SSISTANT required, small office, Kensington Inter. standard. Salary according to ability and experience. 5-day week 'Phone Hunt WES 4841. 4322

WES 4641. 4320 Anglesey office. Applicants must preferably be school trained with about one year's office experience. The successful applicant will be required to work initially is North Wales and later in the Manchester district. Reply giving details of age, experience and qualifications to Box 4444.

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QUALIFIED and experienced ASSISTANT required for extensive general practice. Apply stating salary required to:--R. Potter, F.K.I.B.A., and R. Hare, B.A. (Arch.), A.B.I.B.A., De Vaux House, Salisbury 4563 A RCHITECTUBAL DRAUGHTSMAN required for making brochure drawings of new forms

A for making brochure drawings of new forms of building materials. Previous experience of this type of work would be an advantage but is not essential. Please write to Box 4562.

Type of work would be an advantage of work would be an advantage of the essential. Please write to Box 4562.
 A for busy office in Charing Cross Area. Salary according to ability. Ring LIV. 2793. Box 4560.
 A BISTANT ARCHITECTS required. Inter. R.I.B.A. or equivalent qualifications; salaries ranging to 2745 per annum. Practical experience of work on commercial and industrial buildings essential. Applications stating age, experience, qualifications and salary required to :-W. J. Reed, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society Ltd., 99, Leman Street, London, E.I.

JUNIOR ARCHITECTURAL DRAUGHTSMAN grequired by London firm of Architects and Surveyors. Good prospects. Study time allowed for man taking professional examinations. Apply stating age and experience. Box 4558.

stating age and experience. Box 4558. A BCHITECTURAL ASSISTANT required for operating in Nigeria. Applicants should have Intermediate or Final R.I.B.A., Drawing Office experience and have a sound knowledge of Build-ing Construction. Tour of 18 months with probable opportunity of renewal followed by three months paid leave. No married accommodation available. Age about 23-25. Salary in region of 41,169 p.a. Apply in writing giving full details of experience to Box 4547. Apply in wr to Box 4547.

A BCHTTECTURAL ASSISTANT, experienced A BCHTTECTURAL ASSISTANT, experienced busy West Riding office. Good salary plus bonus to suitable man. Write stating age, full details of experience, date when available and salary required. Box 4542.

Tequired. Box 4942. UNIOR ABCHITECTURAL ASSISTANT re-quired. Salary 2350/2400 p.a. or according to experience. Apply in writing, giving full particu-lars to: Frederick Gibberd. 8, Percy Street, W.1. 4540

RCHITECTURAL ASSISTANT, Intermediate Standard required for country practice. Write stating experience and salary required to C. G. Clark, A.R.I.B.A., Wellington Honse, Heckington, near Sleaford, Lincs. 4527

C. CLEFE, A.K.I.B.A., Wellington House, Heckington, near Sleaford, Lincs. 427
 TRACER (Woman) required by the Crown Agents for their London Drawing Office. Commencing pay between 116a. 1d. and 134a. 10d. a week according to age, rising by annual incre-ments of 5s. a week to 140e. 2d. and 6s. a week to 147a. for 454-hour week. Hours 9 a.m. -5.30 p.m. (12 noon Saturdays). Paid holidays at rate of 18 days a yoar. Refreshment Club on premises—low charges for lunch and tea. Can-didates must be over 21 years of age or orer and proference will be given to experience to the Estab-lishment Officer, Crown Agents, 4, Millbank, London, 8.W.1, quoting 0/225. 4200
 QUALIFIED SENIOR ASSISTANT required to carry through work from sketch plan stage to completion without supervision. Salary by arrangement. Box 4515.
 QUALIFIED ARCHITECT'S ASSISTANT by West End Architer's Office, able to carry through work schereinence to the stage to completion without supervision. Salary by arrangement. Box 4515.
 QUALIFIED ARCHITECT'S ASSISTANT by West End Architer's Office, able by arrangement. Salary by arrangement. Box 4519.

COMPETENT ASSISTANT required. Salary £550-£750 according to experience. Excellent

CUMPETENT ASSISTANT required. Salary 2650-2750 according to experience. Excellent flat available. Apply to Taylor, Knight & Co., Brooksmoor House, Grove Road, Rotherham. 4517 20 B 3 Intermediate ARCHITECTURAL ASSISTANTS required. Interesting work in progress. Write giving particulars of age. experience and salary required to Scherrer and Hicks. 27, Harcourt House, 19, Cavendish Square, W.1. 4516

Actional Section 1998
 Act

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A RCHITECTURAL ASSISTANT required in Plymouth, R.I.B.A. Intermediate Standard. Apply by leiter giving full particulars and salary required to P. W. T. Elford, Sherwell House, Armada Street, Plymouth. 4511

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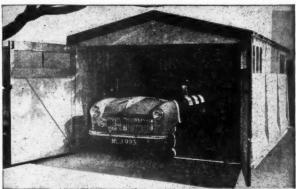






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