THE ARCHITECTS' JOURNAL

standard

contents

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

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Details of Planning, Construction,
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Building Costs Analysed
Architectural Appointments
Wanted and Vacant
No. 3452] [Vol. 133
THE ARCHITECTURAL PRESS
9, 11 and 13, Queen Anne's Gate, Westminster,
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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their addresses and telephone numbers. The glos-ary is published in two parts—A to Ii one week, Il to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

Architectural Association 24/6 Redford Square W.C.1 Museum 0074

AA AAI	Architectural Association, 34/6, Bedford Square, W.C.1. Association of Art Institutions. Secy.: J. H. Holden,	Museum 0974
ABS ABT ACGB ADA ARCUK BAE BASA BC BCC BCCF BCIFA BDA BE BBAB BE BBAB BE BBAB BE BBAB BE BBAB BE BBABBAB BE BBABBBAB	College of Art, Cavendish Street, Architects' Benevolent Society. 66, Portland Place, W.1. Association of Building Technicians. 156, Waterloo Road, S.E.1. V. Arts Council of Great Britain. 4, St. James's Square, S.W.1. Aluminium Development Association. 33, Grosvenor Street, W.1. Aluminium Development Association. 36, Portland Place, W.1. Board of Architectural Education. 66, Portland Place, W.1. British Architectural Education. 66, Portland Place, W.1. British Architectural Students Association. Building Centre, 26 Store Building Centre, 26, Store Street, Tottenham Court Road, W.C.1. British Colour Council. 13, Portland Square, W.1. British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W. British Cast Iron Research Association. Alvechurch, Birmingham British Door Association. 10, The Boltons, S.W.10. Building Exhibition. 11, Manchester Square, W.1. British Electrical Development Association, 2, Savoy Hill, W.C.2. T British Ironfounders' Association. 145, Vincent Street, Glasgow, C.	Langham 5533 Vaterloo 5427/8 Whitehall 9737 Mayfair 7501/8 Langham 5861 Langham 5721 e Street, W.C.1. Museum 5400 Welbeck 4185 5. Ealing 9621 Redditch 716 Fremantle 8494 Hunter 1951 emple Bar 9434
BID BINC BOT BRS BSA BSI CABAS	Building Industries Distributors, 52, High Holborn, W.C.1. Building Industries National Council. 11, Weymouth Street, W.1. Board of Trade. Whitehall Gardens, Horseguards Avenue, S.W.1. Building Research Station. Bucknalls Lane, Watford. Building Societies Association. 14, Park Street, W.1. British Standards Institution. British Standards House, 2, Park St., W. City and Borough Architects Society. C/o S. A. G. Cook, A.R.I.B. Architect and Director of Housing, Town Hall, High Holborn, W.	A., Borough
CAS CCA CDA COID CPRE CUC DIA EJMA	Council of Industrial Design. 28, Haymarket, S.W.1. Council for the Preservation of Rural England, 4, Hobart Place, S.W. Coal Utilization Council. 3, Upper Belgrave Street, S.W.1. Design and Industries Association. 13, Suffolk Street, S.W.1. English Joinery Manufacturers' Association (Incorporated). Sackvi	Dorchester. Belgravia 6661 Grosvenor 8811 Trafalgar 8000 1. Sloane 4280 Sloane 9116 Whitehall 0540 lle House,
EPNS FAS FASS	40, Piccadilly, W.J. English Place-Name Society. 7, Selwyn Gardens, Cambridge. Faculty of Architects and Surveyors. 68, Gloucester Place, W.J. Federation of Associations of Specialists and Sub-Contractors.	Welbeck 9966
FBBDO	Fibre Building Board Development Organization Ltd. (Fidor).	
FBI FC FCMI FDMA FLD FMB FPC FRHB	Stafford House, Norfolk Street, W.C.2. Covered Federation of British Industries. 21, Tothill Street, S.W.1. Forestry Commission. 25, Savile Row, W.1. Federation of Coated Macadam Industries. 37, Chester Square, S.W. Flush Door Manufacturers Association Ltd. Trowell, Nottingham Friends of the Lake District. Pennington House, nr. Ulverston, Lance Federation of Master Builders. 33, John Street, W.C.1. Tel.: Chance Federation of Painting Contractors. St. Stephen's House, S.W.1. Federation of Registered House Builders. 82, New Cavendish Street	Regent 0221 1.1. Sloane 1002 n. Ilkeston 623 s. Ulverston 201 ery 7583 (6 lines) Whitehall 3902 et, W.1.
GPDA	Gypsum Plasterboard Development Association. 11, Ironmonger L	Langham 4341 ane, E.C.2.
GC GG HC IAAS	Gas Council. 1, Grosvenor Place, S.W.1. Georgian Group. 2, Chester Street, S.W.1. Housing Centre. 13, Suffolk Street, S.W.1. Incorporated Association of Architects and Surveyors.	Monarch 8888 Belgravia 4321 Belgravia 3081 Whitehall 2881
ICA ICE IEE	29, Belgrave Square, S.W.1. Institute of Contemporary Arts. 17-18, Dover Street, W.1. Institution of Civil Engineers. 1, Great George Street, S.W.1. Institution of Electrical Engineers. Savoy Place, Victoria Embankr	
IES IGE IHVE	Illuminating Engineering Society. 32, Victoria Street, S.W.1. Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1. Institution of Heating and Ventilating Engineers. 49, Cadogan Squ	
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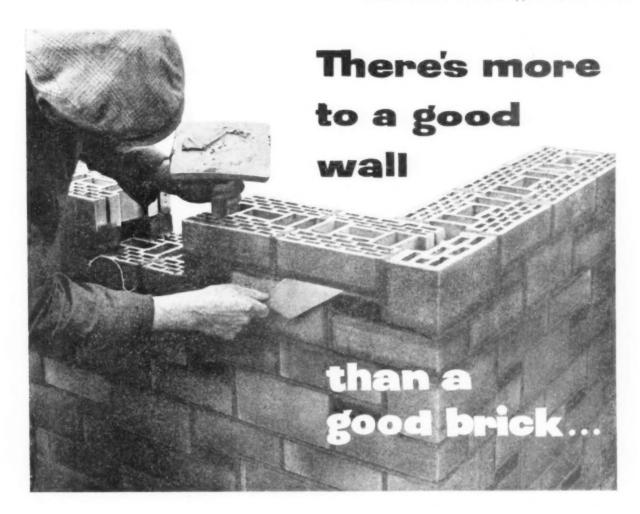
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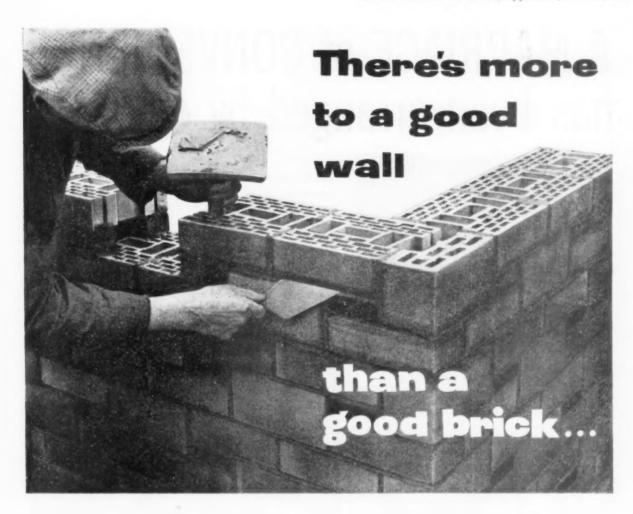
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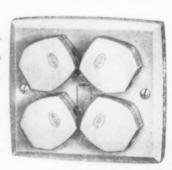
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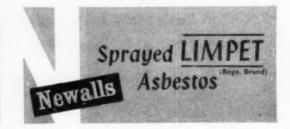
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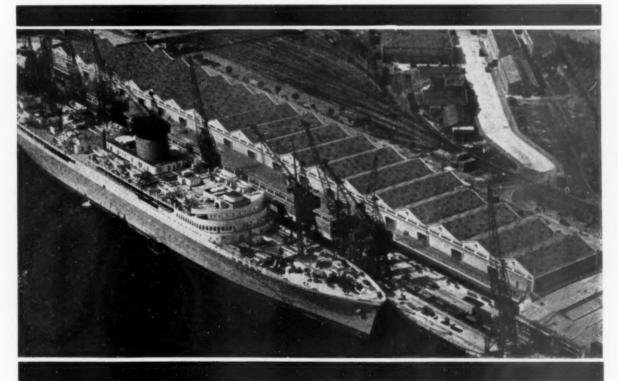
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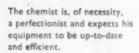
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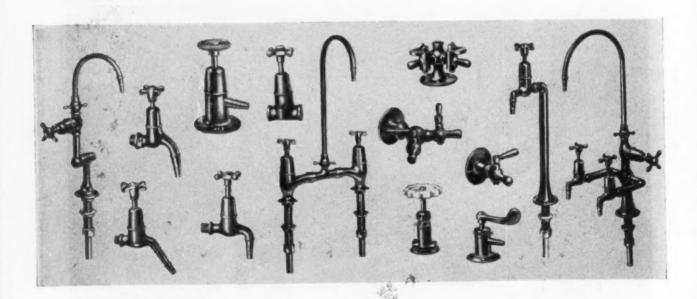
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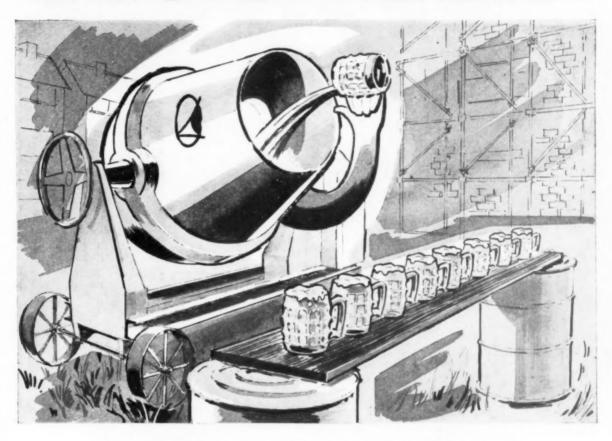
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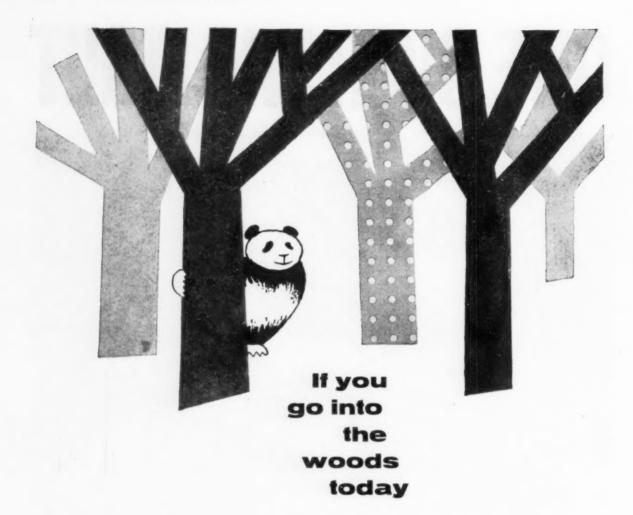


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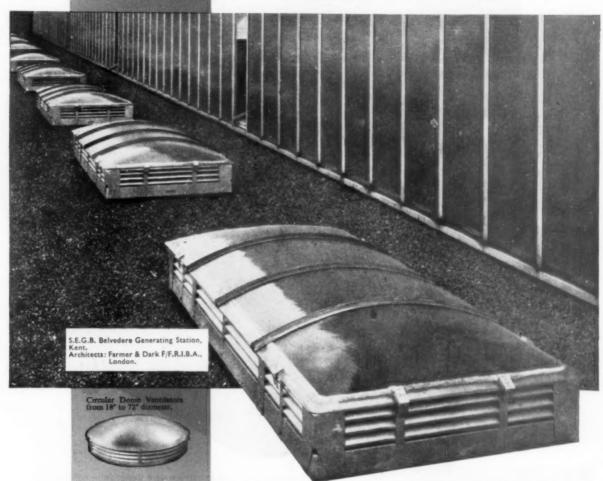
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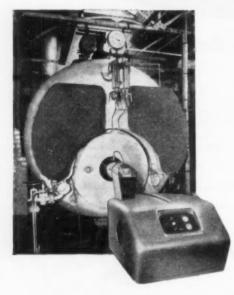


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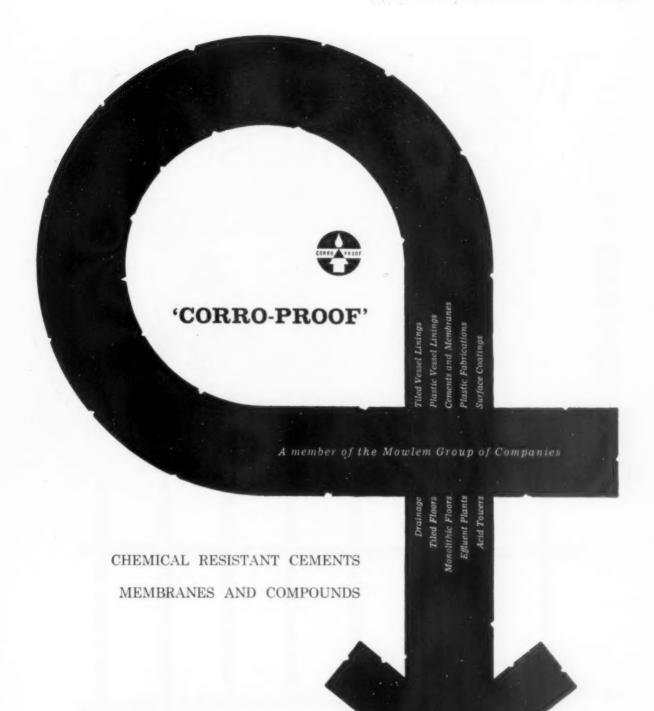
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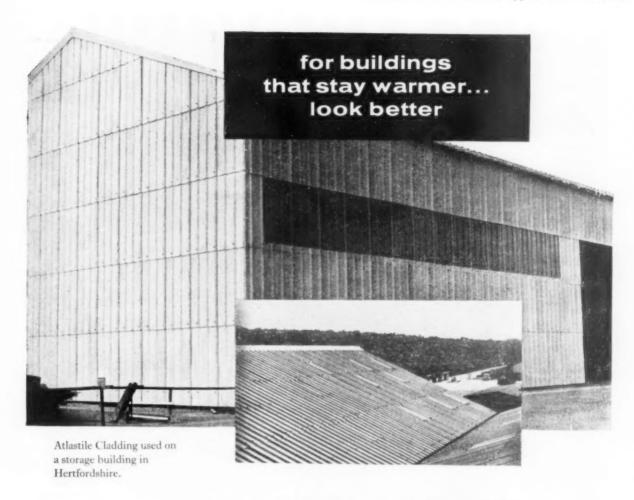


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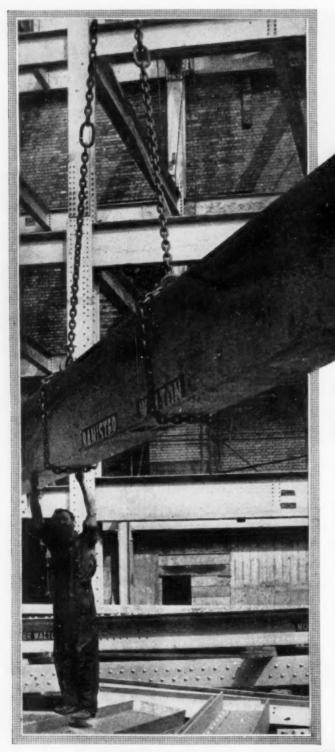
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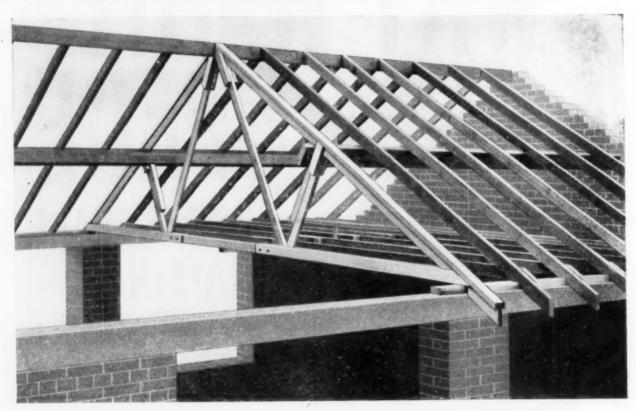
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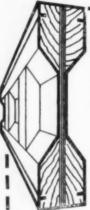
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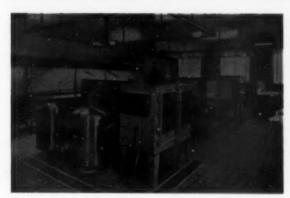
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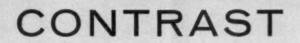


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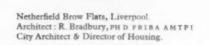
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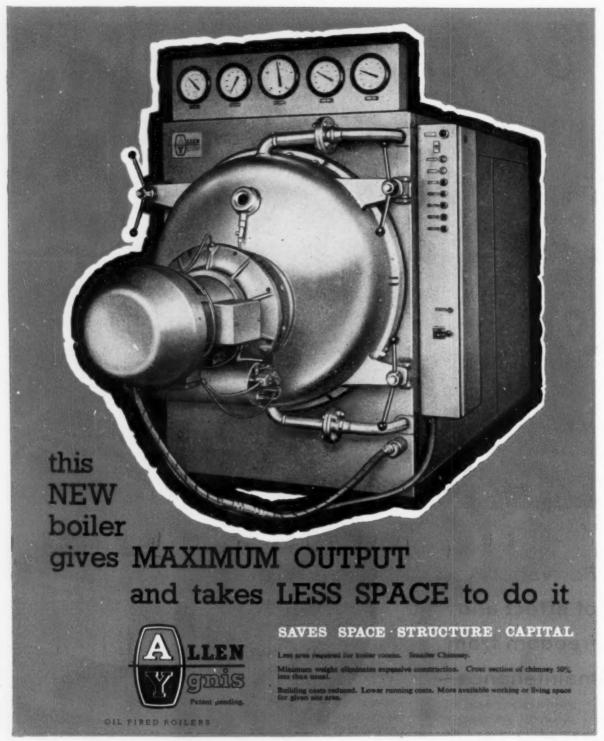


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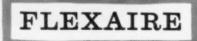
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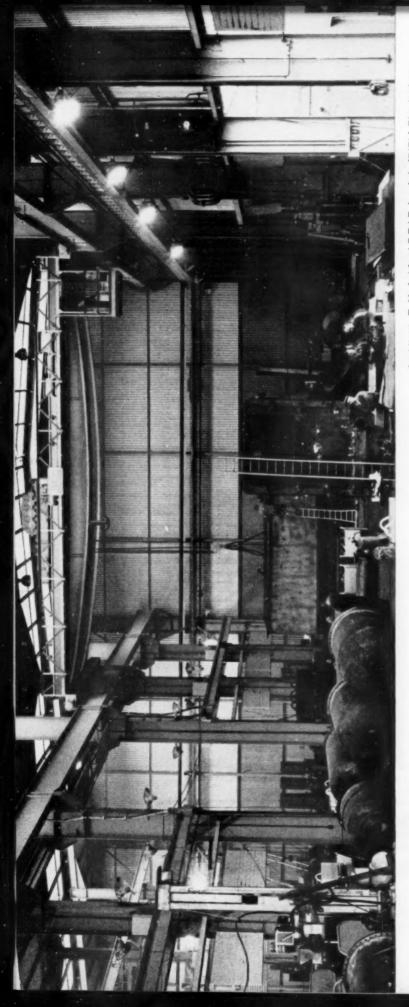
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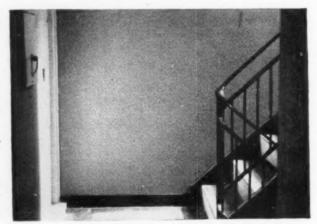
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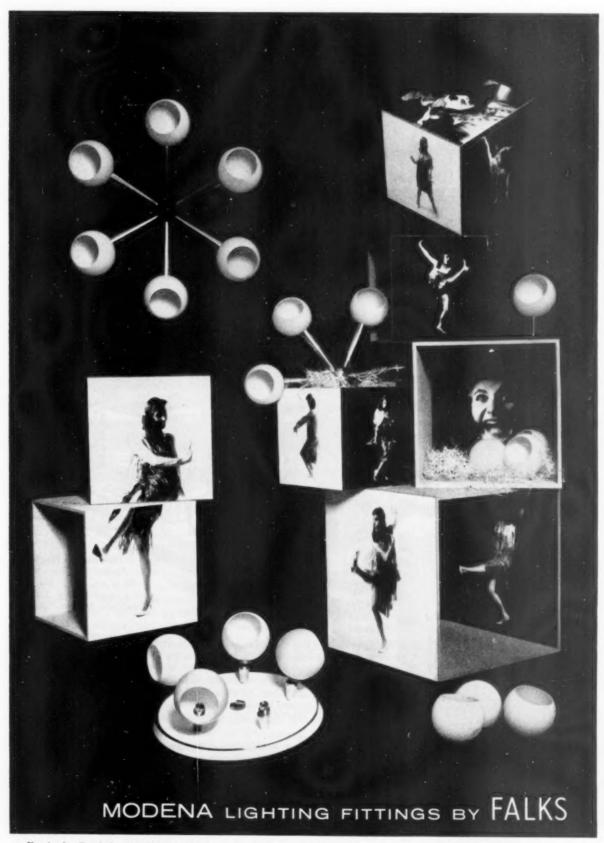
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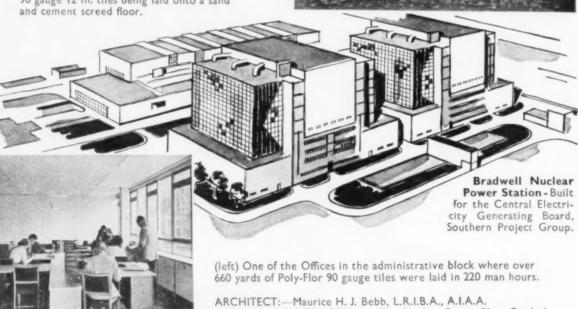
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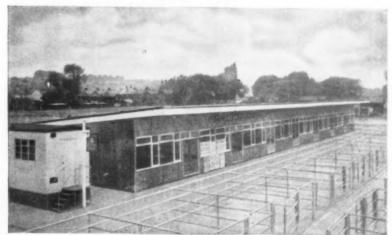
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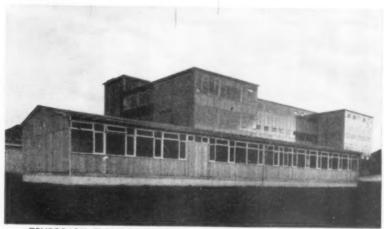


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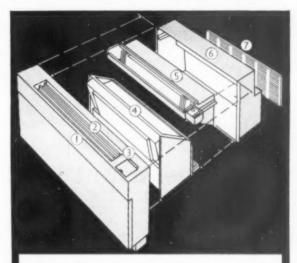
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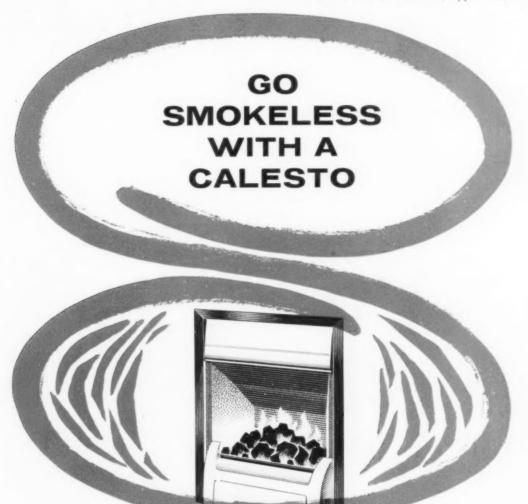
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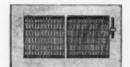


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> SHOP: W. H. Smith, Ealing. PROBLEM: To give the floor of this large shop a feeling of life and movement W. H. Smith, Ealing, PRUBLEM: To give the more this large shop a teeling of life and mov.
>
> ANSWER: Introduce red and black arrowheads, formed from Nairn line tiles, to a floor

> COMMENT: Keeping it simple is half the battle. ARCHITECT: H. F. BAILEY, RIBA FLOORING CONTRACTOR: THE LINO TILE CO

THE ARCHITECTS' JOURNAL (Supplement) June 15, 196

Four shops, four problems, four solutions with Nairn linoleum

shop flooring

WAITS-WHERE FOREGROUND

SHOP: Waits, New Malden, Surrey, Wallpaper showroom. PROBLEM: Floor must be attractive yet calm and quiet, act as foil

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ANSWER: Lavender grey line tiles by Nairn give unobtrusive

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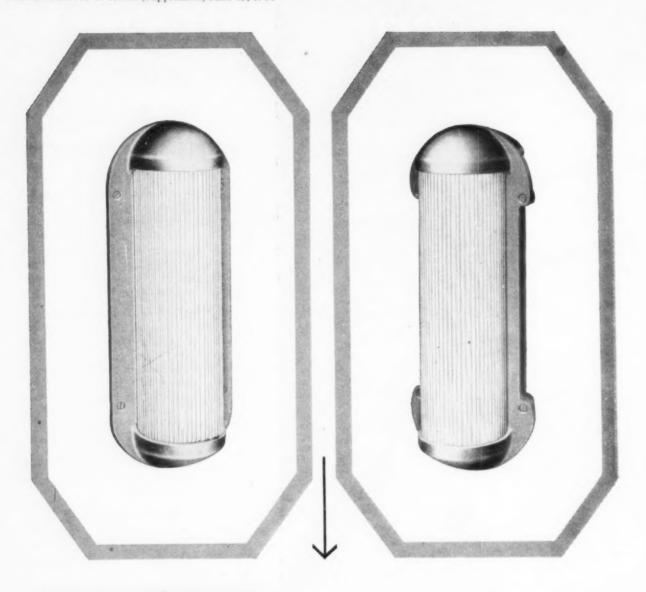
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THE ARCHITECTS' JOURNAL (Supplement) June 15, 1961



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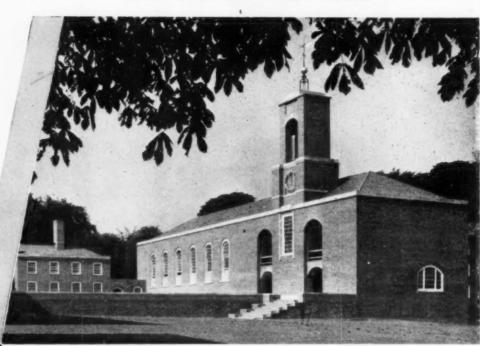
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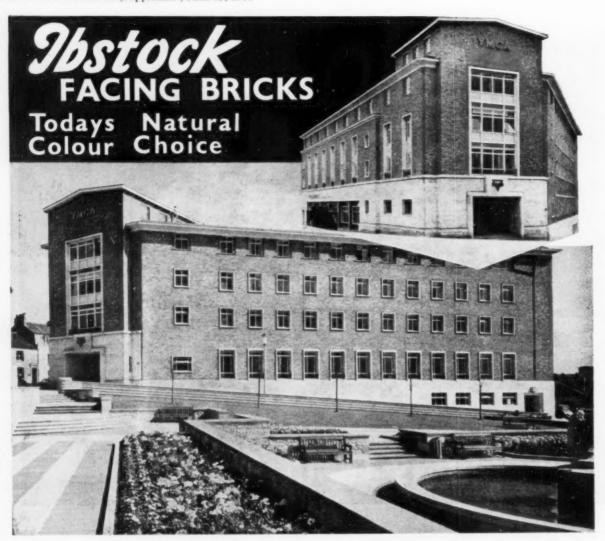
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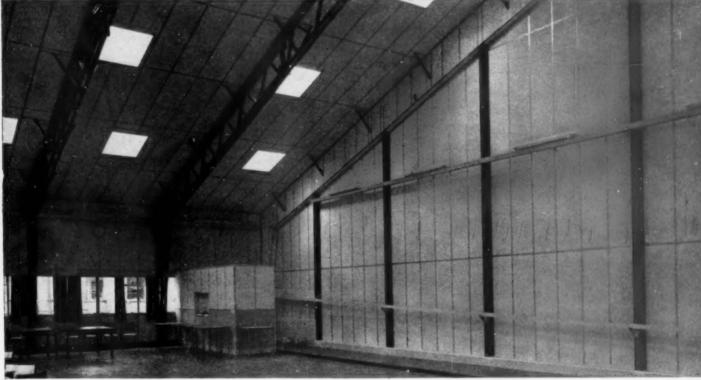
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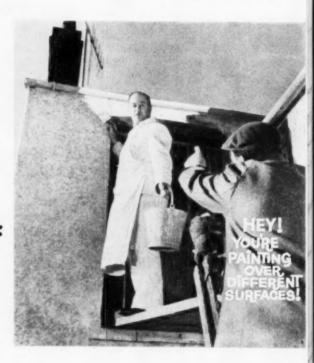
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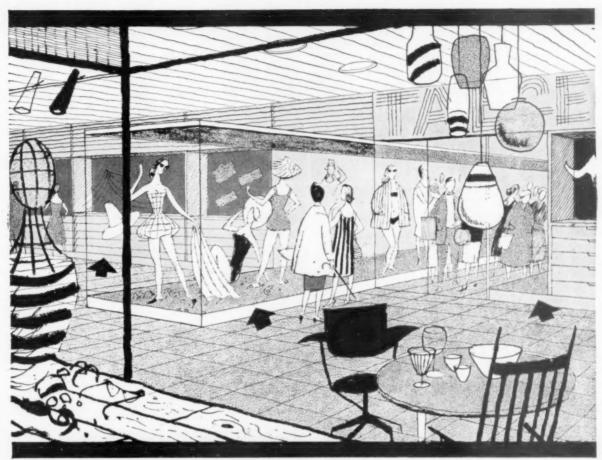
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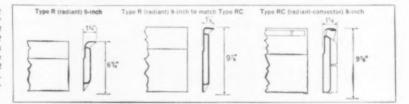


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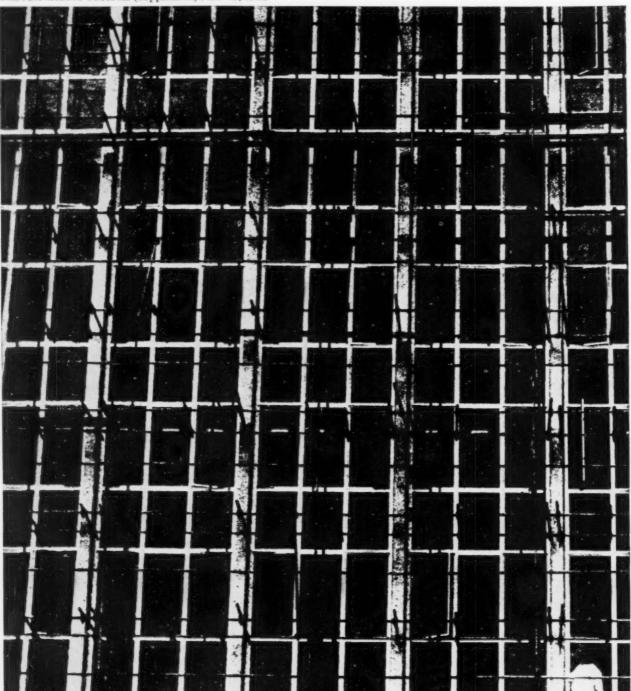
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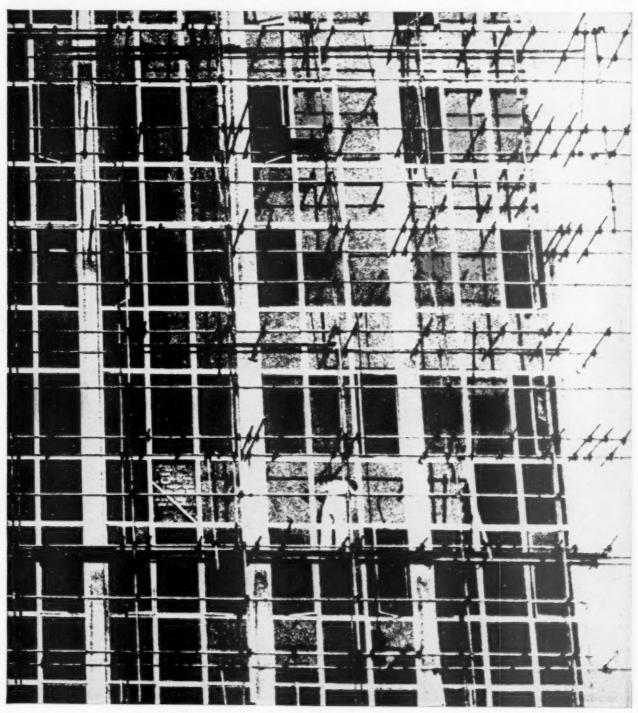
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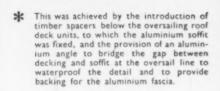
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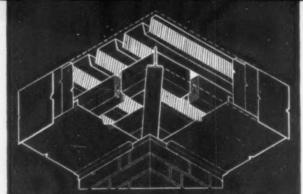
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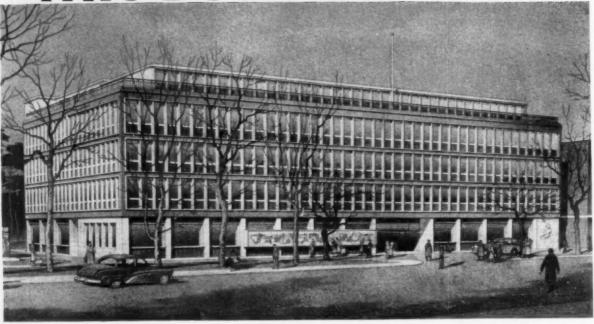
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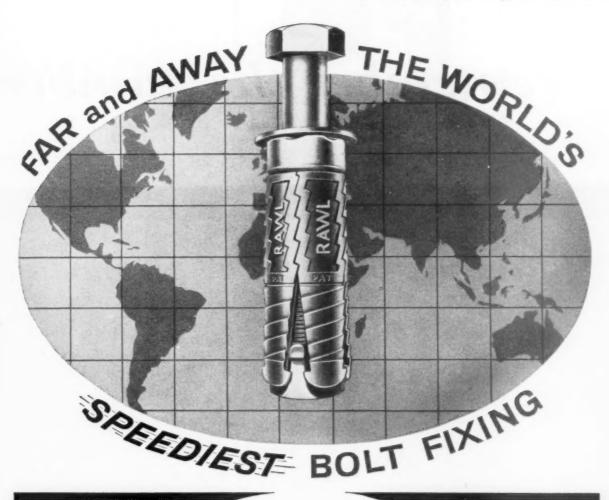
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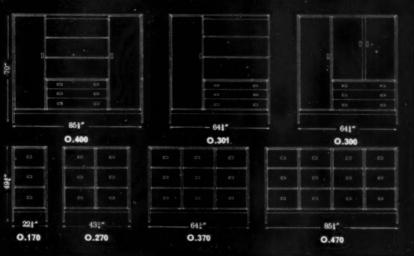
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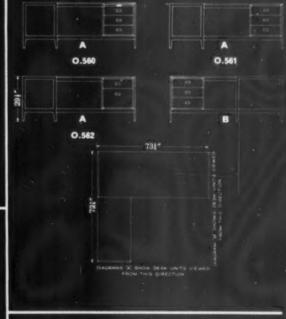
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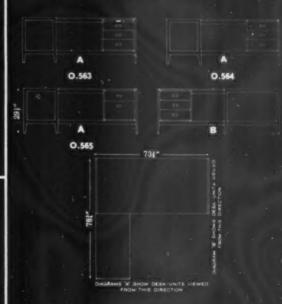
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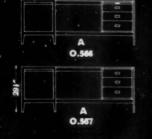


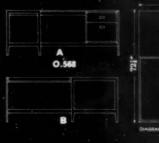


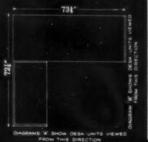




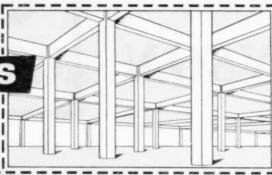


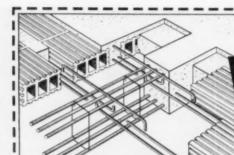






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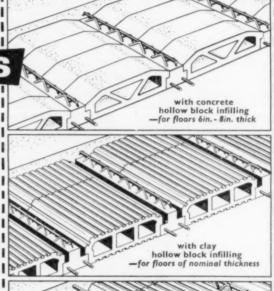
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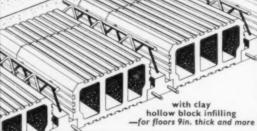
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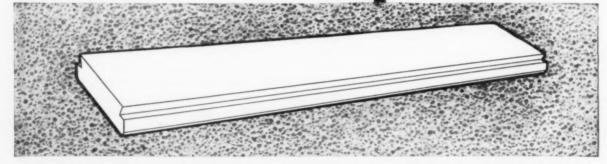
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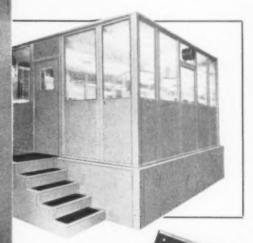
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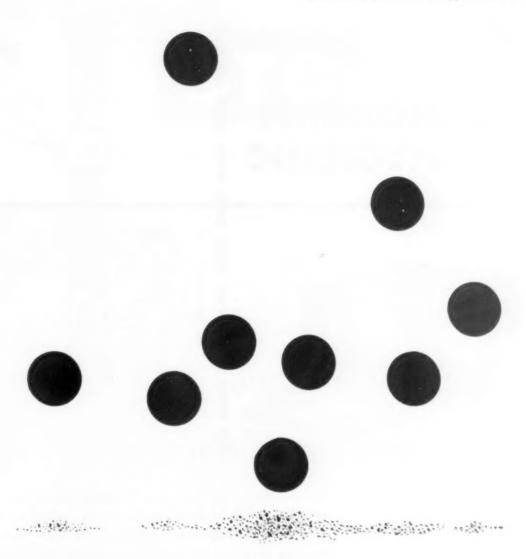
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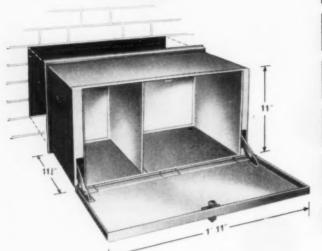


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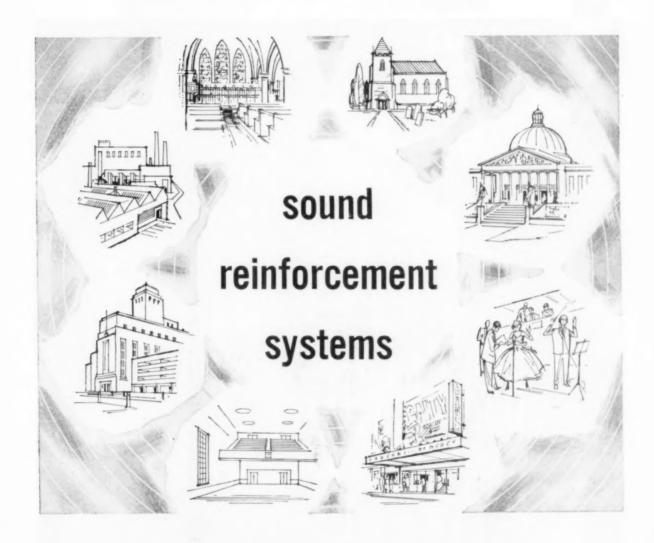
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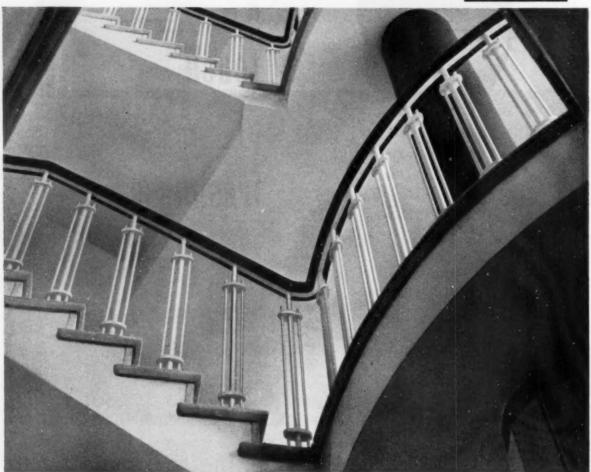
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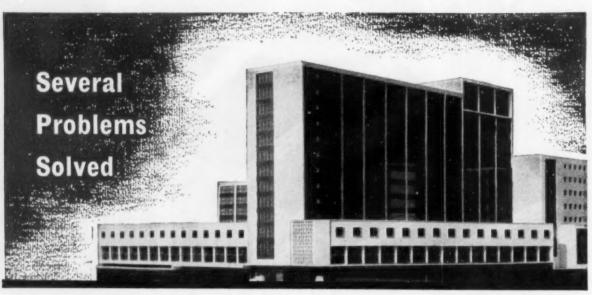
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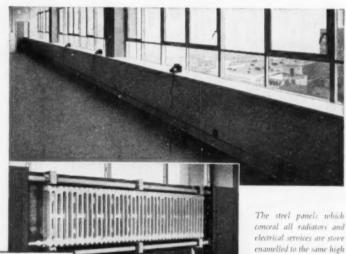
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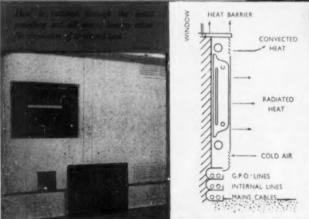
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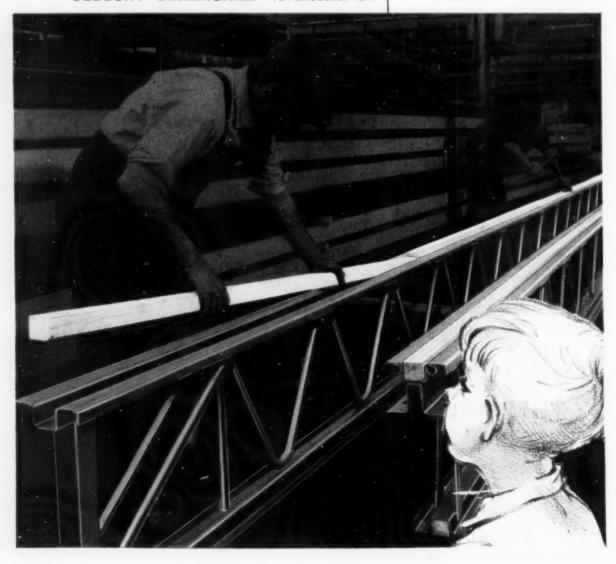
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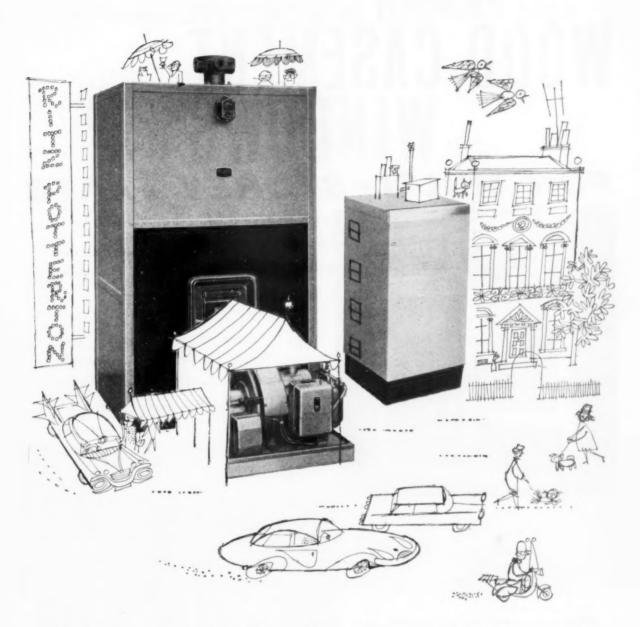
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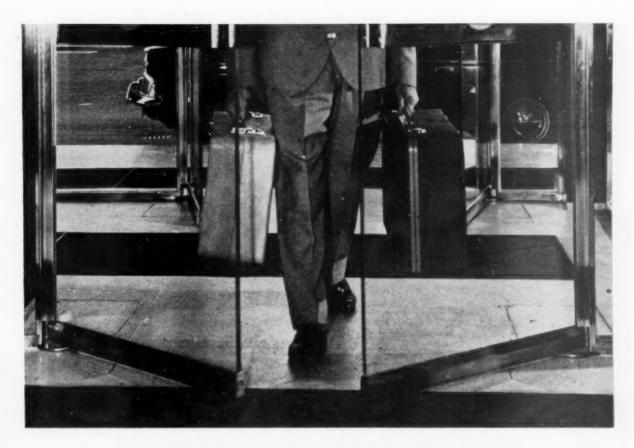
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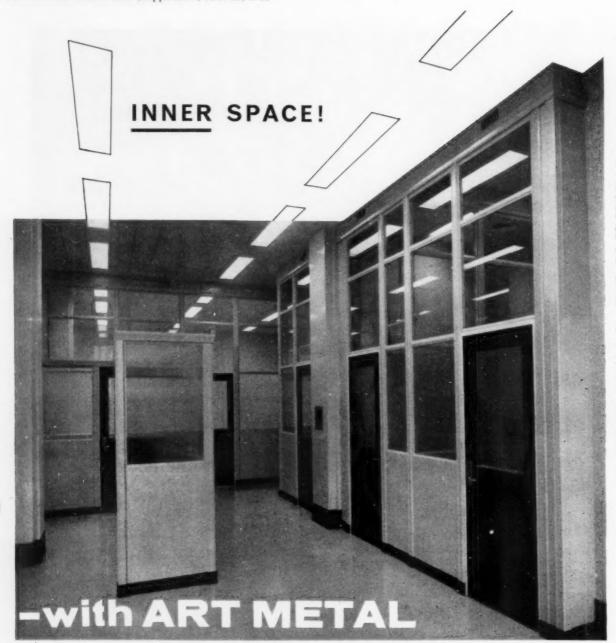


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The Architects' Journal

No. 3452. Vol. 133. June 15, 1961

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Rome Built in a Night

"Comfortable and correct wear beneath togas are [sic] tee shirts or athletic vests (white) and any type of shorts."

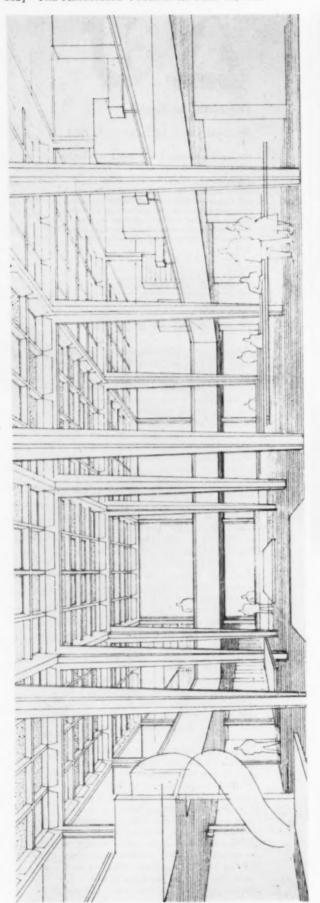
This, on the ticket of admission to the Roman Baths, was a good deal more sober than the VINUM PUELLAE CARMINA of the invitation. Still it looked like being the kind of lark that would keep respectable Bathonians talking until the next Festival. It was obvious that we were there not just for our own amusement but for the thousands who would read of Roman scandals in Reveille, The Daily Sketch and The Bath Chronicle. Never were there so many photographers in togas. The organised entertainments, for all their charm, couldn't compete with the antics of the Press.

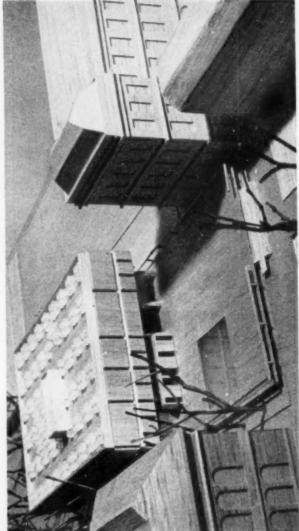
Preview pictures of some of the fifty slaves willingly press-ganged into serving the feast and feasting the eye had already sparked some nice local controversy about the appropriateness-I think it was the appropriateness-of the bikini. An authoritative response was the publication of a new photograph of that Pompeian fresco which is so often adduced to prove that twopiece swimsuits were, incredibly, forgotten for some 1800 years.

The controversy must have had some point. for in the event bikinis were swopped for rather fetching little tunics, much in keeping with the draped shape of all present. Indeed this draping does things for people; for classical dress, like classical architecture, conceals and reveals in just proportion.

The comfortable and correct way of keeping on a toga is evidently an outsize nappy-pin as kindly supplied by the Bath Festival Committee. Car keys, cigarettes, spectaclecases and small change have to be filed away according to your own arrangements. Tiring-girls were at hand to assist those of the men who botched the job of putting on the purple. Many of us botched. With expert help we looked magnificent. Why, we were asked, don't you do this more often?

The Falernian was not heady, as I had sup-





Harmonious Discord

To judge from the size of the entry at least, two hundred and eighteen designs having been submitted from twenty-nine countries, the competition for the Trinity College Library Extension. Dublin, has been a resounding success. The winning design by Paul Koralek (above, the reading room, right, the exterior) is sightly derivative from the Jacobsen design for St. Catherine's College. Oxford. But it has convincingly overcome the problem of fitting alongside the existing buildings. One of the assessors, Professor Albini, does not agree. In a reservation appended to the assessors report, he says that a better attempt could have been made to dovetail into the robust character of the existing buildings, without making any concession to "period" taste. He abstanced from voting for this design, and he also abstained from stating positively how this objective could be more closely achieved. But he did very much admire the entry by H. J. Nicholais. (See page 871.)

posed, and had a pleasant after-taste. As my eyes misted a little, pictures of some postatomic civilisation began to flicker into view. What was this? A cutting headed "BENFEST AT BALLUM, 1980 and all that jazz.... Teddy soots will be worn... Orthentik ets in 20th C mockup... Ballum Publik Lyberry (oldest contemp survyyl)... Snobs will et Instnt Spaghetti Dinner, Fishnchips in nuspage, Mary B. Angel Food... drink Coca-Cola. dance boogy... waiters in soupnfish... gurls in tutus...."

Someone asked plaintively: "When does the orgy begin?" To revive our appetites we strolled through the streets where a few onlookers waited hopefully. It was much cooler outside for, though the bath is open to the English sky, convected heat from the water was surprisingly quite enough for toga'd comfort. Another and perhaps less calculated effect was that the water seemed to act as a sounding board, so that the thump and blare of three bands were reflected alarmingly into the night. We went back to the warmth and the roast peacock.

There was a moment in the evening (before the throng of Romans had got down to smoking and eating off paper plates and noisily greeting Charles and Fanny and Ted) when you descended the stone steps to the Great Bath and looked across the viridian water, under columns hung about with twined evergreens, to where a group of statuesque figures stood by scarlet cushions holding the long scrolls of the evening's proceedings: and you might, if you were in a romantic mood, have caught your breath.

Whatever the fun, the illusion didn't last for long. Earnest, bespectacled, correctly attired save for such minor accessories as suède shoes and socks, hung all about with Leicas and Rolleiflexes, Bolexes and Speed-Graphics, pointing microphones and flashlights, heaving flexes, toting spots, shouting "Cut!" wriggling through pressing crowds of slaves and dancers, zooming on to the roast pig, lurking behind columns to record each indiscretion, climbing riskily, paddling accidentally, borrowing your laurel garland for some other man, borrowing your wife, for some other man, blast him, surely this hardworking band should now appropriate the motto of an older corps-ubique.

Towards the end the photographers left, missing the best pictures of all. Togas had slipped a bit and Romans were rocking to Nero and his Gladiators, and other Romans smoked cigars in the Pump Room, or swam languorously in the Hot Spring. They also missed some of the more enterprisingly improvised outfits: I spotted several girls whose becoming dresses appeared to be mainly, if not exclusively, by Kayser-Bondor.

One fact emerged. There is little truth in the fond belief of fourth formers that Caesar adsum jam forte.

ROGER COOMBS

The Editors

PLANNING WITHOUT REGIONS

THE twin problems of "Urban Renewal" and the "Flight to the Fringes" have been brought into sharp focus by three reports published last week—the Registrar-General's Preliminary Census Report and the first and second Reports of the Local Government Commission for England on the West Midlands.

It is becoming more and more obvious that those older industrial towns in most urgent need of comprehensive urban renewal continue to lose population to their fringe dormitory areas and to the general drift to the south-east. At the same time district councils without fully equipped architectural or town planning departments have to receive the brunt of the demand for new housing development in coastal and green belt areas where townscape and landscape deserve better treatment than present density and bye-law controls permit. These reports tell us little we don't already know, but they are prepared by Government command, and therefore may command some official attention, and perhaps even some Government action.

The "West Midlands Special Review Area" falls roughly into three parts: Birmingham, the Black Country with its five county boroughs and nine districts, and the fringe districts of Staffordshire, Warwickshire and Worcestershire, through which also runs the green belt. "The General Review Area" includes these three counties together with Herefordshire and Shropshire—where the proposed new town of Dawley is situated—and the county boroughs of Coventry, Burton-on-Trent, and Worcester.

Debarred by the terms of the Local Government Act 1958 (Sec. 17) from considering any plan for regional government, the Commission considered the possibility of a "Continuous County" on the present L.C.C. pattern, especially for the purposes of "planning" which they said should include overspill, main highways and traffic control. But finally they put forward proposals for a series of adjoining county boroughs, with two joint bodies, one for overspill, the other for sewage. The Black Country will thus become a group of five adjacent county boroughs, while the surrounding fringe districts will remain within the county council's jurisdiction, who will also continue to exercise control over the green belt.

The Commission said that the county borough solution would provide no machinery for dealing with problems which need to be looked at over a wider area, yet the present climate of opinion was not favourable to a single planning authority for the whole of the conurbation. In its place they propose an "overspill authority" with a board of some twenty members representing the exporting authorities with an independent chairman and some industrial representatives. This Board might eventually develop into a pseudo-regional authority; its expert planning staff could certainly have enormous

influence on the planning attitudes of the existing local authorities.

Even so, their area is too limited: if overspill means new towns or expanded towns, should not a regional organisation be available to co-ordinate this work? Yet the authority proposed is limited to the conurbation only, whose problems can only be solved beyond its boundaries. It looks more like an expedient with a built-in problem than a real solution, and in the long run a real regional authority will be found to be necessary. Why not now?



DON'T BE AFRAID OF MR. BROOKE

Henry Brooke, the Minister of Housing, said something so surprising in his talk last week to the Council of Visual Education that it ought to have made headlines in the Press. He said he believed planning authorities often accepted architectural designs that were "not really good enough" because they were afraid he would approve them if they were rejected and then brought to him in an appeal. This, he said, was not true: any local authority looking for higher standards could rely on him for support. "I hope," he added, "that the Press will let this be known." Regrettably, they didn't.

Not so encouraging was the Minister's jovially indifferent attitude to the suggestion that the planning ministry should deal with roads. And he was firmly opposed to the suggestion that there should be a separate planning

minister. Planning work, he said, would be less well done if it were done in isolation.

Non-classical architects will be glad to know that Mr. Brooke reaffirmed his belief that to copy old styles of building was to "stultify architecture." Although his own sympathies were with the traditionalist he felt that no one in his position should allow personal sympathies to stand in the way of novelty and experiment. On balance, a reassuring speech.

A SPAN?

Thanks to Mr. Brooke's reversal of one of his inspector's decisions, Eric Lyons has won all three appeals on his Blackheath sites for SPAN. All those who admire his housing will congratulate him on his victory over neo-Georgian-minded residents and official procrastination. But we should also bear in mind that while SPAN may have gained a few small sites, they may at the same time have lost the chance of creating a unified comprehensively developed Blackheath which will appeal as much in 150 years' time as Georgian Blackheath does today.

PRETTY SILLY POLL

It's nice to see architects taking an active interest in their Institute's affairs, but there is nothing very impressive about E. B. Redfern's demand (see page 866) for a poll on an architectural education issue-apart from the fact that he has collected 199 signatures to support him. Why does he want twothirds of the people on the Board of Architectural Education to be chosen from members of the RIBA Council? The Board obviously should (and does) include representatives of the Council -but what is the point of increasing the number and thus increasing the work of the already overworked Council mem-

Mr. Redfern's demand that two-thirds of the Board should be practising architects is already recognised in its present constitution. But his other three points seem to be made to ensure that the RIBA continues to keep open a back entrance to the profession for those who cannot attain two " A" levels, and to make sure there are plenty of schools producing a supply of practical architectural assistants. This is retrogressive. It is appalling that the Institute should have to spend £500 or so on carrying out a poll of the profession on a parochial issue, when the money should be spent on collaborating with builders. surveyors and engineers and on thrashing out a joint plan for senior education in the building industry.

CAMBRIDGE VICTORY

From Cambridge comes news of an unexpected victory for modern architecture. You may remember that the interesting lecture hall designed for Sidgwick Avenue by Sir Hugh Casson and Neville Conder (and exhibited at last year's Royal Academy) was stopped by an antiquarian clique in Regent House. This clique took advantage of the local indifference to architecture to enlist a majority against the scheme, so that it had to go back to the architects for reconsideration. The architects tried again, went to Cambridge to explain their revised-but still exciting-project and found the original objectors had stayed away from the meeting. Their absence was so widely noted that when the Regent House met to vote, the objectors found the opposite benches crowded with about four times as many qualified votes as theirs. Their rather shamefaced Non Placet* was answered by a thunder of Placet+ from the other side, and that was that.

The architecturally progressive boys in Cambridge hope the influence of this decision will extend beyond the confines of Sidgwick Avenue and will encourage colleges which are in need of architects for their building programmes.

NOT QUITE OVER

I was wrong (June 1) about "High and Over," the famous Connell house at Amersham. It has not been sold. My apologies. It is, however, up for sale

^{*} For non-classicists, "It pleases not."

^{*} Work it out for yourself

and there is a would-be purchaser with proposals for the future development of the site. I imagine that any development here would be very carefully supervised, because the county architect concerned, F. B. Pooley, is also now the Buckinghamshire county planner.

NO-ONE FORGOT THE STAIRCASE

It seemed a good idea for Harlow New Town Development Corporation to hold a competition* for housing layout, but its request for boldness and enterprise produced some pretty odd entries. Those of you who were not able to see them exhibited at the Building Centre needn't feel you have missed anything. There is, after all, not much sense in having courtyard houses if the windows of some face near north, and if the windows of some houses stare into those of the houses adjoining. And I should have thought every architect would shun a plan that forced people to enter the bathroom from a living-dining room. These and other inadequacies made the exhibition an unfortunate exposé of professional carelessness, and I'm very glad it won't be seen by foreign visitors to the imminent IUA Congress.

RARE BITS OF WALES

I hear that work is going ahead well on two excellent schemes in North Wales-the Ffestiniog pumped-storage set-up (probably the largest of its type in the world), which will have two reservoirs (one well above the other), and the Transfynydd nuclear power station (output 500,000 kilowatts), whose two huge atomic reactors are half built. The dams for the first scheme are almost complete and the top one in particular promises to be a positive feature in the countryside (full marks to Colwyn Foulkes, the architectural and landscape consultant). Sylvia Crowe, I'm glad to hear, is working on the careful landscaping of the power station site. At the moment, incidentally, the most striking structure here is a giant, prefabricated travelling crane (250 ft. high) consisting of two vertical supports on rails, connected by a beam with a 250-ft. span.

WHISKEY GALORE

ASTRAGAL does not attempt to defend the design of Gibberd's buildings at London Airport but he does object strongly to having them obscured by

Winning and commended designs published in May 25

advertisements-in this case three huge dummy whiskey bottles. A colleague who rang up the public relations department at the airport was told that they did not have to have planning permission to put up the bottles as they could do what they liked on their own land. Of course we all know that Ministries are a law unto themselves but does the Minister really imagine that the £10,000 they will receive a year for these advertisements is compensation for the shoddy impression it gives? And if so, why stop at three bottles? Why not cover the whole building with advertisements and paint slogans on the landing strips?

An interesting fact that emerges is that Frederick Gibberd's office did in fact weaken under pressure from the Ministry and agreed to having advertisements at the airport provided they could exercise some control over the type shown. ASTRAGAL learns, however, that the Ministry regrets its original decision. The buildings in this area are temporary anyway and when the area is due for redevelopment in two years' time, the lease for the advertisements will not be renewed. A general cleaning up of the airport's mess of signposting and notice boards might be timed to coincide with this.

MULTI-LINGUAL PENGUIN

J. M. Richards Penguin on Modern Architecture seems always to be reaching my desk in some new revision or translation (the latest Portuguese edition arrived this week), so I decided to make some enquiries about its lively history. The figures-for sales and revisions-are remarkable for such a subject. Although it has been periodically revised, it remains substantially as first written (two years before the wardelayed publication in 1940) but still sells steadily. In 21 years the Pelican edition has been reprinted eight times and has sold nearly 350,000 copies. The total sales must be well over half a million when you include the American version and the translations into Spanish, Japanese, Italian, Serbo-Croat, Portuguese and Dutch (now in production).

To round off this feat comes the news that Cassells are bringing out a hard cover edition of the book, together with other early Pelicans which have established themselves as classics.

FUELLING UP

BP are hoping to go higher than Shell-and higher even than Vickersaccording to their outline application for planning consent submitted to the City Corporation. If the building is approved it will be the highest (at 385 ft.) in Britain: it wouldn't be difficult for it to be the best. London is still waiting for a really first-class office building, and this one is on the drawing board at a time when the standard elements of office design are in need of reassessment. And I do mean curtain walling-among other things.

NODDY IN EPPING

As I reported a few weeks ago, the Civic Trust plan for cleaning up Windsor was slightly marred by one or two rogue decorators who decided to participate (but not to collaborate) at the last moment. The colours they introduced into an otherwise well-thoughtout scheme were very startling. I don't know if the more recent Trust face-lift, at Epping, has suffered in the same way. But certainly there are mistakes there, and I can't help feeling that if this Noddyland touch creeps in where the Civic Trust is co-ordinating the work, anything might happen on the schemes proposed by the 400 or so other councils who intend to go it alone. Even if these councils have the help of architects, there is no guarantee that colours chosen will be suitable.

May I suggest to readers who might get caught up in one of these schemes that there are virtues in black, white and brown. And let me remind them that if Epping Council is anything to go by, they will not get much credit for their far-from-lucrative work. When the Lord Mayor of London, Sir Bernard Waley-Cohen, attended the opening ceremony at Epping, there was nothing in the official programme to tell him which local architects had been responsible-though credits were, of course, given for those who cut the sandwiches and so on.

ASTRAGAL

From July 5, 1961, THE ARCHI-TECTS' JOURNAL will be published every Wednesday instead of Thursday

LETTERS

Ewart B. Redfern, A.R.I.B.A.

H. C. Hooper,

Robin Mudie

Architectural Education

SIR: It is probably a unique occurrence for a sufficiently large group of RIBA Members to combine together to call for a Poll on matters relating to Architectural Education. Under Byelaw 60 (as now operating) a Poll can be demanded by 40 Fellows, 40 Associates and 40 Licentiates, and I have recently sent to the RIBA Secretary, the signatures of 44 Fellows, 106 Associates and 49 Licentiates. These signatures were given to forms setting out four separate proposals as follows:—

"We, the undersigned, being of the opinion that recent decisions by the Council on the subject of Architectural Education are not in the best interests of the profession, consider this an important question on which a Poll should be taken under the provisions of Byelaw 60.

The particular proposals to be the subject of the Poll are:—

(a) That the Board of Architectural Education should be composed of at least two-thirds practising Members who have been elected to the Council.

(b) That when applying the two "A" level standard of entry for Probationers, the Board should be directed to appoint a Selection Board to admit suitable and recommended external applicants who have not continued their academic education beyond five GCE "O" levels.

(c) That the Board be directed to take steps to ensure that all school-trained entrants at Intermediate or Final level take examinations of similar and equal standard to that set for external entrants, and that such examinations have an increased practical bias.

(d) That the Board be directed to ensure that the need for external examinations shall not be progressively reduced or abolished."

My own observations on some of these matters were given at the RIBA Annual General Meetings both last year and this year, and the results of certain private investigations were published in the RIBA Journal in October last year.

Architectural Education has been a subject for complaint and controversy for many years, and it is now up to Members to express their views on these basic questions. We should know this year whether the "academic" control of Architectural Education is to continue or not.

EWART B. REDFERN

Exeter

Perfect Toppings

SIR: Who has not experienced curling with cement and sand or granolithic floor top-

pings? Where is the project where this has not happened to large or small degree?

Monolithic laying is recognised as the counsel of perfection, but in modern conditions it is rarely possible to put this method into practice. Perfect toppings can be laid, however, with very little risk of failure provided a few basic and simple rules are followed. These can be defined under such headings as: base preparation, mix, thickness, laying, curing and protection.

Base Preparation: Base concrete is in place for a considerable number of months before the topping is laid. Site traffic and the various trades deposit a layer of mud, sand, plaster droppings, etc., which is practically impossible to clean completely away. The remains of this, plus dust from surface hacking will defeat any attempt to obtain an overall key to the concrete. Similarly, patent bonding agents fail on this point, apart from the fact that it is extremely doubtful if any one of these is strong enough to hold a topping which is tending to curl.

How then is it possible to keep an independent topping adhering to the concrete? Many people in the trade and some architects who have given thought to the many failures are convinced that the only certain way is to provide a definite mechanical tie. There are several methods to choose from. the simplest, perhaps, is to drop mild steel dogs into the concrete at about 18 in. centres whilst it is being laid. One of your readers recently referred to this method (AJ, 163.61). The dogs are roughly hairpin in shape using 1 to 1 in, mild steel rods. They should be bent over to lie parallel with the concrete and some 6 in. of the rod will show which will, of course, be bedded slightly into the concrete.

With these in place the concrete can be cleaned and thoroughly wetted down the night before laying and, at the same time, the rod can be raised about \(\frac{1}{2}\) in, from the surface so that the grano, can be tucked under. It will assist consolidation of the base of the grano, if, immediately prior to the placing of this, a neat cement slurry of creamy consistency is thoroughly scrubbed into the concrete.

There are variations of the dogs such as "U" bolts in the concrete through which reinforcing rods can be threaded. Another is the laying of chicken-wire or BRC fabric and fixing this by pins shot into the concrete. Dogs are, possibly, the simplest and can be used at a material cost of approximately 3d. per sq. yard. At some extra cost, existing concrete can be drilled and the dogs grouted in. With one or other of these we have then a definite mechanical tie between topping and base which will keep them together in spite of shrinkage and curling stresses in the grano.

The only other preparation consists of the provision of insulating joints. A bituminous or similar jointing material should be fixed around the perimeter of the floor at the wall/floor line and around any obstructions in the floor area to allow for initial shrinkage.

Mix: The standard 2:5 in granolithic work and 1:3 for cement and sand is well known throughout the trade. Keep to these and

make sure a gauge box and good quality aggregate are used. Suggested mixes are as follows:—

Granolithic—2 parts cement; 1 part clean, sharp, coarse graded sand; 4 parts clean granite chippings, free from dust and graded ½ in, to $\frac{1}{16}$ in.

This latter is in place of the usual 5 parts of granite $\frac{1}{k}$ in. to dust and in which there is no control over the amount of fines going into any one gauge.

Cement and Sand—1 part cement; 3 parts clean, sharp, coarse graded sand.

Thickness: Minimum 11 in.

Laying: There should be no need to instruct a floor hand how to operate. "In accordance with good building practice as applied to toppings" will cover this, but two points are important here. One is that the material must be well worked under the dogs, rods or wire to ensure that they are well embedded. The other is the water content and this should be the minimum required to produce a workable mix and to ensure full compaction.

Curing and Protection: This is of vital importance in reducing curling, crazing and cracking, eliminating dusting and improving durability. Quick drying out must be prevented and intermittent curing is worse than no curing at all. A most satisfactory method is to cover the surface with polythene sheeting or waterproof building paper immediately after the final trowelling.

The sheeting should be in contact with the surface and extend beyond the edges so that it can be weighted down to prevent draughts under the sheeting.

Minimum curing period should be seven days and the sheeting can be boarded over so that the floor can be used for site traffic with the least delay and, at the same time, protect the floor surface until it is thoroughly hard.

Here then are the simple rules. They contain nothing particularly new or highly technical and are the result of logical thinking in order to try to combat some of the failures that mar so much modern building. The methods have been proved and they may stimulate discussion amongst architects.

This will be of some help but it is certain that the present "hit or miss" traditions will continue unless the varjous points are detailed in specifications.

H. C. HOOPER technical representative
Cement Marketing Company

Down to Earth

SIR: Mr. Dew's neurosis about verbs and literary techniques ill-becomes the man of great insight who detects in *Him and the Fifteen Doors* "too many clipped indirect references to things the average reader is not likely to know anything about." (See his letter: AJ for May 25.) I hope that the "average reader" will leave Mr. Dew on his exalted plane, having first enjoyed the story.

ROBIN MUDIE

London

NEWS

RICS

Quantity Surveyors' Fees

The new scale of fees for Quantity Surveyors which comes into force on July 1. 1961, and which was presented by the RICS at a Press conference on June 8 has three points of interest. First it divides all work into four categories according to the complexity of the job. Civil engineering works attract the lowest rate of fee; next come "buildings containing little internal details or with a large amount of repetition" (blocks of flats, offices with open floor space and factories are among those cited); next follow works "with some element of repetition" (hospitals, schools, hall of residence . . .)"; and last comes a long list headed by houses (but not those for local authorities), old people's homes and banks, which attract the highest rate.

The second point of interest is the inclusion. as an alternative to the customary method of setting a separate value on each of the three post-contract services, of an overall scale which lumps all post-contract services together and which may be agreed, as a fixed sum, at the beginning of the job. The object of this second innovation is two-fold: first to enable the client to know in advance exactly how much he will have to find by way of professional fees; second, to encourage pre-contract planning, for it is thought that no surveyor would agree in advance a fixed fee for valuations for interim certificates, preparing accounts for variations and dealing with fluctuations unless he knew that the job was properly planned.

The third point is the modification of the fees themselves to accord to this more rational scale pattern. For the non-quantity surveyor the most significant aspect of this is the general raising of the percentage rates for the most complex category of job. Thus, for jobs in this category (e.g. houses) the fee for pre-contract services for works of up to £20,000 in value has been raised from the former starting rate of 21 to 3 per cent. The promulgation of the new all-in rates for post-contract services now makes it possible for the architect to make a comparison between his own fees and those of the Quantity Surveyor. Thus, for the job in the most complex category, the starting rate for post-contract work is 2 per cent, making an overall fee for the Quantity Surveyor of 5 per cent. This means, of course, that, for a building in this category in the range £7,000-£20,000, the fees of the Quantity Surveyor are now only about I per cent below that of the architect. At this rate ought he not to be carrying a greater share of the responsibility for the

TCPA

Forum on "Robin Hood"

A talk by Mr. Henry Wells on his proposal for a Land Finance Corporation, which was one of the most important contributions to the Civic Trust Conference in July last year, opened the Planning Forum of the Town and Country Planning Association in King Street on June 5.

Introducing the proposals Michael Dower described them as a version of the Robin Hood idea of robbing the rich to pay for the poor.

Mr. Wells, who is Chairman of the Hemel Hempstead New Town Development Corporation, saw two major obstacles to the redevelopment of our towns, particularly in their central areas: the multiplicity of owners (hundreds of different owners within an acre), and finance. With regard to the first problem of collecting large areas into one ownership Mr. Wells saw no effective alternative to compulsory purchase. Yet the use of Compulsory Purchase Order powers could not be contemplated except by the larger local authorities such as the LCC whom Mr. Wells excluded from his considerations; this led him to talk about the second major obstacle, i.e., finance. He thought the main financial difficulties were bridging the gap of 3-5 years between the acquisition of land and the time until redevelopment earned enough to meet the loan charges. The other problem was how to make the more lucrative schemes pay for the less profitable ones but which were nevertheless socially necessary.

Mr. Wells' solution to these problems was the creation of a Land Finance Corporation which would pay current market value for all land designated for compulsory purchase by a local authority, hold it until required for redevelopment and sell it at prices reflecting the value prescribed by the Development Plan for public or private redevelopment in accordance with an approved threedimensional scheme. Its advantages would be that profitable developments would pay for the unprofitable ones, that the loan charges would be carried by the Corporation as an accumulated deficit and would not fall upon the rates, and that such accounting would help to finance urban renewal.

Mr. Reginald Stamp, LCC Chairman of the Town Planning Committee, opened the discussion by saying his first reaction was: "what, another authority to delay development?" The LCC was already such a Land Finance Corporation which undertook many a non-profitable development for the public good, and if there were still a public loan board to provide cheap money no new finance corporation would be required. Mr. Stamp didn't think Compulsory Purchase Order power had to be invoked in every case since some of the "big boys" were only too willing to go in for large-scale redevelopment. He distrusted the political make-up of a new Land Finance Corporation and doubted that its funds could be selfbalancing. Mr. Wells, who called Mr. Stamp a true Tory, dismissed his fears by claiming that a Land Finance Corporation would only be an accounting body. However, several speakers in the discussion echoed Mr. Stamp's uneasiness about the power the Corporation would have by virtue of its financial control. (Anybody who has had anything to do with Finance Committees will sympathise.)

Mr. Lane, LCC Planning officer, thought it

should be possible for a private developer who owned two thirds of a large area to acquire the remainder, without having to pay blackmail prices, by applying to a court. This proposal was supported by a private developer, but Mr. Wells called it a "destruction of freedom." Mr. Nesbitt, LCC Agent Valuer, wondered about the practicability of staffing so huge an organisation as a Land Finance Corporation in the light of the grave shortages of qualified staff.

Mr. Wells, in winding up, said all he wanted to do was to put back some of the financial provisions which were in the 1947 Act but which were subsequently revoked.

BIRTHDAY HONOURS

Awards for School Architects

Anthony Pott, chief architect of the Ministry of Education, has been made a Companion of the Bath in the Birthday Honours announced last week. And Dan Lacey, county architect of Nottinghamshire, has received the C.B.E. Other awards given to architects, planners and artists and to those associated with them are:

Knights Bachelor: George Trenchard Cox, Director, Victoria and Albert Museum. C.B.: H. F. Summers, Under-secretary,

MOHLG.

G.B.E .: Dame Evelyn Adelaide Sharp. Permanent Secretary, MOHLG.

C.B.E.: L. W. Griffith, vice-chairman, Arts Council, Alderman H. G. Mason, chairman of Plymouth Planning Committee. S. Mehew, Derbyshire County Surveyor; L. M. Smith. assistant secretary, MOW; C. V. M. Weight, painter, and Professor of Painting School, Royal College of Art. Commonwealth Relations Office List: A. E. Clare, formerly principal architect, Public Works Department, West Australia. Australia List: Mrs. F. M. Taylor of Potts Point, New South Wales, architect and civil engineer,

Prime Minister's List:

O.B.E.: R. H. Bates, president, British Cast Concrete Federation: Tom Mellor, architect in private practice; H. S. Oddie, lately president of the Institute of Builders; Anne Isobel Graham, Countess of Radnor, member, Historic Building Council for England; O. P. D. Williams, chief maintenance surveyor. MOW.

M.B.E.: Mrs. A. J. Batten, jointly honorary secretary, Central Panels Committee, Council for Preservation of Rural England; S. Cohen, regional Chief Clerk of Works (Tech. Grade B) MOW

SCHOOL BUILDING

International Conference

Next Year

The Government has accepted an invitation to organise, in association with U.N.E.S.C.O., an international conference on educational building to be held in London in July, 1962, for which a National Committee has been appointed by Sir David Eccles, Minister of Education.

Its main object is to propose permanent

international machinery for organising the exchange of information and personnel in the field of educational building, with particular reference to the needs of the develop-

Much is already being done to assist the many countries in Africa, Asia and South America who are now beginning to mount massive programmes of educational development. But there is duplication of effort, and the best use is not being made of the scarce resources or expert skill and knowledge.

The conference was originally suggested at an Educational Building Congress held in Milan last October in connection with the Twelfth Milan Triennale. This ended with a proposal from the floor of the Congress, unanimously accepted by the delegates, that the United Kingdom should be asked to organise a further conference in London as soon as possible. It is this invitation which has since been endorsed by UNESCO, and accepted by the Govern-

IHVE

International Congress in Hamburg

A Congress of the heating and air conditioning industry was held at Hamburg last month, the sponsoring body being the German industry, and attended by some 1,600 representatives from most European countries

A party of about 20 went from the United Kingdom, led by L. C. C. Rayner, President of the Institution of Heating and Ventilating Engineers.

A great deal of valuable information was obtained, particularly in regard to the heating of low income group flats: it has been the custom to heat such flats with stoves, but it is increasingly the standard practice in Germany to use a central boilerhouse and distribute hot water to heating systems in the flats. The fuel used is, almost without exception, coke. Boilers were large units, almost completely automatic in that the fuel is delivered into hoppers which automatically supply the boilers, and that ash removal again is automatic, delivering the ash into trucks. These boilers work on very high efficiencies, between 85 and 90 per cent, and the Germans were confident that this led to the lowest heating costs.

Installations in the flats were interesting in that technique has been simplified and capital cost thus reduced. Attempts are being made to develop a simple metering device for hot water, but at present there is an additional charge for heating on the rent. Delegates visited the Postal Cheque Office, a fine building in the middle of Hamburg. which was doubly interesting: first because in Germany facilities now exist for using a post office account as a current accountan idea which the G.P.O. is considering; secondly it was fascinating from the engineering point of view, as a good deal of air conditioning is used there, three plants serving public rooms and different sets of

offices. Here again, the boiler plant was fed with solid fuel and boilers were fully auto-

A return party of some 100 German engineers is expected at the Institution's International Conference in London in September, which will be attended by delegates from all European countries, including the USSR, and by representatives from the United

LAND USE

New Degree Course in Durham

At a time when planning offices throughout the country are crying out for more qualified staff the introduction of a new planning course is welcome news. Professor Allen announced details of this new honours course at a press conference in the Waldorf Hotel last week: it will extend over four years and will be in line with other honours courses in Durham University. The degree will carry the title of "BA honours in land use studies."

Students who may enter direct from school after matriculation will have three options: town and country planning, urban and rural design, and real estate. The first year will be common to all and from the second year onwards students may elect to concentrate on one of the three options. Although the three options will lead to three separate professional qualifications, all students will do much work together and will study certain subjects common to all courses. Professor Allen stated that for the first time planning and land use studies are being established as a discipline in their own right.

The first option will be parallel to the existing honours degree in town and country planning and has been fully recognised by the TPI. The second option is concerned with the visual aspects of land use and will provide training in landscape and town design. This course is before the ILA for recognition. The third option is concerned with the financial aspects of land use and recognition for it is sought from the RICS. Some architectural eyebrows may be raised at the prospect of a planner with one year's training in general planning and three years in landscape and town design replacing the fully-qualified architect planner (five-six years architecture, one year civic design full time or three years planning in evening courses). However, we must realise that this long training of architect planners is something our society is not prepared to recognise fully either in status or salaries and that therefore an insufficient and decreasing number of idealists will be prepared to go through with it. On the other hand, there is a desperate need for civic designers. It may be, therefore, that a student who elects option two, i.e., landscape and town design, will be in a position to make some contribution to the visual aspects of planning even though it is unlikely to be on the level of the work of a fully-qualified architect/planner.

Forward-Looking Annual Conference

The annual conferences of the Town Planning Institute are getting bigger and better. This year the highly successful conference under the chairmanship of the president, Mr. Rowland Nicholas, was held in the fitting setting of Llandudno. This fine coastal resort was laid out in the grand manner less than a century ago by the Mostyn family with wide streets lined with pleasing if not distinguished terraces, many of which have light glazed canopies supported on slender cast-iron columns. The result is a relaxed dignity with a nautical flavour.

The fresh breeze in the town was symptomatic of the new wind which is blowing in the TPI. When Thomas Sharp in 1957 delivered a bitter attack upon the existing planning set-up most leaders of the planning profession then refuted the criticism, claiming that they were doing fine, thank you. Now Lewis Keeble carries on from where Thomas Sharp left off and delivers a broadside every bit as fierce but rather more constructive, only to find that most of his colleagues support his censures, either in part or in toto.

Lewis Keeble, in his usual brisk manner which combines aggressiveness with a boyish charm, fired all his guns in all directions. Since there are a lot of targets around us which deserve to be hit, Keeble scored many bull's-eyes. However, there were some unnecessary sniping shots at architects who were accused of gimmicks every time they tried an experiment, e.g., patio housing. Particularly disappointing was Keeble's attack on Wilson's Cumbernauld conception of a small new town organised on the basis of a community sharing the town centre instead of the usual neighbourhood structure. Surely, while there continues to be a case for neighbourhood planning in existing towns, there may be a good case for adopting a different structure in a new town, especially in the light of some of the well-known shortcomings of the old new towns' solutions and the growing car ownership. In any case, one could reasonably expect Mr. Keeble to hold his fire until the building of the Cumbernauld experiment has been completed and lived in for some years. Another hobby horse of Keeble's, his insistence on ideal densities of 40 persons per acre going up to a maximum of 70 p.p.a., is in my view untenable; his theoretical circular town for 60,000 with a radius of only 1.2 miles does little to dispel one's reasonable doubts whether he is really facing up to the formidable problem of existing high densities in the inner rings of our conurbations and the impossibility of redeveloping these except by adopting densities substantially in excess of his.

However, apart from these points where I believe him to be wrong, Keeble gave a well-considered paper in which he first restated in simple and forceful language the

main planning objectives we should aim at. He then claimed, with considerable justification, that we are not really doing any regional planning today. Keeble criticised the rigidity of the Green Belt policy, the vagueness and lack of definition of official development plans and advocated the preparation of 1/2,500 scale plans. I think he should have gone further and asked for the drawing up of 1/1,250 scale threedimensional plans for at least parts of our city centres and central areas. One cannot but support his plea for more and betterpaid planning staff and the many other positive suggestions he makes.

J. L. Womersley's paper on "Housing the Motor Car" and Seymour Harris's "Design of Shopping Centres" were well received by the conference with hardly a dissenting voice. This is further proof of the breakthrough of new planning ideas in these fields. Womersley's paper dealt in detail with trends in car ownership (one car per family within the life time of all dwellings built today), with practically all known methods of car storage and with various forms of segregation. While a good deal has been said and written about various aspects of this problem, Womersley has for the first time merged most of the arguments and ideas into one paper. Mr. Womersley's ideas for reusing garage roofs as play spaces and his marked preference for underground car-parking whereever possible found a great deal of support. His modest delivery and his instructive slides, many of which illustrated some of the latest ideas being realised in his own Sheffield, earned him a warm reception.

Seymour Harris, in an equally comprehensive paper, dealt with the current procedure of building shopping centres by various types of developers based on different kinds of tender and competitions. Talking about principles of design, Seymour Harris put the elimination of all vehicular traffic from pedestrian shopping centres quite rightly as number one priority. He rejected the idea of the American shopping plaza surrounded by a veritable sea of parked cars and he showed slides which illustrated clearly the ultimate absurdity of such solutions. However, he advocated a much greater provision of car parking than is asked for by most planning authorities and thus overlooked the danger of providing more spaces for parked cars than the roads leading to these centres may be able to carry. Seymour Harris also showed slides of his own numerous schemes most of which showed imaginative manipulation of levels and attractive three-dimensional solutions. There was, however, too great a reliance on roof parking on top of shops; one would like to think that these roofs could be regained pedestrian areas upon which one could have other development, preferably housing, and that these upper levels would eventually be linked together over wide areas to provide continuous pedestrian walkways throughout parts of the central areas. My main slight uneasiness about this paper was a tendency to regard shopping centres as isolated pieces of investment and design and insufficiently inte-

grated with the functions and structure of the towns and their centres. This, however, may well be the fault of the planning authorities rather than Mr. Harris's devel-

The highlight of the conference was the "Presidents' Forum." The Presidents of the RIBA (Sir William Holford), the RICS (Mr. Trustram Eve), the ICE (Sir Herbert Manzoni), the IMunE (Mr. A. Hamilton), sat together on the platform with Mr. Nicholas, TPI President, in the chair, Just to get these five busy men together is no mean feat and was certainly an excellent idea for which we must thank Mr. Nicholas. There was time for only a few questions. A remarkable amount of agreement emerged amongst the five Presidents, all of whom refrained, more or less, from indulging in inter-professional warfare. On the first question, "Whether new legislation should not be introduced to deal with the vexed problem of compensation" the consensus of opinion was that a committee should be set up to look into this problem, Mr. Eve thought that a 50 per cent development charge might have worked where a 100 per cent didn't and that compensation should only be paid if a man's reasonable expectation for development was denied. Sir William said that the fear of compensation undermined good planning, particularly of the smaller authorities. Sir Herbert Manzoni's blunt statement that the only real way to deal with this problem was the public ownership of land was greeted with applause from many a frustrated planning officer. Why have the New Towns proved a failure" drew replies from all Presidents to the effect that the New Towns were a qualified success but that they did fail to prevent the growth of our conurbations, particularly of London. Other criticisms were that they are too disjointed, demographically unbalanced and too close to London. Then there was a complaint that "Architecture was becoming progressively stereotyped." This was the clue for Sir William Holford to deliver a witty and much needed homily on the very nature of contemporary architecture. Weren't the buildings of Jericho stereotyped? Did we realise that the mud huts and terrace houses of the Egyptians and Romans had been stereotyped but had disappeared and only the great public buildings remained. For economic reasons we had to rely more and more on machine-made elements and these had to be standardised. Sir William did not think that our buildings were in any way depressingly stereotyped and where we tried to get away from it we ended up with something worse. (He instanced a row of houses in Cardiff which were alternately pseudo-Georgian and pseudo-Tudor). Sir William duly impressed the fellow Presidents with his arguments and even Sir Herbert Manzoni who admitted that he found it difficult to get used to unfamiliar modern buildings, found the UNO building impressive, while Mr. Hamilton would prefer more feminine curves on our strait-laced architecture, and Mr. Nicholas, though basically agreeing with Sir William, thought architects did some queer things sometimes. On the question "Whether the co-ordination of plan-

ning within the conurbations can wait for the local government reorganisation" the consensus of opinion was that the defunct regional planning bodies should be reconstituted, that regional planning was of utmost urgency and that it would be a tragedy if planning powers were delegated to more and smaller authorities before regional planning was properly reconstituted

The TPI which has been going from strength to strength in the past year or two has at last begun to take seriously the many urgent and unresolved planning problems we are facing. While a good deal of confusion still remains in the attitude to problems of densities, overspill, architectural experiments, etc., a pattern of forward thinking is gradually emerging which only a few years ago would have been unthink-

WALTER BOR

RIBA

Architecture Today Exhi-

Sponsored jointly by the Arts Council of Great Britain and by the Royal Institute of British Architects, an Architecture Today Exhibition will be on show at the Arts Council Galleries, 4, St. James's Square, S.W.1. from June 28 to July 29 (Mondays, Wednesdays, Fridays and Saturdays 10-6, Tuesdays and Thursdays 10-8). It has been timed to coincide with the Congress of the International Union of Architects meeting in London at the beginning of July.

The exhibits cover a selection of the best building work executed during the last 10 years and were chosen by a panel consisting of the Hon. Lionel Brett, Sir Hugh Casson, John Killick, John Piper and J. M. Richards. Trevor Dannatt and Alan Irvine designed the exhibition and J. M. Richards has written an introduction to the catalogue.

Following the London showing the Arts Council are arranging to tour the exhibition to a number of centres in different parts of the country and discussions are taking place with the British Council with a view to touring copies being prepared for sending abroad.

IN BRIEF

Basil Spence and Partners are to start work at once on designing the terminal buildings for Abbotsinch Airport.

The Chancellor of the Exchequer has promised full consideration to new proposals from the London County Council for a National Theatre on the South Bank. If the Government will contribute £1 million towards the capital cost, an LCC deputation told him, the council will provide the remainder, estimated at £2,300,000, from a penny rate for two or three years.



COMPETITION RESULT

British Winner

Paul G. Koralek, above, who submitted the winning entry to the competition for the extension to the Trinity College Library, Dublin, is a British subject who was born in Vienna in 1933 and who came to London with his family in 1938. Married with one daughter, he is temporarily living in New York, working for Marcel Breuer & Associates. He was trained at the AA School. gaining an honours diploma, and was awarded the ICI Travel Scholarship in 1956-7 visiting Turkey and Persia. His previous office experience includes a period with Powell & Moya, where he worked on various stages of the Wythenshawe and Swindon hospitals. He also worked in Paris and Toronto before joining Marcel Breuer in 1960, where he has been engaged on a new ski resort in the French alps. He has informed the promoters of the competition that he intends to return to London to go into partnership with Peter Ahrends and Richard Burton (who have recently opened an office in London) and that he proposes to do all further work on the Library jointly with them.

200 PLASTIC BAGS AND THE BOOK OF KELLS

When we went over to select and photograph, the designs had not been sorted out. In the magnificent long room of the present library two hundred and eighteen sets of drawings were simply stacked all over the floor, each in its plastic bag. Down at the

other end were things like the Book of Kells and the Satchel of Armagh, an astonishing bit of eleventh-century leather work. So we sorted and sifted, whilst slabs and cubes and oblongs (no circles, that I could see: a pity) passed in front of our slowly stupefying gaze. And all the time we were treated with the greatest courtesy and friendliness by the Competition Registrar, Mr. Luce and the Deputy Librarian, Mr. Hurst, at a time when both could justifiably have given short shrift to a stray journalist and photographer: the exhibition happens to coincide with the last and busiest week of the academic year. I can easily imagine the reactions at some English universities.

This is very much to the point. Trinity College. Dublin, is for my money not just a university, but the university in the British Isles. It is neither fossil nor philistine, the impression of live excitement is completely different from Oxford or Cambridge. So is the fact that it is charmingly and unequivocally mixed. The main quad is neither an asphalt desert nor a sacrosanct lawn, but a vivid mixture of setts, turf and baby Fiats. Going to university here really seems as though it might be an entrance into life instead of a rather special kind of withdrawal.

And in the same way the problem of a new library is not just any old competition for a single more or less rectangular building. It really is a crucial test for modern architecture: not only adding new to old, but old which is as good of its kind as it possibly could be. Moreover, the new building cannot just fit in demurely: it must stand up sharply and clearly yet without over powering—there must be absolute parity in quality between 1720 and 1960. It is quite a problem: it is in fact the archi-

tectural problem of building in an existing environment. Force and sensitivity; and I suppose that if you have to split them instead of regarding them à la Hawksmoor as indivisible parts of the architectural problem, it is easier to refine the force—provided it came from the right place in the beginning—than to stiffen up the sensitivity.

As it happens, the first prizewinner could

As it happens, the first prizewinner could symbolise sensitivity and the second for force, and hence I wish that the second design had won. The simple clarity of the floor slabs and mushroom columns would

stand up superbly to the rhythm of the old library and it seems very hard that it was precisely this quality which might have lost it first place: "the industrial characteristics of its construction are unfortunately apparent." As well castigate the old building for looking like an eighteenth-century warehouse, as indeed it does. This is, really, a prolongation of the false argument which forced most nineteenth-century churches to have crockets.

All but one of the other successful entries plumped for sensitivity, and of these the winner was clearly the best. The sensitivity here is deceptive and delightful: in materials (exposed concrete and grey granite), in the tapering cruciform reinforced concrete columns inside, in the rhythm of window openings, keeping a perfect tension in the all-important view from New Quad between the old library and the Museum.

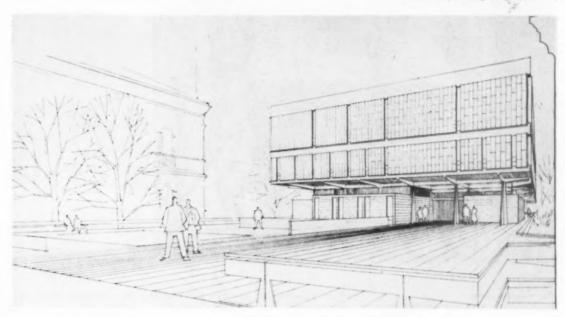
It must have almost escaped the assessors: "a sensitive progression of windows less affected and more logical than appears at first sight" and it must have been a brave decision for Mr. Koralek to eschew all of the flashier tricks of exhibition presentation. Honest and unaffected sensitivity is a rare quality (the cultivated, rather than the natural variety is the species usually met with) and this design is brim-full of it.

The third prize-winner was unlike any other commended design. All the stops were out, and they nearly bowled the assessors over by sheer technique, but its "drawbacks as a working library as opposed to its virtues as architecture have prevented it from achieving a higher award." I am very glad it wasn't the winner, because it is precisely the architectural virtues that I am dubious about. I think they may look marvellous on paper and not work out in practice. The designers say " massive load bearing walls. are modulated in a manner which recalls the projected [sic] pavilions of the adjacent buildings." But these are far more noticeable in plan and in photographs than on the site because, on the site, the monolithic effect of the granite and the huge windows takes over. This in other words is a paper quality, not a real one, and I think that if the design had been built it might have proved drawing-board rather than open-air architecture. IAN NAIRN

Site from the west, old library on left, and museum beyond



North side of winning design (No. 123)



Dublin Library Competition

Out of two hundred and eighteen entries from 29 different countries, the first premium of £1,500 in this competition for an extension to the library of Trinity College, Dublin, has been awarded to Paul G. Koralek (British, but temporarily working in New York). The second premium of £1,000 has been awarded to the Israeli architect Al. Mansfeld in association with D. Havkin and J. Polatsek, and the third premium of £750 has been awarded to Gene J. Festa and William H. Gardner (USA) in association with J. Mesick, T. Ovington and L. Zurlo. The jury, consisting of The Rt. Hon. the Earl of Rosse, Vice-Chancellor of the University of Dublin; Professor Franco Albini, Instituto Universitario di Architettura, Venice; Sir Hugh M. Casson, R.D.I., M.A., F.R.I.B.A., Raymond McGrath, B.Arch., F.R.I.B.A., F.R.I.A.I., and R. T. Esterquest, Librarian of the Schools of Medicine and Public Health at Harvard University (who replaced K. DeWitt Metcalf originally nominated), highly commended the entry by Michael Brawne (UK) and Harold J. Nicolais (USA). Also commended are the entries by Barrie Dewhurst (UK), S. F. Sanchez, A. G. R. das Neves and A. G. Ribeiro (Portugal), Howard Mason, Peter Faller and Malcolm Quantrill (UK), and Vahit Erhan, Orhan Demiraslan, H. Baban and U. G. I. Gundes (Turkey). The jury disqualified thirteen entries for serious infringement of the competition conditions. Professor Albini abstained from voting for the winning design, although he did not oppose this decision by the rest of the jury.

This building is obviously a very suitable subject for an architectural competition, not only because of the difficult functional problems involved in current library planning, but equally because of the very difficult problem of the design and siting of an extension to the original college library which was designed by Hawksmoor.

The assessors have produced a very full and admirably written report, which in no way disguises the fact that they did not whole heartedly agree in their views as to the character of the building required. It is difficult to judge how far this lack of accord was due to the language barrier that Professor Albini presumably suffered in dealing with three other English-speaking assessors, or alternatively his desire to see a much

more expressionistic building on the site. We strongly suspect that the fact that the jury have been able to come to a satisfactory decision may well be due to Sir Hugh Casson taking on successfully a new role as something of an international diplomat.

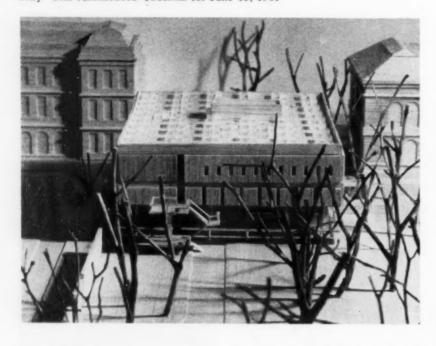
The Assessors' Report

In their report, the assessors point out that apart from a few eccentricities, all the entries were of three main types, the long rectangle, the cube, and the multi-storey stack with low ancillary reading rooms. Of the third type, the jury say that no competitor succeeded in the very difficult task of relating a high building to the

site, and to the existing blocks.

Rectangular and cube forms were, tney say, equally popular, but more rectangles survived to the short list. They also say that the two obvious alternatives of placing stacks underground to form a podium, or overhead like a cranium, were almost equally popular devices and produced some excellent architectural solutions.

But the biggest problem was that of providing a physical link between the old library and the new. In practice the entries showed that any solution other than a connection at basement level proved almost insoluble. It also seemed to them of great importance that the new buildings should be set back to the south, leaving an open square between the old and new buildings.



Model from the south

The winning entry

The assessors define the winning entry as being consciously modern in style and construction. "with enough good taste and judgment to encourage confidence that the new library will be a noteable addition to the architecture of the college." They say, however, that the siting of the new college might be improved by moving it further back, so that the fine oblique vista of the old library from the college park is preserved. At the same time they praised the architectural relationship to the older buildings, by such devices as tying in with the main cornice and string-course levels of the existing buildings. They also commend the formation of an entrance courtyard, but doubt the wisdom of introducing a pool to this area, especially in view of the fact that books are stored immediately underneath. They point out that the structural system. mainly precast concrete columns and trusses with in-situ walls and floors, will almost certainly require much reconsideration. They feel that the general treatment is too boney and over complex, "Search for refinement has led to a finickiness and lack of simplicity-faults which can, however, be

The assessors praise the natural lighting of the building, particularly that there are generous glass areas in the working spaces on the ground floor, supplemented by room lighting, and the way in which this controlled fenestration expresses the function of the interiors, and the varied elevational rhythm that results.

"The required articulation with the old building is wisely placed below ground level, and the tunnel connection is kept short because of the northward extension of the basement. Direct courses and well-placed lifts will facilitate the flow of books from one building to the other. Movement of books within the new building will be reasonably direct and unimpeded by stairs, walls, or long distances.

They praise the way in which the building can be simply and efficiently operated by the librarian-administrator. "There will be very little of the waste matter and excessive travel that is characteristic of far too many libraries."

At the same time, they like the arrangement for users. "Readers who come to consult the catalogue or to seek reference-type information can do so with a minimum of travel and stair climbing, since the catalogue and reference areas are on the ground floor immediately beyond the control desk. Furthermore, the users of these areas will not be subjected to unnecessary noise and disturbance, since other readers (e.g. readers of the general reading room) will not walk through but will be diverted at the main stairway. Again, at the head of the stairs on the first floor, reader traffic will be distributed possibly in four different directions." They also praise the way in which the work behind the scenes can be readily carried out, without disturbing the readers. They equally like the proper siting of the control point in the entrance hall, which contributes towards economical staffing. "Hightraffic areas are properly kept to the ground and first floors. Floor areas for each of the senarate functions are adequate in size, and most of them are efficient in shape. Gangways in the closed stacks are of optimum dimensions-wide enough for use, narrow for economical storage. Arrangement for the deployment of staff recognised the need for economy." The assessors say that although the design does not show readers' seating accommodation which is varied, the flexibility of the design allows readers' furniture to be placed in different ways to achieve this objective.

"All-in-all, the jury considers that the design fulfils the requirements of the accommodation programme prescribed, that it can be built within the limits of cost stipulated and that it meets the desires of the Promoters expressed in Section 33 of

the Conditions which was 'that the new building will represent the twentieth century to posterity as characteristically as the existing library represents the eighteenth century.'"

Professor Albini abstains

Though he did not oppose the award of the first premium to the design by Paul Koralek, and indeed, commended the design in many ways, Professor Albini felt compelled to abstain from voting in its favour. His reservations were given in the assessors' report in the following statement.

"The design has been carefully worked out, especially from the functional point of view, and it answers adequately to the purpose it is intended to fulfil.

"The position of the new building in relation to the two existing buildings is well chosen; it would nevertheless be advisable to site it further away, so that continuity is preserved between the open spaces of the gardens to the east and west of the present buildings.

"The general proportions of the building, when considered in conjunction with those of the old library and the museum, are most acceptable.

"Despite the qualities to be found in favour of No. 123, the most important reservation that I feel it my duty to make concerns the architecture which, though of high standard, does not seem to me to harmonise with the surroundings in which the new building is to be situated.

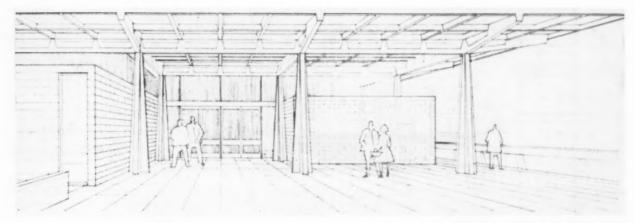
"This reservation applies, not only to No. 123, but in general to almost all the other designs examined.

"The present surroundings are determined principally by the architecture of the old Library, which is the more authentic work of art of the two adjacent buildings, being notable for the regular rhythm of its windows, the uniformity of its material, and the firmness of its stone-structure.

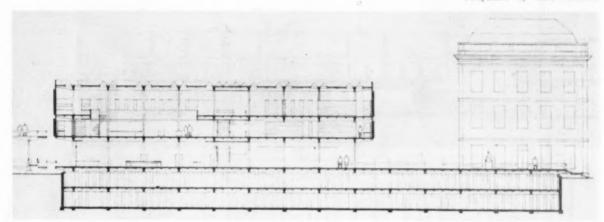
"An important contributory factor to the

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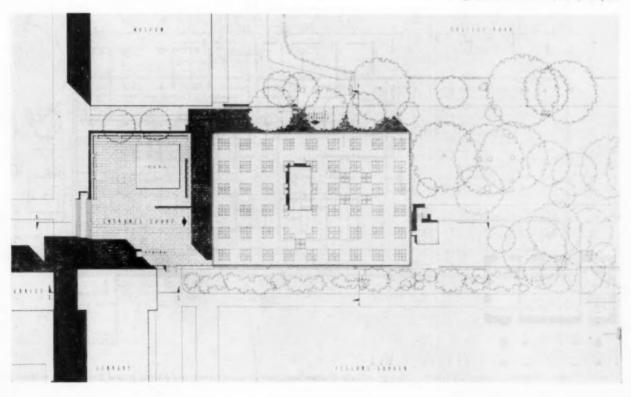
Winning Design by Paul Koralek



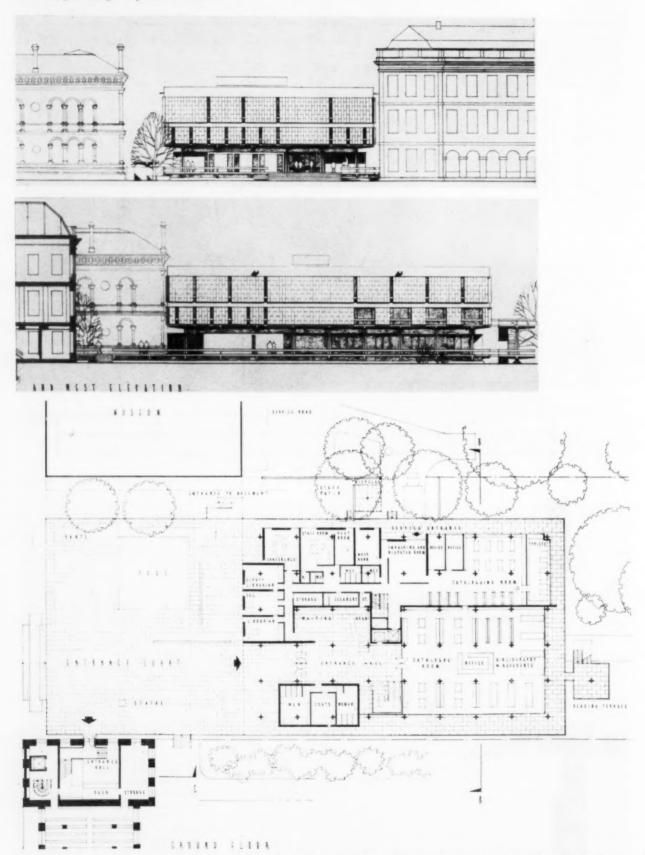
Perspective of main entrance



Longitudinal section and (below) site plan

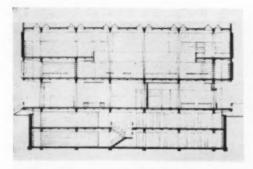


Winning Design by Paul Koralek

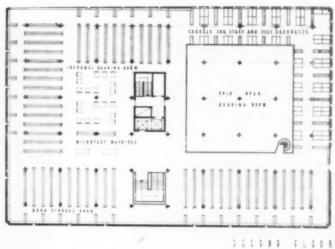


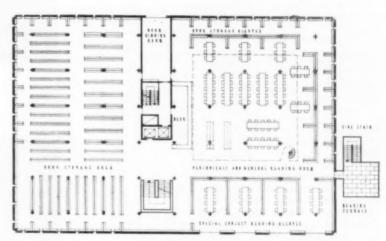
North elevation (top), west elevation (centre) and bottom, ground floor plan at podium level

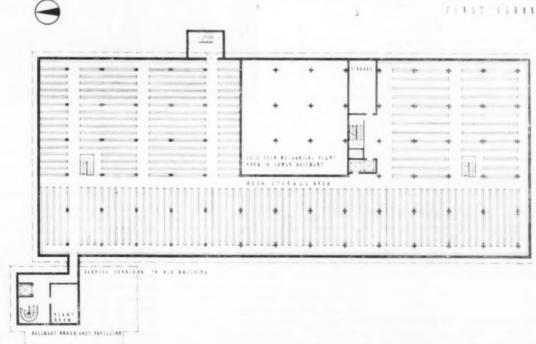
Winning Design by Paul Koralek



Cross section, showing double-level basement forming a podium. The top basement enjoys a limited amount of daylight through clerestory windows, created by raising the podium about 4 ft. above ground level







Plan of second floor (top), first floor (centre) and upper basement (bottom)

Winning Design by Paul Koralek (continued)

attractiveness of these suroundings is the expanse of gardens and the large trees which are situated towards the southern end of the area placed at the disposal of the designer.

"Without going into details, No. 123, and for that matter many of the others, does not appear to give any indication that the problem of inserting the new architecture within the present surroundings has been faced up to, or that the restraints and stimuli that would result from this insertion have been assessed, so as to reach an architectural solution. This solution could have been unreservedly contemporary whilst at the same time, without making concessions to a 'period' taste, it could have attempted that dovetailing with tradition which present-day architectural thought regards as one of its most immediate problems.

"For the above reasons I cannot honestly advise adoption of design No. 123, simply as it stands.

"I feel confident, however, that its author can revise it, bearing this problem in mind. For he has shown a keen awareness of the many other arduous problems which he has encountered and solved, brilliantly, in his design."

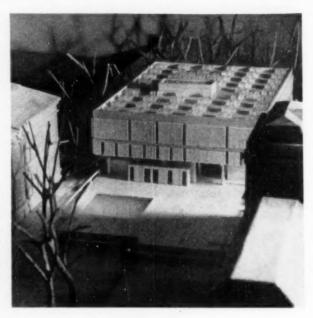
Second prize

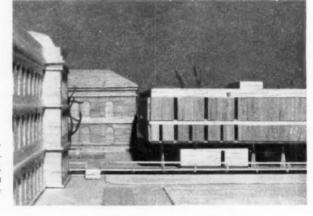
The assessors praise the design placed second as an efficient, spacious, wellplanned and economic building. "It exhibits an almost classical simplicity of design, but the industrial characteristics of its construction are unfortunately apparent, columns with mushroom capitals being employed to obtain a flat floor slab without any beams which might obstruct ventilation ducts and services. As they feel that the building is well sited in relation to the existing layout, but believe that its appearance might have been improved if the podium work had been continued for the full length of the building and not allowed to die away. The physical link with the old library is a bold attempt to centralise control, and is handled sympathetically. They feel that the planning of this design might well be taken as a model for any library of similar size. Most of the readers are concentrated on the ground floor, thus providing maximum convenience for all users, except for the relatively few specialised readers who would use a firstfloor level. The only snag they see with this arrangement is the large concentration of readers which may lead to noise and disturbance. In general, the excellent proportions and tough straightforwardness of the building were much liked by the jury, who considered that it held its own with its neighbours and possesses considerable dignity and self-confidence."

Third prize

Of the design placed third, the assessors say that it is "the most original and imaginative of the competition entries. Although its faults are as positive as its virtues, the

North side of the building, showing the podium between the two existing buildings with its pool. The assessors feel that it is unwise to have this latter feature immediately above the book stock





Model looking towards the new building from the west. For comparison with the site as it is now (see page 870)

jury agrees that it deserves more than commendation. The handling of the interior spaces is impressive, and there is no doubt that it would be a building which people would come far to see." They feel that the use of load-bearing walls on the east and west sides "close the vistas in a highly dramatic, almost Piranesian, fashion. The north and south façades are curtain walls of grey plate glass which would reflect the trees and adjoining buildings. The perspective drawing realistically illustrates this interesting feature of the design. But the jury has some doubt as to whether the administrative staff would be happy behind such a

north-facing curtain wall. The siting is clever to the point of daring. Access is clear and direct for both goods and readers.

But they point out the major defect that "by means of a grand central staircase, readers must ascend some 20 ft. to the general reading-room level. In doing so they pass, at the first-floor level, the readers who are seated at the reading tables in the reference area. This high density traffic would be most undesirable. In general, the drawbacks of the building as a working library (as opposed to its virtues as architecture) have prevented it from achieving a higher award."

Commendations

The assessors say that they were attracted by the highly-commended entry by Michael Brawne, for its horizontal lines, good scale, and imaginative orientation of architectural modelling at low level. "It is, of course, in many ways very similar to the winning design and therefore shares many of its virtues." But they say that "the general planning shows many practical defects," and that "several rooms seem to have been added almost as an after-thought, and the effect is given of improvisation rather than of a carefully thought out plan. Yet the relationships of different areas do show an appreciation of functions, although the arrangement of spaces for the receiving and handling of incoming books is not very satisfactory."

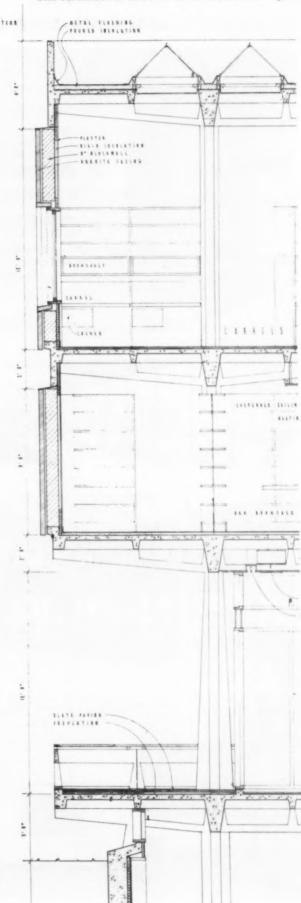
The assessors regard the other highly-commended entry by H. J. Nicolais as being "a solution strongly personal in expression. The serrated façade exhibits an interesting glazed and shafted treatment and establishes a good scale with the adjoining buildings." The assessors record that they disagreed on the question as to how far this design harmonised with the existing buildings. "Professor Albini considers it to be one of the most successful in its handling of the problem of ambience. Mr. McGrath, on the other hand, commends it only because of its plan. He takes the view that its pleated facades, gabled roof line and excessive verticality do not consort well with the old library." In general the assessors praise the planning of the building and draw attention to the peripheral corridor, but point out that it would "serve to insulate readers from book and trolley movement, but it would also cut out natural light from most reading areas-a distinct disadvantage."

The assessors give their views on the commended design and make some 50 other comments on some of the remaining entries, these being divided into architectural notes and library planning notes, a slightly odd split.

Large, diverse entry

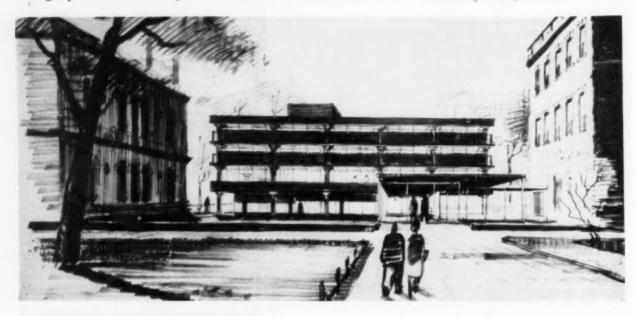
The success of the winning design is very largely due to the successful application of the idea of using a podium formed of a two-level basement for book storage, which can, at the same time, serve as an underground link with the existing building and form a forecourt just above ground level for the new building. At the same time, however, it is quite clear that the assessors, particularly Mr. Esterquest, have subjected the internal planning to very close scrutiny and have come to the conclusion that it is one of the most workable designs submitted.

The other feature of Paul Koralek's design is, of course, that this massing is very much in sympathy with the existing buildings, although the relationship with the museum building in the east would probably be a little better if the block were set further back. The assessors have therefore, from a large and very varied entry, been able to select a design which is fully worthy of the site. It is frequently forgotten that competition assessors can only pick what they consider to be the best entry, and one of the chief reasons for the resounding success of the competition has undoubtedly been the size and diversity of the entry.



Constructional detail of external walling, showing cruciform concrete column and beam system

Design placed second by A. Mansfeld, D. Havkin and J. Polatsek (Israel)

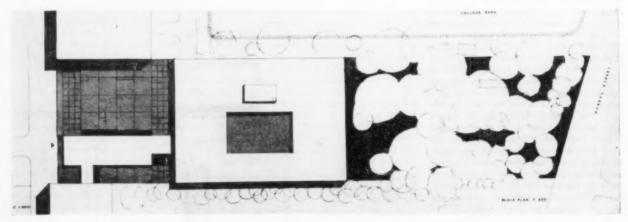




North side of the building (above) and interior of entrance which links the two buildings. The assessors praise the efficient planning of this scheme, but damn it because "its industrial characteristics are unfortunately apparent." It is one of the few happy attempts to link old with new at ground level, so as to provide a common entrance for the two buildings



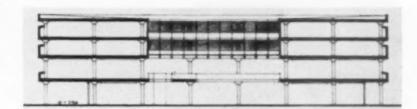
The main reading room (left) and site plan (below)

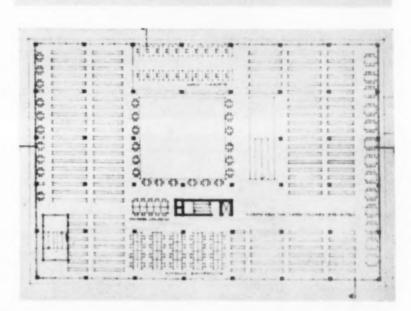


Design placed second by A. Mansfeld, D. Havkin and J. Polatsek (Israel)

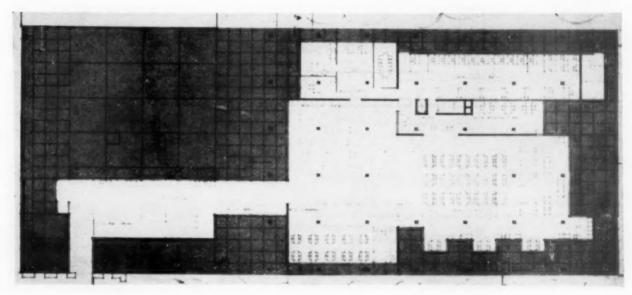


West elevation (above) and section (right). Reading areas in this design are largely concentrated in the double-height reading room with glazed roof over. The assessors felt there were disadvantages, chiefly of noise and disturbance because of this grouping

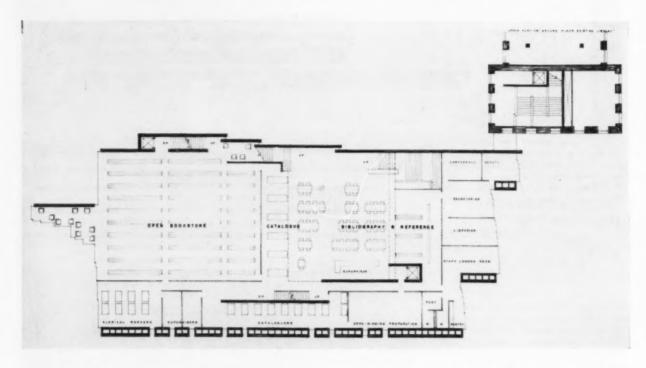


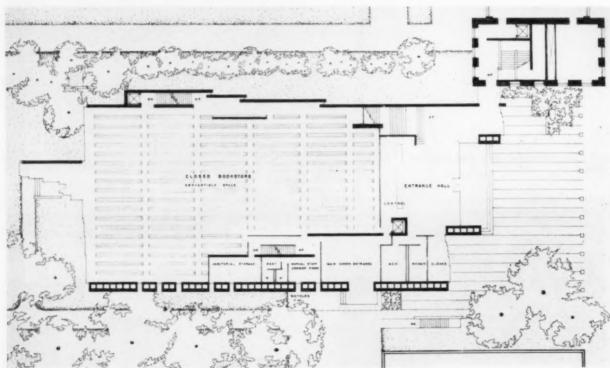


First floor plan (right) and ground floor plan (below)



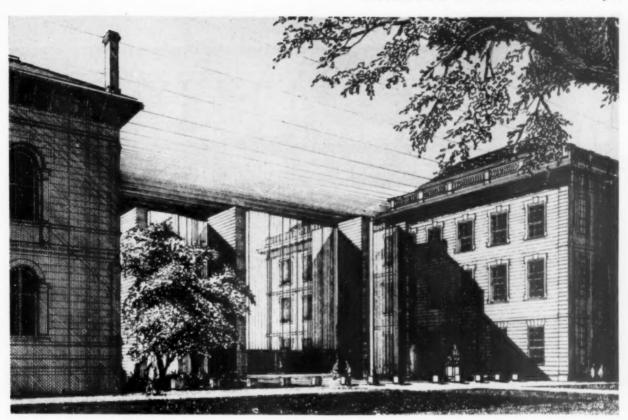
Third winning design by Gene J. Festa and William Gardner (USA)

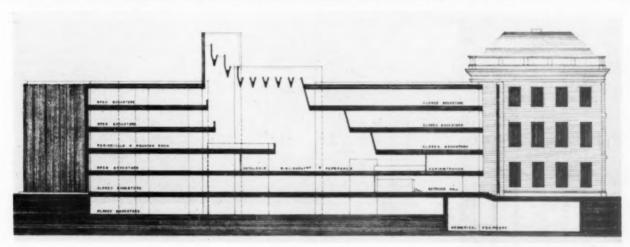




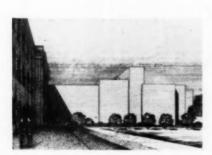
These two architects are associates of Eero Saarinen & Associates; also partly responsible for the scheme were J. Mesick, L. Zurlo and T. Ovington, who are employed by the same office. Ground floor plan and (top) first floor plan. This design sets out, according to its accompanying report, to complement the existing buildings by its massing and external materials. Coupled

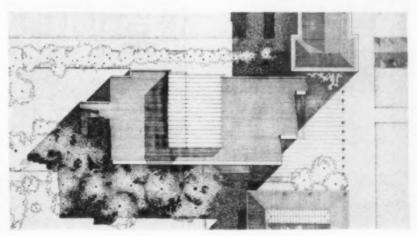
with this concept is the internal reading room, a dramatically conceived and inward-looking volume. This the assessors regarded as impressive, something that people would come far to see. They found it the most original and magnificent of the competition entries, but they could not accept the idea of a grand central staircase by which readers must climb some 20 ft.



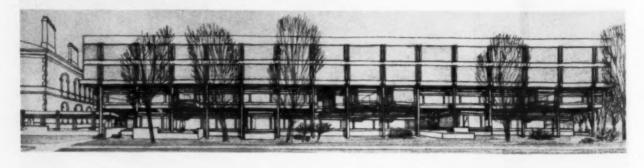


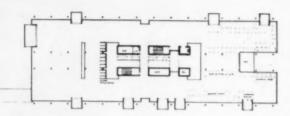
North side of building (top), section showing centrally-lit reading room at first floor level (centre), site plan (right), and below, west elevation





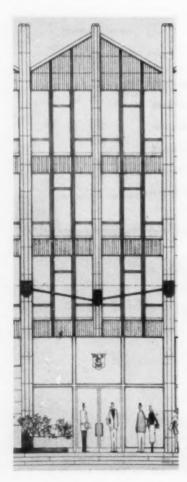
Dublin Library Competition (continued)

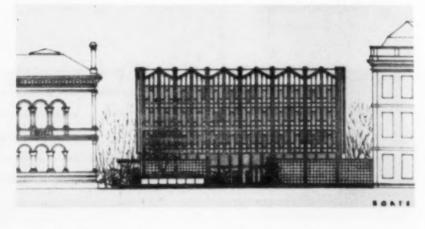


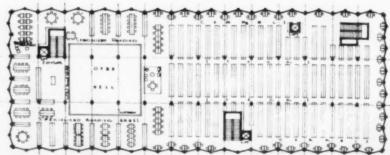


Highly commended entry by Michael Brawne; above, the west side of the building and left, first floor plan. The scheme is basically similar to the winning design, but the assessors found some of the planning slightly improvised









Highly commended entry by H. J. Nicolais; top, north elevation; above, first floor plan and elevation detail (left). It was this building about which the jury disagreed amongst themselves as to how well it harmonised with the existing

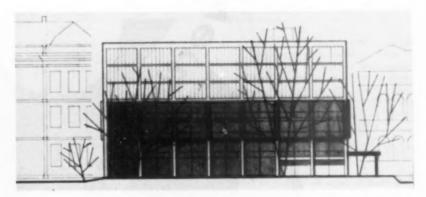
building. "Professor Albini considers it to be one of the most successful in its handling of the problem of ambience. Mr. McGrath, on the other hand, commends it only because of its plan."



West elevation of commended entry by Barrie Dewhurst; a solution similar to the winning scheme, but the assessors found the planning defective



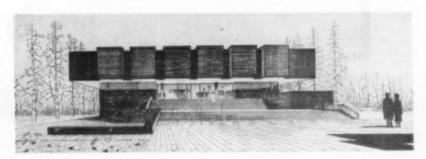
Designed by George Subiotto (UK), this building stands in a pit, dug out to one floor level below the existing ground line, this excavation shown dotted on the west clevation (above). The continuity of the horizontal spaces around the buildings of the college is thereby destroyed



Commended scheme by H. Mason, P. Faller and M. Quantrill; this superficially dull design was commended by the assessors as having a very workable plan

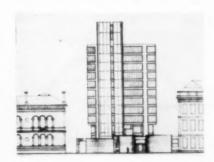


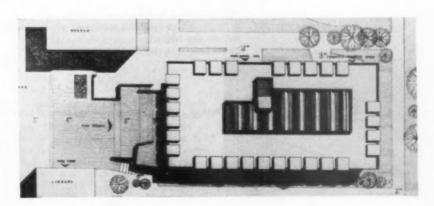
Two of the vertical schemes which tend to prove the case for the massing of the winning design. Above, the east elevation of the entry by Richard A. Kimball and Theodore Musho (Italy), and below, the design by William Cowburn (UK). It is interesting to note that in both cases the designers also proposed to have links breaking into the east façade of the existing library



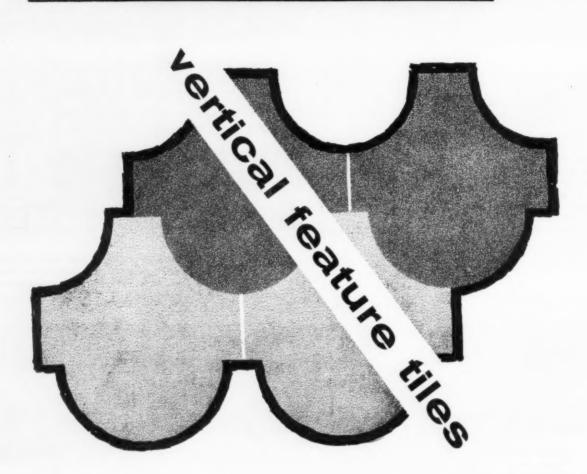
Commended scheme by V. Erhan, O. Demiraslan, H. Baban and U. Gundes (Turkey). North side of the building (above) and site plan below. The assessors thought this design was at first sight a rather tough and brutal solution, and it kept the affection

and loyalty of at least one of the assessors right through the judging (who this actually was is not stated in the report), but they agreed that it had planning defects, especially the climb of some 20 ft. to the general reading areas









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THE INDUSTRY

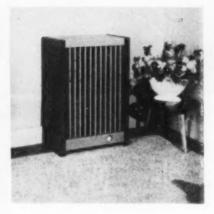
This week Brian Grant describes a book on the history of a saw manufacturer, a thermal storage heater, an anchor channel system, a plastic handrail and a washing trough.

All about Saws

As a general rule I find the average company history is produced to a somewhat wearisome pattern, with the inevitable photo of a dreary little shack (" where it all began") and ending up with the Corinthianspattered front of the new office block. Good enough presumably for the regular customers, but not of very much general interest. I have now just had The Story of the Saw, produced to mark 200 years of Spear & Jackson: an interesting production with a lot of good illustrations and historical information including an astonishingly modern looking Roman log saw. though, of course, the frame is wood and not steel tube. This is a sensible publication in which the sponsors have been content to let their products speak for themselves without beating too loud a drum. (Spear & Jackson Ltd., Aetna Works, Savile Street, Sheffield 4.)



Roman iron frame saw, used in Egypt; the wood frame is a replica



Thermodare thermal storage heater

Thermal Storage Heating

Thermodare, who have just opened a new showroom in Petty France, have also announced a 21-kW. electric thermal storage heater for domestic use. It takes its current at off-peak hours through a time clock control, and is thermostatically controlled. Price is £22 10s, including purchase tax, This is one of the first models to have been designed specifically for domestic use, and as the surface temperature remains at all times comparatively low, it can be painted in any required colour without any danger of discoloration. The unit is intended to form part of a full central heating system, as it would obviously be unreasonable to install separate circuits for a single room, and the makers claim that the installation cost of a complete house should be only about half that of a small bore and boiler system, and also that the annual running cost should be less. (Thermodare (Great Britain) Ltd., 94. Petty France, London, S.W.1.)

Anchor Channels

The Halfen anchor channel system is made in various sizes with carrying capacities from 150 to 6,000 lb. per foot run of channel. The anchor strip is made from hot rolled channel and is secured by steel straps which pass through loops pressed out of the back and are embedded in the concrete. The load is carried by forged steel bolts with heads shaped to fit the lips of

the channels. They can be moved to any point in the channel where a fixing is needed, and extra bolts can be fitted at any time. Short lengths can be used for fixing machinery to floors, and brackets for hanging pipes and cables are also produced. (Kennion Irvine & Co. Ltd., 75, Victoria Street, London, S.W.1.)

Plastic Handrail

The Osmarail handrail cover is made from extruded p.v.c. in shapes to fit the most commonly used sizes of rectangular handrail section, 11 by 4 and 1 in, and 2 by 4 in. It is produced in a range of 14 colours, and as it has good abrasion resistance and the colour goes all the way through to the core. it should have a long life. The makers will supply and fix the covering to handrails which are already installed, and they also produce a standard rail on a 1½ by 1-in. core in lengths from 3 to 15 ft. by increments of I ft., with fixing brackets already fitted. (Osma Plastics Ltd., Grove House, 551, London Road, Isleworth, Middlesex.)

Washing Trough

At the Hospital Equipment Exhibition I noticed the Ellipsa washing trough, which is made of ceramic glazed fireclay and which should be useful in schools as well as in hospitals. It is 48 in. wide and has three tap holes. Fitted with spray taps it could well be used in office washrooms. where it should save space and also make the plumbing more economical. (Shaw Knight & Co. Ltd., Enamelstone Works, Bishop Auckland.)



Ellipsa washing trough



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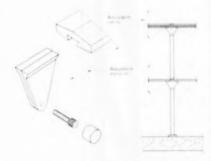


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Aluminium Balustrading

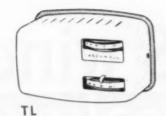
Starkie Gardner, a long-established metal working firm with a first-class reputation for quality, is now controlled by the Le Bas Investment Trust and has started the production of a standardised aluminium balustrading suitable for staircases at any angle and costing about £5 per foot, fixed, with posts at every riser. There are two types of post, one square and the other in a tapered round section, and three handrail sections. The posts are fixed to the side of the stair. or to the treads, and the handrails are dovetailed to take fixing brackets which are in turn hinged to the tops of the posts. This allows for fitting with any required angle between post and rail, and intermediate rails in any of the usual materials can also be provided. Mitred corners are jointed with an angle piece in the dovetail. and raking wreaths or bends for landings are supplied to drawing. The system seems a good one, though I feel that the square extruded post would be better if it were a hollow section. Do not be misled by the somewhat tiresome trade name of Starkie-Strading. (J. Starkie Gardner Ltd., Merton Road, London, S.W.18.)



Standardised aluminium balustrading

Rectangular Hollow Steel Sections

For the last 20 years or so, round section tube has been used for structural work, for which it has many advantages, not only from the point of view of weight saving but for secondary reasons such as savings in painting costs because of the smaller surface area to be covered. Shaping the ends of the tubes for welding is not difficult with the appropriate equipment, but square and rectangular section tubes are now being produced, and any member, square or round, with its end cut square or obliquely. will seat against the flat side of a rectangular section ready for welding, so that all connections are simplified. Stewarts and Lloyds have just issued an illustrated booklet about these sections (Ref. 872) which gives the properties of squares up to 5 in. by 5 in. and rectangles up to 6 in. by 4 in., the smaller sizes being welded and the larger seamless. The illustrations show a wide variety of structural applications, including partitioning, street furniture and balustrading, structural steel frameworks and roof trusses of varying designs. (Stewarts and Lloyds Ltd., Broad Street Chambers, Birmingham 1.)



Ratiomatic thermostal

Controls for Electric Floor Heating

Satchwell have just introduced a new form of thermostatic control for floor heating circuits. It is known as the Ratiomatic and embodies two thermostats, one outside and one within the building, the two working together so that if the night is cold an extra boost is given to the heating even though the room thermostat may not demand it. Intermediate charges between fully on and off are provided by a cyclic switching action, the proportion of time that the floor heating is switched on during the charging period determining the total amount of the charge. The system is simple to install, as only three wires are necessary from the internal to the external control. Heat storage installations are as a rule economical, but are not too easy to control, as it is only possible to govern the charge fed into the heated floor during the night off-peak hours while the daily emission of heat takes place at the same rate whatever the temperature conditions. The Ratiomatic system seems to get pretty near to the right answer. (The Rheostatic Co. Ltd., Slough, Bucks.)

Designing Stonework

The Bath & Portland Stone Firms have just opened a further development drawing office at Vincent House, Vincent Square, London, S.W.1, so that architects will be able to discuss technical details at an early stage of design. It seems that the first design office in Bath was a considerable success, and much used, hence the London venture. The service is entirely free.

Plastics for Light Fittings

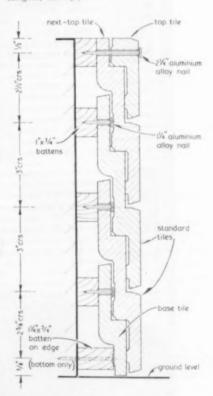
In various experiments with high density polyethylene the Recon development engineers produced a rigid translucent tube which has a high light transmission allied with good diffusion. The tube has high impact strength and can be made in a wide range of colours, and the fact that it is opaque means that all wiring and fittings can be concealed within the tube. Bore sizes up to 4 in. are possible so far and efforts are being made to produce square and oval sections. The tubes can also be reinforced with high tensile steel wire so as to provide a built-in and rust free guard for factory use. Lengths up to 15 ft. or more are possible for use with all lengths of fluorescent tube. The fitting illustrated was made by Courtney Pope. (Recon (Pipelines) Ltd., Sheerwater, Woking, Surrey.)



Plastic lighting tube

Wall Cladding Tiles

Brickbond wall cladding tiles are designed to produce the appearance of brickwork facing without the use of mortar, the joints showing strong shadow lines, while it is also possible to butt the vertical joints close if it is desired to emphasise the horizontals. The system of steps (see sectional drawing) and the use of broken bond provide a weatherproof and rigid cladding which is at the same time able to take up thermal movement. In addition to new work it can also be used for applying to existing damp walls and at the same time maintain the appearance of brick. Fixing is to battens or direct to lightweight block, and the tiles are guaranteed for 50 years against lamination and decay. Standard colours are grey, green and stone, and the price per square yard is about 16s. The catalogue is to A4 size and SfB classified. (Redland Tiles, Castle Gate, Reigate, Surrey.)

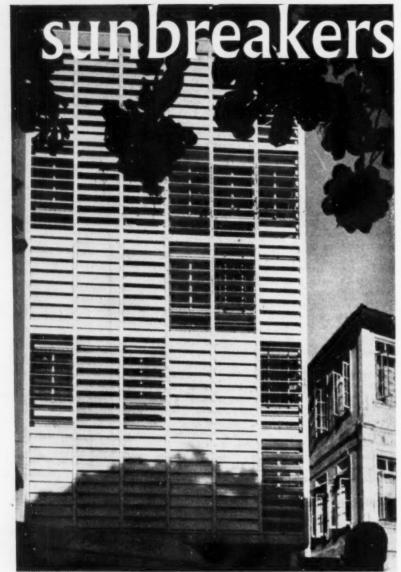


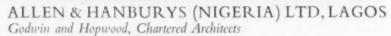
Brickbond wall cladding tiles

Standard Carda Windows

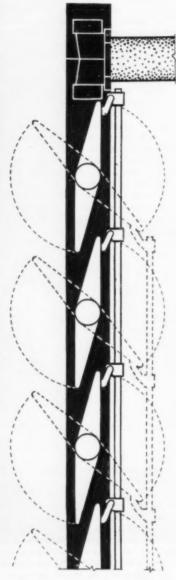
Two sizes of Carda window have now been standardised. Both have a height of 4 ft. 0½ in. and their widths are 4 ft. 0½ in. and 5 ft. 11½ in. at prices of £18 18s. and £21. They are made of good quality softwood and the ex works prices include all fittings. priming and crating. The smaller window has a four point locking espagnolette and a side hung outer sash which opens for cleaning. The larger has a five point lock and the outer sash is stay hung. Both windows are otherwise to standard Carda details. Delivery will be from stock after the end of July. (Holcon Ltd., 21. Mackenzie Street, Slough, Bucks.)

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Two years ago we published a series of articles* by W. S. Gauldie and A. F. S. Wright on Architectural Management which included the subject of architects' drawings. Since that time Robert Alexander, a postgraduate student at Edinburgh, has completed a study of the use to which architects' drawings are put. In the course of his studies he has gathered the views of all architects known to be interested in this subject and has closely questioned a dozen large and half a dozen small building firms on the drawings they actually receive and would like to receive from architects. Also he has collated the results of a questionnaire sent to builders (receiving 75 replies) and has spent three months making on the spot observations in a large firm of contractors in Aberdeen. As a result he has elaborated proposals for drawing reform which, while agreeing substantially with those of Gauldie and Wright, go some distance beyond them.

7 PRACTICE

Working Drawings, 1.

Robert Alexander begins his proposal for the reform of working drawings by plumping for the "elemental" type drawing which separates the trades, in place of the more usual drawing which treats them all together. He then outlines the functions which drawings must perform and makes some further decisions about such matters as numbering and choice of scale.

Since drawings are the architect's chief method of expressing his ideas, it might have been expected that drawing methods would have been developed-by experience, experiment and by user studies-to a high standard of efficiency. In fact, this is not so. The investigations which form the background to this study showed that builders are greatly dissatisfied and find them inferior to those they receive from civil and structural engineers. Nor is interest in this subject widespread among architects. At two symposia on drawing office technique held by the RIBA in suit the practical process of building."

1956 only one firm, Elder & de Pierro, had considered the problem objectively and in any detail.

The architect has to make drawings for many different people: for himself, when working up a design; for the client, to illustrate it; for local authorities; for the quantity surveyor; for consultants and specialists; and, last of all, for the builder. But these articles are only concerned with the drawings needed for the builder.

The development of elemental drawings

A basic defect of the traditional working drawing is that it lumps together information needed by a number of different people. If the drawing is sufficiently full and accurate for all their purposes, it will be a crowded drawing and, therefore, very difficult for any one of its different users to follow. For this reason the case for the "elemental" type of drawing is overwhelming.

Before detailed points in the preparation of working drawings can be examined, it is necessary to consider the builder's general requirements and how the architect can meet these in a form and procedure also acceptable to him:

(a) Distinction between the architect's "roughs" and the finished drawing.

I should like to stress the point made by W. Sinclair with the drawings they are receiving from architects Gauldie and Arthur F. S. Wright in their articles published by the AJ, that "working drawings are not just another outlet for the architect's creative urge: to be fully effective they must be tailored to

^{*} The dates of these articles were January 8, 22, 29; February 5, 12, 19, 1959

technical section

The sort of drawing which the architect produces as qualified architects finds so difficult to fling off, and or part plan to make sure the thing works and adding a great deal of information for the quantity surveyor and to act as personal reminders) is suitable to this creative stage, but it is not acceptable to the builder. What so often happens is that extra instructions to the builder are added and the resulting clutter is then rushed off for printing and issue to the site. Can we wonder that mistakes are made on the site by the builder failing to decipher correctly a drawing of this type?

A definite line of demarcation must be drawn between this "creative" drawing and the working drawing for the site. The initial drawings should be "roughedout" in pencil and need not be the works of art which the architect has been encouraged to produce during his school training. It is this fetish for immaculate and painstaking draughtsmanship which the newly

he designs and constructs (drawing a small section the result is that he becomes so absorbed in it that the important points are completely by-passed. Once the drawings are returned from the quantity surveyor with any necessary alterations marked on them, it is a simple matter to trace, freehand on the larger scales using a Rapidograph type of pen, only relevant information on to the finished working drawing.

(b) Grouping the Drawings

Fig. 1 shows a suggested grouping and indexing of elemental drawings which could be adapted to suit the particular requirements of any job. There is one further aspect in using a series of drawings such as these-ensuring co-ordination. The structure of the drawings, if it is based on actual site operations rather than a design conception, leads automatically to a co-relation of the many aspects. If information schedules on such things as types and depths of floor

Group	Elements	Remarks						
WD 1	Site Works, Setting Out and Excavation	These drawings enable the builder to establish himself on the site and work out his programme for layout of plant and materials						
WD 2	Foundations and Drainage (Substructure)	These drawings should be bold, clear, concise, and on as few sheets as possible, especially as they include only outside work. In all cases the drawings should be related to datum and setting out lines. This group of drawings carries work up to D.P.C. level.						
WD 3	Superstructure	Once the building has reached D.P.C. level, the main outlines have been established and thus the superstructure drawings require very little dimensioning						
WD 4	WD 4 External Openings, Partitions, etc. When superstructure is complete, a new group of a not have seen the job before, will appear. Their wo out. Complete details of the superstructure are not but only fixing details such as windows, doors, etc selves will be detailed by separate drawings and schorm a separate contract anyway							
WD 5	Joinery Fittings, Pre-cast Work, etc. Manufacture	These drawings will be used for all shop-made joinery fittings and other fixtures made off the site						
WD 6	Joinery Fittings, Pre-cast Work, etc. Assembly	This series is required for joinery services and fixtures. No details of construction are required, only instructions on fixing into the building shell						
WD 7	Finishes	These will include doors, wall and floor finishes, partitions, etc., and may be covered by use of standard schedules						
WD 8	Equipment	This series will include, for example, heating appliances, lifts, etc. Only fixing details are necessary on these drawings. The constructional details which may be provided by the engineering consultant will not be required on the site						
WD 9	Services	These will consist of layout drawings in addition to larger details of such items as WC or WHB assemblies						
WD 10	Special Rooms, etc.	Kitchens, machine rooms and other rooms requiring special layout will be included in this series because of their complexity						
WD 11	Furniture, etc.	Furniture, whether built-in or not, will require its own special drawings and details which will be made to suit individual requirements						
WD 12	Key Drawings	This series will be simple outline drawings which will be used to refer the builder particularly on the site to further details and drawings						

Fig. 1: A suggested grouping and indexing of elemental drawings

ASCOT AND THE PRIVATE BUILDER: 4



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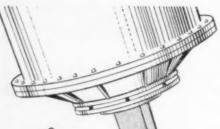
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Plan view of the ground floor of one of the semi-detached houses, showing Ascot 715 in-

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technical section

finishes, partition dimensions, etc., are prepared for the use of each member of the team on the project, and careful thought about cross-checking is maintained, then the desired co-ordination is achieved.

(c) Ease of Interpretation

The information must be given in an easily understandable form to the person who will use it. The builder will judge the drawings on the correctness of the information, their ease of handling, the ease with which important points can be picked out at a glance, and the sureness with which the items of minor importance can be found.

To meet these requirements it is proposed that drawings should be divided into three groups, according to their purpose. These purposes are site arrangement, site assembly and manufacture. The requirements of each are listed below.

(i) Site Arrangement Drawings

I have found that many architects produce $\frac{1}{4}$ -in, in preference to the traditional "eighth scales." If the $\frac{1}{4}$ -in, tries to do no more than the $\frac{1}{8}$ -in, then it is appreciated by the builder. If, however (and this is very common), the architect does his $\frac{1}{4}$ -in, as he would a $\frac{1}{2}$ -in, then this type of drawing is not acceptable to the builder since it becomes even more cluttered and unreadable.

The customary full ½-in, section through the building, showing every detail from the roof tiles to the taps on the sink unit is the prime example of a needless labour of love by the architect. Naturally the architect will require to "rough-in" half-inches when designing, for they must form part of his tying in process, but on the site this type of drawing is "an elaborate and unhelpful phoney," since the agent only uses them to locate his openings in the structure, or as a key drawing to refer him to the large scale detail drawings. The same result can be achieved much more simply by keying the ½-in, scale drawings and by drawing a series of "elemental" wall sections through the various window, door openings, and changes in roof levels, etc.

Also, it is important to remember that if it is necessary to divide the plan into sections, due to its size, then a key plan showing the relationship of the individual parts should be included on each drawing next to the title panel so that it shows when the drawing is folded.

(ii) Site Assembly Drawings

Since the components will have been manufactured off-site, no details of construction are required on these drawings, only instructions on fixing into the building shell. Nor do they need to be "accurate" drawings; it is quite sufficient if they are only approximately to scale and any required information can be traced through free-hand from the manufacture drawings.

However, I believe that a few three-dimensional sketches can take the place of a proliferation of orthodox plan-section-elevation details, and I would refer readers to Gauldie and Wright's article in the AJ for January 22, 1959, in which are illustrated the type of three-dimensional sketch they prepare to elucidate assembly. These are easily drawn free-hand, using backing sheets prepared with isometric or perspective grids. I have found that these are very acceptable to the site agent, and are, in fact, the type of drawing the builder's contract manager prepares for the site if the agent has trouble with some awkward points.

A further use of the perspective grid is to prepare room interior free-hand ink sketches on a light tracing paper and assemble them on the normal headed sheet. From this negative, prints can be taken, and by annotating in ink on these prints, they can be used as negatives for various purposes, e.g. design information to the client, information to the quantity surveyor to prepare his bills, assembly information to the site, and references to painter or electrical work, etc.

(iii) Manufacture Drawings

These go to joinery manufacturers, pre-casters and the like. It is necessary to examine, with particular regard to joinery work, the process in the shop in order to consider the scale and type of drawings.

Briefly, there are two approaches. Firstly, if the architect has carefully worked out his component and does not wish any alterations to be made whatsoever, he should state this in his specification. Nowadays, the detailing of joints, etc., requires a very full knowledge of new machine techniques, and it must be remembered that the manufacturer has his own particular machines and preferences and alters the drawings to suit his own process. Therefore, since the architect can never hope to have such a detailed practical knowledge as the setter-out, he can show little more than profiles, and state in the specification, "The manufacturer is to be responsible for the sound construction of the components, according to the best traditions of the trade and to the satisfaction of the architect. The architect's drawings are intended to show the final appearance of the work rather than the complete construction."

The architect should also ask that he should be given full facilities for inspection of all work in process in the shop, and that he should be given the opportunity to approve the manufacturer's full size setting-out drawings.

The setter-out always draws out all details to full size for the shop and very often this is done on sheets of plywood to avoid the need for preparing a rod. Therefore, there is no need whatsoever for the full size detail for joinery work, and I have found that $\frac{1}{4}$ or even $\frac{1}{4}$ full sizes, referring to members

technical section

in their nominal sizes, are all the manufacturer requires. There will arise, of course, occasions in which the full size detail will be required but generally the 4 full size detail is quite sufficient for most types of work.

(d) Easy Reference

(i) Numbering of Drawings

This should be as simple as possible, and should be made up as follows: office job number/group letters + section number/drawing number in that section, e.g., 120/WD3/1.2.3, etc.

Where revisions are necessary these should be made by re-drawing that part being revised on to a new sheet and giving it the same number, but adding R_1 , R_2 , etc., as a suffix to the drawing number, e.g., $120/WD3/3R_1$.

(ii) Numbering of Plan Units

The recommendations of B.S. 1192 are sound on this point and I set them out below:

Basement	Rooms B01, etc.	Windows WB01, etc.	Doors DB01, etc.	Radiators, etc. RB01, etc.	
Ground floor First floor	G01, etc. 101, etc.	WG01, etc. W101, etc.	DG01, etc. D101, etc.	RG01, etc. R101, etc.	
Second floor	201, etc.	W201, etc.	D201, etc.	R201, etc.	

Numbers should commence at the top left-hand of the plan and proceed left to right in regular sequence, finishing at the bottom right-hand. It should be remembered that since this notation is to refer the builders to further information in schedules it should be boldly printed in different types from other notes.

(e) Drawings should be quickly produced

The various types of modern equipment available can be utilised to this end. The use of standard sheets, printed backing sheets, the typewriter and standard details, etc., will be discussed at the appropriate following sections.

Choice of Scale and Medium

(a) Accuracy of the Drawing

Since the drawings used on the job are reproductions which are inherently out of scale because of the movement of the print material, there is, in fact, no reason for great accuracy. There must, of course, be no gross errors, but *minor* errors such as drawing 15 ft. 6 in. instead of 15 ft. 3 in. do not matter in the least so long as the dimension has been worked out and figured. The fetish of great accuracy in the drawing can waste a lot of time and should be discouraged.

(b) Choice of Scale

The choice of scale for a drawing is determined by several factors:

- (i) The needs of the user.
- (ii) The complexity of the subject.

- (iii) The medium being used.
- (iv) The skill of the draughtsman.

On the question of skill, for example, a drawing to $\frac{1}{4}$ in. scale has the following advantages over one to $\frac{1}{4}$ in, scale:

- (i) Even though larger it takes less time since-
- (ii) Acceptable accuracy is easier to achieve.
- (iii) A thicker line is acceptable, therefore there is less pencil sharpening or trouble with the pen.
- (iv) Clarity can be achieved with less effort.
- (v) Lettering can be made larger and therefore more readable on the site.

Further points to remember are:

- Bold drawings are always easier to read in job conditions and will last longer on the print than will examples of delicate and beautiful draughtsmanship.
- (ii) Where drawings in two scales, such as 1 in. and quarter full size, are required to describe a piece of work, they should be put on one reasonably sized sheet if possible. If two sheets are necessary, then the two scales should be separated, not parts of the work.

(c) Choice of Medium

Let there be no mistake about it, the standard of draughtsmanship coming from many architect's offices is deplorable. The most common faults are faint pencil negatives which print poorly, and ink "works of art" on which the draughtsman has used every thickness of line available and covered the drawing with every note he could think of.

In my opinion the widespread use of ink should be discouraged. Ink must be used for small scale arrangement drawings from which one wishes to get TTS negatives for issue to consultants, etc. Another acceptable use of ink is for the larger \(\frac{1}{8} \) or \(\frac{1}{4} \) full size finished details which can very often be traced freehand from the architect's "roughs," and also for assembly sketches. For this type of work the Rapidograph, or similar types of pens, can be used with savings in time since they require no cleaning, and they also produce a uniform line thickness.

Small scale drawings ought to be avoided as much as possible and the pencil should be used very much more than at present. The draughtsman should remember that a pencil smudge, although it looks had on the negative, does not show on the print. He can, therefore, replace the commonly used grades of pencil, 4H and 3H, with 2H. H and HB, while remembering that bold draughtsmanship always has the advantage over the delicate line. The use of softer grades is also assisted by smooth tracing papers, specially prepared for pencil work, which are coming on to the market. Also, modern printing machines and papers allow perfect prints to be made from pencil negatives. The use of the clutch pencil with a machine sharpener for the lead also does away with the old time-wasting problem of continuous knife sharpening.







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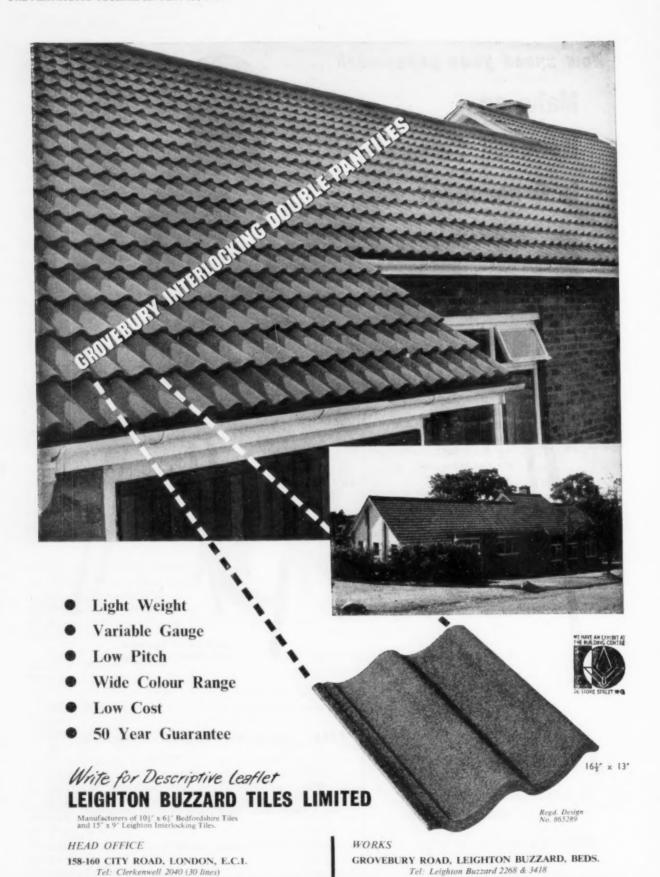
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architectural education

THE ARCHITECTS' JOURNAL for June 15, 1961 [891

editorial

The Teaching Method Seminar held at Cheltenham last Easter was one of the most profitable meetings to have taken place between teachers of architecture. No small part of the success of the Seminar was due to Ian Abbott, the Head of the Cheltenham School, who was mainly responsible for its organisation.

The general feeling of the members of the course, who were widely representative of the different types of schools, was that gatherings of this sort need to be held at least annually. Short courses on teaching method, which staff new to teaching could be advised to attend at the earliest opportunity, would do much to increase the effectiveness of teaching. Many of the "old hands" at the Cheltenham Seminar would agree after their experiences there, that refresher courses for staff with longer service can be exceedingly stimulating.

While the primary concern at Cheltenham was with teaching method, it was interesting to observe the occasional difficulties which arose in attempting to discuss teaching method when this was not related to teaching intention.

A proposal which may do much to help to clarify intentions and methods, and perhaps go some way towards spreading a wider appreciation of the various approaches to teaching, is made by J. M. McLachlan in the following letter:

DEAR SIR.

I am much interested in G. P. W. Taylor's proposals to break away from the positions of splendid isolation in which many schools of architecture have existed for many years. There are a number of ways in which contact can be made, such as conferences, joint study seminars, etc., and I should like to suggest that a system of staff exchanges between schools up and down the country might be added to the list. I do not know whether this has been done before, but either way, I feel sure that much could be gained if such a

system could be instituted or extended. How do we in London really know what is happening in Manchester or in Edinburgh? Articles in the architectural press may tell us facts and figures, but it is unlikely that we can answer the really important questions—how is the educating process being tackled, what is the student staff relationship, what is the influence of the head of the school. Such questions cannot be answered by questionnaire; they cannot even be formulated without appearing impertinent.

I wonder whether there would be support amongst the staffs of architectural schools for an exchange system between individuals, for say one, or a few weeks-or perhaps even for a whole term. Obviously the blessing and encouragement of heads of schools would have to be sought and won, but I believe that if this were forthcoming, arrangements could be made for those on exchange to be accommodated in the homes of the staff of the school which was acting as host. In this way a great deal of valuable information on methods, local conditions and points of view, could be given and received on both sides. No financial complications need arise, for each school would continue to pay its own staff in the ordinary way.

It is, of course, well known that exchanges have been quite common for many years now between schools other than architectural—particularly between here and America. Surely it is time for us to catch up in this field, as in many others, before it is too late?

J. M. McLachlan, A.R.I.B.A.

This is an excellent suggestion, and while there may be difficulties of one sort or another to contend with, the value of such interchanges should provide the impetus to overcome organisational and other hazards.

Mr. McLachian has offered to act as a "central clearing house" for such a scheme, and staff of schools which are interested in profiting from this undertaking are invited to write to him at the following address:—

> J. M. McLachlan, ARIBA, Starston, Church Hill, Horsell, Woking, Surrey.

The remainder of this supplement is devoted to a talk given at Cheltenham by Mr. Maynard Potts, the Headmaster of Hendon Grammar School, on the calibre of the sixth former. This is published as an introduction to a series of articles on 1st Year Foundation Courses which are in preparation for future supplements.

Correction: Mr. Liam Carlin was summarily posted to the Hammersmith School in the last supplement through the inadvertence of the executive editor. Mr. Carlin is, in fact, on the staff of the Kingston School.

Research: It is hoped to compile and publish in due course, details of the research work being undertaken by school staff, as it is thought that wider publicity for such work may bring about helpful contacts between interested parties. If such a facility is of interest to you, please write to the editors of this supplement and provide a succinct description of the nature of the research you are undertaking.

Party: We are proposing to have a purely social gathering of people interested in architectural education, probably at the RIBA, and possibly on a Friday evening, with an informal session on the Saturday morning following. If this suggestion is of interest to you, your comments would be welcomed.

the calibre of the sixth former

This article has been taken from a tape recording of the original talk given at Cheltenham and should be read with these circumstances in mind

I regard the grammar schools as a device to produce a large number of well-trained minds very quickly. If we were a rich country such as the United States, we could afford to educate all our children up to an average level. We are not apparently able to spend vast sums on education, therefore we have to produce a relatively large number of trained minds relatively quickly. Our 18-19-year-olds are about equivalent to the American graduate; we are two years ahead of the United States; we are six months ahead of the Russians. They are trying to make everyone keep up with the grammar school pace. The Americans are keeping everyone back to the average pace. In the grammar schools we take onequarter of each age group, and oneeighth survives to sixth form level-a proportion which is increasing. Oneeighth of each age group, trained to think, is enough to enable our country to preserve its place in the world of ideas. It is a relatively cheap way of producing quite a large number of trained minds at an early age.

In the last century, only the public schools existed to provide the small number of brains to run a vast empire. This century, many more are required, and maintained grammar schools were developed to fill this gap. By 1924 there were 31,000 pupils taking "O" level (or the equivalent in terms of General School Certificate and High School Certificate). In the same year there were 4,000 pupils taking "A" level-I was one of them. This constituted half per cent of each age group. We were not doing very well in 1924. In 1935 the "O" level figure increased to 42,000 and the "A" level to 7,000-a considerable increase.

After the war the great change came. In the war we discovered the need for brains; we probably survived as a result of the efforts of our trained brains. In 1957 there were 100,000 "O" level and 50,000 "A" level pupils. In 1960 65,000 "A" level pupils. In 1967 there will probably be 100,000 pupils taking "A" level examinations. This shows a 25-fold increase in the number reaching "A" level in 43 years. In 1924, only half of the entrants to grammar schools were kept for five years and a mere handful reached the sixth form.

Most grammar schools run a sevenyear course nowadays. The Crowther Report advises that all pupils should stay for seven years and take "A" levels. At the end of their schooling, half of the sixth form will enter university, technical college or teacher training college. One stream should not be considered any better than any other—some types of further education are better suited to individual pupils than other types. The rest of the sixth form will train for responsible posts in industry, banking or the professions, leaving at 18 and a half.

We hope to produce in the sixth former not only a well-trained mind but a habit of responsibility-a leader of men or a leader in fields of specialised knowledge -perhaps not always at the highest level, but at a level which will affect the running of our country. He is given a wide general education plus specialised knowledge. He will have shared with the staff the responsibility of running the school. In his last two years he will have handled people and made all the mistakes the beginner makes in the supervision of human beings. He will be encouraged to realise that his own individual and constructive ideas are of greater value than some of the mass pleasures which our civilisation offers. We try to separate the sixth form from the mass standards of our present day civilisation. You may say that this is a form of snobbishness. But it is our responsibility to see that they have ideas above the level of ideas of the mass if they are to take up posts of responsibility.

The grammar schools are on the whole quite well equipped. Much is spent on equipment and on teachers. In my own school of 650 boys and girls, I have 36 staff. There are six science laboratories, very well equipped; four workshops-woodworkandmetalworkrooms, a drawing office and a machine room, two domestic science rooms, a library and a music room; an instrument practice room (originally a timber store but now lined with soundproof boarding!); visual aid equipment including a cine projector, an epidiascope, a film strip projector, two tape recorders, three pianos, one organ, a wellequipped stage, a hall, a gymnasium, two playing fields. We have a sixth form common room, with colour introduced

E. W. MAYNARD POTTS, M.A., M.Sc.

Headmaster of Hendon Grammar School. Member of Board of Architectural Education

to make it pleasing and youthful looking. We have 130 sixth formers, but only 60 at a time normally use it.

The sixth formers are young men and women of the age of 17 to 19 years, who expect and are given a measure of independence, which is used with considerable discretion. Grammar schools vary in many ways, and this affects you when you accept people from the grammar schools. Some schools aim at securing open scholarships, the pupils being pushed into the sixth form as soon as possible, where they spend four years. The "O" level exam is taken as quickly as possiblethe pupil gets rid of the supporting subjects and concentrates on two or three "A" level subjects for open scholarship purposes. On the other hand, other schools devote five years to the "O" level subjects and leave two years for the sixth form; this can produce a limited course-there is not much time for any work outside the examination syllabus. There are many mixed courses in between these two. A wide syllabus including more subjects

is probably preferred by yourselves for a preparation for architecture, rather than one, two or three subjects taken for scholarship purposes. Many sixth formers take four "A" levels-pure mathematics, applied mathematics, physics and chemistry. On the biology side, there is the zoology, physics and chemistry group (with botany sometimes added). On the arts side, three subjects are a maximum as a great deal of reading is involved-both of set books and of background material-and there is also much writing. Classics groups are rare in grammar schools; many schools develop courses in economics, taking economics, history and geography; this may be of value for intending architects. We combine mathematics with economics, or with science and economics; these are well suited, I imagine, for architecture. Both mathematics and economics are useful. and history inspires vision and imagin-

Now that Oxford and Cambridge no longer insist on Latin, there is a greater freedom in the timetable. Latin is given only to those who need it for their particular subject. Several of you have in discussion with me mentioned the lack of art in the upper part of the

grammar schools. Art, music and technical drawing are taken by a number of pupils, all helping in the kind of development you want for architectural entrants. From 141 to 15, grammar schools cease to teach all pupils the same subjects—an individual variety in pace and in subject is allowed. This may be regarded as premature specialisation in some schools but not so in most schools; it is only a tentative selection-the beginning of the development of individuality.

One of the characteristics of the upper half of the grammar school syllabus is the introduction of a wide variety of subjects. We spread pupils over the whole range of intellectual activity, thereby meeting the demands from the outside world. It would be quite wrong for us to produce nothing but scientists, or nothing but classicists; the demand in Greater London is for a wide variety of trained minds. In the first three or four years everyone is in step, after which both the staff and the pupils are only too glad this variety is offered. There is now a strong tradition of outof-school activities, borrowed from the public schools and continued despite the fact that few grammar schools are boarding schools.

In my school the day finishes at ten to four in the afternoon. On average, at least a quarter of the school will stay on for an hour or so, participating in some activity or club. These are of immense value in helping pupils to create individual interests, but they are also extremely valuable in giving senior pupils opportunities in the organisation, management and stimulation of younger minds-all a training for their life as responsible people in the adult world. We find ourselves trying to combat the insidious wiles of the purveyors of premature sophistication. The teenager is at a most suggestible age, and mass advertising, we feel, is not directed towards his betterment nor towards his true happiness. It flatters him into believing that uniformity with a passing fashion will give him importance, will make him sexually attractive, or will help him to become a lucky winner of great riches. It is one of the tragedies of youth that young people can be persuaded to sacrifice the possibility of real success in order to obtain this ephemeral success. The boy, for instance, who will give up all the out-of-school activities in order to deliver beer to earn enough to enable him to buy the cigarettes which will make him feel important. The right way for him to be important is for him to develop his own individuality so as to become important in his own right, and not important as a smoker of a particular type of cigarette which is associated with an advertisement which

suggests that if he smokes this cigarette he will conquer the other sex!

The grammar schools' contribution to the personal development of the pupil may be measured by its success in dispelling the individual uncertainties which cause teenagers to accept membership of the fantasy world of mass advertising. By the age of 18 or 19, the sixth former should have developed some confidence in his own judgment, an awareness of his own capacities and his differences from other people. He should be prepared to be different. So often our world suggests that conformity is the ultimate prize to be won. Individuality is encouraged at the top of the grammar school-provided that it is applied to the worthy satisfaction of human needs-not only the human needs of the individual pupil but also the needs of the whole community.

In the sixth form, pupils devote about a quarter of their time to general studies. They take a special paper in the use of English; they study comparative religion, philosophy, current events, music, physical education, and a course of science is held for arts students. In addition, some pupils study music, art, German or religious knowledge to give relief and variation to their specialised studies. We had a pupil studying economics who took, in addition, history, geography and art-the art was for him just fun. A science pupil took "A" level music for fun-for relief from the pressure of science.

There is little reference to architecture in the general studies in the Sixth Form. I suggested a scheme to the Architectural Association some four or five years ago, whereby they made contact with sixth formers in grammar schools and with some of the staff-not so much to recruit students as to increase the awareness of the place of architecture in our life. The Architectural Association invited the headmasters to tea to talk about architecture. They were given a talk by Mr. Furneaux Jordan on "The Relationship between the Client and the Architect "-a brief historical survey of the change in relationship between the client and the architect. The client in the Middle Ages was the Church, then the wealthy business man, and now, very often, the committee-that impersonal committee which many of you have had to deal with. In the main, it is the sixth formers who will sit on these committees in later years; they will be making all the mistakes, overriding the good taste of their architects and insisting upon something drab and uninteresting; they will become the professors in the universities who will interfere with the plans for university expansion. They need an appreciation of standards of architecture.

My own sixth form spent one afternoon at the new T.U.C. building, where they found many most interesting features. That kind of thing is most stimulating to pupils and does cause an interest in architecture to grow in a school. A nearby girls' school asked me to suggest the name of an architect who might give away the prizes on their Speech Day, I suggested Gontran Goulden, who did the job extremely well and who made a permanent impression upon the girls in that school. The education of the young women is at least as important as that of the men. In your case, perhaps, your wife was not allowed much say in the design of your house, but in most cases the wife is a very important half of the client with whom you have to deal.

I will try and summarise by giving you some idea of what happens to pupils in my own school. We have an entry of some 105 pupils which represents the top 25 per cent at the age of eleven. Intelligence is the only requirementsome have nothing but intelligence. They range from the very lowest social scale to the upper middle class, and sometimes here there is less culture than in the working class pupils. A good, working class " Mum, who still gets down on her knees to scrub the steps, very often makes an excellent parent, with no great knowledge of culture, but appreciative of the absence of culture in herself and determined that it shall not be lacking in her son.

We start with intelligence, and in seven years the background of speech, manner-and manners-written expression and general education has to be filled. Almost all these stay for "O" level examinations-in our case 103 out of 105. Twenty-five leave with rather meagre "O" level passes, 78 stay for the sixth form course, 8 will join us from modern schools, private schools and convent schools where they have reached "O" level but cannot continue into a sixth form. These young men and young women make delightful additions to the sixth form-mature and balanced people, not frightfully clever, but most sincere and almost invariably very well supported at home. At the end of the sixth form, 35 will go to universities or colleges of advanced technology; 45 will take up posts of importance, many of these continuing to train either full time or part time-in sandwich courses, or day-release or in evening classes-and some will go on to teacher training colleges.

Who, then, are the people who compete with architecture for the sixth formers? Science is, of course, the subject of our and of their-generation. But very often there are better quality teachers to be found on the arts side, and many pupils tend to select the subject taught tive teachers. There is now a swing for the more imaginative, and mechanical engineering for those who can put up with the noise and the oil on their hands. Statisticians-we live in a world of figures-economists, accountants, doctors, dentists, pharmacists. Architects, linguists, a growing demand here, and if we do decide to enter the Common Market, there will be an increasing demand for Russian-and for Chinese if a reconciliation between China and the U.S.A. takes place. Lawyers, teachers and musicians . . . some of our musicians would be the sort of people you would like as designers in architecture. All these go on to universities for further study. Of the others, some go into the Forces as officers, some go into banking or into commerce, insurance or advertising.

You lose a number of your pupils to advertising-something perhaps of the same quality of mind . . . (laughter) . . . an architect lost, perhaps, perverted, shall we say. Industry has sold itself to the sixth form in the last ten years. Ten years ago, no self-respecting sixth former would go in for industry. My own son tells me he is going to be an industrial chemist. The Civil Service takes a few-decreasing in number and in quality.

The expansion which has gone on in the grammar schools has gone on also in the public schools. The figures for the examinations in the public schools (Oxford and Cambridge Joint Board) are as follows: 1939-2,792; 1949-5,531; 1959-12,187; 1960-13,736. The expansion continues and has been aided by the building of science laboratories by industrialists for public schools

To summarise, then, our "O" level leavers are quite unsuitable for architecture; they are rarely capable of invention or design; they have acquired only the basic skills. In accountancy, only one-ninth of those entering with the minimum "O" level requirement will survive as qualified accountants. In banking it has been discovered that "O" level entrants will not become bank managers. If they want bank managers, these must come from the sixth form. Teacher training colleges, who accept five "O" level passes, do in actual practice give preference to entrants with two or more "A" levels. The Crowther Report states that only one-seventh of the entrants to engineering ever pass an exam. Trade union leaders no longer come un from the ranks. A Bevin or a Morrison would have been caught at eleven plus, channelled into the Grammar Schools and up to the Sixth Form!

by the more stimulating and imagina- You will see that there are now twice as many two "A" level examinees as towards engineers-civil engineering there were "O" level examinees in 1924. The field is wide and expanding rapidly. I am quite sure that you have more than enough to man your profession at the two "A" level. Competition with other professions is, of course, growing. There is a growing demand for trained brains. In 1924 there was very little choice for a sixth former apart from teaching-one or two of my friends were doctors; not much else was offered to us in those days. Now our civilisation is so complex that we need a wide variety of trained people.

What is it that architecture has to offer sixth formers? It seems to me that they are not interested in being millionaires—in the job which provides the greatest money. They require a career that will be worth while, that will give them opportunities for creation, for responsibility and for making a contribution to the community. Despite low pay scales, girls still enter the nursing profession; boys and girls decide to become teachers, or doctors (no longer as well paid as before), or social workers (extremely badly paid). There is an idealism in our sixth form which must find an outlet. Those who study economics realise, of course, that there comes a stage where any increase in income makes very little difference to the amount of money in your pocket. They are looking for an interesting job in which they can serve the community and be reasonably well

It does seem to me that architecture, with its opportunities for leading a team of varied people, with its satisfaction in the initial creation and the final building, is very well suited for this purpose. A call from the profession to the sixth formers "to help rebuild our cities " would be answered by many of the most creative minds. Challenge is becoming dimmed in our well-ordered world, but architecture has a challenge which few other careers can equal.

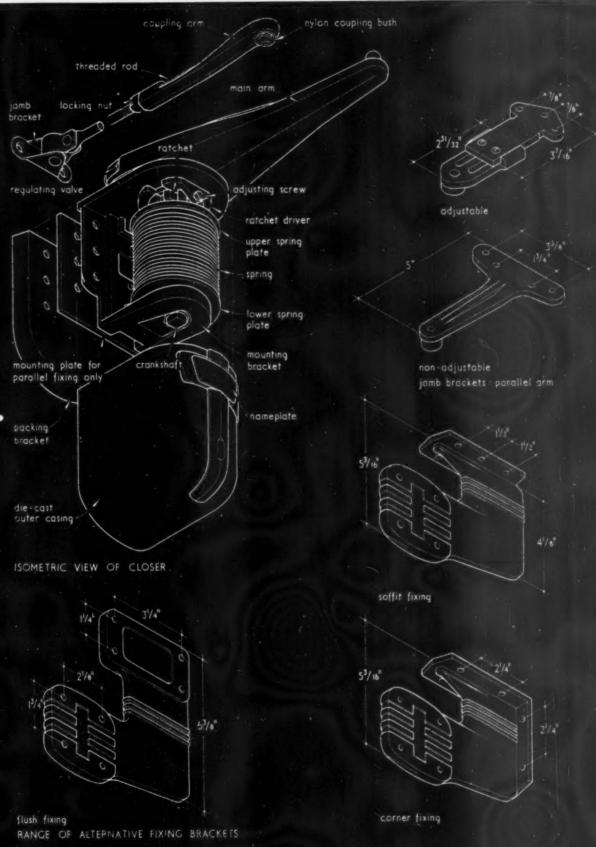
> The Panel which advised on the constitution of this supplement had the following members:-

Liam Carlin Kingston Peter Cowan Bartlett D. G. Thornley Manchester University

The Next Panel will meet at 2.30 p.m. on Saturday, July 29, in the North Committee Room, RIBA.

44.E2 5

The Architects' Journal Library of Information Sheets 823. Editor: Cotterell Butler, A.R.I.B.A.



YALE No. 66 DOOR CLOSER .

Manufacturer The Yale and Towne Manufacturing Co.

44.E 2 · YALE · DOOR CLOSER (Patent No. 776011)

This Sheet describes the Yale door closer which can be supplied with various types of bracket for differing fixing considerations. It can also be fitted with a concealed device to hold the door open at approximately 90°.

Design and Construction

Outer casing: This is constructed of pressure die-cast zinc alloy and designed to give a neat appearance at the back, as this may be visible when the closer is fitted to a glass door. Six fixing holes are provided so that, where the door has a narrow top rail, the four most suitable holes can be used.

Spring: The uniformly-coiled, tempered torsion spring is of Swedish steel and is so designed that there is no possibility of over-stressing when the closer is adjusted to its maximum power. The ratchet has four notch positions for adjusting the spring according to the weight of the door.

Arms: The coupling arm has a specially-designed nylon bush which snaps over a steel knob on the main arm, so that it can be easily adjusted and disengaged instantly.

Regulating valves: Two independent regulating valves are provided to control separately the initial and final closing speeds of the door.

Holding-open device: A concealed device can be incorporated in the closer as an extra for holding the door open at an angle of 90° to 100°.

Packing bracket: The cast-iron bracket shown in the drawing on the upper face of the Sheet can be supplied for use where the back of the main arm would otherwise foul the top of the architrave.

"O" ring seals are used in the closer to prevent oil leakage and these seals have proved completely satisfactory for over a million test cycles during life tests on the closer.

All the components of the closer are produced from materials capable of withstanding the stresses to which they may be subjected in prolonged use: the minimum requirements for every component is 350,000 operations.

Types

The following types of closer assembly are available to suit differing fixing conditions.

Standard: The closer is fitted to the inside face of a door opening inwards and the bracket of the coupling arm to the door head. This type suits either hand of door.

Soffit bracket: This type is fitted to the inside of a door opening outwards and has a bracket for fixing to the underside of the door head: it gives full spring

power. This type suits either hand of door.

Flush bracket: This type is fitted to the inside of a door opening outwards and has a bracket for fixing to the face of the door head. It is suitable for use where the soffit is too narrow for the soffit bracket: it gives full spring power. This type suits either hand of door.

Corner bracket: This is fitted to the inside of a door opening outwards and has a bracket for fixing to the angle between the door head and the jamb. It is suitable for use where wider clearance is required at the head of the door than that given by the soffit or flush brackets. This type of fixing reduces the effective spring power of the closer by 35 per cent. This type suits either hand of door.

Parallel arm: This closer is fitted on the inside face of a door opening outwards and has a bracket for fixing to the underside of the door head which enables the arms to lie parallel to the door when the latter is closed. This bracket is suitable where full headroom is required. It reduces the effective spring power by 45 per cent. It must be specified for right- or left-hand opening door.

A special mounting plate is supplied, as shown in the drawing on the upper face of the Sheet, for use where the closer is to be fixed with the parallel arm bracket.

Sizes

The approximate overall sizes of the closer casing are $4\frac{3}{8}$ in, high by $3\frac{1}{4}$ in, wide by 4 in, deep.

Finishes

All Yale No. 66 closers are available in the following finishes: gold bronze (standard finish), silver birch with chromium plated front strip, copper bronze with chromium plated front strip, chromium plated, satin chromium plated or nickel plated.

Trade Name

The name Yale is a registered trade mark.

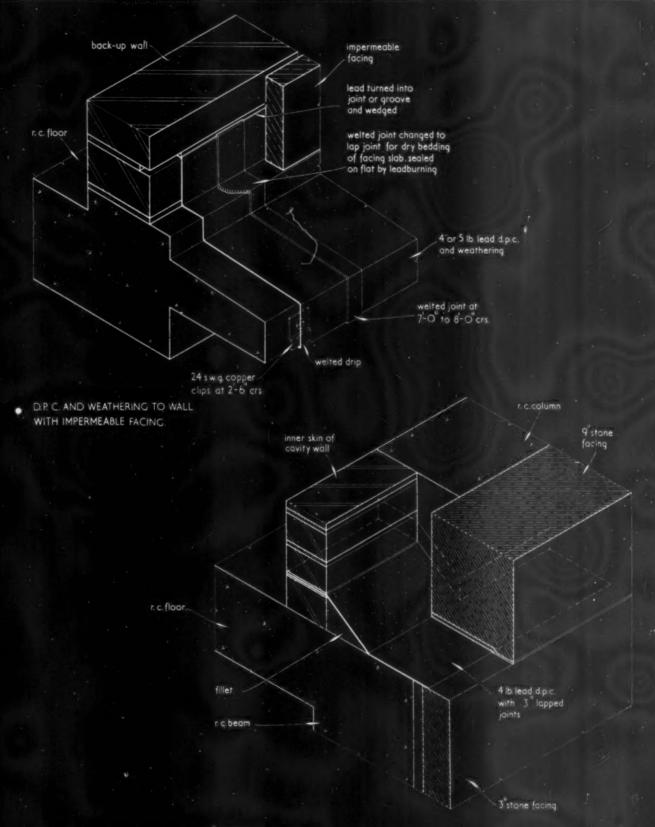
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The Yale & Towne Manufacturing Company
British Lock and Hardware Division

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PRODUCTS D.P.C'S AND CLOAKS LEAD

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D.R.C. AT FLOOR LEVEL TO CAVITY WALL WITH STONE FACING

LEAD D.P.C'S TO FACED WALLS.

Compiled from information supplied by Lead Development Association.

26.A5 LEAD D.P.C'S TO FACED WALLS

This Sheet is one of a series on lead and its applications and describes its use for d.p.c's to faced walls.

General

This Sheet, together with Sheet 26.A4 on lead flashings to heads of openings, illustrates the use of lead in typical new forms of construction. The ease with which lead can be formed into special shapes and bedded close to the structure makes it as readily adaptable for these applications as for traditional work.

D.P.C. and Weathering to Wall with Impermeable Facing

The drawing on the upper face of the Sheet is a detail of a long window head with a narrow projection, the facing above the window being of impermeable material fixed, without bedding, by stainless steel screws. The top of the window is protected by a 4 or 5 lb. lead weathering which is extended to form a d.p.c. under the bottom of the facing. It is carried up the structural wall behind the facing and tucked into the first brick joint, or a groove at an equivalent height, as shown. This ensures that the vulnerable point at the base of the facing slab is adequately damp-proofed. The weathering is jointed at intervals of 7 ft. 0 in. to 8 ft. 0 in. with a welted joint, which is changed to a lap under the facing slabs to give a flatter surface for dry-bedding the slabs. Where the projection is wider than 1 ft. 0 in., separate pieces of lead must be used for the weathering and d.p.c. (for farther details, see Sheet 10.G10).

D.P.C. at Floor Level to Cavity Wall with Stone Facing

The drawing on the lower face of the Sheet shows the infilling cavity walls in a reinforced concrete structure, the inner skin being of 4½-in. brickwork and the outer of 9-in. stone facing, both supported at floor levels. Where the cavity is bridged, a 4 lb. lead d.p.c. is provided to collect and shed any moisture which penetrates to the inside of the stone facing. The d.p.c. stops short of the outer surface of the stone facing to permit the collected moisture to spread, so as to prevent a patchy appearance on the outside of the building. The d.p.c. should be coated with bitumen paint where it is built-in in contact with fresh Portland cement concrete or mortar (see Sheet 26.A1, heading *Protection*).

Further Information

The Lead Development Association maintains a Technical Information Bureau which is available to answer questions and advise on technical problems dealing with the use of lead in building.

Compiled from information supplied by:

Lead Development Association

Address: 34, Berkeley Square, London, W.1. Telephone: Grosvenor 8422

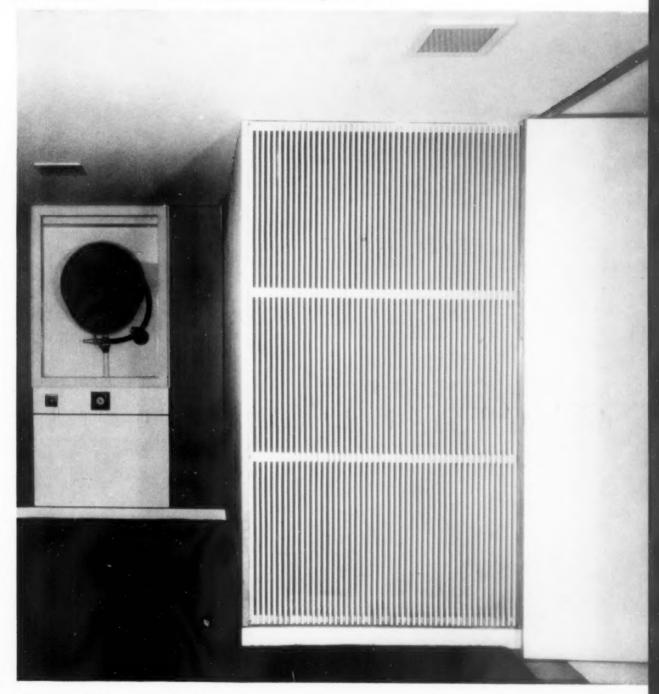
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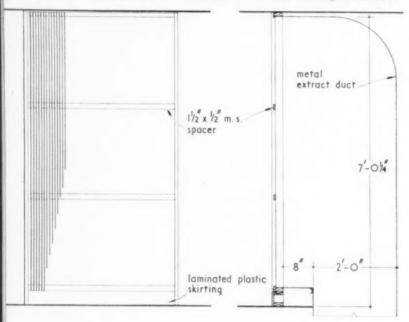


The ventilation inlet does not cover the whole area of the grille. This is, therefore, another application of the idea of applying the pattern necessitated by a functional item to the whole surface in which it appears, thus preserving the sense of a plane.

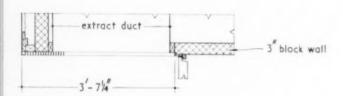
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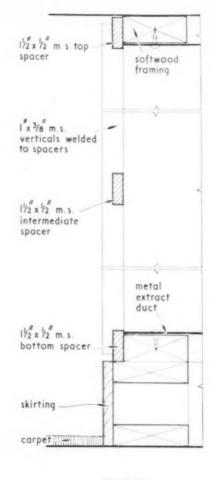
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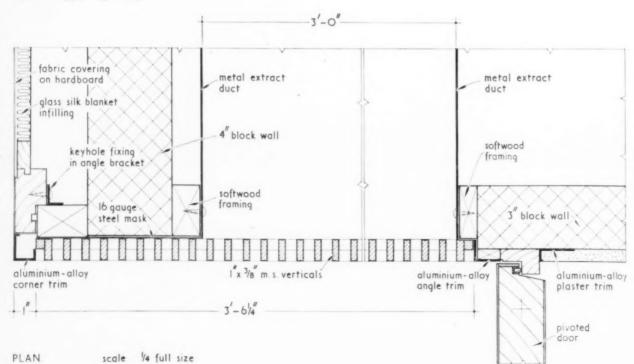
ELEVATION. scale $\frac{1}{2}'' = \frac{1}{1} - 0''$ SECTION scale $\frac{1}{2}$ = $\frac{1}{-0}$



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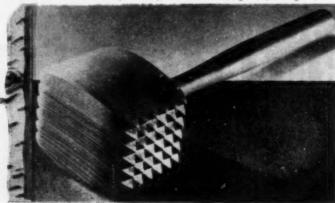
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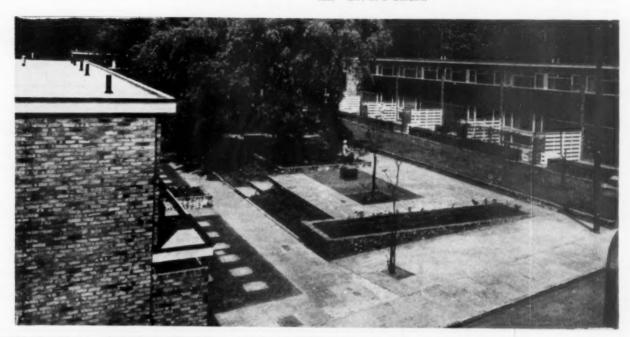
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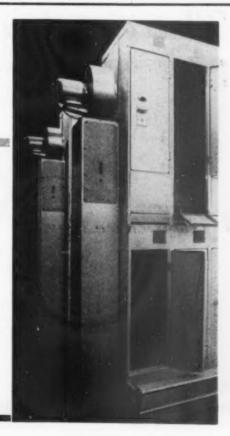


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Announcements

PROFESSIONAL

N. G. Kelsey, F.R.I.B.A. and H. R. Stewart-Hunter, A.R.I.B.A., the partners of G. J. Jolly and Partners, announce the firm will henceforth be known as Kelsey & Hunter and Associates, and will operate from the new head office address—Dralda House, Keswick Road, London, S.W.15. The addresses of the practices in Kaduna (Nigeria), Brighton and Portsmouth remain unchanged. The associate members of the firm are P. Golding, A.R.I.B.A., and E. Miles, A.R.I.B.A. J. Ernest Franck, F.R.I.B.A., will continue as consultant.

R. Lewis Reynish, F.R.I.B.A., announces that his practice has been amalgamated with Kelsey & Hunter and Associates of London, Portsmouth, Brighton and Nigeria. The practice will continue to operate from Kent Lodge, Queen's Crescent, Southsea.

Kelsey & Hunter and Associates announce that their practice in Northern Nigeria has been in operation since January 1, 1961, under the heading of Kelsey & Hunter (Northern Nigeria). The resident partner, G. F. Woodcock, A.R.I.B.A., will be pleased to receive trade catalogues at Box 206, Kaduna, Northern Nigeria.

The partnership of Huckle & Durkin, architects and consulting engineers, has been reformed. D. Durkin, B.SC., M.I.C.E., M.I.Struct.E., and T. F. Moran, M.I.Struct.E., will practise as Durkin & Moran, consulting engineers, at 268/270, Sefton House, Exchange Buildings, Liverpool 2. H. G. Huckle, F.R.I.B.A., A.M.T.P.I., and J. K. Hubert, A.R.I.B.A., will be joined by J. D. Chamberlin, A.R.I.B.A., and will practise as H. G. Huckle & Partners, chartered architects, at 30 Queen Anne Street, Cavendish Square, London, W.1.

Andrew Renton, F.R.I.B.A., F.R.I.A.S., has commenced in practice on his own account in association with Peter Howard, Dipl.Arch.(U.C.L.), and Humphrey Wood, B.A.(Cantab.), A.R.I.B.A., A.A.Dipl., at 48, Queen Anne Street, London, W.1. The name of the firm is Andrew Renton and Associates.

Frederick J. Brand announces that the practice is now to be known as Frederick J. Brand & Partners, consulting structural and civil engineers. The partners include F. J. Brand, M.L.Struct.E., M.Cons.E., W. F. G. Crozier, M.Sc., M.I.C.E., and D. J. Gloyens, A.M.I.Struct.E. By mutual consent A. E. Ironmonger has left the practice and moved to the Midlands.

Jack W. Stockings & Clarke, chartered quantity surveyors of Norwich and Thetford, have opened a branch office at 26, Harborne Road, Edgbaston, Birmingham 15 (telephone: Edgbaston 3061), under the management of T. E. M. Hearn, A.R.I.C.S., who has become an associate of the firm. Trade catalogues and price lists will be appreciated.

Lance Wright, A.R.I.B.A., has opened a London office at 13, Queen Anne's Gate, London, S.W.1, where he will be pleased to receive trade literature.

Corrections

In a letter from H. G. Eisner published in the Journal of May 25, the name of the honorary secretary of the Association of Official Architects was misprinted. The office is held by Geoffrey J. Foxley, pipl.arch., A.R.I.B.A., County Offices, Matlock.

In the Journal of May 25, a notice appeared on the Gas Council Competition for four types of house design. We regret inadvertently stating that the assessor for this competition had not been announced. In fact, the assessor is George Grenfell Baines, F.R.I.B.A., M.T.P.I.

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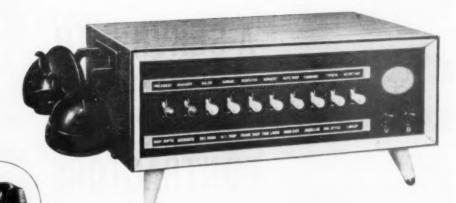
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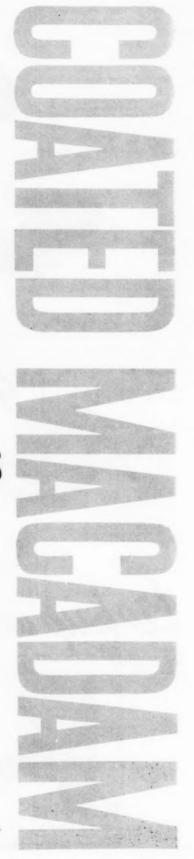
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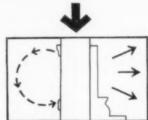


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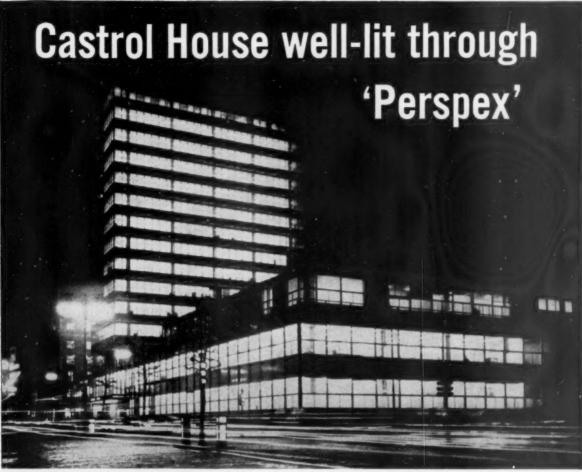




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The Vista Lounge on the top floor of Castrol House showing small ceiling lighting fittings moulded from 'Perspex' acrylic sheet by Frederick Thomas & Co., Stanhope St., London, N.W.I.



The DAEMPA ceilings throughout Castrol House are fitted with continuous trough cold cathode lighting with diffusers made from diamond pattern 'Perspex' acrylic sheet by Ionlite Limited, Scrubs Lane, London, N.W.10.

Architects: Gollins, Melvin, Ward & Partners Con. Engs.: Edward A. Pearce & Partners

Exterior of Castrol House built for Castrol Limited, Marylebone Road, N.W.1, showing the very large installations of cold cathode fluorescent lighting fittings made by Ionlite Limited, Scrubs Lane, London, N.W.10. The continuous trough fittings all have diffusers made from diamond pattern 'Perspex' acrylic sheet.

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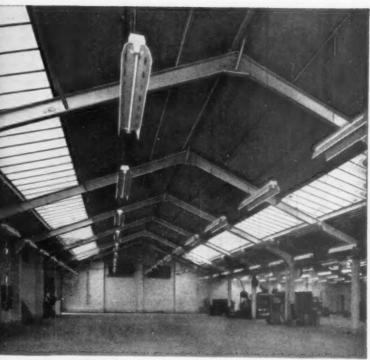


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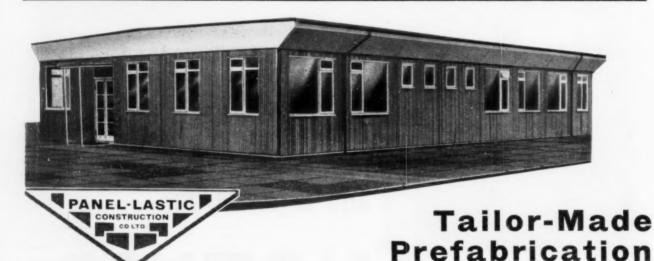
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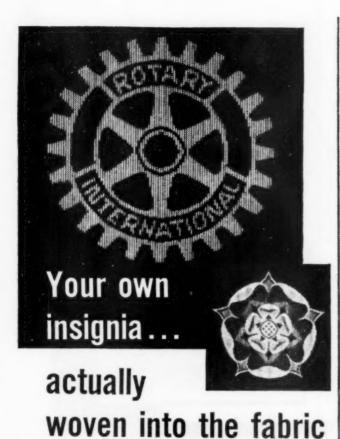
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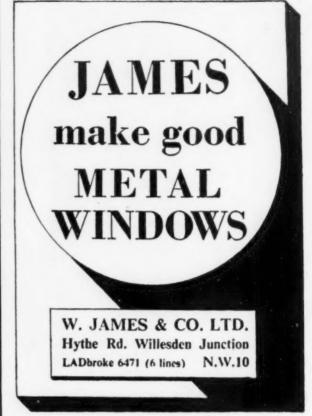
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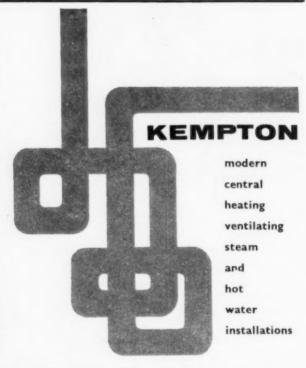
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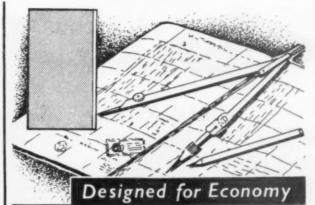
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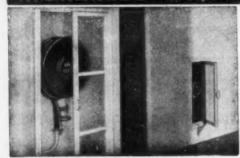
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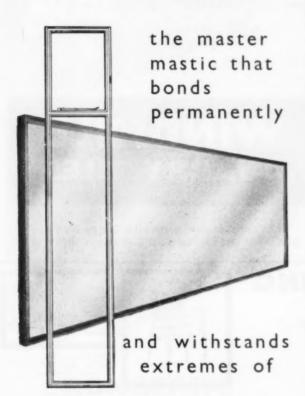




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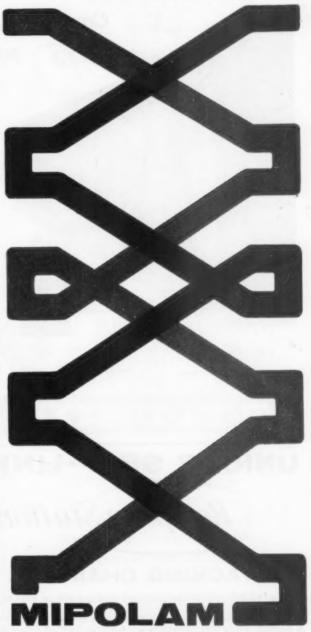
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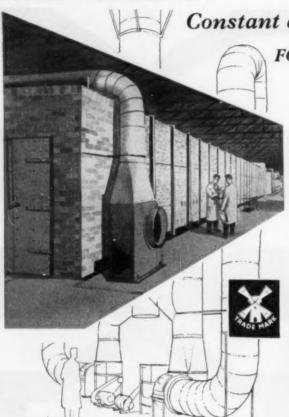
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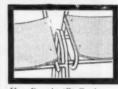


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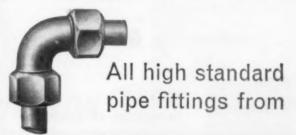
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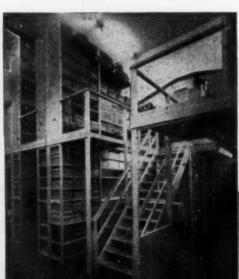
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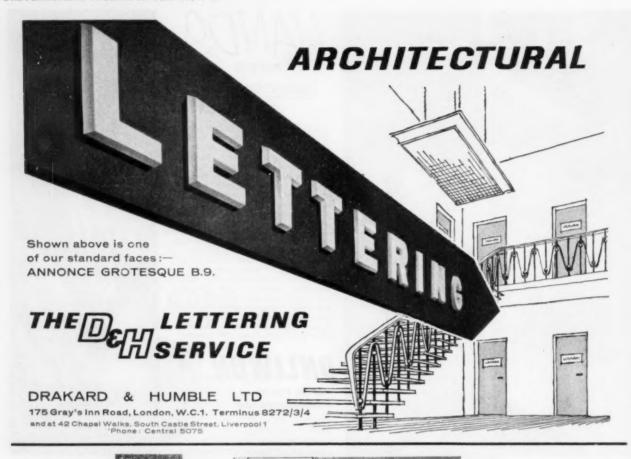


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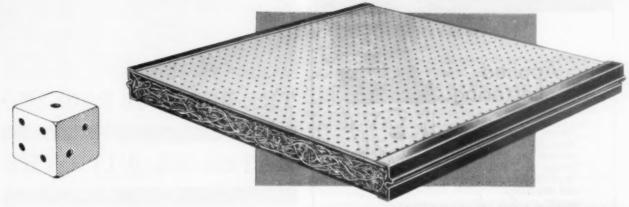
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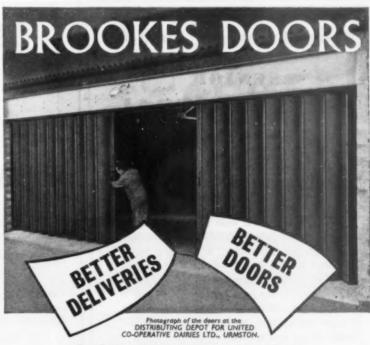
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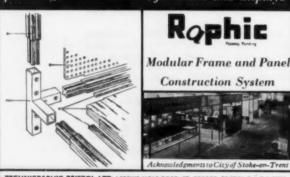
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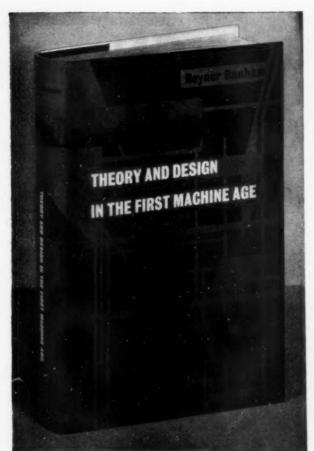
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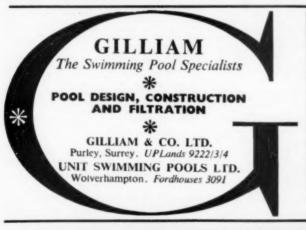
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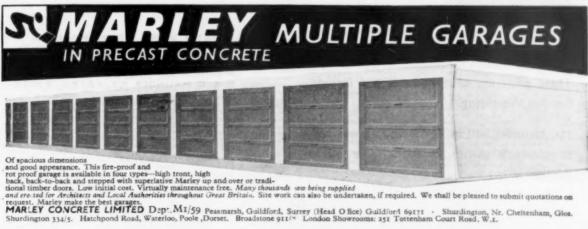
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given above.

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JOHN ATKINSON.

Town Clerk.

Town Hall. Newcastle upon Type, 1. 20th February, 1961.

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Housing accommodation available, if required.
Applications, stating age, qualifications and experience, together with the names of two referees, to be sent to the undersigned.
A. V. WILLIAMS,
General Manager.
Newton Aycliffe.

Churchill House, Newton Aycliffe, Nr. Barlington

Newton Ayeliffe,
Nr. Darlington,
CORPORATION OF LONDON
CITY PLANNING OFFICE
TWO PLANNING ASSISTANTS in the following salary ranges: (a) 21,195-21,490; (b) 21,055-21,300 are required.
The City Planning Office has interesting Planning projects on hand and others in active preparation, e.g. large scale development is now proceeding in Barbican commercial zone where separated pedestrian walkways are planned for a large area.
The vacancies ists in the Civic Design Section for qualified Architectural or Planning Assistants to join small group working on the present important phase of rebuilding in the City Opportunities for advancement should occur from time to time.
Local Act Superannuation.
Apply to the City Planning Officer, Guildhall, E.C.2.
CWMBRAN NEW TOWN

CWMBRAN NEW TOWN

CWMBRAN NEW TOWN

MONMOUTHSHIRE

Applications are invited from suitably qualified
ARCHITECTS who wish to take part in an
interesting and varied programme of work including all types of residential development, Town
Centre development and Neighbourhood Shopping

Centres.

(a) SENIOR ASSISTANT ARCHITECT, Grade
A.P.T. V. £1,310-£1,480. Candidates must be
Associates of the R.I.B.A. with suitable

A.P.T. V. £1,310—E1,460.

Associates of the R.I.B.A. with suitable office experience.

(b) ARCHITECTURAL ASSISTANTS, Grade A.P.T. IIIIV. £960—£1,310. Candidates should have passed the Intermediate Examination of the R.I.B.A. and have had some office experience, particularly in the preparation of working drawings.

The posts are superannuable and Conditions of Service are similar to those in Local Government. Housing accommodation is available to rent or purchase if required. Applications stating age, experience, details of present and former employment (together with applicable salaries) and the names and addressee of two referees must reach the undersigned by first post on Monday, 26th June, 1961.

J. C. P. WEST, A.R.I.B.A., M.T.P.I.

Cwmbran Development Corporation Victoria Street, Cwmbran, Mon.

COUNTY BOROUGH OF SOUTHAMPTON
Applications are invited for the following

Applications are invited for the following population:
ASSISTANT: ARCHITECT, Grade A.P.T. V
(21,310/£1,480), for duties in connection with an extensive and varied programme of housing development including multi-storey flats. Applicants must hold the qualification A.R.I.B.A. with wide experience in the design and administration of major building

design and administration of major building works.

The appointment is subject to N.J.C. conditions of service.

Housing accommodation available in approved cases and approved removal expenses reimbursable up to a maximum of £50.

Apply on application forms obtainable from the Borough Engineer and Surveyor. Civic Centre. Southampton. returnable by Monday, 26th June. 1961.

BOROUGH OF HARROW

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

portionents at the borough Engineer's Department:—
PLANNING ASSISTANTS. A.P.T. Grade II (2815 to 2960 per annum plus London "Weighting"). The commencing salary will be in accordance with qualifications and experience.
A contribution towards removal expenses will be

A contribution towards removal capendar considered.

The appointments are subject to the Local Government Superannuation Acts: and to the National Joint Council's Scheme of Conditions of Service.

Forms of application may be obtained from me and must be returned, not later than Friday, 30th June. 1961.

DAVID PRITCHARD.

DAVID PRITCHARD Town Clerk's Office. Harrow Weald Lodge, Harrow, Middx.

WHISTON RURAL DISTRICT COUNCIL

WHISTON RURAL DISTRICT COUNCIL.
Applications are invited for the following
position in the Office of the ENGINEER and
SURVEYOR:—
CHIEF ASSISTANT ARCHITECT, A.P.T. IV
(£1,140-£1,310 p.a.),
Applicants should be A.R.I.B.A. and have had
experience in Local Authority housing design
and maintenance and other public building
works.

works.

Housing accommodation available if required.

Housing accommodation available if required.

Fixed sum car allowance of £108 p.a.

The Council operate a five-day week.

Applications, stating age, qualifications, training and experience, present appointment and salary, with the names of two referees, to the undersigned by 22nd June, 1961.

J. R. HENLEY.

Council Offices.

Journal Offices,
Delph Lane,
Whiston,
Prescot,
Lancs.

HUYTON-WITH-ROBY URBAN DISTRICT
COUNCIL
(Population-5,000)
Applications are invited from Associate members of the Royal Institute of British Architects for the position of CHIEF ASSISTANT ARCHITECT, Grade A.P.T. V. el.,310 to £1,480, commencing salary within the grade according

for the ARCHITECT, Grade A.F.I. T. Commencing salary within the grade according to experience, Housing accommodation will be provided if necessary.

Applications, stating age, present position, salary and date of appointment, details of experience and previous appointments with dates, together with names and addresses of two referees, to reach R. T. Chappelle, A.R.I.B.A., Architect and Housing Director, "Grasscroft," Archway Road, Huyton, by Monday, 26th June, 1961.

Canvassing disqualifies.

D. WILLGOOSE,

Clerk of the Council.

Council Offices Derby Roa Huyton

Derby Road,
Huyton.

CITY OF HEREFORD

APPOINTMENT OF CITY ARCHITECT
Applications are invited for the appointment of City Architect at a salary commencing at 1,550 per annum and rising by four annual increments of £75 to a maximum of £1,860 per annum. The Conditions of Service contained in the Memorandum and Recommendations of the Joint Negotiating Committee for Chief Officers of Local Authorities will apply to the appointment. A lump sum car allowance will be paid and temporary housing accommodation will be made available, if required. The appointment is determinable by either party on giving three months' notice in writing.

Candidates must be members of the Royal Institute of British Architects.

Particulars of the appointment and forms of application may be obtained from the undersigned to whom applications must be delivered not later than 26th June, 1961.

Town Hall.

Town Hall.

Hereford.

ZETLAND COUNTY COUNCIL

Applications are invited for an appointment of
ASSISTANT ARCHITECT in the County Architect's Department. Salary according to scale for
Professional Assistants (2850—21,150) with placing
according to age, qualifications and experience.
Candidates must be Registered Architects and
should have had wide experience in the preparation of sketch plans, working drawings and
details. The appointment is superannable and
housing accommodation will be considered.

Applications, stating age, experience and qualifications, and accompanied by copies of two recent
testimonials, must be lodged with the undersigned by 30th June, 1961.

JOHN N. SINCLAIR,
County Clerk.

County Buildings, Lerwick, Shetland.

Shetland.
2nd June, 1961.

CITY OF NEW SARUM
ARCHITECTURAL ASSISTANT
Applications are invited for the appointm
on the established staff of the City Engineer

on the established staff of the City Engineer of an:

ARCHITECTURAL ASSISTANT—Grade A.P.T.

I, II or III.

The Grade within which the appointment will he made will depend upon experience and qualifications but preference will be given to candidates who have nassed the Intermediate Evamination of the R.I.B.A.

The post is pensionable, subject to N.J.C. conditions, and a five-day week is worked. Housing accommodation can be made available if required. The department is engaged on an interesting programme of capital works including a Swimming Bath. Civic Hall, and a comprehensive redevelopment scheme.

Applications, stating age, qualifications, present and previous appointments with salary, together with the names of two referees, to the City Engineer, the Council House, Bourne Hill, Salisbury, by Monday, 19th June, 1961.

GEO. RICHARDSON.

Town Clerk.

87892

ISLE OF ELY COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
Applications are invited for the post of
HEATING ENGINEER.
Salary will be within Grade A.P.T. V (£1,310—
£1,460) with essential user car allowance.
Applicants must be A.M.I.H.V.E.
The post will be subject to N.J.C. Conditions
and the passing of a medical examination.
Application forms and further particulars may
be obtained from the County Architect, County
Hell, March, to whom they must be returned by
not later than Monday, 26th June, 1961.

B. F. G. THUBLOW.
Clerk of the County Council.
S7944

Clerk of the County Council.

87944

CARLTON URBAN DISTRICT COUNCIL
APPOINTMENT OF ARCHITECTURAL

APPLICATION OF ARCHITECTURAL

For All Oper Annum and rising by annual increments to £1,480 per annum, the point of entry to be determined having regard to the experience of the applicant.

Applicants must be Associates of the R.I.B.A. or Registered Architects.

The appointment will be subject to the provisions of the Local Government Superannuation Acts 1937 to 1953, the National Scheme of Conditions of Service and the satisfactory passing of a medical examination.

Applications, stating age, qualifications and details of experience, together with names of three referees, should be forwarded to the undersigned by 10 a.m. on Tuesday, 20th June, 1961.

Housing excommodation will be made available if required and removal expenses will be paid by the Council.

A. E. F. WALKER,

A. B. F. WALKER, Clerk of the Council.

Council House,
Burton Road,
Carlton,
Nr. Notungham.

NORTH RIDING COUNTY COUNCIL
Opportunities for applicants of initiative and
drive, and who appreciate a five-day week in
good working conditions, for dealing with a varied
programme of work for all Committees of the

ouncer. Position within the salary ranges shown below ill be given according to ability and qualifica-

will be given according to ability and qualifications.

(a) ASSISTANT ARCHITECTS. Grade A.P.T. IV/V. £1,40—£1.480. Must have passed the Final Examination of the R.I.B.A.

(b) ARCHITECTURAL ASSISTANTS. Grade A.P.T. III. (960—£1,140. Must have passed Part I of the Final Examination of the R.I.B.A.

(c) ARCHITECTURAL ASSISTANTS. Grade A.P.T. III. (815—4960. Must have passed Intermediate Examination of the R.I.B.A.

(d) ASSISTANT ARCHITECTS Salary according to age, ability and qualifications.

Consideration will be given to students who wish to come for a period during the long Summer Vacation, or would wish to come during the vacation time over the period of their training at a full-time School of Architecture. Application forms may be obtained from the County Architect. R. Allnort Williams, M.B.E., B. Arch. F. R.I.B.A., County Hall, Northallerton. Completed forms should be returned to the Clerk of the County Council. County Hall, Northallerton, the County Council. County Hall, Northallerton, by the 24th June, 1961.

ADMINISTRATIVE COUNTY OF LEICESTER (a) PRINCIPAL ASSISTANT ARCHITECT.

£1,410-£1,565.
(b) CHIEF ASSISTANT ARCHITECTS, £1,310-£1,540-£1,556.
(c) SENIOR ASSISTANT ARCHITECTS, £1,140-

(c) SENIOR ASSISTANT ARCHITECTS, £1,140—£1,510.

(d) ARCHITECTURAL ASSISTANT, £815—£1,140 (according to qualifications).

Candidates for (a) must be members of the R.I.B.A., have had sound experience and be capable of acting as Group Leaders on an extensive programme of education buildings. Candidates for (b) must be members of the R.I.B.A., have had considerable office experience and be capable of taking charge of contracts from inception to completion. For (c), should be members of the R.I.B.A. have had office experience and he capable of taking charge of small contracts. For (d), should have Intermediate or Final qualifications of the R.I.B.A. and be capable of executing working drawings. Lodering allowance and removal expenses may be paid to a married man. Apply on form obtainable from County Architect. 123, London Road, Leicester. TC7478

BRITISH FUROPEAN AIRWAYS

Architect. 123. London Road. Leicester. TC7478
BRITISH FUROPEAN AIRWAYS
require an ARCHITECTURAL ASSISTANT to
work under the Chief Staff Architect on interesting and varied projects involving occasional travel
in the UK and oversess. Working conditions are
good and a vigorous and practical approach to
first-class contemporary design is encouraged.
This nermanent nensionable post would suit a
man with at least intermediate R.I.B.A. standard
and reasonable practical experience, preferably
in interior design and shoufitting work.
Salary range £960-£1.235 according to qualifications and experience.
Write for full details and application form
(to be returned by 6th July, 1961) to Personnel
Officer. Head Office, BEA, Bealine House, Ruislin.
Middlesex.

BOROUGH OF CASTLEFORD
APPOINTMENT OF ARCHITECTURAL
ASSISTANT
Applications are invited for this appointment in the Borough Architect's Department. Salary—Grade A.P.T. II (2815—2850). Applicants should have passed the Intermediate Examination of the recognised Schools of Architecture.
N.J.C. Service conditions; superannuable—successful applicant will be required to pass satisfactorily a medical examination; terminable on one month's notice on either side; housing accommodation if required for successful married applicant.

applicant.
Applications, on forms obtainable from me, to be returned not later than 9 a.m. on the 24th June, 1961.
Canvassing disqualifies.
ERNEST HUTCHINSON,
Town Clerk.

Castleford. S7927

CITY OF SHEFFIELD

CITY ENGINEER AND SURVEYOR'S

DEPARTMENT

AREA PLANNING OFFICER, GRADE B

Applications are invited from suitably qualified
persons for the above appointment on the staff
of the City Engineer and Surveyor and Town
Planning Officer (Mr. C. R. Warman, B.Sc.,
M.I.C.E., M.I.Mun.E., M.T.P.I.)

The post is established in Grade B (£1,480—
£1,670 p.a.).

Candidates should have a Town Planning
qualification and an architectural or other suitable additional qualification would be an advantage.

able additional qualification would be an advantage.

The commencing salary will be in accordance with experience and qualifications.

Consideration will be given if required to assistance with housing accommodation and removal expenses in suitable cases.

Superannuable post, N.J.C. Conditions of Service, Medical Examination.

Applications, stating age, education and training, qualifications, experience, present and past appointments (with dates and salaries), and quoting the names of two referees, should be submitted to the undersigned by the 22nd June next.

JOHN HEYS. Town Clerk.

Town Hall, Sheffield, 1.

CHESHIRE COUNTY ARCHITECT'S DEPARTMENT DEPARTMENT
Applications are invited, on forms obtainable from one for posts of ARCHITECTURAL ASSISTANT in Grade A.P.T. III, 1996 rising by 5 annual increments to 21.140, per annum. EDGAR TABERNER, A.R.I.B.A.. County Hall

Chester.

HARLOW URBAN DISTRICT COUNCIL

HARLOW URBAN DISTRICT COUNCIL require an ARCHITECTURAL ASSISTANT Salary within A.P.T. III (£960—£1.140) according to qualifications and experience. Appointment subject to medical examination, Housing accommodation will be made available and removal expenses paid.

Full details from A. W. R. Webb, A.M.I.C.E., Engineer and Survevor. Town Hall, Harlow, Essex to whom applications should be sent by 30th June, 1961.

CANTENDED TOWN ENGLISHED.

CANTERBURY EDUCATION AUTHORITY
CANTERBURY COLLEGE OF ART
SCHOOL, OF ARCHITECTURE
Applications are invited for the following post
in the School of Architecture commencing
Sentember 1961—
FULL-TIME SSISTANT IN STRUCTURAL
DESIGN AND BUILDING SERVICES. Appli-

entember 1961:
FILLTIME ASSISTANT IN STRUCTURAL FILLTIME AND BUILDING SERVICES. Appliants should be suitably trained and qualified. Salary will be in accordance with Grade B f the Burnham Technical Report (i.e. 2700 × 21 10s. 6d. to £1150 per annum), with allowances or graduate qualifications, training and approved

for graduate qualifications, training and approved previous experience.

Applications by letter giving details of training, qualifications and experience, together with the names of two referees, should be addressed to the Principal, College of Art. St. Peter's Street, Canterbury.

N. POLMEAR. Chief Education Officer.

78. London Road. Canterbury.

Canterbury.

Canterbury.

ESHER URBAN DISTRICT COUNCIL

APPOINTMENT OF
SENIOR ARCHITECTURAL ASSISTANT
Applications are invited for the above annointment. Solver Geade A.P.T. IV (2) 140—21.310 plus
London Weighting Allowance of 245 per annum.
Commencing salary dependent upon qualifications and experience.
Qualifications: Final exam. R.I.B.A. or Registered Architect.

The Council is prepared to assist with the provision of housing accommodation. Porm of application and further particulars may be obtained from the Engineer and Surveyor and Plenning Officer. Council Offices, Esher, to whom applications must be refurred by Sth July. 1961.

FREDERICK EDWAEDS.

Council Offices.

Council Offices.

CITY OF BRADFORD

SENIOR ARCHITECTURAL ASSISTANT—
POST No. 204. A.P.T. IV/V (£1,140—£1,480)
Applications are invited for the above superanneable appointment in the City Engineer and
Surveyor's Department.
Applicants should have had experience in the
design of houses, flats and shops and the layout
of housing estates, have sound design ability
and be experienced in the preparation of working
and detail drawings and be either A.R.I.B.A. or
Application forms obtained.

A.M.T.P.I
Application forms obtainable from the City
Engineer and Surveyor, Town Hall, Bradford, I,
with three testimonials, must be received by the
undersigned by 30th June, 1961.
HENRY PATTEN,
Town Clerk.

Bradford, L. 7959

BOROUGH OF HENDON

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

SENIOR ASSISTANT ARCHITECT
Applications are invited for the above appointment at a commencing salary according to experience within Grade A.P.T. 4(£1,310 to £1,480 plus London Weighting £45).

Applicants must be Associate Members of the Royal Institute of British Architects. The person appointed will be directly responsible to the Chief Assistant Architect, with opportunity for suitable applicants to act as Group Leaders. Previous experience in school work, housing and redevelopment, or civic buildings, will be an advantage.

redevelopment, or civic buildings, will be an advantage.
Pensionable post. National Scheme. Medical Examination. Appointment terminable by one month's notice on either side.
Applications stating age, education, qualifications, experience, present appointment and salary, together with the names and addresses of two referees, must reach the Borough Engineer and Surveyor, Town Hall, Hendon, N.W.4, by Monday the 26th June, 1961.
Canvassing will disqualify.
R. H. WILLIAMS, Town Clerk.

Town Hall, Hendon, N.W.4.

Town Hall,
Hendon, N.W.4.

7958
PETERLEE DEVELOPMENT CORPORATION
APPOINTMENT OF ASSISTANT ARCHITECTS
Vacancies exist in the Chief Architect's Department for qualified men and others interested in developing and carrying forward the new techniques being established in the current South West Area housing projects in the New Town of Peterlee,
Opportunities also exist for qualified and creative applicants to work on the Town Centre and associated projects in design stage.
Appointments will be made to a grade commensurate with achievement and experience. For one appointment a qualification in landscape architecture is essential and for others a planning qualification would be an advantage.
Peterlee occupies a site of exceptional amenity, and the Designated Area includes the wooded gorge of Castle Eden Dene with sea views from an undulating rural landscape. A golf course adjoins the site; sailing, fishing and gliding are within easy access.
Excellent housing accommodation is under construction, and can be made available if required at reasonable rentals.
Immediate written anolications, special interests and present salary, to be submitted to the undersigned not later than Friday, 23rd June, 1961.

A. V. WILLIAMS,
General Manager.
Shotten Hall.
Peterlee.

Shotton Hall, Peterlee, Co. Durham.

COUNTY BOROUGH OF NORTHAMPTON
Applications are invited for the following
appointments in the Education and General Sec-

appointments in the Education and Control of the Co

CITY OF SHEFFIELD
EDUCATION COMMITTEE
COLLEGE OF TECHNOLOGY
DEPARTMENT OF BUILDING AND
CIVIL ENGINEERING

Applications are invited for appointment as LECTURER IN BUILDING/OUANTITY SURVEYING to teach Surveying subjects in the full-time sandwich courses and in part-time professional courses Experience and membership of a professional institute are desirable. Scalar (under review): Burnham Technical Scalar for Lecturers (£1,370 × £35—£1,550 per

annum. Application Forms, obtainable from the under-signed (s.a.e.) at P.O. Box 67, Sheffield, i., should be returned within 14 days of the appear-ance of this advertisement.

T. H. TUNN. Director of Education.

Architect's Junior Assistants



PLAN YOUR CAREER WITH THE

WESTMINSTER

RANK

COMMENCING
SALARY
£550 to £850
WITH
GOOD PROSPECTS

- Modern London Drawing Office
- Favourable House Mortgage Rates
- · Luncheon Club
- Sports Club & other Social Activities
- Pensions Scheme
- Fare for Interview refunded

Write, stating age, experience and salary required to:

THE ARCHITECT, WESTMINSTER BANK LTD
Post Office Court, 10 Lombard Street, E.C.3

now available
a new book giving
an authoritative
architectural background to the design

of industrial buildings.



INDUSTRIAL ARCHITECTURE

an analysis of international building practice JAMES F. MUNCE, A.RI.B.A.

This book analyses the basic principles and most recent developments in factory design in Great Britain, Germany and the U.S.A., and provides a background to the building problems facing the industrialist and his architect. These include aesthetic appearance, location, utilities, services, and structural elements. The numerous sketches, diagrams and photographs illustrate some of the best work by leading industrial architects and engineers.

105s. net by post 107s. 232pp. about 250 illustrations.

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ILIFFE Book Ltd., Dorset House, Stamford St., London, S.E.I.

ARCHITECTURAL STAFF

SENIOR & INTERMEDIATE ASSISTANTS & DRAUGHTSMEN

required by

F. W. Woolworth & Co Ltd

Five day week. . ension scheme. Dining facilities. Modern office building. Good salaries according to experience and qualifications. Apply giving details of salary required, age and experience to:—

District Architect, F. W. Woolworth & Go Ltd, 1264 London Road, Norbury, S.W.16



ASSISTANT BUILDING SURVEYOR

Assistant Building Surveyor required by Sheffield Office of Mobil Oil Co. Ltd.

Applicants must be capable draughtsmen, have some experience in supervision of site works and be capable of working under limited supervision. Must hold current driving licence. Luncheon vouchers, good employee benefits.

Write, giving details of age, experience and salary required, to:

Employment Adviser, MOBIL OIL CO. LTD., Caxton House, London, S.W.I. quoting ABS 5261 SOUTHAMPTON
BORCUGH ARCHITECT'S DEPARTMENT
Applications are invited for the following per-

pplications are invited for the following per-nent posts:—
SENIOR ASSISTANT PLANNING OFFICER (Landscape) Scale "A" (£1,380—41,565).
Applicants should be qualified Landscape Architects and preferably members of the T.P.I., to be in charge of small landscape group, with considerable opportunity for pre-paring and carrying through schemes or urban landscaping.

paring and carrying through schemes or urban landscaping.

ASBISTANT PLANNING OFFICER Grade A.P.T. V (£1,310-£1,480).

Applicants should be members of the T.P.I. and preferably R.I.B.A., experienced in the redevelopment of central urban areas.

Commencing salary within grades according to experience and qualifications. Housing accommodation available in approved cases, and approved removal expenses reimbursed up to a maximum of £50.

Application forms from the Borough Architect, Civic Centre, Southampton, returnable by 1st July, 1961.

BRACKNELL DEVELOPMENT CORPORATION
Applications are invited for the following post
in the Quantity Surveyors section:

JUNIOR QUANTITY SURVEYOR
A.P.T. Grade II, salary range £815-£960.
Applicants must have passed the R.I.C.S. Intermediate examination (Quantities sub-division).
Duties embrace Housing, Town Centre and Industrial buildings. Superannuation schemes, medical examination. Housing available.
Apply by frd Jily, 1961, stating age, education and qualifications, experience and appointments held (with dates and salaries), and names of two referees, to General Manager (Q.S.), Bracknell Bevelopment Corporation, Farley Hall, Bracknell, Berks.

Development Corporation, Farley Hall, Bracknell, Berks.

CITY ARCHITECT'S DEPARTMENT Applications are invited for the following permanent appointments:

1. SENIOR ASSISTANT QUANTITY SURVEYOR, SO/A (£1,455-£1,555).

Applicants should have wide experience in all aspects of a Quantity Surveyor's duties.

2. SENIOR ASSISTANT QUANTITY SURVEYORS, A.P.T. III (£950-£1,140).

Applicants should be experienced in the measurement of variations and the settlement of final accounts for large schemes and should have some experience of taking-off.

3. ASSISTANT QUANTITY SURVEYOR.

A.P.T. II (£950-£1,255).

Applicants should have had experience in the measurement of work in progress and in the settlement of final accounts.

4. ASSISTANT QUANTITY SURVEYORS,

A.P.T. I (£645-£815).

Applicants should have experience of working-up and measurement of work in progress.

5. JUNIOR ASSISTANT QUANTITY SURVEYORS,

C. SENIOR ASSISTANT QUANTITY SURVEYORS,

3. JUNIOR ASSISTANT QUANTITY SURVEYORS,

3. JUNIOR ASSISTANT QUANTITY SURVEYOR,

4. ASSISTANT QUANTITY SURVEYORS,

3. JUNIOR ASSISTANT QUANTITY SURVEYOR,

4. ASSISTANT QUANTITY SURVEYORS,

5. JUNIOR ASSISTANT QUANTITY SURVEYOR,

4. DEPARTMENT OF THE ADDITIONAL ASSISTANT QUANTITY SURVEYOR,

5. JUNIOR ASSISTANT QUANTITY SURVEYOR,

4. ADDICANTS SURVEYORS,

5. JUNIOR ASSISTANT QUANTITY SURVEYOR,

6. JUNIOR ASSISTANT QUANTITY SURVEYOR,

7. JUNIOR ASSISTANT QUANTITY SURVEYOR,

8. JUNIOR ASSISTANT QUANTITY SURVEYOR,

9. JUNIOR ASSISTANT QUANTITY SURVEYOR,

1. JUNIOR ASSISTANT QUANTITY SURVEYOR,

2. JUNIOR ASSISTANT QUANTITY SURVEYOR,

3. JUNIOR ASSISTANT QUANTITY SURVEYOR,

4. ADDICANTS SURVEYOR,

5. JUNIOR ASSISTANT QUANTITY SURVEYOR,

6. JUNIOR ASSISTANT QUANTITY SURVEYOR,

7. JUNIOR

Applicants should have some caperage working-up.
The appointments are superannuable-medical examination.
Application forms obtainable from the understoned are to be returned by 12 noon, Friday, 30th June, 1961.
Canvassing disqualifies.

J. R. SHERIDAN-SHEDDEN
City Architect

Priestley House, Quarry Hill, Leeds, 9. 7th June, 1961.

Leeds, 9.

Th June, 1961.

BRACKNELL DEVELOPMENT
CORPORATION

Applications are invited for the following post in the Chief Architect's Denartment:

ARCHITECTURAL ASSISTANT — Salary range £645—815.

The post offers the opnortunity of working on progressive schemes in Housing Industrial and Town Centre development. Housing can be made available in suitable circumstances. Superannuation schemes, medical examination, 5-day week Apply by Thursday. 29th June, giving age, education, experience and any appointments held (with dates and salaries) and the names of two referees, to General Manager (A). Bracknell Development Corporation, Farley Hall. Bracknell Berks.

BOYAL BURGH OF DUMPRIES

Hall. Bracknell. Berks.

ROYAL BURGH OF DUMFRIES
DEPUTE BURGH ARCHITECT
Applications are invited from Qualified Architects, preferably with experience in Redevelopment Work.
The appointment, within the Salary Scale 21.280/21.430 (by three increments of £50), will be subject to the Tow., Council's Sunerannuation Scheme and N.J.I.C. Conditions of Service, and the successful applicant will require to pass a medical examination.
If required, the tenancy of a Council house will be given to the successful amplicant.
Applications, stating age, qualifications and experience, and the names of two referees, should be lodged with the undersigned not later than 20th June, 1961.

GEORGE D. GRANT.
Town Clerk.

Municipal Chambers, Dumfries. 2nd June, 1961.

HORNCHURCH URBAN DISTRICT COUNCIL ARCHITECT'S DEPARTMENT
APPOINTMENT OF ARCHITECTURAL ASSISTANT, GRADE A.P.T. III
Applications are invited from suitably qualified persons for the appointment of Architectural Assistant at a salary in accordance with the Grade A.P.T. III (1990—£1.140 per annum) with a plussage equivalent to London "Weighting." The commencing salary will be fixed according to the ability and experience of the successful candidate."
The Council's housing policy permits advances of up to 100 per cent. of the Surveyor's valuation to be granted to members of the staff, or alternatively, consideration would be given to the provision of housing accommodation.
The appointment will be subject to the previsions of the Local Government Superannuation Acts, to the passing of a Medical Examination, the National Joint Council Scheme of Conditions of Service, and one month's notice on either side.

Forms of applications can be obtained from the undersigned, to whom completed forms should be returned not later than noon on Friday, the 23rd June, 1961.

P. L. COX.
Clerk of the Council

P. L. COX. Clerk of the Council

Council Offices, Billet Lane, Hornchurch, Essex. June, 1961.

June, 1961.

LONDON COUNTY COUNCIL
BRIXTON SCHOOL OF BUILDING
Ferndale Road, S.W.4.
Required to commence September, 1961. ASSISTANTS GRADE B to teach Construction and allied subjects in professional courses. Candidates should be corporate members of the R.I.B.A. or R.I.C.S. and have had appropriate professional experience. Teaching experience are commendation. Consideration will also be given to candidates with experience of Town Planning Design.

design. Salary Scale £738—£1,486, point of entry and maximum dependent on training, qualifications

and experience.

Application forms (foolscap s.a.e.) from the Secretary, returnable within 14 days. Please quote (FE3a/A/1504/6).

Secretary, returnable within 14 days. Please quote (FESIA/1504/6). 8037

TOWN DEVELOPMENT AT BASINGSTOKE DIRECTOR OF TOWN DEVELOPMENT (63.580—64.600) required for pensionable post concerned with the expansion of Basingstoke under the Town Development Act, 1952, from its present consultation of 25.000 to about 75.000 by 1975. The Director will be appointed to the staff of the Hampshire County Council but will work under the direction of a Joint Committee of representatives of the Basingstoke Borough Council, the London County Council, and the Hampshire County Council.

Candidates should hold appropriate qualifications and have had extensive experience of town expansion schemes. Separation allowance and assistance with removal expenses will be paid in approved cases. The salary will be fixed withir the range according to qualifications and experience.

experience. Applications stating full details of are, educa-tion, qualifications and experience, and accom-panied by two converts one testimonial and the names of two referees, should reach the Clerk of the Courty Council, The Castle, Winchester, by 30th June 88036

Of the County Council, the Castle, Whicheselv 30th June

COUNTY BOROLGH OF DUDLEY
BOROLGH ARCHITECT'S DEPARTMENT

ASSISTANT ARCHITECT'S DEPARTMENT

A.P.T. GRADE V. £1,310-£1,480

Anotications are invited from persons who are
Recristered Architects and Associates of the Royal
Institute of British Architects.

Housing accommodation will be provided in
appropriate cases.

Apolications with a copy of one testimonial and
the names and addresses of two Referees, to reach
me by Monday, 10th July, 1961.

P. D. WADSWORTH.

Town Clerk.

The Council House, Budley, Wores, 5th June, 1961,

BOROUGH OF LOUGHBOROUGH
APPOINTMENT OF
APPOINTMENT

Housing accommodation to the coessary.

Applications, with details of age, qualifications, experience, present and previous appointments, and giving the names of two persons to whom reference may be made, are to be delivered to the undersigned not later than noon on Friday, 23rd June, 1961.

ARTHUR USHER.

ARTHUR USHER. Southfields. Loughborough. 9th June, 1961.

8013

GLASGOW CORPORATION TRANSPORT VACANCY FOR ARCHITECTURAL DRAUGHTSMAN Applications are invited for the appointment of an Architectural Draughtsman. The salary will be in accordance with the Scale Grade E.D.111 4785—£845.

Applicants must have served a recognised architectural apprenticeship, and have appropriate technical education.

Applications should be lodged with the Subscriber not later than 14 days after the date of this advertisement. 14 days after
E. R. L. FITZPAYNE,
General Manager,
8071

46 Bath Street, C.2.

46 Bath Street, U.2.

6.6.61

HACKNEY BOROUGH COUNCIL

ENGINEER AND SURVEYOR'S DEPARTMENT
VACANCIES FOR ARCHITECTURAL STAFF
Applications are invited for permanent appoint-

Applications are interest for perments of ASSISTANT ARCHITECTS AND ARCHITECTURAL ASSISTANTS in the Architectural Section of the Department in Grades ranging between A.P.T. I (£645—£815) and A.P.T. V (£1,510—£1,480).

London Weighting Allowances (£45 p.a., for appointments in A.P.T., III and above) payable in addition.

Grading and commencing salaries will be fixed according to training, qualifications and experience.

ence.
The Department has on hand a heavy and varied programme of Housing Development and other architectural projects.
Modern staff canteen; alternate Saturdays; post-entry training facilities (in appropriate cases) and possible 100 per cent advances for hose-purchase within or without the Borough.
Frequent electric train service to Hackney Downs.
Application forms obtainable from Town Clerk. Town Hall, Hackney, London, E.8, returnable by 9 a.m., 3rd July, 1961.

ARCHITECTS AND MAINTENANCE SUR-VEYORS. Pensionable posts for men and women at least 25 and under 35 on 1.1.61 (extension for regular Forces service, Overseas Civil Service, established Civil Service and temporary Government service as Architect or Maintenance Surveyor). Candidates must be registered Architects or, alternatively, for Maintenance Surveyor posts, have achieved Corporate Membership of R.I.C.S. (Building Section), or have passed examinations necessary for attaining Corporate Membership. National salary £936-£1,258 according to age, rising to £1,430. Promotion prospects. Write Civil Service Commission. 17. North Audley Street, London, W.1, for application form quoting \$/56-61.

CITY OF CARDIFF

CITY OF CARDIFF

CITY SURVEYOR'S DEPARTMENT

Apolloations are invited from suitably qualified
persons for the vacant bosition of:

PRINCIPAL TOWN PLANNING ASSISTANT,

J.N.C. Scale A (21, 485-21, 565).

General conditions of Appointment may be
obtained from the undersigned, to whom should
be sent all apolications, in envelopes suitably
endorsed, stating age, qualifications, and experience, and names and addresses of three referees.

Closing date 24th June.

W. TAPPER-JONES.

Town Clerk.

Cardiff. 7977

BOROUGH OF BEDFORD

Applications are invited for the following posts in the Architect's Section of the Borough Engineering

ROROUGH OF REDFORD
Applications are invited for the following posts in the Architect's Section of the Borough Engineer's Department.

(a) Three SENIOR ASSISTANT / RCHITECTS, A.P.T. IV to V. 61.140-61.480.

(b) Two ASSISTANT ARCHITECTS, A.P.T. II to III. 2815—61.140.

In the case of (a) amplicants must be Associated of the R.I.B.A., and the conditions of this appointment include the payment of a car allowance of £115 per annum.

Housing accommodation will be offered to all successful amplicants and a contribution towards removal expenses will be made. Commencing salary will depend on qualifications and previous experience.

The present programme of capital work includes new primary and secondary schools, new municipal offices, multi-storey flats, shous and houses. The office is run on a group system and opportunity is given to all assistants to have experience on varying works undertaken.

Further particulars and application forms may be obtained from the undersigned to whom, when completed, forms should be returned as soon as possible for immediate attention.

Borough Engineer and Surveyor.

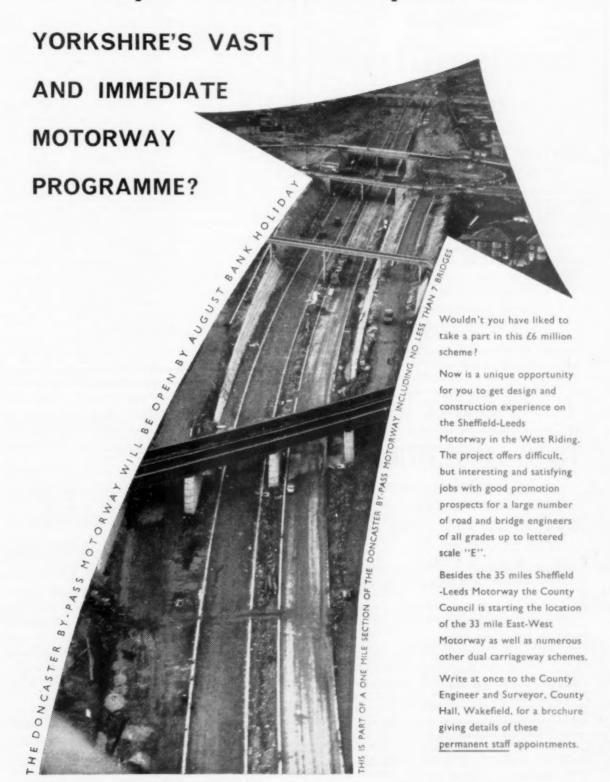
Newnham House.

Horn, Lane,

Horn Lane, Bedford.

MIDDLESEX COUNTY COUNCIL
COUNTY PLANNING DEPARTMENT
SENIOR PLANNING ASSISTANT (A.P.T.
III-IV. 61.005-61.355). Preference to candidates
with architectural qualifications and experience
able to do preliminary work on urban redevelopment schemes. Prescribed conditions. Further
particulars and application forms from County
Planning Officer. 10. Great George Street, S. W.I.
returnable by 23rd June. (Quote G.513 A.f.)
7974

Would you like to help . . .



HALTEMPRICE U.D.C.
ASSISTANT ARCHITECT
Applications are invited for an ASSISTANT
ARCHITECT in the Engineer and Surveyor's
Department, A.P.T. Grade III. 1960—21,140, commencing salary dependent upon qualifications and
experience. Applications stating qualifications
and experience, giving the names of two referees,
should reach the undersigned not later than
23rd June, 1961.

A. R. GLASSPOOL.

A. B. GLASSPOOL, Clerk of the Council.

Anlaby House, Anlaby, East Yorks

MINISTRY OF TRANSPORT

SENIOR ARCHITECT and TWO ARCHITECTS are required to assist in a study of the long term development of roads and traffic in urban areas and their influence on the urban environment. This interesting work is expected to take from 18 months to 2 years to complete. Applications are invited from Registered Architects (preferably with additional A.M.T.P.I. qualifications) with experience in large-scale planning and comprehensive development. Salary: Senior Architect starting £2,080 p.a. Architects £1,450-£1,950 p.a. plus London weighting. Forms from Ministry of Labour, Technical and Scientific Register (K), 26, King Street, London, S.W.I. Quoting J. 190/1A. 8025

EXETER CITY COUNCIL

CITY ARCHITECT'S DEPARTMENT
Three SENIOR ASSISTANT ARCHITECTS required on the established staff to work on an interesting and varied programme of local authority works.

Salary within A.P.T. Grade IV (£1,140-£1,310), entry point on the grade depending on experience. PROVISION OF HOUSING ACCOMMODATION will be considered and removal expenses will be paid.

Applicants must be Associate Members of the

paid.

Applicants must be Associate Members of the R.I.B.A. N.J.C. Conditions of Service. Successful candidates will be required to pass a medical examination.

Applications stating age, experience and qualifications, should be received by the City Architect, Municipal Offices, Exeter, not later than 26th June, 1961.

BOROUGH OF SWINTON & PENDLEBURY

BOROUGH OF SWINTON & PENDLEBURY

Applications are invited for this position within
A.P.T. Division Grade III, the commencing salary
being determined by qualifications and experience.
The work will be mainly in connection with
housing development. Form of application obtainable from Borough Engineer, Town Hall, Swinton,
Lancs, must be returned by 3rd July, 1961.

8029

CITY OF CARDIFF
CITY ARCHITECT'S DEPARTMENT
Applications are invited from Qualified Architects for the undermentioned appointments:—
CHIEF ASSISTANT ARCHITECT (Civic Design).
I.N.C. Scale "A." £1.485-£1.565 per annum.
The successful applicant will work under the Assistant City Architect (Civic Design) principally on the redevelopment of outworn shopping, business and housing areas. Experience in similar work and Membership of The Town Planning Institute would be considered an advantage.
CHIEF ASSISTANT ARCHITECT (General).
J.N.C. Scale "A." £1.485-£1.565 per annum. The successful applicant will work under the Assistant City Architect (General) on ublic buildines of all types including Libraries, Police and Fire Stations, Abattoirs, Welfare and Children's Homes, etc.
General Conditions of Appointment may be obtained from the undersigned.
Applications stating age, qualifications, pagt and present appointments, details of experience and the names of two persons to whom reference can be made, should be delivered to me in aporportately endersed envelopes and must be received not later than the 19th June 1981.

Cardiff.

City Hall, Cardiff. May, 1961.

May, 1961.

CITY OF BIRMINGHAM
PURIJC WORKS DEPARTMENT
Planning and Redevelonment Section
Audications are invited for the nost of SENIOR
PLANNING ASSISTANT (Research) Grade
A PT. IV (21:40-61.310 per annum) in the Planning and Redevelopment Section of the Public
Works Denartment. Anolicants should be corporate members of the Town Planning Institute
or he a graduate of a British University.
The successful candidate will be required to
work in a Research Groun and should have had
some previous experience in the Research Office of
a planning authority.
The post is nermanent, superannuable, and
subject to a medical examination.

Applications endorsed with the heading of the
post, and stating qualifications, age and experience, together with the names of two nersons
to whom reference may be made should reach
the undersigned by the 24th June, 1961.

Canvassing discousifies.

HEURERT J MANZONI.

City Engineer and Surveyor.

Civic Centre.

Baskerville House, Civic Centre, Birmingham, 1

AIR MINISTRY requires QUANTITY SUR-VEYING ASSISTANTS, Grade III, at R.A.F. and Ministry of Aviation stations throughout the United Kingdom. The work includes abstracting and billing, site measurement and preparation of

estimates.

Salary, which is dependent upon age, qualifi-cations and experience, ranges from £726 (age 25) to £961 maximum in Grade III. There are pension prospects and also opportunities of advancement to numerous posts in the higher

advancement to numerous opportunities of grades, viz.,
Technical Grade II: £961-£1.098 123 posts
Technical Grade I: £1.098-£1.348 42 posts
Technical Grade B: £1.348-£1.52 6 posts
Technical Grade B: £1.348-£1.52 6 posts
Technical Grade B: £1.348-£1.52 6 posts
Technical Grade A: £1.439-£1.697 6 posts
Vacancies occurring in the higher grades are,
as a rule, filled by promotion of existing staff.
Overseas tours for which special allowances
ranging at present up to £1.800 p.a. are payable
in addition to a higher salary. Financial assistance and time off allowed for recognised courses
of study leading to higher qualifications. Fiveday week with 18 days paid leave a year
initially.
Applicants who must be natural born British
subjects, must hold O.N.C. (Building or Builders
Quantities) or equivalent and have had good
experience under Quantity Surveyor or Building
Contractor, Kanowledge of W.D. Schedule an
advantage, Forms from Manager (P.E.2), Ministry of Labour, Professional and Executive Register, Atlantic Bouse, Farringdon Street, London,
E.C.A. Candidates selected will be interviewed in
Air Ministry, London, and certain expenses reimbursed. Only applicants selected for interview
will be advised.

S7028

oxfordshire County Council

ARCHITECT'S DEPARTMENT

ASSISTANT ARCHITECTS A.P.T. Grade V

(Starting salary according to experience)

(Starting salary according to experience)

Applications are invited from qualified Architects to work on an interesting and varied building rogramme.

The appointments are superannuable and subject to medical examination.

The Council will pay 50 per cent of any removal expenses. Five-day working week.

Applications for forms and further particulars should be made at once from the undersigned.

ALBERT E. SMITH.

Park End Street Offices,

Park End Street Offices, Oxford.

Oxford.

BOROUGH OF LEYTON

(in the County of Essex)

COMMITTEE FOR EDUCATION

APPOINTMENT OF ARCHITECTURAL

ASSISTANT

Applications are invited for the permanent and the county of the

BOROUGH OF LEYTON
(in the County of Pssex)
APPOINTMENT OF JUNIOR
APPOINTMENT OF JUNIOR
APOLICATIVE ASSISTANT
Applications are invited for the appointment of Junior Architectural Assistant Grade A.P.T.I.
1645—2815 per annum plus London Weighting.
The successful applicant will be employed by the Fssex County Council and will work in the School Architect's Section of the Borough Engineer and Surveyor's Denartment. Town Hall, Leyton, E.10. Five-day week is operated.
Details and forms of application from the Borough Education Officer, Education Offices.
Kirkdale Road. Levtonstone, E.11. to whom they should be returned within 14 days from the annovarance of this advertisement.

S7984

CITY OF LEEDS

CITY ARCHITECT'S DEPARTMENT
Applications are invited for the following
ermanent annointments:
PRINCIPAL ARCHITECT (HOUSING SECTION), Grade SO/C. Salary Scale:

Dermanent additional terms of the control of the co

City Architect.

Priestlev Hone Quarry Hil Leeds 9 7th June, 1961. F\$:11

CITY OF NEW SARUM
APPOINTMENT OF TEMPORARY
A temporary architectural assistant is required to work on housing and redevelopment area schemes now in preparation. The work offers considerable scope on design and detailing of multi-storey dwellings for a scheme in which particular attention is to be given to the treatment of open spaces.

The appointment, which will be initially for a period of nine months, is thought to be suitable for an assistant with Intermediate R.I.B.A. or a newly qualified person requiring office experience.

tor an assistant a newly qualified person requiring a newly qualified person requiring conce.

The department works a five-day week. Applications, stating qualifications, experience, availability and salary required should be sent to the Citz Engineer, Council House, Bourne Hill, Salisbury, by 30th June, 1961.

GEO. RICHARDSON, GEO. Town Clerk. 87996

BRITISH STANDARDS INSTITUTION
APPOINTMENT OF TECHNICAL OFFICER
The British Standards Institution requires a
Technical Officer for an appointment to the staff
of the Building Section of the Institution, primarily concerned with building materials and
components.

The staff is responsible for the work of the
Institution in the preparation of British Standards
in co-operation with the various sections of
industry and is required to plan and progress
the work. They act as secretaries to technical
committees.

the work. They act as secretaries to technical committees.

Applicants should have a university degree or equivalent technical qualifications.

There are three grades of appointment and salaries in the top grade range up to £2,000 plus; applications, however, are invited for the grade which has at present a maximum salary of £1,550, the starting salary being dependent upon individual qualifications and experience. The post is negative.

pensionable.
Apply to the Establishment Officer, B.S.I., 2,
Park Street, London, W.1.

Park Street, London, W.1.

BOROUGH OF SCUNTHORPE
(Population-65,000; Area-7,895 acres; R.V.—
£1,562,541)

ARCHITECTURAL AND PLANNING
APPOINTMENTS
Applications are invited for the following appointments in the Borough Engineer and Surveyor's Department:—
(a) SENIOR ASSISTANT ARCHITECTS—
Grade A.P.T. III/IV (£960—£1,310 p.a.),
(b) SENIOR PLANNING ASSISTANT (Redevelopment)—Grade A.P.T. III (£960—£1,140 p.a.).

Grade A.P.T. III/IV (1960—cl.310 p.a.).

(b) SENIOR PLANNING ASSISTANT (Redevelopment)—Grade A.P.T. III (1960—cl.140 p.a.).

(c) PLANNING ASSISTANT (Development Control)—Grade A.P.T. III/III (2615—cl.140 p.a.).

Commencing salaries will be fixed in the appropriate grade according to qualifications and experience.

Applicants for posts (a) should be qualified Architects and have a good experience of Architectural practice and procedure but Local Government experience is not essential; for posts (b) and (c) previous experience in redevelopment and development control work respectively in an urban area is essential.

The population of the Borough continues to expand rapidly and an extensive programme of capital works is planned. Opportunity for valuable architectural and planning experience also exist in conjunction with a comprehensive Redevelopment Scheme now being prepared for the Central Area of the Borough.

Housing accommodation available, if required, approved removal expenses reimbursed in full, Applications, stating age, details of present and past appointments, training, qualifications and experience, together with the names of two nersons to whom reference may be made, should be sent to F. J. Bowyer, Esc., Borough Engineer and Surveyor, Borough Surveyor's Denartment, Laneham Street, Scunthorpe, on or before Tues, day, 27th June, 1961.

Ancheam Street, Sciumone.

J.ONDON ELECTRICITY BOARD
ARCHITECTURAL DRAUGHTSMAN
Applications are invited for the above position
under the supervision of an Architect in the Chief
Engineer's Department in Central London
(Waterloo).
Apolicants should preferably have had several
years' experience in an Architect's Office and have
obtained five passes at "O" level and two at
"A" level of the G.C.E. or have gained the
Ordinary National Certificate (Building).
The post is graded under Schedule "B" of the
National Joint Board Agreement, as Grade 15.
Class "BX," and the commencing salary will
be in the range of £780 to £1,065 per annum,
inclusive of London Allowance.
Application form obtainable from the Construction Engineer, Lesco House, Stamford Street,
London, S.E.I. Please quote ref.: PER/V/3230/A.

86024

WORCESTERSHIRE COUNTY COUNCIL ARCHITECTURAL ASSISTANT required, Grade A.P.T. II (£815—£960), in the Section concerned with major school projects. The County Council owns some housing accommodation for which a successful candidate may apply. Application forms and further particulars can be obtained from L. C. Lomas, F.R.I.B.A., County Architect, 14, Castle Street, Worcester, not later than 22nd June, 1961. (N.143) 87874

NAVY WORKS DEPARTMENT

Admiralty

There is a vast field for adventurous and progressive thought in the recently formed Architects' Section of the Navy Works Department at Headquarters (Pinner, Middlesex). More Architects and Architectural Assistants of the under-mentioned grades are required to help in the task of applying new ideas to the design of Naval buildings of all kinds. Architects (Main and Basic Grades) are also required at Liverpool and Rosyth at salaries slightly less than in London.

(i) ARCHITECTS (Main Grades) to lead small groups of Assistants and to be in full professional control of jobs. Salary scale £1,506—42,010 per annum (London Rate).

(ii) ARCHITECTS (Basic Grades) having the same degree of professional responsibility as (i) above in respect of less sizeable jobs solvent and the same 2976 at age 25 to £1,308 at 34 or over. Maximilar range 2976 at age 25 to £1,308 at 34 or over. Maximilar grades (i) and (ii) above. Salary scale £1,033—12,205 per annum (London Rate).

(iii) ARCHITECTURAL ASSISTANTS (Basic Grade) to work with professional grades (i) and (ii) above. Salary scale £638 at professional grades (i) and (ii) above. Salary scale £638 at

professional grades (i) and (ii) above. Salary scale £638 at age 21 to £945 at age 28 or over to maximum of £1,033 (London Rate).

Grades (ii) will need to be Associates R.I.B.A. by examination-with energy and first-class design ability. Grades (iii) will need to have passed the Intermediate R.I.B.A. examination, and preference will be given to candidates who are well on the way to becoming fully qualified. Grade (iv) will need to have had not less than two years Drawing Office experience and preference will be given to candidates who are already studying for the Intermediate R.I.B.A. Examination.

Good promotion prospects particularly for Leading and Basic Architectural Assistants who qualify for A.R.I.B.A.

Those studying for the Intermediate and Final R.I.B.A. examination will be considered for day release.

The posts offered are non-pensionable, but there will be opportunities or establishment.

Conditions of Work: five-day week, initial annual leave allowance 25 days for Main Grade, 22 days for Basic Grade Architects and Leading Architectural Assistants, 18 days for Basic Grade Architectural Assistants. All candidates must be British subjects.

Applications by letter giving full particulars should be sent to: Director General, Navy Works, Ref. 45/96/123 (CB), or General, Admiralty, Chamberlain Way, Pinner, Middlesex.



Capable **Architectural** Assistant

required by

MOBIL OIL COMPANY LIMITED

in their Manchester Division Office

The post offers opportunity for neat and experienced draftsman to take responsibility for the design and supervision of small contracts and to gain experience in the surveying of new and existing sites.

Salary in accordance with experience. vouchers, sickness benefits etc.

Write giving full details of age, experience and salary

Employee Relations Adviser, MOBIL OIL COMPANY LIMITED Caxton House, London, S.W.1

MICHELIN

TYRE CO. LTD. STOKE-ON-TRENT

requires

a junior architectural assistant

to join a team engaged on interesting building projects ranging from housing to industrial buildings.

Applicants, aged 22-25, should hold or be studying for Inter R.I.B.A. or H.N.C. Building, and should have had experience in a professional office.

Salary range £660—£850 per annum according to age and experience. The appointment is permanent and pensionable. Housing assistance may be given to a married candidate. Removal expenses paid. Five-day week. Three weeks annual holiday.

Please write in confidence giving full details of qualifications and experience to:

> Mr. B. G. Tierney, Technical Personnel Officer, at the above address, quoting Ref. B/1023/AJ

LAING

ARCHITECTURAL STAFF

SYDNEY GREENWOOD, A.R.I.B.A Chief Architect.

JOHN LAING AND SON LIMITED

requires

Assistant Architects and Architectural Assistants for a recently established Regional Office in

This office will be responsible for all types of Architectural projects undertaken by the Depart-

Assistant Architects should preferably be qualified with 2/3 years' experience in schools, Industrial or Commercial Projects.

Architectural Assistants should be of Intermediate standard with 2/3 years' experience in an Architect's office.

There are excellent prospects within an expanding Organisation, including a Pension Scheme and other progressive benefits.

Applications, giving brief details, to Group Personnel Manager (MRO. 19), John Laing and Son Ltd., London, N.W.7.

CITY OF LEICESTER EDUCATION
COMMITTEE
LEICESTER COLLEGE OF ART
Principal: E. E. Pullee, A.R.C.A., F.S.A.E.
SCHOOL OF ARCHITECTURE
Head of School: Robert Howrie, B.A., F.R.I.B.A.
Applications are invited for the post of STUDIO
MASTER in the School of Architecture from
Architects who have a degree or diploma of a
recognised School of Architecture and not less than
three years post-graduate practical experience in
Architecture.
Salary Burnham Technical Scale, Grade B—2700
to £1,550 p.a., plus degree and training allowance
and increments for approved teaching and/or
industrial experience. Commencing salary according to qualifications and experience.
Form of application can be obtained from the
Registrar, Leicester College of Art.

BOROUGH ARCHITECTS
Grade A.P.T. II, 140-91,310.
Grade A.P.T. II, 171, 170-91,310.
ARCHITECTURAL ASSISTANTS
Grade A.P.T. III, 2560-21,40.
Grade A.P.T. II, 2515-2500.
Grade A.P.T. III, 2550-261,140.
Grade A.P.T. III, 2550-261,140.
Grade A.P.T. II, 2515-2500.
Grade A.P.T. III, 2550-2510.
Grade A.P.T. IIII A.B. IIIII A.B. IIIII A.B. IIIII A.B. IIII A.B. IIII A

N. CATCHPOLE. Town Clerk.

Town Hall. Colchester June, 1961.

CITY OF OXFORD
CITY ARCHITECT AND PLANNING OFFICER
(SECOND ADVERTISEMENT)
Applications invited for this appointment.
Salary within scale £2,695—£3,070 a year. Car

allowance.
Further particulars and application forms (to be returned by June 29th, 1961) can be obtained

HARRY PLOWMAN. Town Clerk.

SURREY COUNTY COUNCIL
Applications invited for following appoint-

Applications invited for following appointments:

1. ASSISTANT ARCHITECT, GRADE IV (£1.140-41.310 p.a. plus £45 p.a. London Allowance). Approved removal expenses will be paid to successful candidates in this Grade.

Must be A.R.I.B.A. and have had experience in preparation of drawings and specifications, and be capable of assuming responsibility for medium to large scale contracts.

2. ARCHITECTURAL ASSISTANTS, GRADE II (£815-£950 p.a. plus up to £40 p.a. London Allowance, according to age).

Must be of good general training, preference given those who have passed Inter. R.I.B.A. Candidates will be appointed at the appropriate point within the scale according to age and ability.

Full details, present salary and three copy testimonials, preferably one from present employer to County Architect, County Hall, Kinston, as soon as possible.

SOUTH WEST METROPOLITAN

Singston, as soon as possible.

SOUTH WEST METROPOLITAN
REGIONAL HOSPITAL BOARD
PRINCIPAL ASSISTANT ARCHITECT
An Architect with initiative is required to lead a newly-formed group to carry out a number of major hospital projects together with ancillary social, theraneutic and educational buildings. Outstanding design ability and a complete knowledge of contracts procedure is essential. Hospital experience is desirable but not obligatory.
The commencing salary will be at the minimum of the scale £1.665 × £50 (1) × £75 (2) × £85 (2) -£2.055, plus London Weighting allowance of £50 p.a.

e2.035, plus London Weighting and the Royal p.a.

Applicants must be Associates of the Royal Institute of British Architects.

Applications stating age, salary, experience, qualifications, present and previous appointments together with the names of three referees should be sent to the undersigned at 40, Eastbourne Terrace. London, W.2, by not later than 27th lane. F. G. BRAITHWAITE, Secretary. 8063

CAERNARVONSHIRE COUNTY COUNCIL Applications are invited for the following Applications are invited for the following appointments:—
ASSISTANT ARCHITECT, A.P.T. V-£1,310/

ASSISTANT ARCHITECTS, A.P.T. IV-£960/ £1,310.

£1,310.

Further particulars and application forms from lerk of the County Council, County Offices.

87926

BRACKNELL DEVELOPMENT CORPORATION Applications are invited for the post of ARCHITECT, Grade IV. Salary range £1,140-£1,310. The Minister is expected to give his decision shortly on the proposal to extend the scope of the New Town by increasing the designated area from 1,150 to 3,050 acres. Superannuation schemes, medical examination, 5-day week. Good housing accommodation available. Applications, stating age, education, qualifications, experience and appointments held (with dates and salaries), and the names of two referees, should be addressed to the General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks., to be received not later than 29th June.

CITY OF BIRMINGHAM

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The work in hand includes a large Exhibition building, multi-storey Office Blocks, and a new Central Library, as well as Schools, Colleges and Housing (including multi-storey flats) and many other importanting multi-storey flats) and many other importanting with the scale will be according to capabilities and experience.

Applications to the undersigned stating age-created vasifications, exceptions and easily considerations.

Pension scheme. Five-uss Examination.

Applications to the undersigned stating age, present position and salary, qualifications, experience and names of two referees.

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City Architect.

Başkerville House, Civic Centre, Birmingham, 1.

Birmingham, I. 88064

BOROUGH OF ILFORD

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Applications are invited for the appointment of
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The commencing salary will be fixed within the
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Application forms and further particulars may
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The Council is prepared in special circumstances
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Grade A.P.T. V (£1,340-£1,350).

Grade A.P.T. V (£1,340-£1,350).

Candidates must be Associates of the R.L.B.A. with subsequent practical experience in the handling of large projects.

2. ARCHITECTURAL DRAUGHTSMEN.

Grade Misc. III (£555-£625).

Candidates must have had a minimum of four years' experience in a similar capacity.

The appointments will be subject to:—

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Forms of application, which must be returned

houses.

Forms of application, which must be returned by the 16th June, 1961, may be obtained from: P. Woodcock, F.R.I.B.A., County Architect, Green Hall, Lichfield Road, Stafford,

T. H. EVANS,

Clerk of the County Council

Clerk of the County Council.

7963

HAMPSHIRE COUNTY COUNCIL

AREA PLANNING OFFICER, Scale D (£1,710—£1,975), based initially on Fareham, to be responsible, under general direction of County Planning Officer, for planning of South-East area of county and for control of development. Candidates must be Corporate Members of the Town Planning Institute and preferably also of an allied professional budy. Commencing salary according to qualifications and experience. Car allowance payable for use of own car. Separation allowance and assistance with removal expenses in approved cases.

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8011

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S.W.I. Belgravia 3361. TC6105

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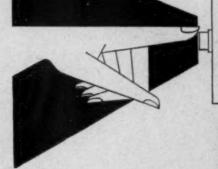
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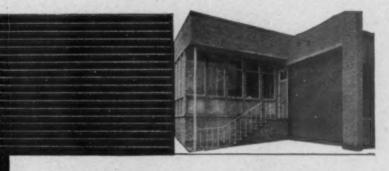


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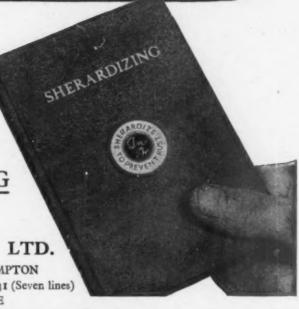
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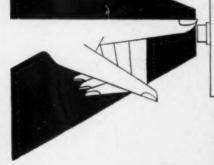
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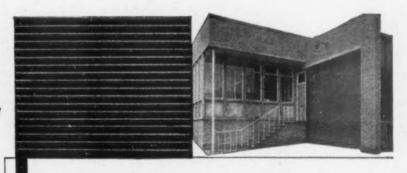


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