ТНЕ



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

NEWS and COMMENT

Astragal's Notes and Topics Letters News Diary Criticism

TECHNICAL SECTION

Information Sheets Information Centre Current Technique Working Details Questions and Answers Prices The Industry

CURRENT BUILDING

Major Buildings described: Details of Planning, Construction, Finishes and Costs Buildings in the News Building Costs Analysed Architectural Appointments Wanted and Vacant Vol. 134 No. 5 THE ARCHITECTURAL PRESS 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1. 'Phone: Whitehall 0611 Price 15.

Registered as a Newspaper.

ARCHITECTS' JOURNAL

The Architects' JOURNAL for August 2, 1961

 \bigstar A glossary of abbreviations of Government departments and societies and committees of all kinds, together with their addresses and telephone numbers. The glossary 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.

AA AAI	Architectural Association, 34/6, Bedford Square, wc1 Museum 0974 Association of Art Institutions. Secy.: J. H. Holden,
ABS ABT ACGB ADA ADA ARCUK BASA BCC BCC BCC BCCF BCCRA BCIRA BDA BE BEDA BIA	College of Art, Cavendish Street, Manchester 15 Architects' Benevolent Society. 66, Portland Place, wi Association of Building Technicians. 156, Waterloo Road, SEI Arts Council of Great Britain. 4, St. James's Square, swi Aluminium Development Association. 33, Grosvenor Street, wi Architects' Registration Council. 68, Portland Place, wi Building Centre, 26, Store Street, Tethenham Court Road, wci British Architectural Education. 105, Uxbridge Road, Ealing, w5 British Door Association. 10, The Boltons sw10 British Door Association. 10, The Boltons sw10 British Icentre, 24, Store Street, You British Door Association. 10, The Boltons sw10 British Icentre, Association. 145, Vincent Street, Glasgow, c2 Control 2021
BINC BOT BRS BSA BSI CABAS	Glasgow Central 2891 Board of Trade. Whitehall Gardens, Horseguards Avenue, swl Building Research Station. Bucknalls Lane, Watford Building Societies Association. 14, Park Street, wl British Standards Institution. British Standards House, 2, Park St., wl Mayfair 0515 British Gorough Architects Society. C/o S. A. G. Cook, ARIBA, Borough Architect and Director of Housing, Town Hall, High Holborn, wcl
CAS CCA CDA COID CPRE CUC DIA EJMA	County Architects' Society. C/o J. Hurst, ARIBA, County Hall, Dorchester Cement and Concrete Association. 52, Grosvenor Gardens, sw1 Belgravia 6661 Copper Development Association. 55, South Audley Street, w1 Council of Industrial Design. 28, Haymarket, sw1 Council of net Preservation of Rural England, 4, Hobart Place, sw1 Coal Utilization Council. 3, Upper Belgrave Street, sw1 Design and Industries Association. 13, Suffolk Street, sw1 English Joinery Manufacturers' Association (Incorporated). Sackville House, 40 Ereadilly, w1 Belgravia 8000 Discondilly, w1 Belgravia 8141 Design and Industries Association (Incorporated). Sackville House, 40 Ereadilly, w1 Belgravia 8141 Belgravia 8141 Belg
EPNS FAS FASS	40, Piccadilly, w1 Regent 4448 English Place-Name Society. 7, Selwyn Gardens, Cambridge Faculty of Architects and Surveyors, 68, Gloucester Place, w1 Federation of Associations of Specialists and Sub-Contractors.
FIDOR	14, Bryanston Street, w1 Welbeck 1781 Fibre Building Board Development Organization Ltd. (Fidor)
FBI FC FCMI FDMA FLD FMB FPC FRHB	Stafford House, Norfolk Street, wc2 Covent Garden 3008 Federation of British Industries. 21, Tothill Street, sw1 Whitehall 6711 Forestry Commission. 25, Savile Row, w1 Regent 0221 Federation of Coated Macadam Industries. 37, Chester Street, sw1 Sloane 1002 Flush Door Manufacturers Association Ltd. Trowell, Nottingham Ilkeston 623 Friends of the Lake District. Pennington House, nr. Ulverston, Lancs. Ulverston 201 Federation of Master Builders. 33, John Street, wc1 Chancery 7583 (6 lines) Federation of Registered House Builders. 82, New Cavendish Street, w1
GPDA	Gypsum Plasterboard Development Association. 11, Ironmonger Lane, EC2
GC GG HC IAAS	Gas Council.1, Grosvenor Place, sw1Monarch 8888Georgian Group.2, Chester Street, sw1Belgravia 4321Housing Centre.13, Suffolk Street, sw1Whitehall 2881Incorporated Association of Architects and Surveyors.Whitehall 2881
ICA ICE IEE	29, Belgrave Square, sw1 Belgravia 3755 Institute of Contemporary Arts. 17-18, Dover Street, w1 Grosvenor 6186 Institution of Civil Engineers. 1, Great George Street, sw1 Whitehall 4577 Institution of Electrical Engineers. Savoy Place, Victoria Embankment, wc2 Covent Garden 1871
IES IGE IHVE	Illuminating Engineering Society. 32, Victoria Street, sw1 Institution of Gas Engineers. 17, Grosvenor Crescent, sw1 Institution of Heating and Ventilating Engineers. 49, Cadogan Square, w1 Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers. 37, Soho Square, w1 Gerrard 5056
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Place:

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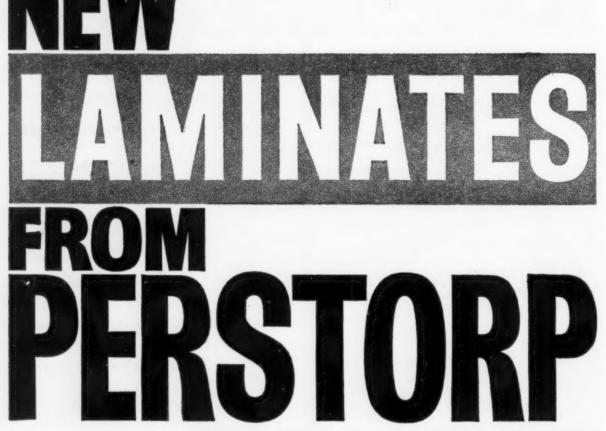


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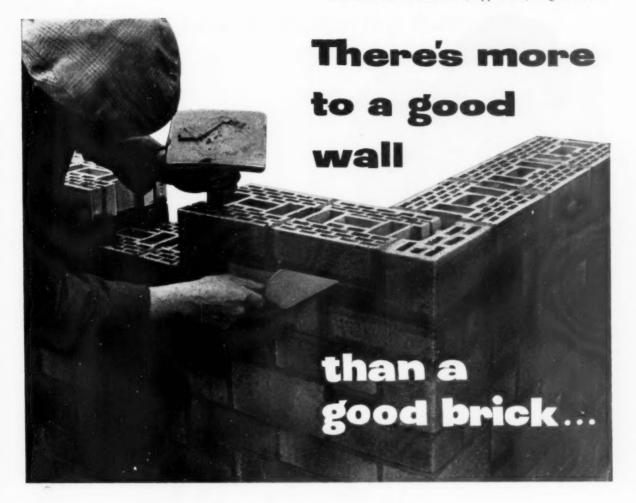
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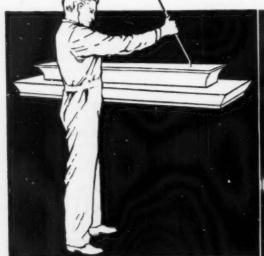
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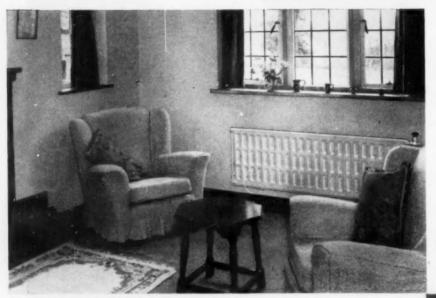
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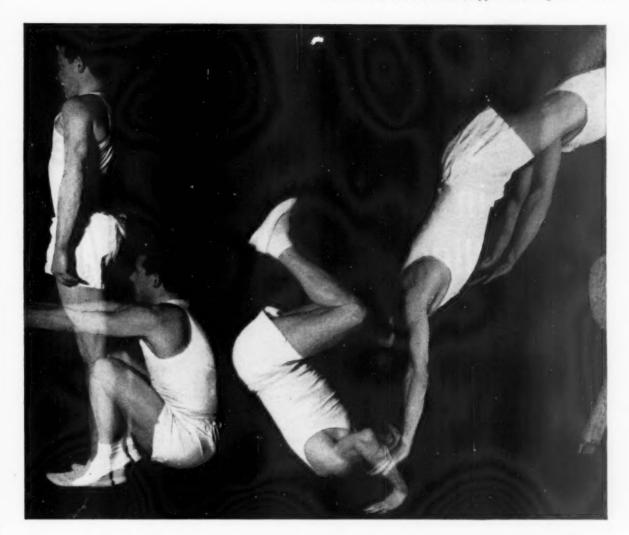
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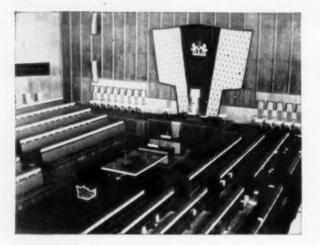


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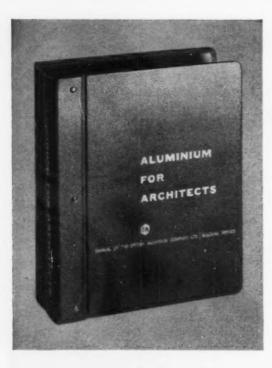
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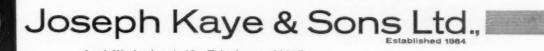
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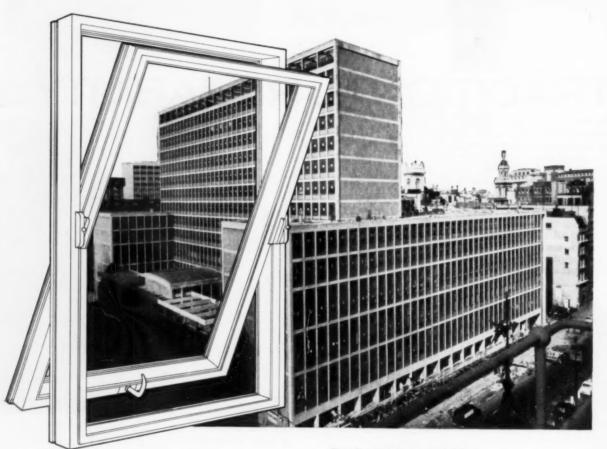


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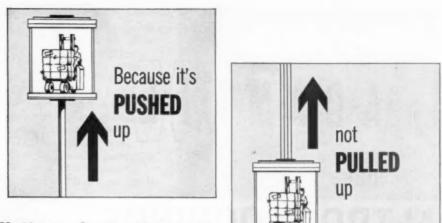
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THE ARCHITECTS' JOURNAL (Supplement) August 2, 1961

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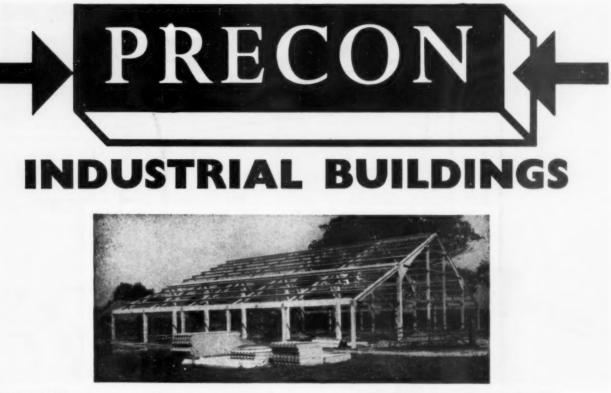
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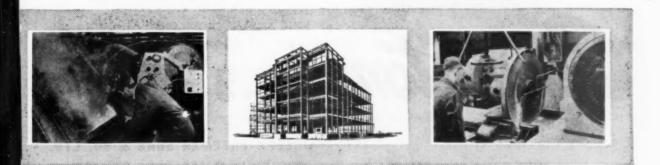
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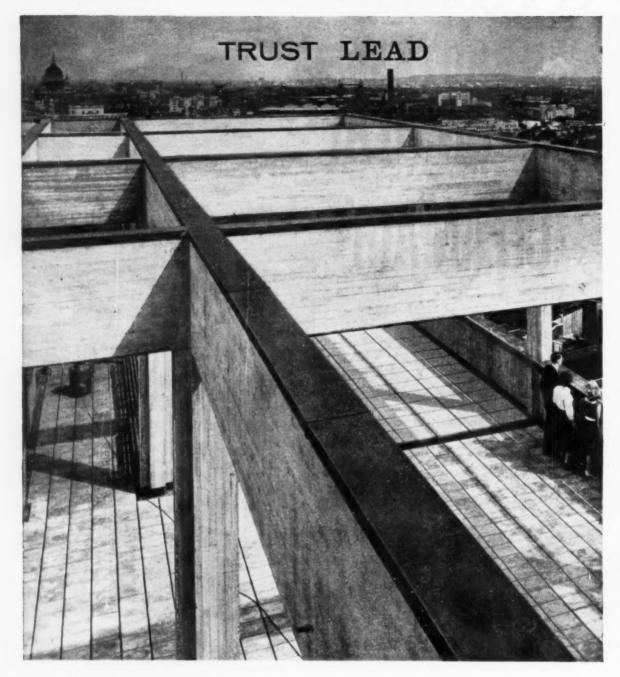
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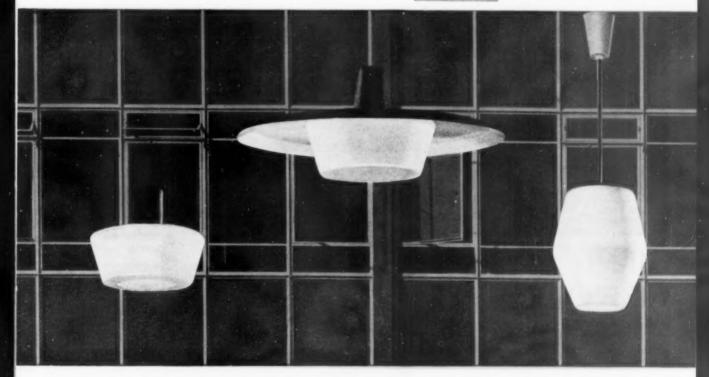


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The New Garret Hostel Bridge, Cambridge, uses hand rails and balustrade of Delta Bronze No. IV.

Architects : Timothy Guy Morgan in conjunction with Guy Morgan, F.R.I.B.A.

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Photographed 20 years after fixing. Cleaners' Store Room at Blurton School, Stoke-on-Trent, Architect: J. R. PIGGOTT, T.D., F.R.I.B.A., Stoke-on-Trent City Architect. Quarry Suppliers: A. WOOD & CO. (Longton) L'D., Tile Fixing Specialists.



Photographed 19 years after fixing. Corridor at Longton High School, Stoke-on-Trent, Architect: J. R. PIGGOTT, T.D., F.R.I.B.A., Stoke-on-Trent City Architect. Quarry Suppliers: A. WOOD & CO. (Longton) LTD., Tile Fixing Specialists



Photographed 20 years after fixing. Cloakroom at Chell Secondary Modern School, Stoke-on-Trent, Architect: J. R. PIGGOTT, T.D., F.R.I.B.A., Stoke-on-Trent City Architect, Quarry Suppliers: MOORE & BROCK LTD., Builders' Merchants, Crewe.



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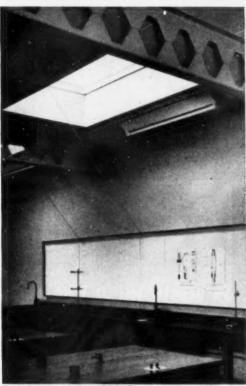
It is not surprising that his dreams of yesterdays can so easily be today's reality when architects are seeing the advantages of planning with 'Windowall' in mind.

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Domelights made from Opal 'Perspex' by Henry Hope and Sons Ltd., Smethwick, on the roof of Hadrian County Secondary Modern School built for the Borough of Wallsend Education Committee. Architects: Messrs. Reavell & Cahill, F/F.R.I.B.A., Alnwick. Contractors: Messrs. Alex Anderson (Contractors) Ltd., Newcastle-upon-Tyne.



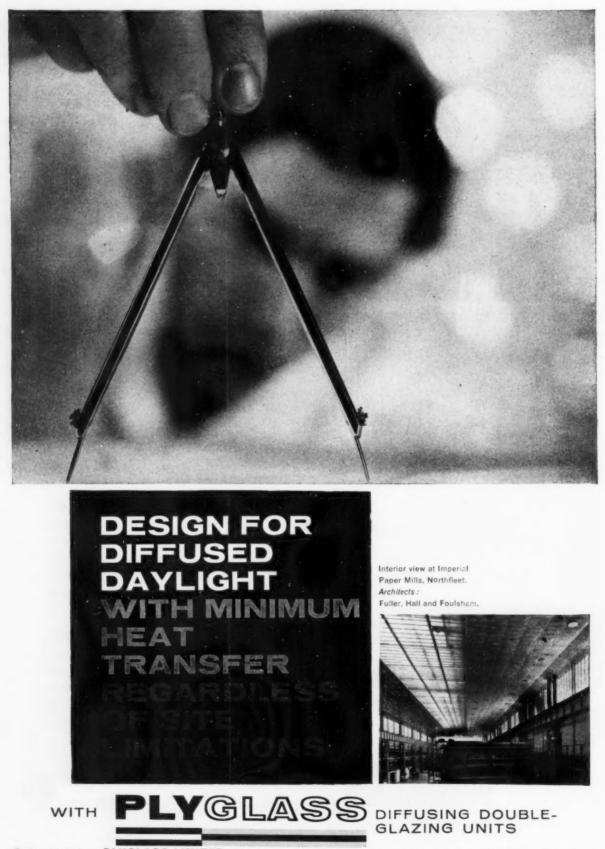
THROUGH DOMELIGHTS ARE MADE FROM OPAL 'PERSPEX'

G OOD, NATURAL LIGHTING is essential in school classrooms. That is why the classrooms of Hadrian County Secondary Modern School at Wallsend have domelights made from Opal 'Perspex' acrylic sheet. Because Opal 'Perspex' is used, these domelights transmit an evenly diffused daylight, which benefits both pupils and staff.

'Perspex' is inexpensive to install and saves money on artificial lighting. It is light, tough, easy to handle. It is unaffected by the severest weather conditions and withstands the corrosive atmospheres of most industrial and marine areas. Undoubtedly, Opal 'Perspex' is the ideal material to use where diffused daylight is needed to ensure good working conditions.

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'Perspex' is the registered trade mark for the acrylic sheet manufactured by I.C.I.

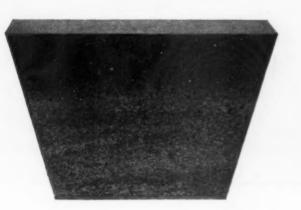


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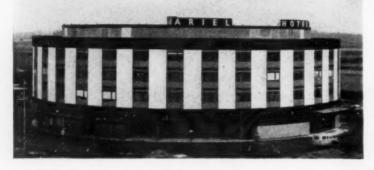




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News from Hull



ARIEL HOTEL at LONDON AIRPORT

Architects: RUSSELL DIPLOCK ASSOCIATES. Consultant Architects: F. J. WILLS & SON. Contractors: MYTON LIMITED. Proprietors: THE PALACE HOTEL LIMITED

'Standard' bathroom equipment specified in 186 Guest Rooms

Situated not far from London Airport is the new Ariel Hotel. It is unique in appearance as it is completely circular with a courtyard in the centre and guest rooms looking both outward and inwards. The Hotel is compactly designed and contains as many as 62 rooms, with bathrooms, on one floor alone and in all has 186 guest rooms.

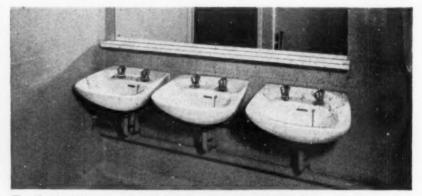
The Ariel Hotel caters both for motorists and passengers from London Airport. The guest rooms contain several interesting and attractive features. The beds convert to divans for daytime use, the windows are double-glazed to keep out the noise of arriving and departing aircraft, the controls for television, radio, telephone and light, separate independent control for each guest, are contained in one compact panel situated near the beds, and the rooms are air conditioned.

In the bathrooms, attached to the guest rooms, the same high standard of utility and good appearance has been maintained. Compact and easy to clean and maintain, all the bathrooms contain 'Standard' vitreous china sanitary ware. These include the elegant wall-hung Kingston wash basin, and the Sanwall water closet. The Sanwall is supported from the wall, and stands clear of the floor—it also achieves the most attractive appearance for this type of equipment. In the larger cloakrooms, too, the Kingston wash basin has been used extensively. Like all 'Standard' equipment, made from vitreous china, these items have an extremely long life, are hygienic and practical, while at the same time being æsthetically pleasant in design.

'Standard' equipment made by Ideal Boilers & Radiators Ltd., of Hull, is available in a range of colours and white, and keeps its good looks throughout a long life.



This is one of the bathrooms attached to the guest rooms at the Ariel Hotel. The clean, simple lines of the 'Standard' Kingston wash basin and Sanwall water closet give the bathroom a feeling of practical elegance in a strict, modern setting.

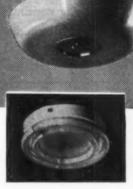


These 'Standard' Kingston wash basins in one of the cloakrooms at the Ariel Hotel are made from virreous china. Vitreous china, fired at a far higher temperature than other ware, is more durable and hygienic, and does not rely on its glaze to make it watertight.



Harris & Sheldon (Electrical) Ltd., designed these special fittings for Woolworth's Head Office, Each houses the three Philips Circular Fluorescent Lamps - 94 watts of fluorescent lighting in a rectangle of small size.

Here's the **new look** in fluorescent lighting



Many manufacturers have selected Philips Circular Fluorescent Lamps for their fittings. Shown at left is a model by Allom Heffer & Co. Ltd., with opal perspecboul and gilt enrichments. Available in two sizes for 40w. or 32w. Circular.

This Philips A.5001 fitting combines both 40w. and 32w. Circular. A further version has one 40w. only. Both versions accept a choice of diffuser attachments.

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Philips Circular Fluorescent Lamps are made in three sizes: 40w. 16" dia.; 32w. 12" dia.; and 22w. 84" dia., and are available in several colours. Philips Colour 32, with its warm and luxurious colour rendering and special double coating to suppress distortion, is extremely popular. The rapid growth in popularity of circular fluorescent lamps brings you lower List Prices than ever before - 27/6 for the 40w.; 25/- for the 32w. and 22w.



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rchitects: Basil Spence & Partners

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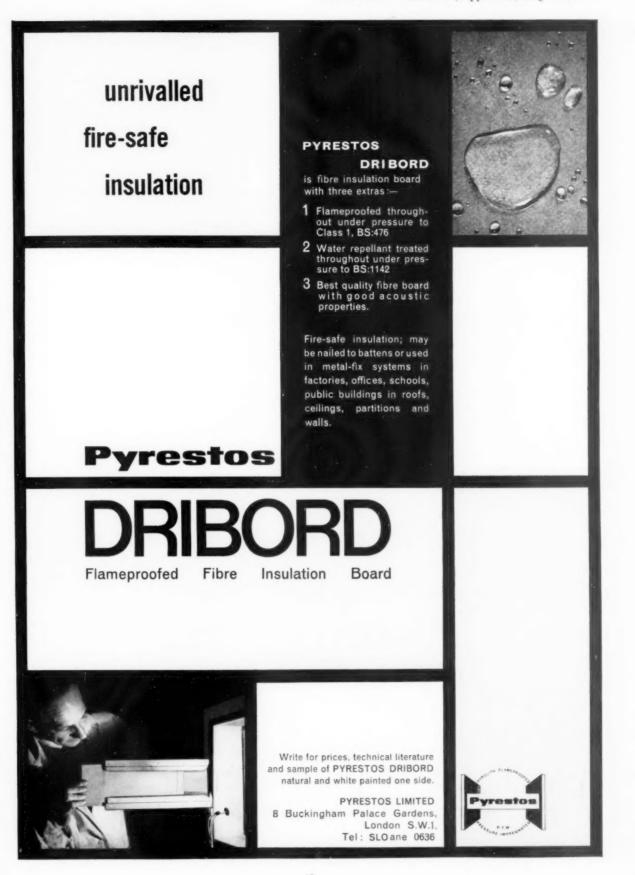
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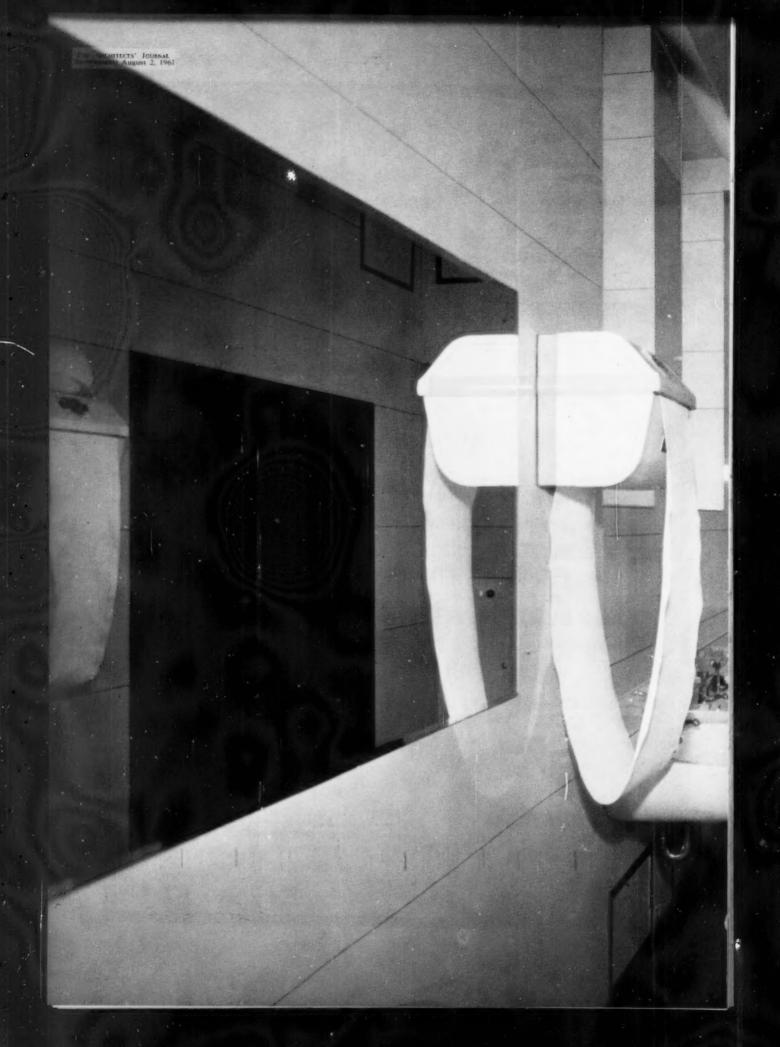


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PILKINGTON BROTHERS LIMITED

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SCALE: HALF-SIZE

HOLLOW STRUCTURAL STEEL

The hollow structural steelwork complies with BS 2799:1956 (Tower Cranes) and is fabricated from S & L sections throughout, all conforming to the mechanical properties of BSS 1775, Grade 16.

This tower crane, 130 ft. high, was constructed by Ruston-Bucyrus Ltd., of Lincoln, for Abelson and Co. (Engineers) Ltd., of Birmingham.

The half-scale drawing shows a detail of the tower structure and illustrates the ease of fabrication when Rectangular Hollow Sections are used in conjunction with round steel tubes.

The round tube bracing members are simply cut off at a suitable angle and seated against the flat side of the R.H.S. main member, ready for welding. This simplification of end preparation applies equally, of course, when the bracing members are R.H.S.

R.H.S. are now being used increasingly, either alone or with round tube, for a wide range of structural and mechanical applications.

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The Architects' Journal

Vol. 134 No. 5 August 2, 1961

9-13 Queen Anne's Gate, London, SW1 Whitehall 0611

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NOT QUITE ARCHITECTURE

An earlier Cezanne

Although it can boast two Roman gateways, the Jesuit college where Bonaparte went to school and several other attractions, the Burgundian town of Autun has not had much success in recent years as a tourist centre. For one thing it demands quite a detour from the main routes by car between Paris and the Mediterranean coast. For another, the town has never quite recovered from the economic stagnation it suffered when the nearby coal mines were shut down between the wars. Even now the place has a slightly dead air about it; there is, for instance, little building going on, and the town hardly fills the enclosure of the Roman and mediaeval walls.

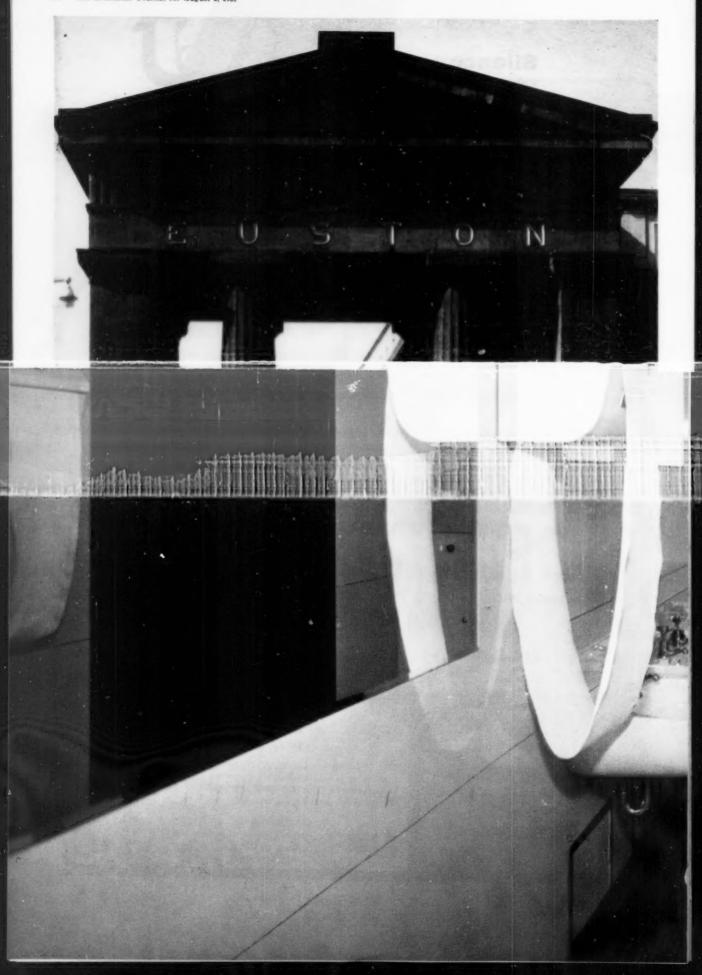


Eve stealing the apple

But this situation is likely to change, thanks to the appearance this summer of a lavishly illustrated book written by a local priest, Abbé Grivot, and Professor George Zarnecki of the Courtauld Institute. London, entitled *Gislebertus, Sculpteur d'Autun.**

It had always been known who was responsible for the magnificently carved tympanum over the west door of the church of St. Lazarus, because it is clearly signed *Gislebertus hoc fecit*. But the authors have established beyond any reasonable doubt, thanks to several years of painstaking re-

*Editions Trianon. An English version will be published shortly



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why they are not already the bedrock of present policy. The reasons are many and complex; here are some of them: As regards (1), the parliamentary system itself, five year parliaments, and annual budgets; the dilemma already referred to between planning and freedom; a society that is still fundamentally split on basic social objectives.

As regards (2), the fact that in politics, personality is usually a more potent factor than principle; political men now make their names most quickly by advocating and bragging that they have secured bigger programmes of this, that or the other (homes, hospitals, schools, etc.); the tragedy is that, while we need more of all these, one has, if resources are limited, to accept the principle of priorities and fair shares; collective planning by Ministers calls for a cessation of "personality politics" but spotted animals are not known to change their spots.

As regards (3), the inertia in our political and administrative institutions against revolutionary change; this inertia can be broken down; educational building is the classic example of what can be achieved in the field of capital investment by

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The Architects' Journal

Vol. 134 No. 5 August 2, 1961

9-13 Queen Anne's Gate, London, SW1 Whitehall 0611

Subscription rates: post paid, inland £2 15a. 0d. per annum; abroad £3 10s. 0d. per annum. Single copies, 1a. post paid, 1s. 6d. Special numbers are included in subscriptions; single copies, 2a.; post paid, 2s. 6d. Back numbers more than 12 months old (when available), double price. Half-yearly volumes can be bound complete with index in cloth cases for £1 17s. 6d.; carriage 2s. extra.

NOT QUITE ARCHITECTURE

An earlier Cezanne

Although it can boast two Roman gateways, the Jesuit college where Bonaparte went to school and several other attractions, the Burgundian town of Autun has not had much success in recent years as a tourist centre. For one thing it demands quite a detour from the main routes by car between Paris and the Mediterranean coast. For another, the town has never quite recovered from the economic stagnation it suffered when the nearby coal mines were shut down between the wars. Even now the place has a slightly dead air about it; there is, for instance, little building going on, and the town hardly fills the enclosure of the Roman and mediaeval walls.



Eve stealing the apple

But this situation is likely to change, thanks to the appearance this summer of a lavishly illustrated book written by a local priest, Abbé Grivot, and Professor George Zarnecki of the Courtauld Institute, London, entitled *Gislebertus, Sculpteur d'Autun.**

It had always been known who was responsible for the magnificently carved tympanum over the west door of the church of St. Lazarus, because it is clearly signed *Gislebertus hoc fecit*. But the authors have established beyond any reasonable doubt, thanks to several years of painstaking re-

*Editions Trianon. An English version will be published shortly



A Nuffield for Euston?

Now that the Minister has refused to find the £190,000 necessary for removing the Euston Arch to another site, some other means of doing this must be quickly found. As London is not a mausoleum city, she is none too rich in monuments and not many of those she possesses have the intrinsic grandeur of the Euston Arch. It is true that the buildings which have grown up round the arch prevent Londoners from seeing it in its true splendour; but, even so, it has a remarkable hold on the popular imagination. Euston Arch has a threefold claim to be preserved. It is the last great classical building in the English sequence with an architectural merit which would make it welcome in almost any setting. Second, it is an important common-

place of Victorian London, a landmark in English life and literature. Third, it is a splendid reminder of our country's leadership in the early Railway Age. WE CANNOT POSSIBLY LET IT BE DESTROYED. But who is to foot the bill? Where is the money? The Government says it hasn't any. By contrast, we know that enormous and tax-free capital gains have been made during the last few years by the owners of property. We also know that there has been a marked tendency of late for real estate in central London to coalesce into the hands of a few rich and able men. To readers of AJ £190,000 seems a lot of money; but to these formidable people it is nothing. Would it not be an impressive gesture if one of them were to save this monument for posterity?



Adoration of the Magi

search and examination, that with the exception of a few odd pieces of carving in dark corners, presumably done by his assistants, this man was responsible for all the original Romanesque carving of the church (started in 1120).

This is a remarkable achievement by the authors, but the study reveals something much more significant. When the illustrations of this sculptor's work, mostly capitals and rather difficult to see in the church itself,



The Weighing of Souls

are gathered together in this book, they are revealed as the product of a highly individual artist, working quite outside the ordinary vernacular of the period.

Each carving is carried out with freshness and consummate skill, making the most daring use of relief, and showing an entirely original organisation of the particular subject, be it Eve stealing the apple, the three Magi or the weighing of souls at the last judgment. The original colouring has gone. of course, but many of the carvings are otherwise in a superb state of preservation. This discovery is important not only because it shows that long before the Renaissance these small-scale and profuse masterpieces could be the work of one individual, rather than an anonymous collective effort, but because it gives belated recognition after 800 years to an artist André Malraux has acclaimed as the "romanesque Cézanne."

The Editors

The Report of the Plowden Committee on the Control of Public Expenditure* is a somewhat muted document. The cutting edge of its findings has been presented to the Government in a series of separate confidential reports and all we are offered is a broad view of the flat of the blade. Nevertheless, given this inevitable limitation, we have thirty or so pages of plain common sense and some deft thrusts have been made at the whole body politic and constitutional.

The Report states that it is mainly concerned with "systems and techniques in the Departments, in the Treasury, in the Cabinet, in Parliament" of controlling public expenditure and, indeed, all aspects of the economy—production, investment, wages, prices, balance of payments, gross national product. The advice and solutions it offers are only in terms of general principles and broadly in relation to three main themes; "surveying expenditure as a whole, over a period of years, in relation to prospective resources; the need for greater attention to be given to the systematic improvement of management throughout the public service; and the opportunity for constructive Parliamentary control."

On this third theme the Report realistically accepts that Parliamentary control of public expenditure is a fiction. Legislation apart, Parliament can in practice do no more than vote annually the money (Supply) needed to carry out policies and commitments already entered into. There is no practical way by which they can authorise these policies or commitments in the first place. Knocking five pounds off a Minister's salary is the vestigial symbol of the illusion that, in money matters, the Legislature controls the Executive. The grown-ups know that the real seats of power are not the leather benches of the House but the chairs behind the desks in Whitehall. The Plowden Report might have taken up the fundamental and painful dilemma of a society such as ours in reconciling the need for planning, which calls for an expert and even ruthless bureaucracy, and the insistence on freedom. which traditionally means a slow-moving apparatus of democratic institutions.

It is, however, the first theme that is the heart of the problem and of the Report—the surveying (and control) of expenditure as a whole, over a period of years, in relation to prospective resources. The Report propounds four guiding principles: (1) long term planning must be carried out on both the generation and the expenditure of national resources and decisions must be taken in the light of these surveys; (2) in so far as Ministers take these decisions they should do so more in a collective capacity and, by inference, less on an individual departmental basis; (3) the tools for measuring and handling public expenditure problems must be approved; (4) decisions once taken must be adhered to (no chopping and changing). These propositions seem so self-evident that one has to ask why it needs a committee of this kind to enumerate them and

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why they are not already the bedrock of present policy. The reasons are many and complex; here are some of them:

As regards (1), the parliamentary system itself, five year parliaments, and annual budgets; the dilemma already referred to between planning and freedom; a society that is still fundamentally split on basic social objectives.

As regards (2), the fact that in politics, personality is usually a more potent factor than principle; political men now make their names most quickly by advocating and bragging that they have secured bigger programmes of this, that or the other (homes, hospitals, schools, etc.); the tragedy is that, while we need more of all these, one has, if resources are limited, to accept the principle of priorities and fair shares; collective planning by Ministers calls for a cessation of "personality politics" but spotted animals are not known to change their spots.

As regards (3), the inertia in our political and administrative institutions against revolutionary change; this inertia can be broken down; educational building is the classic example of what can be achieved in the field of capital investment by refashioning the techniques of analysis; the reason why other departments and other building clients are not following suit is the inbuilt habit of letting things take their course—what Sir Winston Churchill branded as being "resolved only to be irresolute, adamant for drift."

As regards (4), the internal weakness of the economy as a whole, its consequent inability to withstand external pressures and hence, merely to survive, the inevitability of choppings and changings, such as the Chancellor's most recently announced measures; the strengthening of the economy in order to break out of this intolerably limited situation runs one smack into the sort of factors mentioned.

Almost anybody can devise a mechanical model of our social, economic and political future with the necessary gadgets for controlling public expenditure in the process. The real problem is to know how to make it a working model, how it is to be powered, and who is to operate it. Lord Plowden does not hazard an answer. Can anybody?

THE BLUNT AXE FALLS

When in doubt, cut public spending, discourage private investment by raising the Bank Rate, and appeal to company directors for self-restraint: this seems to be the accepted response of British Chancellors to economic crises, and last week's "little budget " was no exception. It was accompanied on this occasion, however, by the publication of the Plowden Committee's Report on the control of public expenditure, and although the short term proposals for making us all pay more for everything (which is apparently an essential prerequisite for exporting things more cheaply), got the limelight, we believe that the Plowden Committee's Report is really more worthy of serious consideration, in the faint but persistent hope that it may in fact become the starting point for a thorough and long-term reconsideration of how Governments should direct public spending in the future.



STRIKING EDUCATIONAL PROGRAMME

A colleague reports that at an informal meeting with the Press last week Edward Mills, chairman of the Board of Architectural Education, gave an interesting report on progress by this relatively new and select educational body. Two conferences are planned, one in October on the neglected subject of post-graduate training, and another for representatives from schools in underdeveloped countries. The first will be attended by invitation only and, so far, the Press are not invited (as with the famous Oxford Conference), even as observers, which seems an odd omission. Education is hardly a delicate, confidential subject and the constant plea is for informed comment from the Press. Various forms of post-graduate training will be discussed, as well as the subjects suitable for such courses, the relationship between teaching and research, and what type of course would be suitable for a qualification such as a Master's Degree. The chairman will be Richard Llewelyn Davies, which should inspire confidence.

The second course will include such subjects as the effect of two-A levels in GCE on entry, whether there is need for a sub-professional level of training (a better phrase than two tiers?), the possibility of exchanges of lecturers and



It's over half a mile to the top of this multi-storey, ramped garage for Leicester. See "Cars Incarcerated"

ways of increasing scholarships from abroad.

I was sorry to hear the Board has no minimum list of contents for architectural school libraries and glad to hear they insist on separate departmental libraries for architectural schools (they don't think that a central university or art department library is good enough). And I was delighted to learn that the Board requires all teaching staff to have unrestricted opportunity for practice. It is keeping in close touch with BASA —by the way—sometimes inviting the past president (Hilary Chambers) to meetings and lunches.

VICTORIANA UNFLUNG

Betjemanian romantics in Japan are protesting about the destruction of Tokyo's "Little London "—a block of Victorian red brick, built so solidly (Professor Josiah Condor, FRIBA, 1890's) that it has alone survived—with the exception of F.Ll.W's Imperial Hotel—both earthquake and bombardment. Forgetting for a moment that Howell and Killick are orientalising Bromley, has anyone thought of exporting our Victorian architects whose style is so cramped by the squeezing Chancellor?

HIGHLAND GEFLINGEN

Three distinguished foreign architects have been invited to take part in a West German town planning competition for the new town of Wulfen, 20 miles north of Essen. They are Sven Markelius, Van den Broek and Bakema and Hugh Wilson, the architect for Scotland's new town of Cumbernauld —wisely chosen because Wulfen is to

be a town for 50,000 people, compactly planned for high density and segregation of traffic from pedestrians. Right up Mr. Wilson's steep and traffic-free street. Good wishes to him.

CARS INCARCERATED

Presumably the Multideck company employed an architect for its Leicester scheme (see picture), though a dozen pages of publicity hand-out give no indication who was responsible for this seven-storey, sloping-floor garage (for 1,050 cars), combined with an office block, a supermarket and a 36-lane, 10-pin bowling alley. This will be the largest parking garage in the country, but it will hardly be as satisfactory as American examples as British garage designers apparently haven't heard of the American express exit ramps.

DON'T MISS THIS

If you want a change from spikey, backscratching insect sculpture, go to see the Italian bronze statuettes at the v and A-a show organised by the Italian Ministry of Public Instruction, the Rijksmuseum Amsterdam and the Arts Council-and be reminded of the scope of bronze as a sculptor's material. Look out for a Pisano head of a woman and some work by Giovanni Rusticci, Riccio and Giovanni Bologna. There are two delightful females of Bacchio Bandinello'-the one Cellini hated so much, and a magnificent candlestick by Verrochio from the Palazzo Vecchio in Florence.

BRONZE MONKEYING

Which reminds me that the Royal

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Society of British Sculptors is trying to find a way of limiting the number of bronze casts of any work. As the circular points out, up to the end of the eighteenth century the conversion of a clay prototype into a bronze cast was so hazardous that the chance of a number of replicas being produced was small. Nowadays the artist can go on churning out copies almost ad infinitum. Hence a proposed code of conduct for members of the Society, so that only "limited editions" of works of sculpture are produced, serially numbered and signed by the artist.

This is all very well, but now that modern techniques make reproduction works of art flawless, surely there is less to be said for the old argument about the distinction to be maintained between original work and reproductions? Aren't we individualists getting rather near the end of our tether when we have to rely on international codes of conduct to frustrate our own advances in technique?

COLD COMFORT

Today 23 per cent of British homes have a refrigerator-an improvement of 15 per cent in five years, but not very good when you compare it with Denmark's 30 per cent, Western Germany's 40, Sweden's 60, and percentages ranging from 80 to 97 in countries such as New Zealand, Australia, Canada and the States. But just as bad as the shortage of refrigerators is the shortage of space for them in kitchens-and the manufacturers are realising this: last week the Domestic Refrigerator Development Committee discussed the problem with representatives of the building Press.

.

Couldn't the whole question of domestic storage and mechanical equipment be examined, under architectural supervision, with particular reference to the relationship of dimensions so that more equipment can be easily built in? As a first step in the right direction the Ministry of Housing and Local Government is said to be on the verge of recommending larger floor areas and some form of central heating for all houses.

LETTERS 'British Failure'?

P. A. Denison,

sales director of Cate Building Products Ltd.

Antiestablishmentarian W. R. Headley,

architect to London Midland Region, British Railways

K. Kocimski. professor of architecture, Iowa State University

A. Ray-Jones, BArch, ARIBA Stephen Marks, Student RIBA G. P. Leonard, Student RIBA S. H. Statham, FRIBA, FRSA

IUA Headquarters Building

SIR: It is clear that the basis upon which this building was erected has not been fully understood by the architectural Press. A number of papers, AJ included, have depicted the three companies who "sponsored" the project as having been persuaded by the architectural profession to provide materials for an experiment devised by the profession. If anything, the reverse is more nearly the truth. If anybody had to be persuaded it was the RIBA and the IUA organisers. Although I must certainly add that any such resistance as might have been evident at a very early stage quickly evaporated when they understood what we wanted to do.

It is a trifle ironical to find that an experiment devised and initiated by industry has provided an excuse for mocking the mere technologists."

I appreciate that there has been much to read and consider in connection with the IUA and that we should not expect a bias of attention upon ourselves. Nevertheless, in view of the conclusions of the Congress, I think it is worth pointing out that when Cape Building Products, British Aluminium Co., and Pilkington Brothers Ltd. first met in August last year we decided that it was obvious that the congress would reach two conclusions:

(1) That there was a need for more collaboration between architects and industry. (2) That there were many dangers implicit in any future dependence upon industrially conceived building components.

We therefore decided (quite a long time before we met Theo Crosby) that we wanted to present an example of experimental collaboration which would reflect the coordinated influence of both artist and architect in a prefabricated structure based upon our materials.

It is a little ungenerous, perhaps, in this context to chide the manufacturer for his mereness, when on this occasion, at least some of us have been honest enough to recognise the dangers that may exist.

P. A. DENISON

Uxbridge

SIR: I would like to comment, in English, upon some inaccuracies which appeared in four languages in your issue dated June 29. Under the general heading "Some British Failures" on page 944 (the twelfth page after the advertisements) there appeared a photograph of the interior of the classroom wing of the Phase I building of the North West Kent College of Technology, with the caption " Dartford Technical College, Kent (County Architect: E. T. Ashley Smith)," and the comment: "it fails because the needs of the occupants for a good working environment have been forgotten."

In the first case, you are unnecessarily maligning the person named in the caption, as this phase of the college was designed prior to his appointment. A clue to the perpetrator of the outrage was given in a meeting of the Kent County Council in November 1955 by Alderman W. C. Redman, then chairman of the Kent Education Committee, who said: "I am sure that the County Council will wish publicly to give credit where credit is due for this exceptionally fine building . . . Mr. Garnham Wright, ARIBA, Dip.Arch., designed the building . . ." (I hope you will forgive his adjectives: he was speaking on behalf of the client authority, and you know how wrong some clients can be!). Of course, a small team of youthful enthusiasts was engaged upon the project, but we will not affront their maturity with a public reference to their misled youth. .

In the second case, you are quite wrong in your assumption that the needs of the occupants were forgotten. They were not forgotten. If the Phase 1 building failed in any way this might be due to plain architectural incompetence, but not to professional negligence. I am only sorry that I cannot repudiate this libel in your four languages, especially Russian. I should hate them to get the wrong idea.

Let me establish the case for incompetence : The Phase 1 project was probably the first of the new Regional Colleges to be designed after the Education Act 1944. In the absence of established guidance, the architects investigated the User Requirement problem fully, reporting their findings before the Bulletin had been issued on this subject. At the same time they attempted to solve the technological problems of prefabricating a multistoreyed building (for which task at that time there were few precedents, and none within the desired price-range), and of eliminating conventional materials and labours, which were then in very short supply. Phase 1 would not have been built at all, at that time, without this attempt.

We know now, of course, that experiments in building should not attempt too much at once; but in those war-veteran years. valour had the better of discretion. Development had not been formally established. O rash, halcyon days! It would amuse your foreign readers (if they could read English) to know how much was attempted, by so few, with so little time!: Ideal physical conditions; spaces suited to a new-found purpose; light-weight steel; pre-stressed concrete; plastics for walls, drains, floors, fittings; detachable external walls; movable internal walls; self-finished materials eschewing applied finishes (before the Brutalists!); coloured glass (before Ronchamp!): cost control (before cost planning techniques!) . . . Quel dommage!

Fortunately (or is it a Terrible Thought?), Phase 1 was only a beginning. Much chastened by their experience, the architects tried to improve their competence when building Phase 2 and Phase 3, surrounded. so to speak, by those embittered occupants, like undelivered Daniels in a den of thornpaw'd lions. the first Phase, a truncated version of its original self when built, is slowly beginning to take its rightful place in the context of the whole scheme. And, Brother, how those needs have been remembered!

It is agreed that we should learn from mistakes, but we can only do so by getting the facts properly arrayed. And everybody makes them, so it is said, so you should give these foreign chaps the opportunity to take an unbiased view of genuine experiments wherever they happen to be in Britain. You seemed to be treating the Visitor-to-Britain architect like Pyramus, and turning your magazine into the Wall to provide a selected chink or two through which he might court the ravishing, unblemished Thisbe of British - Achievements - in - Industrialised-Building. You risk his comment: "I k'ss the wall's hole, not your lips at all."

I am named in this letter, but prefer to remain:

ANTIESTABLISHMENTARIAN

Prefabricated stations

SIR: I found the excellent IUA Congress number of the JOURNAL extremely interesting and in circulating amongst the Congress Delegates it has been obvious that it has been widely read and appreciated. In view of the international importance of the issue it is regrettable that some statements made were not checked with those concerned before publication. I am particularly referring to your comments under "Some British failures" on page 944.

One of the points which has been stressed repeatedly in the discussions on all three papers before the congress has been the essential need for full co-operation between architects and engineers. On the Midland Region the utmost endeavour has been made to stimulate this co-operation. Whatever one's views on the organisation within the railways an allegation that it has been responsible for the failure of the prefabrication programme, when this allegation is entirely without foundation, can only be detrimental to the relationships between engineers and architects.

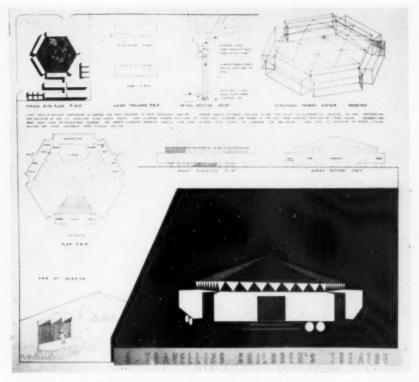
On page 949 in the same issue of the JOURNAL you give a quotation by Reyner Banham as follows :-

. the critic, to survive and keep any self respect . . . will have to go with the architect and understand his factual, organisational and other problems. .

This appears to be very sound advice.

London, NW1

W. R. HEADLEY



Design for a movable theatre by Robert Lee of Iowa-with apologies to him and Professor Kocimski for wrong attribution in our IUA issue

THE EDITORS REPLY: Our comment was based on a news item in The Guardian (Manchester edition) of May 16, 1961, which said that the new prefabricated stations between Manchester and Crewe and Liverpool and Crewe were "likely to be the last of their kind," but we accept Mr. Headley's correction of our comment which went further than the news item justified. We would still like to know, however, why British Railways are reverting to "more traditional building methods along the rest of the route."

Wrong students

SIR: I have read with interest the excellent review of students' designs for a movable theatre at the IUA Congress, published in the July 5 issue of your journal. I should like to point out, however, that several mistakes have been made in photographs of designs and respective credits:—

1. On page 10 the upper photograph credited by you to Massachusetts Institute of Technology is in fact the work of a student of Technion, Israel Institute of Technology.

2. On page 11 the design for a movable children's theatre, described by your reviewer, is the work of Mr. Robert M. Lee, student of Iowa State University, USA, executed under my guidance and I am enclosing a photograph of this work.

On behalf of myself and of Professor A. L. Mansfeld of Israel Institute of Technology I should appreciate your correction of the above.

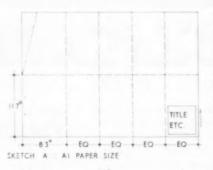
K. J. KOCIMSKI

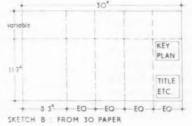
London, sw7

Working drawings

SIR: I agree with many of the points made by Mr. Alexander in his interesting article on drawings (AJ, July 5) but the "A" series of paper sizes (size A4 in particular) will probably be used increasingly for notepaper as well as for technical literature of all kinds, and there are obvious advantages in having drawings and notepaper that both fold down to the same size, and in the diagram.

 $\wedge 4$ (8¹/₄ in. × 11¹/₄ in.) works very well as a





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"basic module" for drawing sizes. At for example ($23\frac{1}{4}$ in. $\times 33\frac{1}{4}$ in.) is exactly eight times A4 and makes an excellent replacement for Imperial and Double Elephant.

All Λ sizes below and including Λ 1 can be cut from a 40-in.-wide roll of tracing paper without waste, by cutting it to produce two rolls, one 16½ in. wide and one 23Å in. wide (the width of Λ 2 and Λ 1 respectively), but I have found in practice that pre-cut sheets of tracing paper in sizes Λ 1 and Λ 4 can be used for almost all drawings; the Λ 1 sheets are stored by one of the usual methods and the Λ 4 sheets are punched and kept in a looseleaf folder.

This co-ordination of sizes between notepaper, technical information and drawings produced in the office will become increasingly useful. Apart from anything else the proportions common to all sizes will make photographic reduction an easy matter.

A. RAY-JONES

Derby

Good for filing

London, w2

SIR: I am writing just to say that the new binding method is a great improvement from the point of view of breaking the AJ up for filing. It also means that we can have A4 size for Information Sheets and for text. I hope you don't have any complaints from those who object to any change on principle!

STEPHEN MARKS

SIR: The recent change in the method of binding the AJ without the use of metal staples is a great benefit for those who like to dissect their copies for filing.

There is, however, one further snag. On the face of each page the text allows an ample margin on the left-hand side. But on the reverse side the wide margin is again on the left-hand side, with very little on the right. This makes it impossible to punch the sheet for filing without damaging the text on one side, and making it almost impossible to read when filed.

G. P. LEONARD

Worthing, Sussex

THE EDITORS REPLY: Changes in the design of AJ pages will shortly be made which will meet Mr. Leonard's criticism. Meanwhile, congratulations to two students for being first to mark and comment on the changed binding.

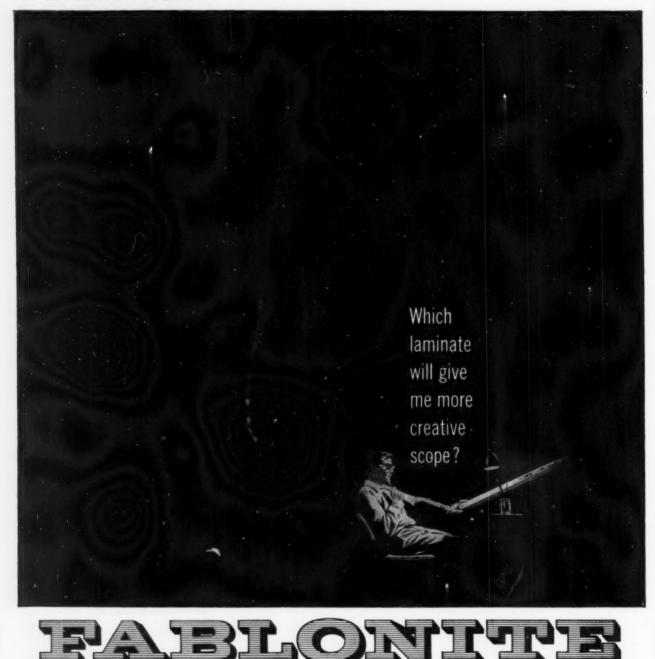
An exciting draw

SIR: The RIBA Golfing Society played its annual match against the Chartered Surveyors Golfing Society at Worplesdon Golf Club on Tuesday, July 18, both societies fielding their strongest sides, and an exciting match resulted.

The overall result of the match was a draw, each side scoring 10½ points.

S. H. STATHAM

London, WI



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COMPETITIONS

Watford Rural District Council

Watford RDC has announced a competition for mixed residential development at the village of Bedmond, Abbots Langley, Hertfordshire, comprising individual houses, old people's dwellings with shared amenities and a warden's house, and two shops. The Council has appointed Clifford Culpin, OBE, FRIBA, MTPL, to act as assessor.

Premium for the design placed first will be $\pounds750$; and for the designs placed second, third, fourth and fifth there will be a premium of $\pounds750$, to be divided in such proportions as the assessor decides.

Closing date for inquiries is September 2, 1961, and final date for entries, not later than noon on December 12. Details and conditions available from the Clerk to the Council Watford RDC, Wynyard House, Langley Road, Watford, Herts.

City of Johannesburg

The City of Johannesburg is holding an architectural competition for the development of a new Civic Centre in Braamfontein. Johannesburg, comprising (1) a municipal office block, city council suite and public reception halls, and (2) a layout of the whole civic centre site. The City Council has appointed the following assessors: B. L. Loffell, city engineer of Johannesburg, Professor Sir William Holford, Professor John Fassler, Johannesburg architect and two splanner, and two South African architects, John Cowin and Norman Hanson.

Applications for competition documents to the Town Clerk, PO Box 1049, Johannesburg, accompanied by £5 deposit. Closing date for despatch or handing in of designs, June 8, 1962.

RCA

Awards by English Electric

A research fellowship worth £750 a year is to be awarded at the Royal College of Art next year by the English Electric Co. Ltd., to enable young designers to work more closely with the electrical industry. The award will enable the successful candidate to carry out research in the design and use of domestic electrical appliances as a postgraduate project for one year.

ABS

Annual ball

The Architects' Benevolent Society Twelfth Annual Ball will take place on Wednesday, December 13, 1961, at Grosvenor House, Park Lane, w1. "Tropicana" is the theme chosen for this year's ball.

TCPA

Old wine in a new bottle

Close on the heels of the Local Government Commission's proposals for the West Midlands came the joint policy proposals of the Town and Country Planning Association and the Midland New Towns Society, put before a conference of over 300 representatives of local authorities, industry, and other vested interests in Birmingham last month.

"Regional Planning" is once again popular, after a decade of wilful neglect: even the TCPA puts forward "regional" proposals embracing an area 100 miles in diameter, from Caerws and Welshpool in the west to Leicester in the east, and from Stoke and Leek in the north, to the Forest of Dean in the south. This was swallowing regionalism with a vengeance including not only the West Midlands, but large bites of several other regions.

To make it all work, an overall regional planning authority was proposed, to which no one really concerned with good planning could possibly object, but within this context it was the old wine of a couple of new towns, and nearly 30 expanded towns.

Dr. Eversley, of the University of Birmingham, and secretary of MNTS had begun the day with a frightening statistical array of the human problems of over-population, migration, and rate of housebuilding in the conurbation: Birmingham with its 47,000 unfit houses demolishing 1,000 a year in its slum clearance-61,000 new jobs created during the last five years, and office building going forward at such a rate that thousands more jobs must occur in the next 10 years-3,000 new dwellings being built per annum when the need was about 9.000-all this without taking into account the renewal requirements of the "twilight" zones!

Dr. Loasby, Bournville Research Fellow, followed with a useful summary of the effects on industry of relocation—well supported by Paul Cadbury himself in his description of his own firm's successful expansion in the Wirral, Merseyside (well outside the region!).

Somehow one couldn't help feeling after Peter Self had concluded the morning session with the draft proposals, that a large chunk of England and the Welsh Marches was going to be covered in a sort of planners' "Merrie England" of evenly spaced settlements all with their happily balanced populations employed in dispersed industry. Beneath this idyllic concept there seemed to lurk the utter and complete suburbanisation of many small towns and of much countryside.

Urban renewal — which Lewis Mumford has referred to as one of the major endproducts of regional planning—was hardly mentioned, least of all by the conference speakers.

None of the local authority representatives objected to the town expansion schemes indeed, two from the County Boroughs of Worcester and Burton-on-Trent, threatened with demotion to Municipal Borough status The Architects' Journal for August 2, 1961 153

because of their small size, and lukewarm to overspill previously, now fell over themselves to offer space to Birmingham or no matter where in order to keep the numbers up.

Comment on new towns was strangely absent, except that in most speakers' minds there seemed to be present the belief—contrary to Government and conditioned no doubt by rate payments—that new towns were cheaper than expanded towns.

The only real objections to the proposals concerned the regional approach and were vigorously put by the Town Clerk of Wolverhampton, who in spite of the impasse on overspill and dispersal had the effrontery to say that local authorities were quite capable of organising overspill by getting together voluntarily, and that no overall regional authority was necessary.

Another interesting point was raised by councillors from Gainsborough and Wisbech, towns well outside the region, even as extended by the TCPA, who felt that being in nobody's region, they would be left out, so to speak, and suggesting that a national plan was really needed.

Not once during the whole day was the validity of the TCPA and MNTS proposal questioned as far as its basic concepts of new towns and expanded towns were concerned. For a brief moment a research worker from the Oxford Institute of Agriculture did question the desirability of turning country towns of character into nondescript industrial offshoots of Birmingham, and suggested that joint committees of "preservationists" and "industrialists" should consider this: perhaps a lead in here for the Civic Trust? But as to the form of the city region of the next hundred years, not a word.

As to whether we can rebuild our worn-out Victorian Birmingham and desolated Black Country by a policy of dispersal alone, even in a regional context, not a word.

Once only did a speaker suggest that perhaps modern man likes living in a large city, and would he be able to enjoy firstclass football in a town of 60,000?

While we must welcome the effort of the TCPA and MNTS to put over the idea of a regional planning authority as the only competent authority for planning in this age, one cannot at the same time accept nineteenth-century idealism as the best solution within it, even if it does appeal to the sentimental reactionaries of the smaller towns.

Anyway the conference itself was hardly a conference—discussion was limited to statements by Councillor This and Mr. That, and no real discussion took place at all. If there are to be more of these meetings, their organisers would be wise to consider making the discussion more realistic and less formal.

LESLIE GINSBERG

Splendours and miseries of American education

"The cafeteria is a highly organised industry throughout the United States. The paper napkins, the impenetrable waxed cartons



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and cracker packs, the push-button dispensers for liquid refreshment, the "line" (queue), the clatter, the speed, the efficiency, the hygiene and the endless perspective of stainless steel-these are daily experiences in the towns and villages, and along the roads. And so they are in the schools. Enter a school cafeteria at lunch time. Here the pink moulded plastic trays, the sandwich packs, cartons, straws and napkins flow continuously from counter to table and into the trash cans (" Bus your own dirties" the notice reads-for the conveyor belts had not in 1959 yet reached the high schools). The students, with their piles of books and handbags, also come and go continuously, pausing for a few minutes to eat some of the food, to drink, and to throw their conversation down the long tables. Then the last ring of the lunch bell pierces through everything, and suddenly the cafeteria is left to the white-nylon-overalled staff and the janitors with their 42-in.-wide brooms, who re-establish perfect, shining order until to-morrow's invasion. Day after day this process goes on, and nothing looks as if it had ever been used!"

This vivid description characterises the new MOE Building Bulletin No. 18, Schools in the USA, which is the report of two architects (from MOE Development Group), who spent twelve months over there in 1958-59. One would like to think that every architect, not just those specially concerned with schools, but every architect and architectural student and every client might read it. More than informative, it deals pungently with almost every issue of present-day architecture in its social context. In places, admittedly, over-condensed descriptions and insufficiently detailed diagrams oblige the reader to take too much on trust. The photographs, too, are disappointing. But on the work as a whole these blemishes are insignificant. It is no exaggeration to call much of it entertaining-even the few statistics are dramatic; many of its observations are memorable and profound.

The report covers the whole field of American education from kindergarten age to 19 or 20 (unravelling, incidentally, terms like "graduation." "high school" and "college" which have quite different meanings on the two sides of the Atlantic). At each stage it gives a plain unvarnished description of the educational problem and the architectural solution found for it, followed by an appraisal of the result and its relevance to our own circumstances. The great variety of ideas and method it reveals make the English educational scene seem flat and unadventurous by comparison. The report remarks that "the test of central administration is whether it can encourage the raising of low standards on the one hand, and prevent extravagance without discouraging initiative on the other." By such a test. England compares most favourably with America; nevertheless one wonders if we might not do well to find ways of permitting the occasional expensive sortie beyond the territory of fair shares for all. "Some school boards [in America] . have been charged with extravagance when. in fact, they were breaking new ground and setting the pace for the future."

The bulletin collects many ideas for which our own school specialists will find immediate practical application, particularly in the field of furniture and fittings, and it is to be hoped that it will make school equipment manufacturers realise the potentialities of collaborating with "consumers" and the right kind of architect in developing new ranges.

"The equipment industry is constantly eager to meet new requirements, and, above all, to produce articles that are simple to manufacture and practical to use. Not only is the architect offered a greater choice, higher quality and better service than he has in Britain, but he can more easily meet his requirements by an off-the-shelf selection, thereby saving time without sacrificing quality.

"Because of the highly competitive nature of the American furniture industry, it has to keep its ear very close to the ground. Its representatives (some of whom may indeed have been recruited from the teaching profession) therefore keep in close touch with school administrators, teachers and architects, looking for mistakes to rectify and new requirements to satisfy; sniffing for tomorrow's trends—each in the hope of getting one jump ahead."

Vigorous commercial enterprise is not, however, without its dangers. High pressure salesmanship in the field of mechanical services no doubt accounts for what the authors find the most disturbing aspect of the American scene. Temperature and humidity present great problems of environmental control. But with the American's characteristic love of gadgetry and innovation, coupled with the determination of industry to expand its markets, the trend is already far advanced to the creation of an entirely artificial environment-windowless classrooms, completely reliant on artificial light, schools where only the swimming pool is without air-conditioning (because the air would be too cool for swimmers). Only in rare exceptions are architectural rather than mechanical means employed for " controlling light and heat without interfering with the fundamental character of an educational environment-the traditional use in hot, bright climates, for example, of reflected light, together with wide overhangs, patios, and views to planting; and the rich texture of evergreen shrubs and trees, which, with their contained shadows and dark colours, are restful to the eye. . . . There was a time when modern architecture began to break the division between the inside and the outside. Now, modern technology is separating them more widely than ever. But does man, who is in fact a part of nature, begin to wither in some respect if separated unnecessarily from his natural environment?

The authors are ungrudging in their admiration for much in America:

"To walk round the drawing boards in an office and to see design on structure, mechanical services, heating, electrics and sometimes lighting and landscaping proceeding simultaneously is to have one's faith restored in the possibility of design once again becoming a unified, rather than an additive process. . . .

"A common characteristic of the majority of new American schools is the high quality of the workmanship, and the durability and robustness of the finishes, hardware and equipment."

"The custodian, then, is a highly respected individual who, with his administrative colleagues, takes pride in the running of the school plant. He is armed with a vast array of equipment for the upkeep of the machinery, furnishings and fabric of the building, and his technical knowledge and interest are often amazing."

While recognising some of its absurdities, they admire, too, the practical emphasis of American education. They admire the widely accepted idea of a "general industrial arts" workshop which discourages too early specialisation but makes students aware of a number of different materials before they settle down to any particular one at an advanced level.

Admiration, however, is never uncritical. The report remarks on an advanced cabinet course in which "products range . . . from the trivial to the admirable : ' There are 2,000 photographs of furniture designs in the pile from which to copy,' the teacher said. An advanced cabinet course is 'designed for those wishing to work in the area of period furniture such as Chippendale, Hepplewhite and Sheraton, and early American colonial styles. It will include the use of 26 pieces of power equipment of the latest design." "It is important to emphasise the fact," the authors remark, "that the machine has removed the understanding that there used to be between the maker-designer and the buyer, and in the long run it must be the responsibility of the schools, by a process of education, to re-establish that understanding. Wherever a tool is offered for use, be it a penknife or a power-saw, there must be thought about design, and about the sequoia sempervirens and the douglas firs which are torn from the forests and delivered to the lumber stocks. There are courses on how to sell, but the courses on how to buy are more important. In the last resort, only the buyer can defend standards of judgment and understanding."

It is discussion and comment at such high level made by two thoroughly professional observers, which commend this bulletin to the general reader. Their observations are made with a sympathy based on understanding for the predicaments which unavoidably accompany widely differing conditions of geography, population density and wealth. But underlying their whole report is the disturbing anxiety that mechanical affluence ultimately divorces humanity from its real sources of richness and satisfaction. This is the peril which, if ever we put an end to recurring economic crises, the report forewarns us to forearm a rainst.

Who builds in stone, and why?

Is there any future for stone as a building material? At present its use as what is rather odiously described as a "dignified" material is largely confined to restoration work and to facing luxury buildings. Is the stone industry making any serious endeavours to develop stone as part of the range of modern materials available to the progressive architect? The attitude of the industry itself can be judged from this article by D. H. Thornton, president of the London Association of Master Stonemasons

It is often regarded as perfectly fair game for the building industry and the architectural profession to indulge in the pointless pastime of sniping at each other. Successful sniping merely kills the bird, unsuccessful makes him frightened and he runs away.

However, architects might consider why, in the post-war period, they have, in the main, not only seemed to display a lack of knowledge of detailing in stone, but a lack of desire to acquire this knowledge. Pre-war the names of a number of leading architects came to mind as men with a profound knowledge of the use and detailing of stonework. Why is it that the present school of architecture, even when it wants to build in stone, does not seem to have the knowhow to design in detail in this medium?

The rock upon which the modern school of architecture may be said to be foundering is that of natural stone. Why is it that in the search for progress so many architects overlook this natural, readily available material? Would they rather be known as builders of glass houses, than builders of dignity?

Of course, nobody builds in stone in this modern age. As a material it probably has its use in restoring cathedrals, and in providing work for builders in university cities. Even here its employment is fairly tightly limited to the Oxbridge areas.

What is wrong? Is the building owner ignorant or badly informed? Has the whole modern school of architecture swung away from designing in stone, or, let it be whispered, is it unable to do so? Are the masons of the country out of work, incapable, or non-existent? To answer these questions let us glance calmly around at what is going on in the world of building in stone, and to see whether all of those concerned are making the best and cheapest use of this fine material.

Firstly, is it capable of being used in contemporary design? At the 1959 Building Exhibition 18 different cladding materials were on view. It would be quite unreasonable to expect an architect to have detailed knowledge of all of these materials. He should not hesitate to pick the brains of the people who make and supply them. It is here that the stone industry has some ground for comment. In only 50 per cent of cases where stonework is to be used, is the industry called in at the design stage to offer its advice, or to assist the architect with specialised knowledge of the uses of its product. Alas, in the other 50 per cent of cases the first that the mason hears of the use of stone is the arrival on his desk of a bill of quantities and, if he is extremely lucky, some rough sketch drawings, often merely of 1th scale. He has then to sit down and see what is practicable. He frequently has to consult with the architect, and to amend and qualify the drawings. He often has to advise on major aspects of redesign in order that his material may be used to its best advantage. Thence, bills of quantities have to be prepared again from new drawings, and the stonework has to be remeasured. All this is taking place while the building is "coming out of the ground." There is then a frantic race to ensure that the mason is able to have his stone purpose made, cut and dressed, and delivered to site in order to keep pace with the work of the main contractor.

Twin criticisms often used in defence of the lack of building in stone are the failure of the industry to mechanise itself and to adapt itself to post-war needs, and slowness. Yet in one stone firm £250,000 has been spent in the last 15 years on mechanisation and plant. Perhaps the stone industry has been slow to realise the necessity for mechanisation but stone is now intensely competitive and if mechanisation had not taken place then perhaps it is true to say that the already slightly high cost of stone would have become prohibitive. On the second point it would be apposite to draw a comparison. Much is made nowadays of a rate of building of a floor a week. It is worthy of note that the East Wing of Bush House was erected at exactly this speed in 1926/ 27, and in 1960 three months of the contract time were saved at the Carlton Tower Hotel in London by speedy building, a great deal of which was in stone.

It is inevitable that at this stage there will be comment on the cost, and it is as well to initiate some clear thinking on this vital matter. One gets what one pays for. Nobody pretends that building in stone is cheaper than a number of other forms of cladding, but it is essential to take into account the very considerable advantages of building in stone. Suffice it to mention the durability of the material, the almost total absence of maintenance, save for occasional cleaning, and the variability of pattern and finishes available in stone.

Who builds in stone, and why? Stone is a status symbol, but the view of this status symbol is nearly always coloured by hard economics. The banks incline towards it because they feel that their premises need dignity, but when one finds stone being employed by two of the largest chain stores in the country one can assume that it has an additional value-that of attracting notential purchasers into its buildings. In spite of the constantly changing needs of medicine it is interesting to note that a great deal of stone is being used in the Princess Margaret Hospital at Swindon, and that in Huddersfield a seven-storey hospital is also being stone faced. It is also, perhaps, not without interest that in spite of the constantly changing requirements of educationists much stone is being used in the building of our new technical colleges. In the primary and secondary modern schools the new conception of building for a short life and the allowable cost per place tend to debar stone.

Remington House, Holborn, designed by Seymour Harris and Partners, showing Portland stone facing



An 11-ft.-diameter primary cutting saw sawing through rough stone which is carried



Westminster Housing Competition

The winner of the Lillington Street, Pimlico, housing competition sponsored by Westminster City Council is John William Darbourne, a 26-year-old London architect, who receives the first premium of 1,500 guineas. The second prize of 750 guineas and the fourth (250 guineas) to Andrew Artur. Two schemes were commended, one by Riches & Blythin and the other by Paul Albert Hamilton and John Rupert Bicknell. There were 68 entries for the competition, of which Westminster's assessor Philip Powell says that "an encouraging number were of a high standard and needed serious and detailed consideration" is awarded to Alexander Collecton, Newman Smith and Winston Barnett; the third (500 guineas) to Gordon Barry Gasson,

With the announcement of the result of the Lulington Street Housing Competition it looks as though history might well be repeating City Council shortly after the war, they were itself down Westminster way. For when Powell and Moya won the Churchill Gardens housing competition organised by the Westminster both in their twenties and almost completely London's showplaces in the housing field and its architects have established a secure place in the forefront of their profession. Now the In many ways this competition may prove a unknown. The Churchill Gardens scheme. which when completed next year will comprise a total of 1,680 dwellings, is rightly one of second post-war Westminster housing competition (this time for an important site on the bv another young man, 26-year-old Londoner Vauxhall Bridge Road) has been won J. W. Darbourne, also an unknown.

petition, had the wisdom to invite Philip Powell (of Powell and Moya) to act as assessor, a man who possessed ample knowledge of the specific The sponsors, already experienced in the holding of a housing comin whom they had the fullest confidence and requirements of the Westminster City Council. The conditions were most carefully prepared. generally precise and explicit and yet permitting, and indeed encouraging, competitors to express new methods of approach to the problem of urban housing design. The drawings and photographs of the site accompanying the conditions were suitably comprehensive; and the fact that the winning scheme was prepared in the United States bears ample testimony to the fullness and adequacy of the information model of its kind.

London to the West End), and three stucco fronted Pimlico streets, dilapidated in places the problem set was a difficult one. A roughly reciangular site covering twelve acres, bounded by Vauxhall Bridge Road (an important but not the most prepossessing artery from South but scrubupable and quite cosy; a Victorian for housing at a required density of 200 to the were to be one- or two-roomed and the balance church, by appointment to Pevsner, to be retained; provision for schools and other special buildings to be made; leaving some 91 acres acre. Some 60-75 per cent of the dwellings arger. Competitors were asked to plan the housing in the form of flats, maisonettes or houses, with special accommodation for the elderly, and also to incorporate three children's playgrounds, a tenants' social hall and a tenants' car park for 350 cars. A comparatively free hand was allowed in the form of layout and no restrictions were laid down concerning the height of buildings. Existing planning and had to be observed and, of course, economic factors had to be taken into consideration. To this challenge some 148 architects and students responded, jointly submitting a total of 68 building bye-law requirements given to each competitor. schemes.

By and large they were a dull and stodgy lot, but with some 15 or so schemes of interest and worthy of closer examination, which may be a reasonable proportion. Of these better schemes, that of the winner is quite outstanding. At first glance it may appear somewhat humdrum, probably because of its low scale (no building over 8 storeys), but this is decep-

tive, for it is a most efficiently conceived solution, pleasantly domestic in character and eminently liveable in. Its particular merits and those of the other premiated and mentconed designs are best summed up in the excellent and detailed assessor's report which follows (with architects' names substituted for assessor's numbers).

Of the other prize-winning and commended schemes, it is the order in which they are placed that appears a trifle mystifying. They are all obviously runners up to the winner but there really is little to choose between any of them. One can only suggest that if the winner won by a length, then the places must have called for a photo. And of the unplaced designs, your correspondent picks that by M. J. Attenborough, W. Chalk, D. Crompton. D. Currey, R. Herron, T. E. Kennedy, J. A. Roberts and A. Waterhouse, here illustrated and the scheme by B. H. Binsted, D. Codling, A. W. Lester and C. Lush as being schemes which for their boldness and originality he

This has been a successful competition, for may have been small, it should yet serve to fession to take part in future contests. Not the least remarkable has been the feat of Philip Handing in day was July 10, and only ten days later the council This is concentrated assessment on the grand scale-the more notable for being accompanied although the number of new ideas emerging encourage the younger members of the protheir assessor's recommendations. by a written report of most commendable would have added to those commended. Powell, the assessor. received clarity.



J. W. Darbourne

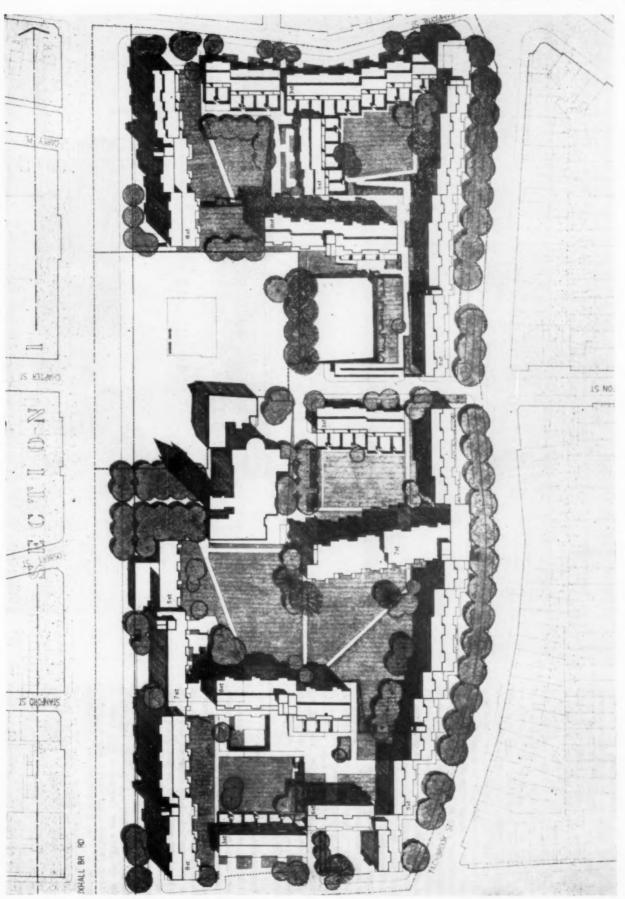
Assessor's report

Introduction

The shape of the site, its enclosure on all four sides by continuous walls of buildings, the high density of the population required, the abnormally large proportion of small flats and the formidable number of cars to be parked, all make th and to reach a solution which goes beyond the successful piecing together of a i gaaw puzzle.

No restrictions were placed on the height of buildings within the site and this has so widened the range of individual solutions that it is not easy to generatise on the character of the designs submitted. Yet it is clear from them that there are two clearly defined and opposing lines of approach. One aims to perpetuate the urban pattern and scale of the

The winning design: site plan opposite



church tower; the other to offer a stimulus district with its streets flanked by buildings and which are punctuated occasionally by a which lead into a series of tree-lined squares to the district by locally destroying the pattern to succeed in and many of the competitors and introducing into the noisy dullness of Vauxhall Bridge Road a design of contrasting scale. This latter approach is the more difficult who attempted it produced disappointing designs. The solutions derived from the first line of approach vary enormously but there is a very reasonable tendency to house the larger families in buildings which cling to the ground -sometimes even in houses-with the smaller families in tall towers, this century's visual equivalent of the church tower.

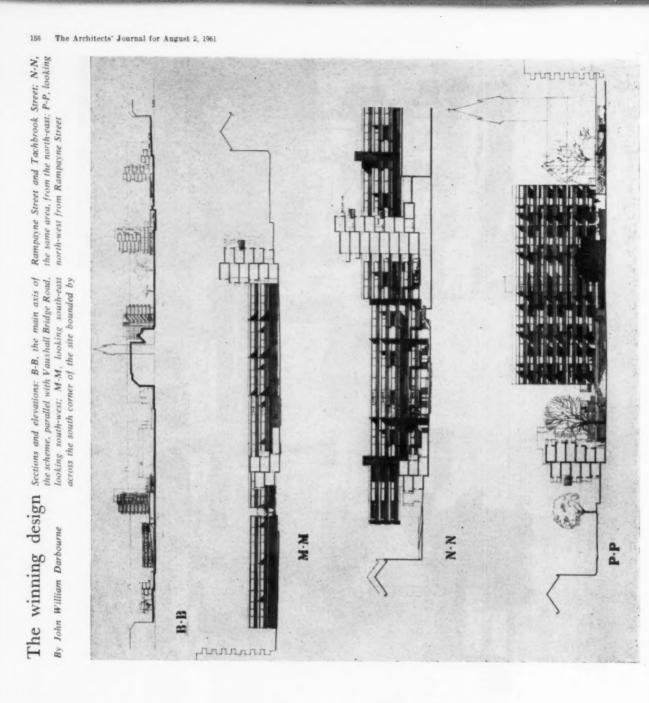
Many competitors have gone to great lengths, rightly in my opinion, to separate pedestrians from cars and to hide the cars from view. The formation of the site with its surrounding streets at high level has lent itself happily to an upper and lower ground level separation. Few, however, have solved this problem with success and economy simultaneously.

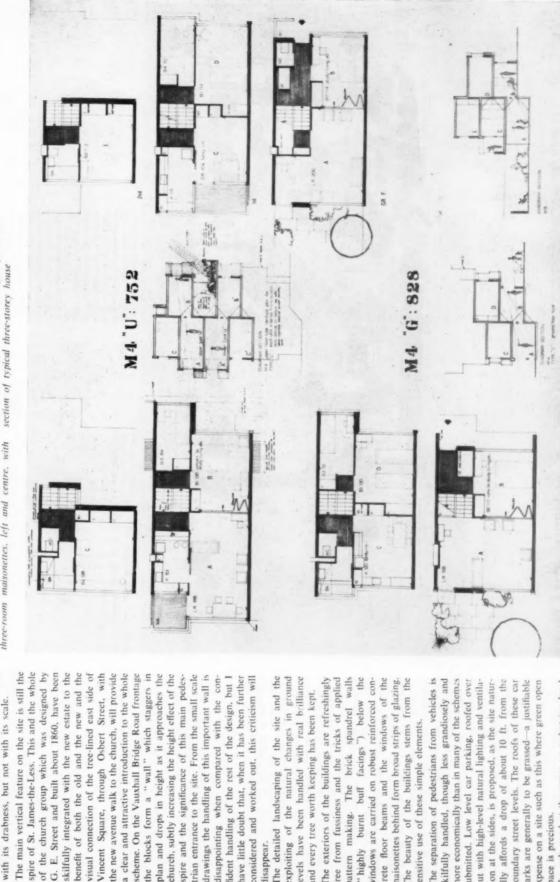
In passing, I notice that almost every competitor prefers maisoniettes to flats for any home of three rooms and more and that precast concrete cladding with the aggregate exposed is the preferred external finish.

Winning design

Most designs have relied on the drama of contrasting towers and souatter slab blocks. The winner, on the other hand, builds with asparent casualness and on a more domestic scale, concentrating on the proportions and on the moulding of the buildings and on the form of the spaces they enclose. These buildings vary from three storeys (terrace houses) to eight storeys (blocks of maisonettes), the height of each being carefully regulated by that of its neighbours, both inside and outside the site. They are arranged so that, except at chosen entrances, they enclose the site and subdivide it into well-proportioned interlinking squares.

The projecting and receding faces of the blocks are appropriate in buildings of medium height such as these and, around the perimeter of the site, this staggered treatment allows them to run parallel with the terraces on the opposite side of the road, their varying heights con-





The winning design

sciously relating with the heights of the buildings outside. In this way a completely new and unfamiliar-looking development becomes a renewal of the existing urban pattern-a break

with its drabness, but not with its scale.

Floor plans and sections of typical, interlocking three-room maisonettes, left and centre, with

ground floor type below. On right, plans and

a clear and attractive introduction to the whole scheme. On the Vauxhall Bridge Road frontage

the blocks form a "wall" which staggers in plan and drops in height as it approaches the church, subtly increasing the height effect of the spire and the significance of this main pedestrian entrance to the site. From the small scale drawings the handling of this important wall is fident handling of the rest of the design, but I have little doubt that, when it has been further disappointing when compared with the conconsidered and worked out, this criticism will disappear.

The detailed landscaping of the site and the levels have been handled with real brilliance exploiting of the natural changes in ground and every tree worth keeping has been kept.

free from fussiness and the tricks of applied pattern making. The brick spandrel walls facings") below the crete floor beams and the windows of the The exteriors of the buildings are refreshingly windows are carried on robust reinforced conmaisonettes behind form broad strips of glazing. The beauty of the buildings stems from the sensitive use of these simple elements. buff ("highly burnt

The separation of pedestrians from vehicles is skilfully handled, though less grandiosely and more economically than in many of the schemes submitted. Low level car parking, roofed over but with high-level natural lighting and ventilation at the sides, is proposed, as the site naturally affords a drop of about 10 ft. from the boundary street levels. The roofs of these car parks are generally to be grassed-a justifiable expense on a site such as this where green open space is precious.

The only road at the upper or pedestrian level

Designed by Alexander Collecton, Newman Smith and Winston Barnett

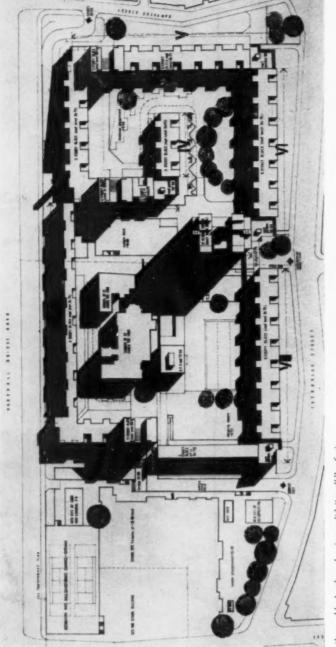
Second Prize Winner

ton Street which leads from Tachbrook Street which penetrates the site is that length of Moreleads down to the low level road encircling the transformer station and to two of the three main covered car parks. This road can also be ing in addition two short lengths of gated roads at the upper level to be used by authorised vehicles only, service traffic can reach all to the south-west boundary of the church site. By retaining this, the Competitor has avoided great expense and difficulty in changing the levels of a large sewer and a 30-in. gas main. From Moreton Street a branch service road used for other service vehicles and, by includthe buildings on the site. By these means, the competitor has offered an ingenious and economical solution to the combined problems of the separation of pedestrians-especially children-from vehicles, and of the provision of extensive yet unobtrusive car parking.

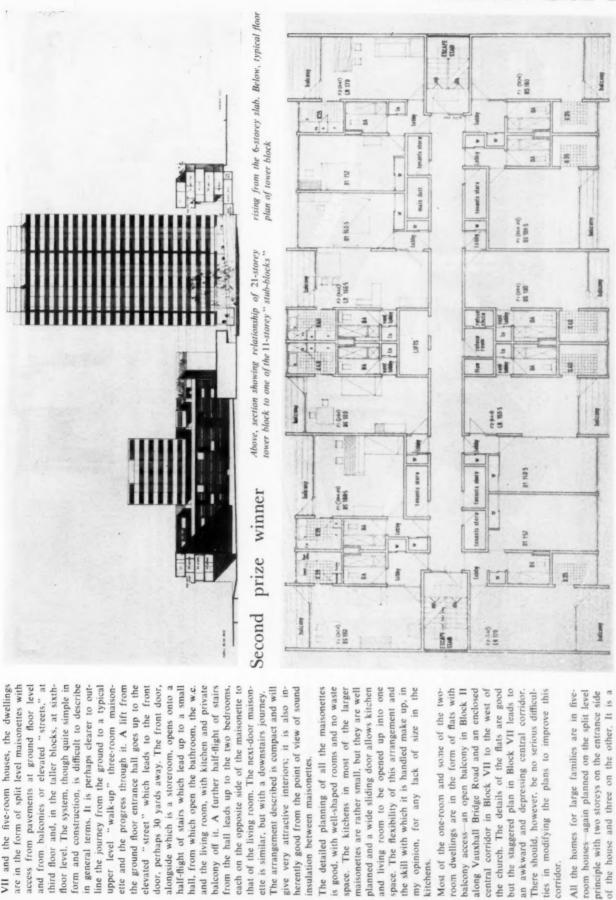
This separation breaks down, however, at Moreton Street but it would appear to be quite feasible to provide a path at its end between the transformer station and the new school sile and also, perhaps, a pedestrian bridge over Moreton Street which could be at the same level as the children's playground on the transformer station roof, linking it with the other side of the site.

There is a danger that the covered car parks as proposed would be very dark, probably needing mechanical ventilation, artificial lighting and expensive fire precautions. To avoid these, it should be possible greatly to increase the light and air by forming fair-sized holes in the roofs, which, if carefully arranged, need probably have little effect on the amount of open space above.

Excepting the one-room flats in Blocks II and



Above, block plan showing solid " wall" of sixstorey buildings facing into open-ended squares. Below, elevations -ILLII



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F2

corridor.

kitchens.

fine achievement that, at so high an overall density and without any really high buildings elsewhere on the site, it has been possible to provide nearly 40 homes with private gardens for those who most need them. While these houses are not wastefully planned, it may be necessary to reduce their floor area if they are to be brought into line with the recommended standards set out in the Ministry of Housing and Local Government's Flais and Houses 1958.

The standard of daylighting is good throughout the standard of daylighting is good throughout (with minor exceptions in Blocks VII and IX, where some replanning will be necessary) but in some of the maisonettes and houses planning changes may be worth attempting to allow their living rooms to receive more sunlight.

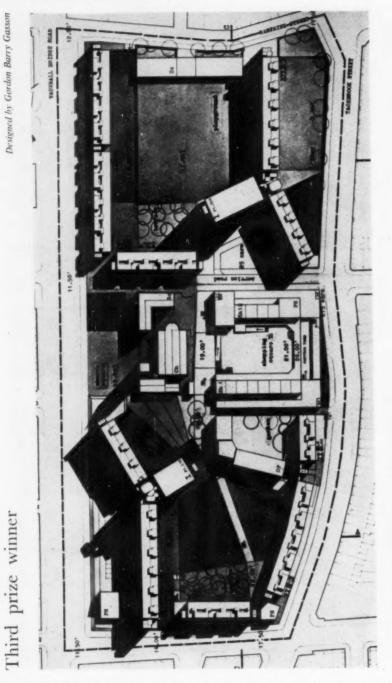
With buildings of medium height, as in this design, the problems of giving proper means of escape are not so great as with taller blocks. Here, the detailed planning of the dwellings and the access to them appear to comply in all respects with the standards laid down by the LCC.

For lifts, the split level arrangement of the maisonettes is economical as they need stop at one upper level only in the medium height blocks and at two in the eight-storey blocks. The position of lifts and stairs in Block VI may, however, need some further thought.

may, however, need some further thought. Access to the refuse chutes and containers appears to be reasonable but the number of chutes provided is not enough; it may be necessary to have two chutes instead of one at each staircase. Access to some of the refuse containers is from Tachbrook Street, to others from those upper level roads reserved for authorised vehicles only and to the rest from the lower service road level.

The old people's hostel is an L-shaped block occupying the lower floors of Blocks II and III and is planned in association with some of the self-contained one-room and two-room flats. It is near the centre of the estate, the estate hall and Vauxhall Bridge Road. Detailed plans of the hostel were not required but the general planning appears to be reasonable, although about one-third of the bed-sittingrooms face north-west and will not be very sunny.

The tenants' estate hall is placed at the centre of gravity of the estate and is at the base of



Above, block plan showing layout in three areas with central core of low buildings surrounding existing church and school. Below, section



Plans of two types of dwellings, and section • Block plan 0 through-block E/3 H --7 7 MIN 801 311 R SM LR 150 1 150 4 0 -S NOT THE 4 . W4 ĩ., Fourth prize winner Third prize winner Designed by Andrew Artur III SAIP NULLING BLADS 1

Block III, overlooking a pool. It is well related to the site as a whole and to its main pedestrian entrances.

As stated in the conditions, the ten shops will form only a minor centre, the major centre being in Section 2 near Warwick Way. Unlike many competitors who placed the shops around a central piazza within the estate, th's competior sensibly sited them along Tachbrook Street, near the Moreton Street entrance, so that they are in a good position to attract both that hey are in a good position to attract both estate and surroundings. Each shop has a basement, with service yard and service road at that level.

The Enterprise public house has been retained on its present site at the corner of Charlton Street and Tachbrook Street but has been rebuilt and incorporated in the lower floors of one of the blocks. The Builder's Arms is similarly treated but has been moved from Moreton Street to the corner of Tachbrook Street and Rampayne Street. The Lord High Admiral, which must be demolished for the Vauxhall Bridge Road widening, has been resited and rebuilt in front of Block III, with pedestrian access from Vauxhall Bridge Road but service access from a lower level road within the estate.

Subject to the comments of the London Electricity Board the transformer station appears to be well sited and has the necessary service roads, but its size may need to be slightly increased. Its floor is at the lower ground level, with the older children's playground on its roof with access from the upper level—an arrangement which has been well and sensitively worked out.

The site reserved for the new school is arranged as an extension to the existing site of St. James-the-Less School. The new school building is likely to be low and the site layout has taken this into account. Although the site has a frontage onto Vauxhall Bridge Road, service traffic can reach it from the end of Moreton Street or from the lower level estate road serving Block XIV.

The informal layout of the blocks makes phased development fairly easy and lends itself well to an extension into Section 2 of the site. The retention of the hostel at No. 5 Moreton Street for several years need have no serious visual or practical effect on the layout. When



1,889 or 198.5 persons to the acre. The proportions of the various sizes of dwellings, with the Council's recommended proportions in The number of dwellings provided, including the bed-sitting rooms and the two flats in the old people's hostel, is 770. The conditions asked for a population density of about 200 persons to the acre. The population in this scheme is parenthesis, are as follows:---

E	I-room (including old people's hostel) 43.4% (40%-50%)	old	people's	hostel) (40%	43.4%
	:	:	:	:	20.7%
				(20%	0-25%)
	:	:		:	10.2%
				(50	(~10%)
	:	:	:	:	20.8%

(20%-25%) (4%-5%)

5-room

4.9%

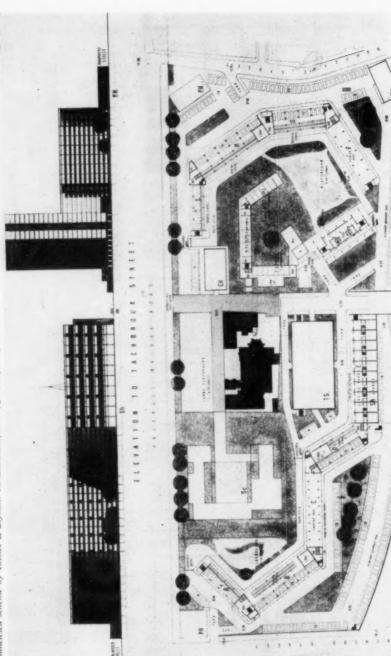
this is a reasonable figure and I consider the the scheme is set out in detail in his report and the total figure is £1,754,088. In my opinion, probable cost, based on last month's building rates, will not exceed the amount of the estimate The competitor's estimate of the overall cost of by more than 10%.

Second prize

access ways for pedestrians are at upper ground band of six-storey building which envelopes the site and turns into it to form internal open 21-storey tower and, as minor punctuation marks, three stub towers of eleven storeys which rise out of the six-storey blocks. The main floor and at fourth floor levels, where the access This scheme consists of an almost continuous ended squares. In this respect, it is similar in character to the winning design. In contrast with the lower buildings, however, are an isolated



Commented scheme by Riches & Blythin: elevation and, below, ground floor plan



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balcony is widened to form an elevated walkway. All vehicles are kept below ground in a network of roads and car parks, with headroom generous enough even for the tallest lorries. The site has been well planned to be safe for the pedestrian and this competitor has obviously taken enormous pains to design a high density scheme which is fit for children to live in.

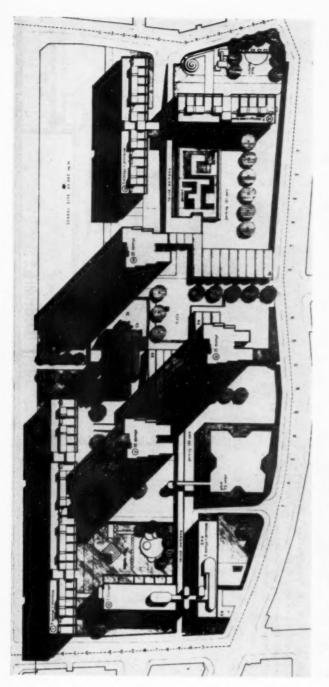
The design of the buildings and of the open spaces between them has been handled with great skill and is most attractive. The treatment of the stub towers rising out of the six-storey blocks—an unpromising idea in the abstract has been carried out brilliantly and the design of the 21-storey tower with its pre-cast concrete cladding is appropriately simple. Moreton Street, as it passes through the site, is closed to normal traffic and is to be treated as a " ceremonial way" which can be opened to vehicles for special occasions such as wedding.

christenings or funerals. The majority of the dwellings are in the 6storey blocks containing an intricate system of interlocking flats and "walk-up" and "walkdown" maisonettes and the towers contain small flats only.

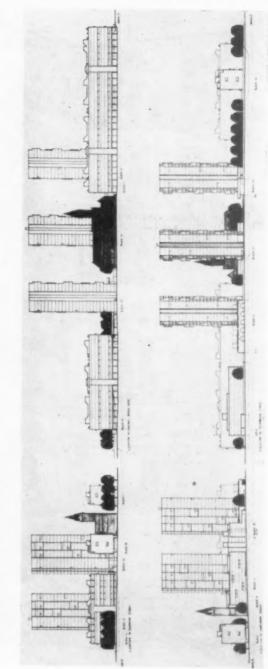
The The been rather extravagantly conceived and, as in underground road and car parking area has the winning design, would require far more church is unduly isolated from the outside north-west portion of the site of Section 1 so that, when Section 2 is developed, it will be light and air if it is to avoid costly fire preworld and few of the mature trees on the site have been kept. The school site and the transformer station occupy the whole depth of the isolated from Section 1. The interlocking system of flats and maisonettes appears to have become too involved. leading to inconveniences in planning as, for example, 3- and 4-room maisonettes running through three floors. In spite of these criticisms, however, the scheme is one of pleasant character and great merit. cautions and mechanical ventilation. This fine scheme has also its defects. The estimated cost is £1,902,491.

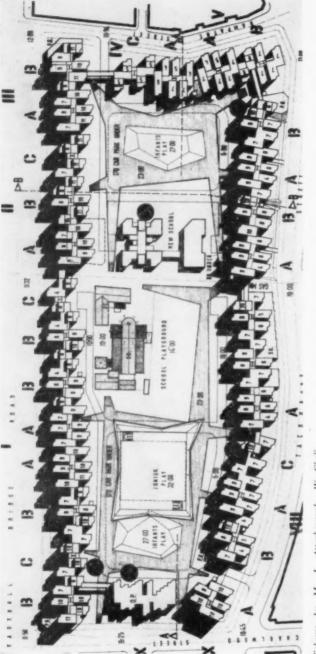
Third prize

In this design the site is divided into three areas, a large court at each end confined by 5-, 10- and 17-storey buildings and a central



Commended scheme by Paul Hamilton and Jo'm Bicknell: above, block plan; below, elevations





core of low buildings built round the nucleus the existing church and school. The 5- and Road frame the view of the church and, as in the winning scheme, make the square in front 10-storey blocks fronting onto Vauxhall Bridge

10

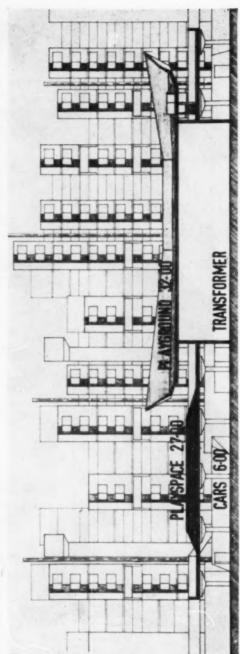
of the church an excellent entrance to the site. especially to the north-west par, of it. The two 17-storey blocks are skilfully turned so that they are no longer parallel with Vauxhall thereby avoiding any north contain. This worthy device usually leads to an ungainly relationship with other blocks and wasteful use of ground space, but here has been managed with a subtlety and originality which enhance the In the central area, the partially sunken transformer station, its surrounding roads and a cleverly evolved three-tier car park for 275 cars, have been grouped under one roof which forms a podium for a shopping centre with public house and estate hall, all at a convenient level for pedestrians. This whole central feature has made intensive and brilliant use of a very limited space and has turned it into After this, the rest of the car parking and the service road system is an anticlimax and, for pedestrians, the south-east section of the site is poorly connected with the centre, being cut

avout.

aspect in the flats they Bridge Road,

D. Crompton, D. Curry, R. Herron, T. E. Kennedy, J. A. Roberts and A. Waterhouse: site bordered by highly integrated maisonettes and flats (see comment Chalk. M Attenborough, p. 168) and, below, section M py. Scheme

an exciting focal centre of the scheme.



off from it by the main service road-Moreton The larger dwellings are in the form of split similar to those in the winning design and the small flats are in the 17-storey towers. All the dwellings are well planned, although the living room and kitchen sizes in the 3-room maisonettes are too small. The external treatment of the blocks, though somewhat diagrammatically shown on the drawings, is robust and The castellated roofs formed by the penthouse rooms of the larger maisonettes in the fiveblocks are entirely successful interesting roof line without resort to tricks to obtain it. The appearance of the scheme is marred, in my opinion, by the strange clustered summits of the staircase towers to the two tall blocks with their grim association with nineteenth-century asylum level maisonettes in the 5- and 10-storey blocks, attractive, clearly expresses what goes on inside and gives promise of fine looking blocks. chimneys. The estimated cost is £1.776.000. 10-storey give an Street. and and

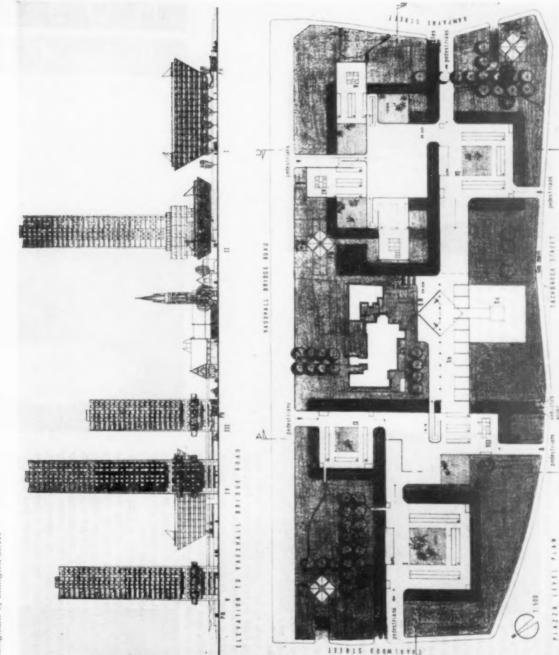


In this almost symmetrical layout, the church and, behind it, a shopping square and 11storey block form the central axis on the Street frontages. They are flanked on each side by a six-storey block of maisonettes. At each lation-here by means of "light funnels" Vauxhall Bridge Road and the Tachbrook corner of Rampayne Street are two 19-storey towers, square on plan, and near Charlwood Visually the layout is developed with a clarity which would be easy to understand and appreciate and the relationship of the six-storey blocks with the church is particularly successful. The external treatment of the buildings is vigorous and well proportioned, although the six-storey blocks, with their pattern-making parking at the lower level is well handled and this is one of the few schemes which has combined the amenities of concealed low-level parking with good natural lighting and venti-Street there is a short 23-storey slab block features. are the least successful. The car which grow out of the open lawns above.

Vauxhall Bridge Road and would therefore On the other hand, the service road system is tions given to competitors, it connects with ing the site. The pedestrian bridge over it with staircases on either side would be even less weak and Moreton Street is retained in its entirety so that, contrary to the recommendacontinue to be used as a through road, bisectused than the bridges over the Kingston Bypass. Blocks III and VII, which could easily have been reached from within the site, depend on Vauxhall Bridge Road for their service access. One of the 19-storey towers is too near Rampayne Street and infringes the daylighting requirements and the 23-storey block would need to be set back much farther from Charlwood Street to allow any high density development in Section 2.

The flat and maisonette planning is uneven, often good but occasionally weak as, for example, in the four-room maisonettes where the major portion of a living room which has a staircase in it is only 8 ft, 6 in, wide in the clear. The internal public staircase in the 19-storey towers is unpleasant and there are features in the planning of all the blocks which would not meet fire escape requirements. The estimated cost is £1,966,400.

Scheme by A. and M. Bailey: "The San Gimigniano of Lillington Street"



COMMENDED

Scheme by Riches and Blything This design aims to vary the rhythm of the neighbourhood and produces a strong pattern of its own. Two long slab blocks 11-storeys high bend or hinge one way or the other at each starcase junction. These, together with a 22story tower, form a horse-shoe-shaped backcloth to the church. The layout is well worked out, the internal planning is good with plenty of sun for all living rooms, but the overall effect from outside is rather overpowering. The siting of the 22-storey block in relation with its two 11-storey neighbours aggravates the sense of oppression. Scheme by Paul Hamilton and John Bicknell This design consists manly of seven-storey blocks and three 25-storey towers. Their design and grouping are good, especially the low blocks, and the separation of vehicles and pedestrians is complete. This competitor has, however, not covered over the car parks but flys over them with handsome footbridges. Unfortunately, from the flats above the cars are not hidden from view and the public open space left is so mean that there is a danger that, out of lack of space, pedestrians will invade the lower level. Here is a case where the car parks could easily have been partially covered over to give more useful space.

north-west of the church would have been a great improvement. The lower blocks which contain maisonettes and old people's flats are The shape of the site reserved for the school is unfortunate as it occupies a vast frontage block on this site in alignment with that to the though quite well placed on the site, are of a deeply indented and serrated form-grim and maisonettes opening off either side of an access corridor are cleverly arranged with all living onto Vauxhall Bridge Road; a seven-storey very well handled but the three tall blocks, The internal planning is generally good and the overpowering in blocks of this height. rooms facing south-east or south-west.

OTHER DESIGNS

"The Towers of Lillington Street," relieving the tedium of Vauxhall Bridge Road and piercing the skyline like the towers of San Gimigniano, has been a theme which has attracted a number of entries, the best of

which, by A. and M. Bailey, is a beautifully worked out and presented design with slender authority housing. J. C. E. Eastwick Field's design with its six towers, two of 19 storeys and four of 25 storeys, is less elaborate but is well planned and a more valid answer to the has five short slender slab blocks, varving in height from 24 to 36 storeys, R. L. Alexander's, towers of varying heights, inverted pyramids, and exciting and skilful landscaping-but unfortunately outside the cost range of local problem. P. A. Bottomlev's elegant solution with towers and stepped pyramids, or ziggurats, That by D. C. Downes is beautiful, very polished is an exciting and sensitively conceived design. and very expensive.

Only two competitors—No. 22 and No. 68 attempted the simple but fine idea of houses and gardens for all the family dwellings, contrasting with tall blocks of flats for those without children—a system with exciting possibilities for this site where so large a proportion of the dwellings are for this latter group. Unfortunately the detailed working out of these two designs did not do justice to the idea.

C. Lush, by building tall, narrow blocks, stepping back on one end face on each floor, each step being treated as a garden, has made a brave attempt to combine into one building the advantages of tall blocks of flats and houses with private gardens. Unfortunately the blocks often badly overshadow one another. P. Carter's two 22-storey slab blocks at each end of the site and a low group of buildings in the middle—is a fine design of classic simplicity, beauty and great cost.

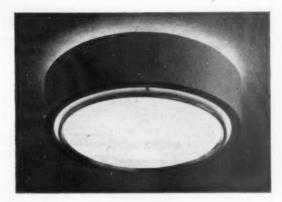
ings round the site and left the centre space to be developed as a park, the church being varying in rapid and jagged succession from inconvenient. R. T. Simpson's scheme, 10 storeys Several competitors placed a girdle of buildthe only building of any size within it. The most thoughtful and successful design of this type is that by M. J. Attenborough's group (illustrated on p. 165) which consists of highly articulated groups of maisonettes and flats, seven to 10 storeys in height and clustered but the system of passenger lifts is grotesquely high throughout, is a simpler and more restful round their public staircases and walkways. The treatment of the site is original and successful statement of this theme. With less height,

implying, however, a design for a lower density development, this would have been a very fine scheme.

Finally, a design by R. G. Smith of great subtlety and character, lowers the height of the girdle to four storeys and places in the central park, in company with the church, a 25-storey tower. The street frontage of the girdle looks unnecessarily grim and forbidding.

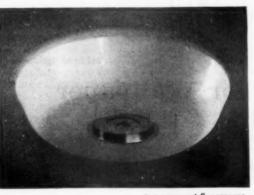


THE ARCHITECTS' JOURNAL for August 2, 1961







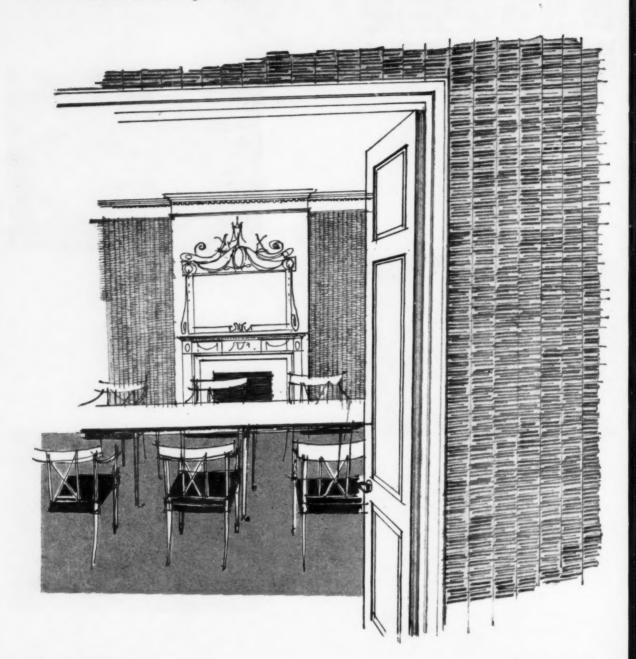


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technical section

THE INDUSTRY

This week Brian Grant describes a booklet on tile fixing, aluminium wall cladding, multiple socket outlets, an asphalt publication, aluminium windows, a book on the use of copper for radiant heating, and cobbled pavings

Tile fixing

The manufacturers of ceramic tiles have been experimenting for some time on fixing methods and have now published a booklet on a thin bed type of adhesive which allows tiles to be fixed easily and quickly without the attendant mess of cement/sand mixes, and without having to soak the tiles. The fix is produced by Evode, and is known as CTF. It is produced in three grades, Nos. 1 and 2 being suitable for all general walling work, though grade 2 is recommended as giving better adhesion when subject to unusual heat and moisture. The fix is supplied in powder form and needs only the addition of water, after which it is applied to the wall in a thickness of about $\frac{1}{8}$ in. and given a series of ribs by combing with a notched trowel. The tiles are then buttered with the mix and tapped into position, leaving a gap of at least $\frac{1}{16}$ in. for grouting, which is carried out with Ceramic Tile Grout, or CTG, a material claimed not to crack or fall out of the joints.

Floor tiles are laid with a flooring grade of CTF on a bed of 3 to 1 sand and cement mortar, which in turn should be separated from the structural floor with a layer of paper or sand. The tiles should be laid with joints not less than $\frac{1}{2}$ in. wide, and grouted with a 1 to 1 mix of cement and fine sand. (*Evode Ltd., Common Road, Stafford.*)

and cleaner if preformed. The weight of the cladding, fixed, is just over $\frac{1}{2}$ lb. per square foot in the standard 21 swg thickness. The manufacturers intend to maintain large stocks of standard lengths so as to provide quick delivery. The descriptive booklet (A4 and sfa classified) contains some handy fixing notes and useful detail drawings of eaves, window heads and jambs, corners, sills and some formed flashings. Booths have been making aluminium for years but are only now moving into the building industry. In providing the sort of information architects want they have certainly made a good start. (James Booth Aluminium Ltd., Kitts Green, Birmingham 33.)

Aluminium wall cladding

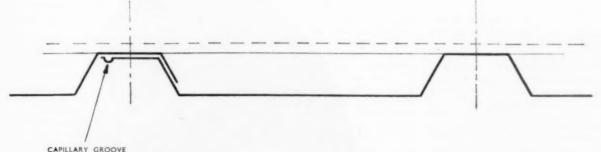
James Booth Aluminium, now I believe in alliance with Kaiser Aluminium, have just introduced Boxrib vertical cladding, an 8-in. pitch troughed aluminium sheet with 1-in. deep ribs and a cover width of 40 in. The sheets have been designed specifically for wall cladding, and compared with corrugated or troughed sheeting designed primarily for roofing, it provides an improved appearance at lower cost. A simple capillary groove in the overlapping side is claimed to provide an entirely weathertight joint. The sheets are made in standard lengths from 6 to 24 ft. in increments of 6 in. Fixing is by aluminium hook bolts, or roofing bolts with Oakley clips, and Booths will make flashings to drawing unless the fixing contractors prefer to form them on the site from flat aluminium sheet, though the first method is often better as the arrises of such details as corner flashings are sharper

Multiple socket outlets

Midland Electric have just introduced two new multiple socket outlets. One has a 13-amp. fused outlet and two 2-amp. 3-pin outlets protected by a single 5-amp. fuse, the other has four 2-amp. 3-pin outlets either plain or fused. Both units are made in brown or ivory and are supplied complete with plugs. (Midland Electric Manufacturing Co. Ltd., Reddings Lane, Tyseley, Birmingham 11.)

Asphalt in multi-storey garages

The NAMMC has just published an information sheet (No. 5/61) on the application of mastic asphalt to multi-storey garages. In America it has been found that car finishes can be quite seriously damaged by liquids dripping through floor slabs, and although one may applaud anything which tends to make American cars less flashy there is little doubt that the owners have some cause for complaint. The remedy,



Section of James Booth's Boxrib cladding

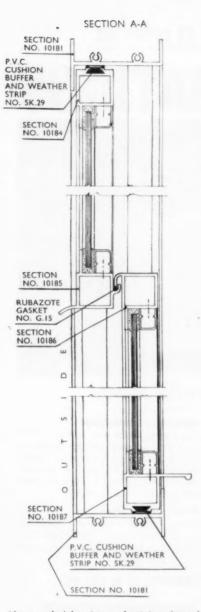
THE ARCHITECTS' JOURNAL for August 2, 1961



showers used to play tricks... but now they're fitted with

Leonard thermostatic mixing valves

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Above and right, Aygee aluminium framed sash window

it seems, is to use the appropriate grade of asphalt, and the information sheet gives details and specifications for the treatment of roofs, internal and external ramps, floors subject to water hosing and floors which have to cope only with traffic. Copies of the sheet from the Natural Asphalte Mine Owners & Manufacturers Council, 14 Howick Place, London, sw1.

Aluminium windows

The illustrations above show a new aluminium framed sash window. The corners are mechanically jointed, not welded, and the sashes run in guides which are weather stripped with a silicone treated wool pile, cushioned pvc being used at head and foot. The lower sash has a lifting handle running the full width of the bottom rail and the glazing is by screwed or snap-on beads. (Aygee Ltd.,

Century Works, Havelock Road, Southall, Middlesex.)

Copper for radiant heating

The Copper Development Association has issued a book which deals with radiant heating using either piped hot water or electric cables. It is a companion volume to publication No. 25 Copper Pipe Line Services in Building, and No. 55, Copper for Small Bore Heating. The book includes a series of worked examples of heat requirements and radiant panel layouts from which "it is hoped that the reader will be able to prepare any radiant heating scheme other than the most complicated." This may well be true, though it strikes me as somewhat optimistic, for although the facts are there, many of the calculations are pretty tedious and most architects will probably prefer to

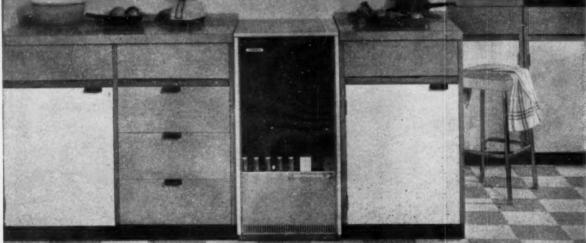
go to a consultant for anything but the smaller jobs. This does not detract from the value of the publication, which is excellent. (Copper Development Association, 55 South Audley Street, London, w1.)

Cobbled pavings

It is now possible to buy precast concrete slabs faced with sea washed pebbles in sizes from 12 by 24 to 36 by 24 in. at prices of about 5s. a square foot for small quantities, less, of course, for large areas. Loose cobble stones are also available for laying in the usual way, but the precast slabs may well be useful for relatively small areas or if cobbles are to be used in conjunction with plain concrete slabs. (British & Overseas Minerals Ltd., Creechurch House, Creechurch Lane, London, EC3.) THE ARCHITECTS' JOURNAL for August 2, 1961

From the makers of the 'Redfyre' Centramatic 50 and 80 comes the

REDFYRE CENTRAMATIC 35



fully automatic oil-fired boiler-specially designed for smaller houses

Unique automatic control system

Indicator lights on the Redfyre Centramatic 35 act as a constant reminder of the temperature selected by the user and the boiler is automatically operated to this setting by a sealed printed-circuit control unit. When the correct temperature is reached, the boiler switches itself off.

Exceptional fuel economy

When heat is needed the Redfyre Centramatic 35 lights itself electrically and reaches full operating efficiency almost at once. No pilot flame or low-pressure 'idling' to dribble away the fuel wastefully.

Perfect for the kitchenette

The Redfyre Centramatic 35 has dimensions to fit the smallest kitchen. The attractive enamelled casing is in white or cream; the bottom front panel is anodised aluminium; and for the easily interchangeable top front panel there is a choice of: Atlantic Grey, Nursery Blue, Eau-de-Nil, Flame Red, Cream, White, Buttercup, and Lilac. And because the 35 is totally enclosed, permanently installed, and fed with oil from outside the house, it is of course always safe.

Automatic combustion

The Redfyre Centramatic 35 does not rely on a good constant chimney draught to provide air for correct combustion. The fan on the unit does this and a 5" diameter chimney flue (top or back outlet) with some updraught is all that is needed.

Brief specification

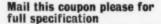
Output — 35,000 B.Th.U's/hr. continuous rating (water transfer). Overall size — 36'' high x 18'' wide x 21'' deep. Steel boiler with $1\frac{1}{4}''$ B.S.P. tappings.

Retail price of the Redfyre CENTRAMATIC 35 is £93-9s.

A REDFYRE CENTRAMATIC TO SUIT EVERYBODY

The Redfyre Centramatic 80

There are now three Redfyre Centramatics — the 35, described above, the 50 (50,000 **B**.Th.U's/hr.) price £134-8s (each of these models will fit beautifully into the kitchen) and the 80 (80,000 **B**.Th.U's/hr.) price £156-9s. All three Redfyre Centramatics are fully automatic and suitable for use on either gravity or small bore systems.



NAME

ADDRESS



ALZE REDFYRE

The Redfyre Centramatic 50

Newton Chambers and Company Limited, Redfyre Products, Thorncliffe, Sheffield Flease send me detailed technical literature on the Redfyre Centramatic 35

60

contract administration



preparation of contract documents

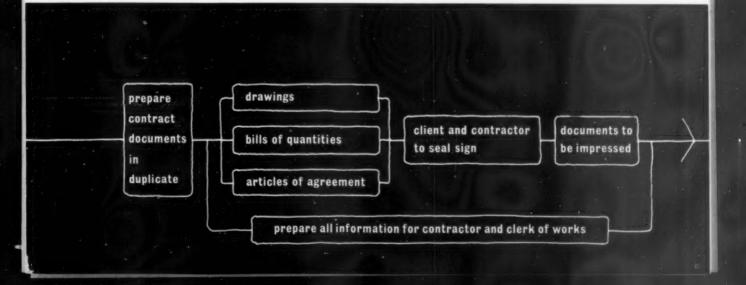
- (a) The form of tender
- (b) The drawings on which the contractor tendered
- (c) The specification on which the contractor tendered
- (d) The RIBA Articles of Agreement for use without quantities.
- 2. Where quantities have been prepared
- (a) The principal drawings or, on small jobs, the drawing from which quantities were prepared.
- (b) The priced bills of quantities and tender form submitted by the contractor
- (c) The RIBA Articles of Agreement for use with quantities.

The documents should be prepared in duplicate so that the contractor will have a true copy of the originals.

The RIBA Articles of Agreement must be completed and all amendments signed by each party in accordance with the conditions printed in the bills of quantities on which the contractor tendered. Where the Articles are to be executed under hand by written signature, each copy should have a 6d. stamp attached and cancelled on execution, within 14 days of the date of contract. If under company seal the original must be impressed by the Inland Revenue with a 10s. stamp within 30 days of the contract and the duplicate with a 5s. stamp. The original and duplicate must be compared and inspected by the Inland Revenue authority and the duplicate stamped to indicate duty paid on the original document.

While it is usually the case that a limited company must execute a contract under company seal this is not invariable as certain company articles allow a contract up to a fixed figure to be executed by hand. Where both parties are limited companies and one wishes to execute the contract by hand, check that the other company has authority to do so before agreeing. Drawings and bills of quantities or specification comprising contract documents should all be marked as the contract documents referred to in the Articles of Agreement. They should be signed by each party to the contract and dated.

Where a clerk of works is employed by the client he should be provided with a copy of the completed but unstamped Articles of Agreement under which the work is to be carried out for information throughout the contract.



contract administration

placing the contract

To programme the work sensibly and set the contract on its feet efficiently, the contractors must have all the information as soon as the contract arrangements have been settled. At this stage you should write to the contractor on your client's behalf instructing him to take possession of the site in accordance with the terms of the contract and to proceed with the work. You should at the same time issue:

- (a) The stamped " copies " of contract documents.
- (b) Two copies of all drawings for the work, including those from engineers and consultants.
- (c) Two copies of the bills of quantities.
- (d) Two copies of all sub-contract estimates and any drawings with an instruction that the contractor should place official orders and enter into sub-contract with these firms. (Remember to inform the sub-contractors.)
- (e) Copies of consents and the notices from the local authorities which are

course of work.

The letter of instruction should give general information on the contract including the name and telephone number of the architect in the office who will be primarily concerned with general enquiries, site supervision and the day to day running of the contract. Give the name of the clerk of works, the client (or his representative), quantity surveyor, and the names of local authority officials with whom you have been in contact in respect of consents, etc.

Draw the contractor's attention to the terms of any party settlements which have been made with adjoining owners. Ask for a draft programme of works to be prepared as soon as all the information has been assimilated and for the contractor to hold a site meeting of all sub-contractors (which you should attend) so that the programme can be discussed and agreed by everyone concerned, or modified if necessary for acceptance.

to be submitted throughout the Make it a specific instruction that every query, however small, should be referred to the clerk of works who has instructions to contact the architect in all cases, or alternatively where no clerk of works, to refer all queries directly to the architect's office. This instruction is essential because, although it is noted in the bills of quantities, a new general foreman or clerk of works is normally reluctant to refer queries to the architect in case the answer is obvious, and an old hand either thinks it will delay the job, cause trouble or produce a difficult alternative and he would be safer to plod on. Under no circumstances should instruction from the client or any other source be acted upon without your approval.

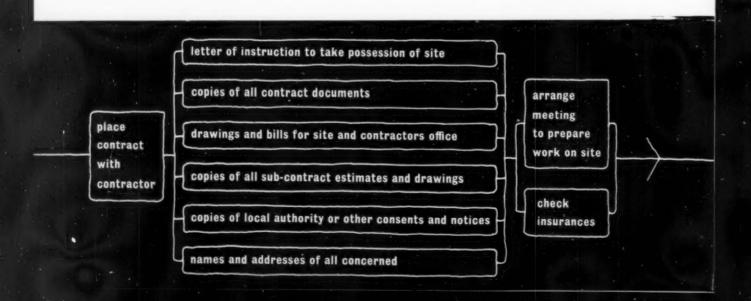
LIR No.

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UDC No. 651-69

Ask to see insurance certificates in accordance with contract terms and premium receipts when due.

Check that all hoarding notices, etc., have been served. Ask to be informed in advance of tests to be carried out to ensure that you can attend.



ecause this represents a natural break between pre-contract and post-contract work in the sequence I have chosen, it is perhaps the point at which we should review the architect's legal standing in administering the contract by quoting from *The Law Relating to the Architect*, by E. J. Rimmer.*

agent/quasi arbitrator

"The extent and nature of the authority of the architect at various stages of his engagement is important from two points of view. In the first place, the act of an authorised agent binds the principal and therefore anything done by the architect within such authority will render the building owner liable for any expenses thereby incurred. In the second place, as agent for the building owner the architect will be responsible to the building owner for the skilful and proper discharge of his duties, but once the architect has ceased to be an agent only, and is vested with the powers of *quasi* arbitrator his duty is then to the two parties to the contract and, provided he discharges his duty honestly, he owes no responsibility for his decisions to either."

negligence

"Generally speaking the law on the subject of the discharge by a professional man of his duties may be summarised in the words of Tindal, L. J.: 'Every person who enters into a learned profession undertakes to bring to the exercise of it a reasonable degree of care and skill,'† and the question whether a person has exercised reasonable and proper care, skill and judgement is one of fact which 'appears to us to rest upon this further enquiry, viz., whether other persons exercising the same profession or calling and being men of experience and skill therein, would or would not have come to the same conclusion as the defendant.' \ddagger "

supervision

" It will be seen from the authority with which the architect is cloaked by the building owner and the contractor under a contract in the RIBA Form § that during the execution of the works he has all the powers necessary to ensure that his direction and supervision may be completely effective in regard to enforcing the contract requirements.

"How far an architect is responsible to the building owner for detailed supervision and detailed tests of the works in progress, and how far he is relieved of responsibility by the employment of a clerk of works constantly engaged upon the works is by no means clear. But that the building owner is entitled to expect that the architect will make sufficient visits to the works and on those visits make a sufficient investigation of the methods and manner in which the work is being carried out to ensure that the works are being executed substantially in accordance with his drawings and specifications, is well established. The RIBA Conditions of Engagement || state:

- "(b) The architect shall give such periodical supervision and inspection as may be necessary to ensure that the works are being executed in general accordance with the contract. Constant supervision does not form part of the duties undertaken by him.
- "(c) In cases where constant superintendence is required a clerk of works shall be employed for this purpose; he shall be nominated or approved by the architect and appointed and paid by the client. He shall be under the architect's direction and control."

inspection and certification

"In the discharge of his duties under the contract the architect is required on substantial completion of the works to give a certificate, from which date a period known as a defects liability period begins to run, at the end of which a further and final certificate of the architect becomes due. Upon the issue of such final certificate all liability of the contractor for defects in the works ceases save in cases of fraud, dishonesty or fraudulent concealment or *defects and insufficiencies which a reasonable examination would not have disclosed*. This clause, by freeing the contractor from a liability for defects subsequently ascertained, makes the examination of the works during execution a matter of very high importance and entitles the contractor to take advantage of the failure of the architect to have made an examination which would disclose the defects."

\$ Chapman ν. Walton (1833) 10 Bing. 57, at p.63. § Ante p.19.

[•] Quoted by permission of the publishers, Stevens and Sons Ltd.

[†] Lamphier v. Phipos (1831) 8 C. & P. 475, at 479.

^{||} Post p.95.

contract administration

contract interpretation

have been completed it is important that the client is informed by letter of the change of role for the architect. This is the point at which the architect becomes the arbitrator between contractor and client in assessing and taking decisions according to the interpretation of the contract throughout the rest of the work. In order to fulfil this role he may possibly at times be acting against the general interests of the client and, although still tech- You have the responsibility to settle nically employed by the client, he is

As soon as the contract arrangements contract impartially according to its true intent. This particularly applies to such situations as extensions of time for bad weather or other causes beyond the contractor's control and, in the case of a failure, in interpreting correctly whether the contractor took every reasonable care in the construction of the work to ensure a sound result. Inform the client that under no circumstances should he instruct the contractor or any of his men direct.

contract problems by objectively applyunder obligation to administer the ing the terms under which the Articles of Agreement were accepted and it is essential that your client is forewarned of this obligation as he is, in many cases, rather less willing than the contractor to accept a decision against him.

It is fair at this stage to inform the client of the approximate amounts which are likely to be included in certificates and to remind him of the likely dates of presentation of certificates so that he may make banking arrangements accordingly.

write to client

certificate arrangements

new role of architect

UDC No. 651-69

B

SIR No.

The BASA Editor The Building Centre Store Street London WC1

Monthly supplement



IUA REPORT

Throughout the industrialised world the means of production of building components is increasingly controlled by technologists, and the only vitally interesting point that arose from the IUA working party discussions concerned the position and motives of those in control of this industrialised building. Professor Russell Hitchcock had assumed in his main paper

" A general survey of architectural change caused by the emergence of new techniques and materials," that the existence of technical change was an historical prerequisite of architectural change. The Hungarian commentator pointed out that it should be architectural requirements that generate the need for new materials and not vice versa. Professor Russell Hitchcock

accepted this criticism: "A good deal has been said about the fact that existing materials determined the form of buildings, but in my view what is needed is to specify the qualities wanted and then to create the appropriate material."

Several delegates were quick to point to other, more important, forces underlying architectural change:

"New techniques and materials are only secondary factors in architectural changes, and are, as a rule, accompanied by such factors as new needs, achievements of techniques in other fields, economic aspects, and qualifications of authors, patrons or clients."

Dr. B. Lisowski, Poland.

Delegates from the affluent West thought the Hungarian statement idealistic.

"The ideal would of course be to take concerted action with a view to making industrialists provide what architects want, when they want it. But this can only be a dream." M. Tauté, SA.

This " dream " procedure seems to occur only in countries where close political and economic collaboration of specialists exists-in countries where the ends are clearly defined and accepted and where a whole range of enterprises can be directed towards finding satisfactory means: "Industrialisation is a means but cannot be an end in itself."

M. Garcia Morales, Spain. "Architecture which meets daily human needs requires particular creative effort." Professor J. Zachwatowicz, Poland.

"Industrialisation demands close collaboration between architects, technicians, sociologists and academic workers. In the USSR experience has shown that if the problem was tackled properly, solutions were attained which met the requirements better than the solutions produced by V. I. Bogomolov, USSR. individuals."

"The architects and engineers of the world are in a good position to make use of modern materials in the interests of the welfare of mankind."

Professor Wu Ching-Hsiang, China. "We must not be slaves to industrialisation, but must direct it bearing B. Cox, GB. in mind human needs." The increasing dexterity with which techniques may be organised makes it imperative that the problems that are to be solved technically should be posed technically. Put in a different way, this means that analyses of

FOURTH BASA CONFERENCE ON ARCHITECTURAL EDUCATION TO BE HELD AT YORK INSTITUTE OF **ADVANCED ARCHITECTURAL STUDIES**

THE BASIS FOR DESIGN

Friday September 1 - Sunday September 3 1961

STUDENT'S VIEW

BASA at IUA

Most of BASA's activities in and around the IUA Congress seem to have gone off without too much multilingual angst. The AA boat trip took about 60 English and visiting students upstream past Louis Kahn's barge by the pleasure Gardens (and past all the best gas works in town!) then, turning round and going downstream as far as Greenwich, to pause for a pleasant stroll and yet another drink. On the return trip to Charing Cross the drink ran out and coffee was reverted to. Jiving was spasmodic throughout the trip and took place, more or less, simultaneously with the playing of the Bresslaw trio.

The only other entertainment organised by London schools was the Bartlett party which took place in the grounds of the Freemasons Arms, Hampstead. Marvellous location-the paved court below the grass and crazy-paving terraces of the beer gardens. There was plenty to drink, and eat, and visitors were entertained by the music of Morton, Davis, Monk and the MJQ. Not actually in person, Student learnt from the American guests that Davis, Monk, and Coltrane are still the tops in the US too, so the jazz time lag's closing up. Conversation seeemed to flow easily in broken French, German and American and many contacts were made . . . the AA and the Bartlett must be congratulated on their efforts, but it seems a pity that other London schools were unable to provide further entertainment.

The dance at University College was not quite so successful. The main attraction was the Temperance Seven, who celebrated their return to UC by a display of prima donna antics that Student had previously believed to be unknown outside the Met. (opera house, not Underground). After much haggling

Cost, inclusive of food, accommodation and booking fee of 10s. 6d.: for members 3 guineas; for associates 3½ guineas; for non-members 4 guineas. Booking form overleaf.

needs need to be described quantitatively and objectively rather than qualitatively and subjectively. (The qualitative may be described in quantitative terms but not the other way round.) But even the movement towards any real concern, subjective or objective, for the "user" did not really seem deeply rooted in Congress delegates. It would appear from the Congress précis that the British are among the very few who take user requirement consideration seriously:

"the main lesson that has been learnt from the low-cost housing programme has been that the social needs of the user must be considered before any plans could be drawn up." P. E. A. Johnsohn-Marshall, GB. " As architects our main task is to create quiet, harmonious buildings as a

background for living, not exciting Baroque works of art.' Cleeve Barr, GB.

One of the few subjects which caused any major divergence of opinion was whether industrialisation necessarily involved monotony:

" standardisation and uniformity are not entirely products of economic necessity. They have also come about because of the general tendency which exists to bring equality and fairness into everyday life, to introduce Prof. J. Hryniewiecki, Poland, equal standards for all." Prof. J. Hryniewiecki, Poland in his main paper " The effect of industrialised building on architecture," the objections to this statement were of several kinds:

"How do people build who had opportunity to choose ? They choose solutions in harmony with life and nature. The solutions might be too luxurious, but variety was of great value, for it was every man's right to have 'his window on the universe' and the architect should help him have it." J. B. Bakema, Netherlands.

"Architecture is thus rapidly ceasing to be a truly polytechnic enterprise in command of every contributory art, craft, and mode of engineering or manufacture: it is rapidly becoming monotechnic, in which forms that do not lend themselves to rapid fabrication and probably rapid obsolescence were rejected." Prof. Louis Mumford, USA.

These criticisms were admirably answered: "Nothing is more monotonous or devoid of charm than an area in which all the houses are different." Graeme Shankland, GB.

To end with, a definition of architecture:

"The architect's most characteristic task is the organisation of space, considered above all as a component and organising element of social and individual life." Anton Moisescu, Rumania. A sane plea for more intelligent world wealth usage:

"The legacy of all man's ingenuity and of the resources of the earth is at present being used in the service of only 40 per cent of the population. If the benefits of industry could be spread to cover the whole population of the world there would no longer be any need to contemplate war." R. Buckminster Fuller, USA.

And a do-it-yourself aphorism:

"The proper basis of modern architecture is not modern materials but a modern way of thinking." Mr. Nowicki, Poland.

about amplifiers and unplayable pianos they simply refused to play. However, the second band came to what was nearly the rescue and played on till the dance finished with some of the Seven. The bar arrangements weren't brilliant either. A good time was had by some.

Streamlining

The BASA executive is at present working on proposals to streamline the organisation and procedure of executive functions.

A sub-committee has been formed to prepare an interim report for the York Conference.

The reasons are given as follows:

- I. Lack of integration within the executive committee.
- 2. Coordination between school representatives and the executive is very difficult.
- 3. Cumbersome administration due to lack of standard procedures.
- 4. Failure to make contact with students outside architectural schools and associate members.
- 5. Failure by its members to realise that the Association is dynamic.

The sub-committee will not of course determine policy, but will examine the best available methods of implementing what is determined by the executive.

" Careers Again "

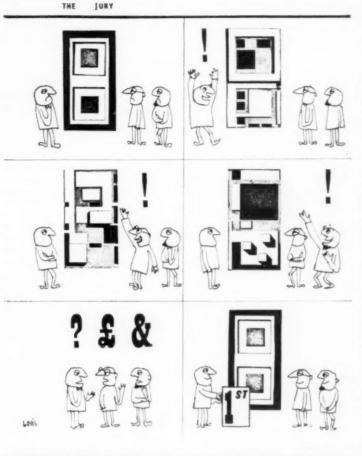
Any hopes entertained that "A Career in Architecture" by M. Patrick and M. Tree was just what the school leaver had been waiting for were over optimistic. Although the book gives some useful historical information the only really vital information of interest to a potential architect (whether he wishes to train full or part time) is which are the best schools, and why; and what kind of architect do they try to produce. Schools should surely be sufficiently aware of their aims to be able to contribute to such a book as this says it is. Messrs. Patrick and Tree start with a History of the Profession in which they do not explain why students should be expected to join the RIBA. They end this chapter with: "... in the second half of the 20th century architecture is no exception to the generally acknowledged fact that this is an age of transition." Well, yeah! In the chapter on the architect's work the clientarchitect relationship in terms of analysis of requirements is superficially

Please reserve me..... place(s) at the York Conference.

I enclose booking fee fees.

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Post to Permanent Secretary, BASA, Building Centre, Store Street, London, WCI



dealt with. App² ntly in country practices... (the client) " writes to the firm [of architects] stating his requirements generally and asking for plans to be drawn up." After a description of work in local government and city offices (the part on the country practice is longer than both these put together!), the next chapter concerns itself with education: the influence of the Beaux-Arts and the Bauhaus, training abroad including America. The next chapter: "Am I suited to the career?" outlines qualities necessary to become an architect.

"The abilities, however, which may single out a person for architecture are in the last resort an amalgam of artistic sensibility matched by a real interest in technology." He must also have "a higher than average degree of observation," must think " about how people live" and "be able to organise his work sensibly." 'The chapter on methods of training is notable mainly for some dubious advice as to which school to go to if you're shy. Recognised schools, University schools, part-time and articled pupilage are described. After which, under the subheading "The Curriculum of a Recognised School," is a lengthy description of the way they

do it at the AA. The unknowing reader is lead to believe that this is a typical curriculum, as if there was such a thing anyway. The last two chapters deal with "Post Graduate Work" and "The Future" which contain some useful facts but nothing of fundamental significance.

The real trouble with this book is that it has made a reasonable and lively coverage of the same field that much more difficult.

BASA EXHIBITION

177

Out of a total of twenty schools less than six managed to submit their work by the stated submission date. Nearly half brought their work in less than two days before the exhibition was due to open. Some of these just turned up without letting me know beforehand that they even intended to exhibit, expecting to be included and moaning when they were not.

In short, most schools have shown themselves apparently incapable of assembling and submitting work by a specified date and in any coherent form. It was stated that the exhibits were to be mounted on card to sizes specified in the instructions, 1 in. hardboard was not asked for for obvious reasons, neither were hundreds of unnumbered unrelated pieces of paper-thin cards. Those who sent their exhibits in on in. hardboard could not have considered the difficulties of fixing (it was stated that we would be pinning the exhibits to the actual exhibition screens) not using 3 in. nails and 3 lb. hammers. The general inability to comply with the instructions seem to go hand in hand with perhaps an even greater inability, the inability to communicate to a complete stranger what their exhibits were supposed to be:

Working drawings so small as to take on the complexity of line usually only associated with a treasury note.

Meaningless perspectives covered, nay almost obliterated, by "architectural people and trees."

One school—maybe they think they are a cut above the others—did not even bother to state what the schemes included were, let alone such simple things as scale, where the sections occurred, etc.

Another was covered with architectural arrows so recently stuck on that with the first temperature change they all fell off, leaving a rather large and assorted collection of unconnected photographs and title blocks. This school evidently had not thought in terms of transit, handling and erection. The résumés asked for in the instructions were in most cases not included, adding further to the general meaninglessness of the pretty patterns, so carefully drawn to such a minute scale.

It seems hardly credible that the people who submitted the work are being trained as architects, supposedly capable of a certain degree of planning, co-ordination, communication, etc., for the amount of forethought evident in most of the exhibits could only be described as negligible.

I would like to thank all those at the RIBA especially Mr. John Lander and Mr. David Taylor for their help and encouragement while designing and organising the exhibition. Also the students of the Royal College of Art and St. Martins School of Art, for lending some of their work to bring a certain arount of relief in what was rather an architecturally disappointing exhibition.

RODNEY MACE

REVIEWS

Symposium AASA

(Australian Architectural Students Association)

The first edition of Symposium was published March 1961; it was to serve as a vehicle to the aims of the AASA. This first issue primarily features aspects of architectural education; the intention is to follow up this theme with the next Symposium by pursuing " post-graduate study " outlining where this work is available throughout the English speaking countries, and the nature of the work available. The Australian students then intend to devote a complete issue to the study of " architecture for Australian conditions."

The AASA is concerned with the weaknesses of Australian design; it seems that Australia has been content with second or third hand copies of overseas building. Mr. Lehmann in his foreword suggests that the architect cannot help importing overseas techniques. The Australian beach resorts and cities are adorned with the most violent, vulgar and cheap creations of " well-off" foreign people.

The magazine, with almost every article, wishes to propagate and stimulate a national architecture; this wish is encouraged by the fact that Australian architectural design is very much in its pioneering days. Emergence from this position however can only be stifled by a continual enforcement of " advanced" American or international styling upon a landscape and way of life clearly unsuited to it. The early building developments in the Anglo-American colonies underwent similar processes of "enlightenment" as the Australian scene must be experiencing now. Symposium examines with a critical eye its own schools; their progress and development. Thorough analytical studies have been made of the courses provided by their universities and technical schools, a comparative analysis of office experience sandwiched within the course of study and office experience at the termination of studies is made; an examination of the pros and cons of the diploma and degree course is made.

Symposium has not been used as a medium for scathing attacks directed at the teaching staff and curriculua of the schools but it is a practical exposure of the basic problem inherent in their system of architectural schooling, including that of student apathy. Apathy among many students in Australia is not helped by the fact that they must endure six long years of strenuous work in an architect's office, with night classes, week-end projects and studies and examinations superimposed on a normal working day.

Mr. Lindsay Roberts in his article, has illustrated the deep frustration of not only the Australian but of the New Zealander living "that end of the world " and he has exposed the inherent wish for travel both at home and abroad the fellow " down-under " has. One function that the AASA serves is the provision of adequate opportunity for the student to travel and participate in interests outside his immediate scholastic course: to encourage students to accept responsibilities and to contribute articles to university papers and magazines; to encourage attendance at organised functions such as Students' Congress and Forums that can only benefit the student participating. The student must inherently be selfish; he must firstly seek and take all that is offered in the experience of life, in the experience of man and his actions; he must then plant back into life the accumulated and digested components. Symposium AASA in its first issue must have provided a solid foundation for the further development and growth of this Australian student body; the next issue devoted to " architecture for Australian conditions" should surely attract many ideas and theories, not only from their own schools but from ours maybe?

RUPERT W. ALCOCK

Modern Architecture in Mexico, by Max L. Cetto. £3 105. od.

Recent Mexican architecture has attempted to integrate a most individual heritage with the international style, and has failed. Now, new inspiration is being found in the feats of structural gymnastics performed by the concrete of Felix Candela, whose sculptural designs are rapidly becoming characteristic of Mexico.

Early buildings showed a simple Corbusian influence, but were unfortunately soon engulfed by traditional decoration in an attempt to unify the arts into an architectural whole. The University City in Mexico for twentyfive thousand students, completed in three years, is undoubtedly the most laudable example; while the grotesque O'Gorman house, San Angel (the supposed culmination of this idea), if the architect's dream, is equally the

housewife's nightmare!

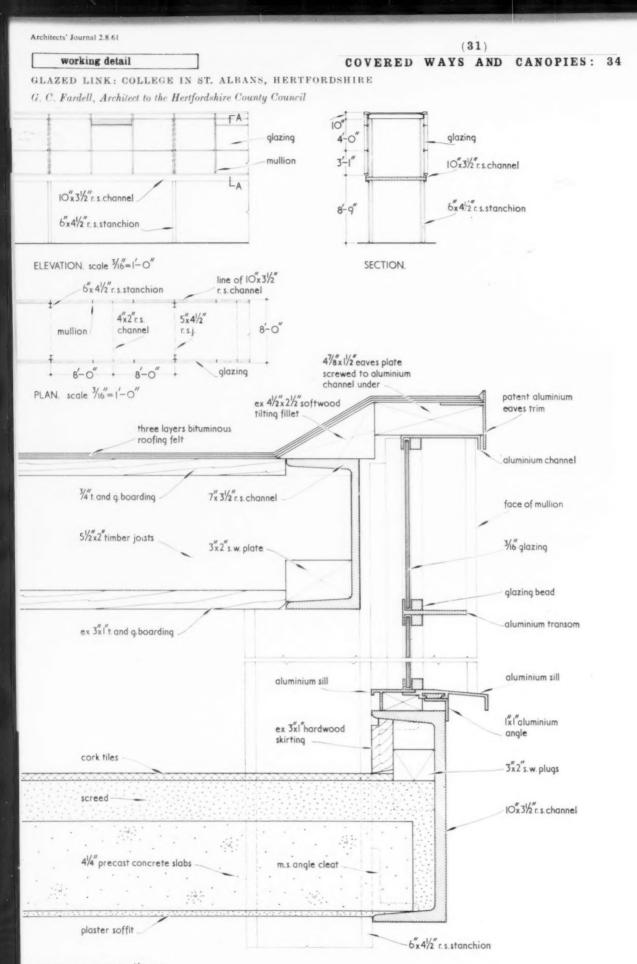
These art buildings should not, however, detract from the more honest, less publicised schools, hospitals and churches that Mexico is producing. Ail that Candela's shells have done for church design, the planning of Garcia and Yanez is doing for hospitals and schools. Complementary with these are individual lessons in astute traffic separation (e.g., the President Juanez housing development), and of clarity at Mexico Airport.

This critical appraisal by Max L. Cetto himself a Mexican architect, is surprisingly objective and constructive. He is able, with an extremely interesting and thorough introduction, to trace the historical background from Aztec and Maya times, and thereby to expose the root of the recent architectural schizophrenia. He then follows up this text with a detailed coverage in plans, photographs and sections of over one hundred buildings of the last ten years, and amplifies each with footnotes and blurb in a very interesting, wellproduced book.

TONY MONK

Architects' Journal 2.8.61	(31)
working detail	COVERED WAYS AND CANOPIES: 34
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This economically detailed covered way and glazed first floor corridor links separate blocks of the technical college, being a successful combination of steelwork, aluminium glazing and floorscape.



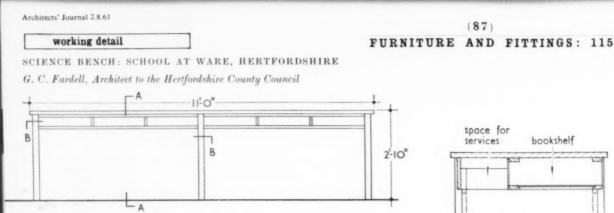
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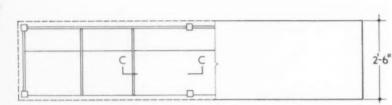
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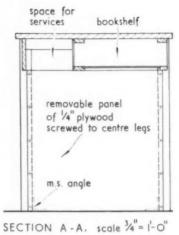
SCIENCE BENCH: SCHOOL AT WARE, HERTFORDSHIRE G. C. Fardell, Architect to the Hertfordshire County Council



This fixed science table provides space for six pupils for formal lectures or practical experiments. There is a full length shelf on one side for books and other belongings; the central cased support neatly houses the service connections.

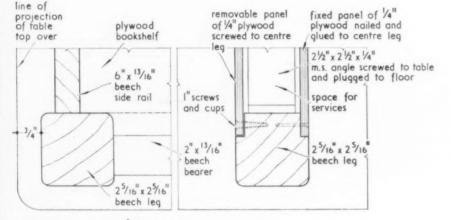




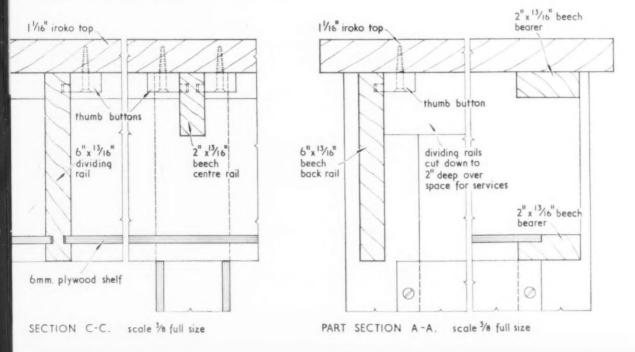


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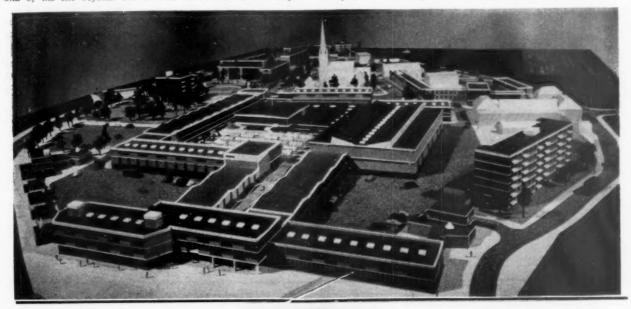
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Redevelopment of Darlaston

This model illustrates the scheme prepared by Charles E. Mason & Richards, in conjunction with C. W. Frost, engineer and surveyor to the council, for the redevelopment of the central area of Darlaston. The scheme includes a large pedestrian precinct (in the foreground) for offices, shops, covered and open markets and associated bus station and parking areas. The layout also includes high density housing in the form of flats at the north end of the site beyond. The scheme which has been developed The Architects' Journal for August 2, 1961 179

in conjunction with the Staffordshire County Council and a firm of developers, is likely shortly to be the subject of a public inquiry. It is obvious that such schemes are essential for the revitalisation of such central areas, by treating the scheme as one complete entity. The terms of reference for the architects are somewhat unusual, since they have been commissioned both by the developers and the local authority, which would appear to overcome some of the objections that the RIBA have recently expressed about this type of scheme. The outstanding difficulty appears to remain that the architects have been forced to work within a difficult-shaped road pattern for the perimeter, which tends to repeat the errors that have occurred with, for example, the inner ring road scheme in nearby Birmingham.



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The Architects' Journal for August 2, 1961 180

Announcements

PROFESSIONAL

Gordon Slingo, ARIBA, has been appointed chief architect to Medway Buildings and Supplies Ltd., Rochester, Kent.

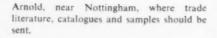
M. Howard-Radley, ARIBA, has moved his offices to 41, Cheval Place, Knightsbridge, London, sw7 (telephone Knightsbridge 4966). He will be pleased to receive samples and trade literature. Representatives will be seen by appointment only.

Miller & Tritton (AA), who are now practising under the style of Miller & Tritton Associates, have moved their office to 64-66, Bury Walk, London, sw3 (telephone Flaxman 4314).

Donald Goldfinch & Partners have moved their London office to 1, Vine Street, Uxbridge, Middlesex (telephone Uxbridge 37741), with J. Hogger, ARIBA, AADipl, as associate in charge.

Frank Brock, ARIBA, chief architect of Salisbury, has succeeded N. Roberts, ARIBA, as City Architect of Hereford.

The Divisional Architects Department of the East Midlands Division of the National Coal Board has moved to Sherwood Lodge.



Owen McCarthy, BArch, MRIAI, ARIBA, has set up a practice at 38. South Mall. Cork. Eire (telephone Cork 21181), and would be glad to receive trade catalogues.

A joint committee of representatives of the English Joinery Manufacturers' Association and the Timber Development Association has recently been established. The committee is to work out details of a scheme, put forward by EJMA, for the amalgamation of the English Association with the Scottish Joinery and Door Manufacturers' Association and the TDA's Approved Manufacturers. The new body would be known as the British Woodwork Manufacturers' Associa-

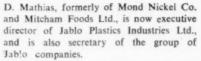
The University of Oxford has appointed Chamberlin, Powell & Bon to be the architects for a new building for the Department of Zoology.

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H. Matthews, BSC, AMIEE, has been appointed a technical director of Pantak Ltd., of Vale Road, Windsor, Berkshire.

Henry Sykes Ltd., makers of Univac pumps, have opened a depot at Studd Green Works, Elworth, Sandbach, Cheshire (telephone Sandbach 986).

James Halstead Ltd, have opened a London sales office at 44, Pall Mall, London, sw1 (telephone Whitehall 7234). The London sales manager is G. Ross.

CORRECTION

The Library of Trinity College, Dublin, referred to in AJ, 15.6.61, was designed by Thomas Burgh, the Surveyor-General of Ireland (1670-1730), and not, as stated, by Hawksmoor.

In the cost analysis of the administration block of Edinburgh Agricultural College (A) July 26) under the heading "Partitions" the cost per sq. yd. of 4-in. lightweight concrete blocks should have been 11s. 6d.

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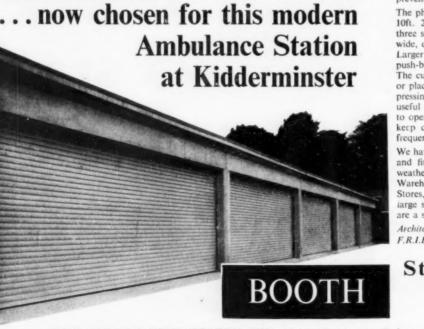
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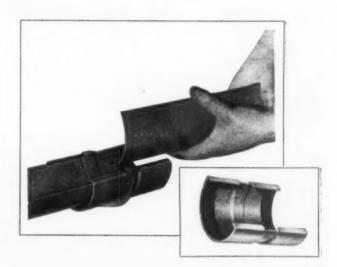
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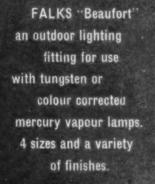
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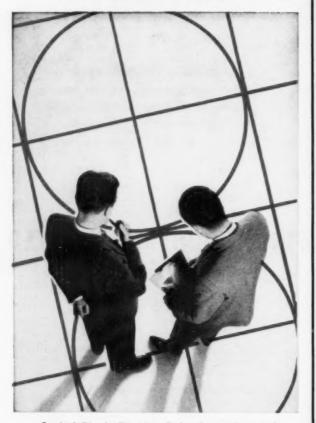
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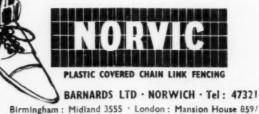
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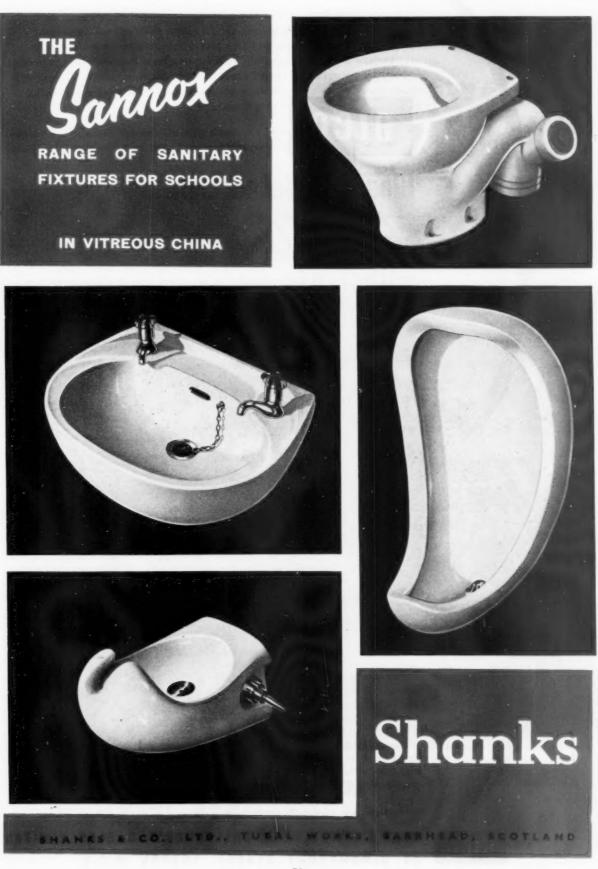
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Fence, A purchaser or receiver, and/or a storer of stolen goods.—Dictionary of Slang and Unconventional English.



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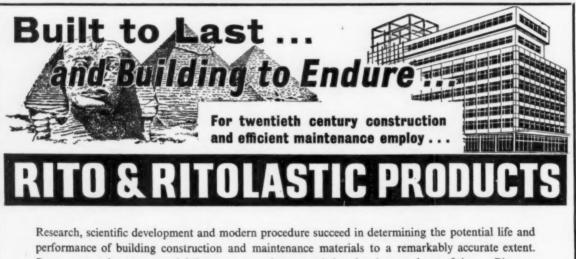
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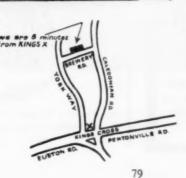
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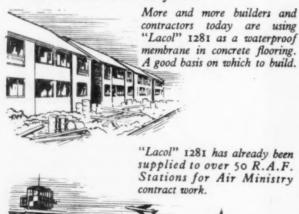
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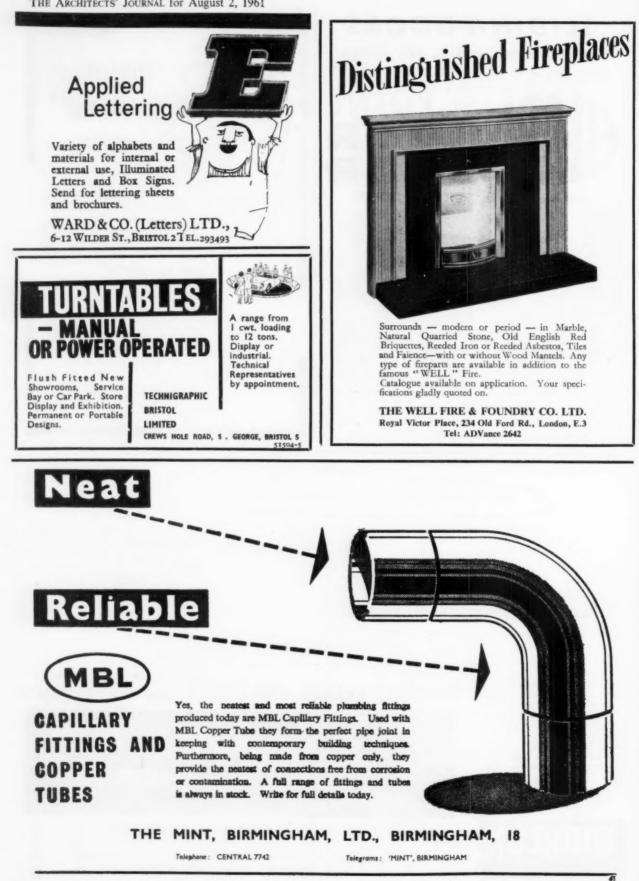


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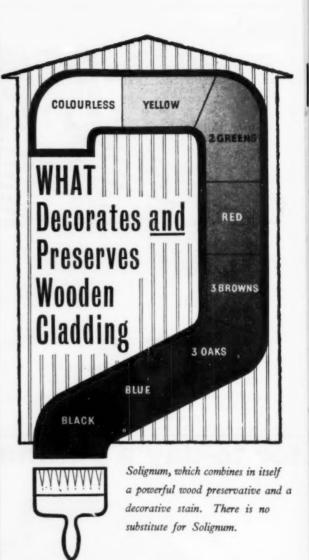
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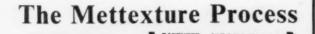
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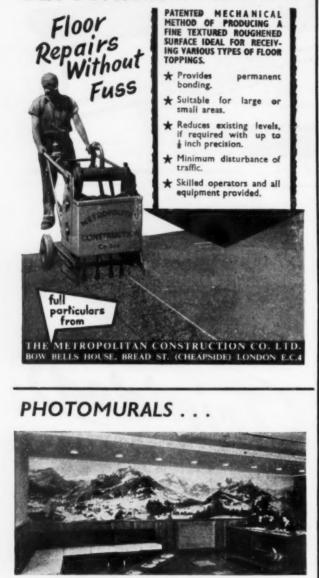
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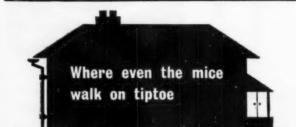
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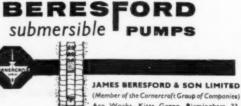
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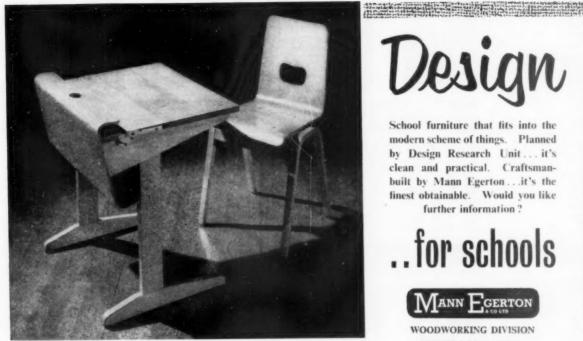
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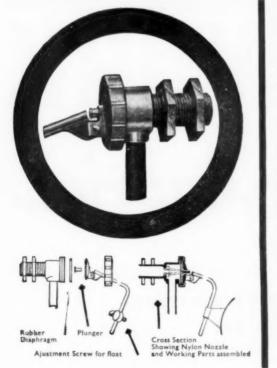
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- Thumbscrew for adjusting float to suit required water level. *
- * The Kingley B.R.S. Ball Valves are designed for both high and low pressure nozzles.

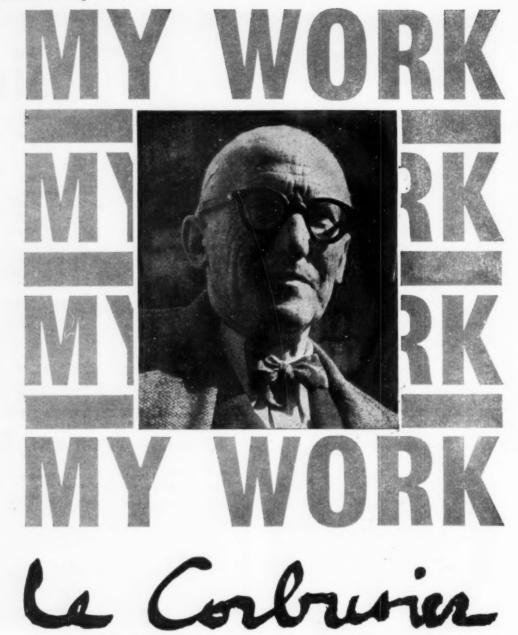


Write for full details and illustrated leaflet to:-

KINGS LANGLEY ENGINEERING CO. LTD., Kings Langley, Herts.

Telephone: Kings Langley 4022 Telegrams: Champion Kings Langley

87



The record of a life's work—architecture, painting and sculpture—written, illustrated, and designed, by the world's most eminent and controversial architect. 84s.

CLASSIFIED ADVERTISEMENTS

Owing to the August Bank holiday the issue of August 9th will go to press two days earlier than usual. All advertisements for this issue must reach the publishers not later than first post Wednesday, August 2nd.

Advertisements should be addressed to the Adver-tisement Manager, "The Architects' Journal," 9. 11 and 13. Queen Anne's Gate, Westminster, S.W.1, and must reach there by first post Friday morning for inclusion in the following Wednesday's paper. Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address aimen above.

given above.

given above. AIR-MAIL SERVICE available on request. In response to requests from a number of Overseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appoint-ments Vacant, we have been pleased to arrange that cutings of all such classified advertisements appearing in the AJ., shall be despatched by air-mail each week. The cost of this special service to Overseas subscribers will be is. for four weeks (ls. 3d. for each additional week) and prepay-ment should be sent by subscribers wishing to take advantage of this service. The charge we are making represents only the actual cost of the postage incolved.

Public and Official Announcements

36s. per inch; each additional line 3s.

ADMINISTRATIVE COUNTY OF LEICESTER (a) PRINCIPAL ASSISTANT ARCHITECT,

(a) FARACHER ASSISTANT ARCHITECTS, £1,310-£1,410-£1,565.
 (b) CHIEF ASSISTANT ARCHITECTS, £1,310-£1,410-£1,566.
 (c) SENIOR ASSISTANT ARCHITECTS, £1,140-

(c) SENIOR ASSISTANT ARCHITECTS, £1,140-£1,310.
(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 ex-tensive programme of education buildings, Can-didates 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 incep-tion to completion. For (c), should be members of the R.I.B.A., have had office experience and be 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. Lodging allowance and removal expenses may be paid to a married man. Apply on form obtainable from County Architect, 123, London Road, Leicester, TC/1478

COUNTY BOROUGH OF GREAT YARMOUTH EDUCATION COMMITTEE SCHOOLS ARCHITECTS DEPARTMENT Applications are invited from Associate Men-bers of the R.I.B.A. for the appointment of a SENIOR ASSISTANT ARCHITECT at a salary within A.P.T. IV (£1,44 to £1,510) to work on in-teresting and progressive pro-ramme. Previous experience with Loc J Government not essential.

essential. Housing accommodation will be available to the successful candidate if married and assistance with removal expenses may be made in suitable

Full details of present and past appointments, age, qualifications and experience, together with the names of two referees should reach the Schools Architect, 22 Euston Road, Great Yarmouth, by 11th August, 1961.

D. G. FARROW, Chiel Education Officer.

22 Euston Road, Great Yarmouth, Norfolk.

88639

 Borbolit
 Secara

 ROROUGH OF SCARBOROUGH
 BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT

 Applications are invited for the following appointments: Assist ANT ARCHITECT-Grade A.P.T. IV (£140-£1.310). Applicants should be Associates of the R.I.B.A.

 ARCHITECTURAL ASSISTANT-Grade A.P.T. II (£615-£960). Applicants should have passed the Intermediate R.I.B.A. examina-tion or its equivalent

 Both appointments are subject to the provisions of the Local Government Superannuation Acts, 1957/1955, and to the passing of a medical examination, and will be terminable by one-month's notice on either side.

 Housing accommodation will be made avail-able for successful applicants, if marfied, and the Council will pay one-half of the removal examined to successful applicants, if marfied, and the council will applicants of the removal examined for successful applicants, if marfied, and the council will be of the removal the council will be the removal of the removal examined for successful applicants, if marfied, and the council will applicants of the removal examined for successful applicants, if marfied, and the council will be availed of the removal examined for successful applicants, if marfied, and the council will be successful applicants, if marfied, and the council will be availed of the removal examplementer and previous appointments, training, oualifications and experimence, together to the andersigned not later than 18th August. 1961.
 to the

V. FORSHAW. Borough Engineer and Surveyor Town Hall. Scarborough. July, 1961. 88774

CITY OF NEW SARUM SENIOR ASSISTANT ARCHITECT required in the City Engineer's Department. Salary Grade A.P.T. V. 41,310-e1.480. Applicants must possess Final R.I.B.A. and have backenese, estate layouts and public buildings, and in the supervision and handling of contracts. The Council has a large capital works pro-development area and the successful applicant if the responsible directly to the City Engineer for the organisation and work of the architect's ection of the Department. Performable post Medical examination required. Assistance with removal expenses. Car allowance. Applications stating age, present and previous appointments with salaries, with the names of House, Bourne Hill, Salisbury, by 19th August. Deco ELCHARDEON

GEO. RICHARDSON, Town Clerk

COUNTY BOROUGH OF WEST HAM Vacancies exist for a number of SENIOR ASSIS-TANT ARCHITECTS, J.N.C. Scale "A." £1,400-41,565 p.a., and for an ARCHITECTURAL ASSISTANT, in the salary range £655-£1,140 p.a. (and London allowance), according to qualifica-tions and experience.

ASSISTANT, in the according to quantum cand London allowance), according to quantum tions and experience. An expanded programme of work, including numerous official buildings, Fire Stations, Primary and Secondary Schools, high density housing, and Town Centre Redevelopment Scheme, is on board

hand. Applications, with details of qualifications and experience (together with names of two referees), to be addressed to Thomas E. North, O.B.E., F.R.I.B.A., Dist.T.P., M.T.P.L., Borough Architect and Planning Officer, 70, West Ham Lane, Strat ford, E.15.

tord. E.15. 88651 COUNTY OF LINCOLN PARTS OF KESTEVEN COUNTY ARCHITECT'S DEPARTMENT ENGINEER'S ASSISTANT (HEATING) A.P.T. Grade II (2815-2960) Full particulars of the above appointment may be obtained from the County Architect, County Offices, Sleaford, Lincs. Applications from suitably qualified persons, to gether with the names and addresses of two referees, should reach the undersigned not later than the 3rd September, 1961. J. E. BLOW.

Clerk of the County Council.

S8656

County Offices, Sleaford, Lincs.

COVENTRY Applications are invited for the appointment of : SENIOR PLANNING OFFICER (REDEVELOPMENT) For redevelopment schemes including high ensity Urban Renewal, requiring enthusiastic related

For redevelopment schemes including high density Urban Renewal, requiring enthusiastic architect. Planning qualification/housing experience addi-tional advantages. Salary Grade: A. P. T. V. 61,310-61,480 or Scale "A." £1,350-61,565, according to qualification/ experience. Post permanent and pensionable subject to satis-factory medical certificate. Housing accommoda-tion in approved circumstances or up to 55 per cent. advance for house purchase. Removal expenses loan. Five-day working week, Application forms from Department of Archi-tecture and Planning, Conneil House, returnable within 10 days of publication. STAINES URBAN DISTRICT COUNCIL

within 10 days of publication. 88657 STAINES URBAN DISTRICT COUNCIL ENGINEER and SURVEYOR'S DEPARTMENT ARCHITECTURAL ASSISTANT. A.P.T. IV. 21,140-21,310 plus London weighting. Applicants must have had a good experience in architectural design and building work under con-struction and should have passed the examination for associateship of the R.I.B.A. Application form may be obtained from the Engineer and Surveyor, Shortwood House, 240. London Road, Staines, and must be returned to him in suitably endorsed envelope, not later than 5 p.m. on Thursday, 10th August, 1961. F. ENTWISTLE. Clerk of the Council. 88658

8738

Officers. Application forms and further particulars obtainable from me. Completed forms to be returned by 19th August, 1961. W. E. BUFTON. Clerk of the County Council.

County Offices, Ruthin,

PROVINCIAL PLANNING OFFICE DEPARTMENT OF MUNICIPAL AFFAIRS AND SUPPLY PROVINCE OF NEWFOUNDLAND, CANADA APPOINTMENT OF ASSISTANT PLANNING DIRECTOR Applications are invited from suitably qualified and experienced persons for the above appoint-ment in the Provincial Planning Division of the Department of Municipal Affairs and Supply in St. John's.

and experiences persons in the Division of the perturbation of Municipal Affairs and Supply in St. John's. Duties will include the preparation of Municipal and Regional Plans including detailed designs for communities and districts throughout the Province, and the control of development in accordance with various Provincial regulations, and initiative, and a wide range of talents. The office is situated in St. John's, bat some traveling within the Province will be required. Candidates must have appropriate professional qualifications in Town Planning together with the analysis of different to a state of the province of the second and the province of the second and the province of the second and the province of the second to the second t

88042 THE URBAN DISTRICT COUNCIL OF ESTON (a) APPOINTMENT OF CHIEF ARCHITEC TURAL ASSISTANT, A.P.T. IV (£1,140-(1,140-))

TURAL ASSISTANT, A.P.T. IV (£1,140-(1,10))
 (b) APPOINTMENT OF QUANTITY SURVEY. ING ASSISTANT, A.P.T. III (£960-£1,140)
 (b) APPOINTMENT OF QUANTITY SURVEY. ING ASSISTANT, A.P.T. III (£960-£1,140)
 Applications are invited for the above appointments. Applications for (a) should have experiences in housing work and should hold an appropriate architectural qualification. Applicants for (b) should have experience on housing schemes, be able to prepare bills of quantifies, undertake the measurement of work on site and the preparation of interim certificates and final accounts, and pre-ference will be given to candidates with an appro-priate qualification. Both appointments will be subject to one month's notice on either side, the National Scheme of Conditions of Service, the Superannuation Scheme, and a medical examina-tion. Housing accommodation will be made avait. able if required. Applications stating age, train-ing, qualifications and experience, logether with the names of two referees, are to be sent to me by 4th September. 1961. N. C. HARRISON, A.M.I.C.E., M.I.Mun.E., Engineer and Surveyor.
 Town Hall, Fabian Road.

Town Hall, Fabian Road, South Bank, Middlesbrough.

BIGDING RURAL DISTRICT COUNCIL APPOINTMENT OF SURVEYING ASSISTANT ENGINEER AND SURVEYOR'S DEPARTMENT Applications are invited for the above appoint-ment at a salary within Grade A.P.T. II (2815-2960 per annum). Housing accommodation will be available to the person appointed, if necessary, and the Council normally assist with removal expenses.

expenses, who should be of Intermediate R.I.C.S. or R.I.B.A. standard, should be generally experienced in housing estate development and have specialised knowledge of house design and detailing. The arguithmetic

are specialized and which will be subject to the Council's Conditions of Service and the provisions of the Local Government Superannuation Acts may be terminated by one month's notice either

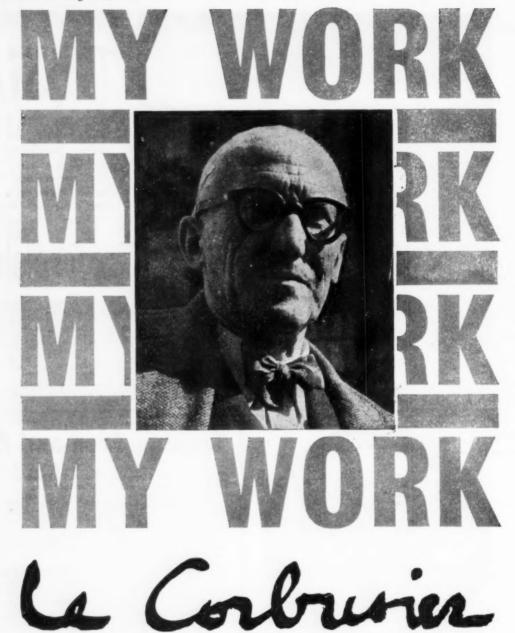
side. Applications stating age, education, experience and giving the names and addresses of two techni-cal referees, should be sent to the undersigned to arrive not later than the 11th August, 1961. D. P. HARRISON, Council Offices Clerk to the Council.

8676

Council Offices, Windsor Road, Slough, Bucks.

All MINISTRY require SENIOR WORKERS TIP in Quantities Division in London. Salary, which is dependent on age, qual. and exp., ranges from 61.045 to 61.185 (max) on annual incremental basis. Five-day week with three weeks three days naid leave a year initially. Some promotion and pension prospects. Quals.; Applicants, who must be natural born British subjects, should hold O.N.C. or C. & G. (Quanti-ties) or equiv, and be fully connectent to work up entire bills of quantities. Financial assis-tance and time off allowed for recognised courses of study leading to higher quals. Forms from Manager (PE 519). Ministry of Labour, Pro-fessional & Executive Register. Atlantit Honse, Farringdon Street. London, E.C.4. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only applicants selected for interview will be advised. S8144 \$8716

K2



The record of a life's work-architecture, painting and sculpture-written, illustrated, and designed, by the world's most eminent and controversial architect. 84s.

CLASSIFIED ADVERTISEMENTS

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Advertisements should be addressed to the Adver-tisement Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Weshminster, S.W.1, and must reach there by first post Friday morning for inclusion in the following Wednesday's paper. Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address aiven above.

above.

given above. AIR-MAIL SERVICE available on request. In fesponse to requests from a number of Oerseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appoint-ments Vacant, we have been pleased to arrange that cuttings of all such classified advertisements appearing in the A.J., shall be despatched by air-mail each week. The cost of this special scruce to Overseas subscribers will be 5s. for four weeks (1s. 3d. for each additional week) and prepay-ment should be service. The charge we are making represents only the actual cost of the postage involved.

Public and Official Announcements

36s. per inch; each additional line 3s.

ADMINISTRATIVE COUNTY OF LEICESTER
(a) PRINCIPAL ASSISTANT ARCHITECT, £1,410-£1,565.
(b) CHIEF ASSISTANT ARCHITECTS, £1,310-£1,410-£1,566.
(c) SENIOR ASSISTANT ARCHITECTS, £1,140-£1,310.

(c) SENIOR ASSISTANT ARCHITECTS, £1,140-£1,310.
(d) ABCHITECTURAL ASSISTANT, £315-£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 ex-tensive programme of education buildings. Can-didates 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 incep-tion to completion. For (c), should be members of the R.I.B.A., have had office experience and be capable of taking charge of small contracts. For (d), should have Intermediate or Final executing working drawings. Lodging allowance and moval expenses may be paid to a married man. Apply on form obtainable from County Architect, 123, London Road, Leicester, TC7478

COUNTY BOROLOGH OF GREAT YARMOUTH EDUCATION COMMITTEE SCHOOLS ARCHITECT'S DEPARTMENT Applications are invited from Associate Mem-bers of the R.I.R.A. for the appointment of a SENIOR ASSISTANT ARCHITECT at a salary within A.P.T. IV (21,140 to 21,310) to work on in-teresting and progressive programme. Previous experience with Local Government not essential.

essential. Housing accommodation will be available to the successful candidate if married and assistance with removal expenses may be made in suitable

cases. Full details of present and past appointments. age, qualifications and experience, together with the names of two referees should reach the Schools Architect, 22 Euston Road, Great Yarmouth, by lith August, 1961. D. G. FARROW

D. G. FARROW, Chief Education Officer.

22 Euston Road, Great Yarmouth, Norfolk.

 Norfolk.
 S8639

 BOROUGH ENGINEER AND SURVEYORS DEPARTMENT
 DEPARTMENT

 Applications are invited for the following appointments: ASSISTANT ARCHITECT-Grade A.P.T. IV (£140-£1,310). Applicants should be Associates of the R.I.B.A.

 ARCHTECTURAL ASSISTANT-Grade A.P.T. II (£615-£960). Applicants should have passed the Intermediate R.I.B.A. examina-tion or its equivalent.

 Both appointments are subject to the provisions of the Local Government Superannuation Acts, 1937/1955. and to the passing of a medical examination, and will be terminable by one month's notice on either side.

 Housing accommodation will be made avail-able for successful applicants, if married, and the Coucil will pay one-half of the removed exmense incurred.

 Andictions in envelopes suitably endorsed, stating age, present and orevious appointments, running, qualifications and experience, logether with the names of two referees, to be delivered to the undersigned not later than 18th August. 1961.

 V. FORSHAW.
 to the

V. FORSHAW. Borough Engineer and Surveyor.

88774

Town Hall. Scarborough. July, 1961.

CITY OF NEW SARUM SENOR ASSISTANT ARCHITECT required in the City Engineer's Department. Salary Grade A.P. Applications must possess Final R.I.B.A. and have have a senter and the senter of the senter of the senter schemes, estate layouts and public buildings, and in the supervision and handling of contracts. The council has a large capital works pro-development area and the successful applicant in the supervision and handling of contracts. The council has a large capital works pro-development area and the successful applicant in the supervision and work of the architect's senter. Performable post. Medical examination required. Assistance with removal expresses. Car allowance Applications stating age, present and previous appontments with salaries, with the names of House, Burne Hill, Salisbury, by 19th August, bust, bust. GEO. RICHARDSON,

GEO. RICHARDSON

88646

88666 COUNTY BOROUGH OF WEST HAM Vacancies exist for a number of SENFOR ASSIS. TANT ARCHITECTS, J.N.C. Scale "A " £1,400-£1,565 p.a., and for an ARCHITECTURAL ASSISTANT, in the salary range £645-£1,140 p.a. (and London allowance), according to qualifica-tions and towards according to sub-

ASSISTANT, in the according to qualifica-tions and experience. An expanded programme of work, including numerous official buildings, Fire Stations, Primary and Secondary Schools, high density housing, and Town Centre Redevelopment Scheme, is on and hand

hand. Applications, with details of qualifications and experience (together with names of two referees), to be addressed to Thomas E. North, O.B.E., F.R.I.B.A., Dist.T.P., M.T.P.L. Borough Architect and Planning Officer, 70, West Ham Lane, Stratford. E.15.

Clerk of the County Council.

County Offices Sleaford, Lincs.

S8656 COVENTRY Applications are invited for the appointment of : SENIOR PLANNING OFFICER (REDEVELOPMENT) For redevelopment schemes including high ensity Urban Renewal, requiring enthusiastic rehited:

For redevelopment science, requiring enthusiastic architect. Planning qualification/housing experience addi-tional advantages. Salary Grade: A.P.T. V, £1,310-£1,480 or Scale "A." £1,350-£1,556, according to qualification/ experience. Post permanent and pensionable subject to satis-factory medical certificate. Housing accommoda-tion in approved circumstances or up to 95 per cent, advance for house purchase. Removal expenses loan, Five-day working week. Application forms from Department of Archi-tectare and Planning, Conncil House, returnable within 10 days of publication. STAINES URBAN DISTRICT COUNCIL

Approximate and Planning, Communication and Planning, Communication and Planning, Communication and SURVEYOR'S DEPARTMENT ARCHITECTURAL ASSISTANT, A.P.T. IV, e1.140–(1,310 plus London weighting. Applicants must have had a good experience in architectural design and building work under construction and should have passed the examination for associateship of the R.I.B.A. Application form may be obtained from the Engineer and Surveyor, Shortwood House, 240, London Road, Staines, and must be returned to him in suitably endorsed envelope, not later than 5 p.m. on Thursday, 10th August, 1961. F. EXTWISTLE, Clerk of the Council.

DENBIGHSHIRE COUNTY COUNCIL COUNTY ARCHITECTS DEPARTMENT Applications are invited for the following posts the above Department:-(a) ARCHITECTURAL ASSISTANT - A.P.T. Grades IV/V (Salary £1,140-£1,480 per

(b) TWO ARCHITECTURAL ASSISTANTS-A.P.T. Grades II/III (Salary £815-£1,140

per annum). Appointment (a) will be to a newly recon-stituted Area Architect's Office at ABERGELE and Appointments (b) will be to the Head Office at WREXHAM. Contribution made towards removal expenses of successful applicants and consideration given to the payment of lodging allowance to married Officers annum)

Officers. Application forms and further particulars obtainable from me. Completed forms to be returned by 19th August, 1961. W. E. BUFTON. Clerk of the County Council.

County Offices. Ruthin 8738

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THE URBAN DISTRICT COUNCIL OF ESTON (a) APPOINTMENT OF CHIEF ARCHITEC TURAL ASSISTANT, A.P.T. IV (£1,140-(1,110-1))

TURAL ASSISTANT, A.P.T. IV (£1,140-(£1,310).
 (b) APPOINTMENT OF QUANTITY SURVEY. ING ASSISTANT, A.P.T. III (£960-£1,46).
 Applications are invited for the above appointments.
 Applicatis for (a) should have experience in housing work and should hold an appropriate architectural qualification. Applicants for (b) should have experience on housing schemes, be able to prepare bills of quantities, undertake the measurement of work on site and the preparation of interim certificates and final accounts, and pre-ference will be given to candidates with an appro-priate qualification. Both appointments will be subject to one month's notice on either side, the National Scheme of Conditions of Service, the Station. Housing accommodation will be made avail-able if required. Applications stating age, train-ing, qualifications and experience, together with the names of two referees, are to be sent to me by 4th September, 1951. N. C. HARRISON, A.M.I.C.E., M.I.Mun.E., Engineer and Surveyor.
 Town Hall.

Town Hall, Fabian Road, South Bank, Middlesbrough.

Middlesprougn. 8070 ETON RURAL DISTRICT COUNCIL APPOINTMENT OF SURVEYING ASSISTANT ENGINEER AND SURVEYOR'S DEPARTMENT Applications are invited for the above appoint-ment at a salary within Grade A.P.T. II (£815-1960 per annum). Housing accommodation will be available to the person appointed, if necessary, and the Council normally assist with removal expenses. expenses

expenses. Applicants, who should be of Intermediate R.I.C.S. or R.I.B.A. standard, should be generally experienced in housing estate development and have specialised knowledge of house design and detailing. The appointment which will be subject to the Council's Conditions of Service and the provisions of the Local Government Superannuation Acts may be terminated by one month's notice either side.

may

side. Applications stating age, education, experience and giving the names and addresses of two techni-cal referees, should be sent to the undersigned to arrive not ' ter than the 11th Angust, 1961 D. P. HARRISON, Council Officer Clerk to the Council

88716

8676

Conneil Offices. Windsor Road, Slough, Bucks.

Slouch. Bucks. S8716 AIR MINISTRY require SENIOR WORKERS UP in Quantities Division in London. Salary, which is dependent on age, qual. and exp.-ranges from £1.043 to £1.188 (max.) on annual incremental basis. Five-day week with three weeks three days naid leave a year initially. Some promotion and pension prospects. Quals.: Applicants, who must be natural born British subjects, should hold O.N.C. or C. & G. (Quanti-ties) or equiv, and be fully commetent to work up entire bills of quantities. Financial assi-tance and time off allowed for recognised courses of study leading to higher quals. Forms from Manager (PE 519). Ministry of Labour, Pro-fessional & Executive Register. Atlantic Honse, Farringdon Street, London, E.C.4. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only applicants selected for interview will be advised. S8144

ASSISTANT ARCHITECT required by HAYES & HARLINGTON U.D.C. Salary within Grade A.P.T. IV i.e. 41,140-41,310 p.a. plus appropriate London weighting Preference given to finalists of the R.I.B.A. Successful candidate must be capable of preparing sketch designs, full working drawings, specifications, supervision of building contracts, etc. Housing accommodation provided if necessary. Five-day week. Further particulars and conditions of service and form of application obtainable from the undersigned, which when completed must be returned by 14th August, 1961. *GEORGE HOOPER*. Toyn Hall

employ. The appointment, which is superannuable, will be made in accordance with the National Joint Conditions of Service, and is terminable by one month's notice on either side. Written applications to be received by the undersigned not later than 16th August, 1961, accompanied by three recent testimonials. State experience, qualifications, etc. HENRY J. DICKMAN, Clerk of the Council.

8/10 Picton Place, Haverfordwest Pembrokeshire.

S8718

 Pembrokeshire.
 88718

 BOROUGH OF WREXHAM
 BOROUGH OF WREXHAM

 ENGINEER AND SURVEYOR'S DEPARTMENT ARCHITECTURAL ASSISTANT'S
 Applications are invited for

 1. ASSISTANT ARCHITECT. Salary within the range of A.P.T. III (2960-21,140 p.a.).
 2. ASSISTANT ARCHITECT. Salary within the range of A.P.T. III (2645-2815 p.a.).

 Housing accommodation for one and two and car allowance for one offered.
 Further particulars from the Borough Surveyor.

 Closing date for applications Monday, 21st August, 1961.
 1961.

PHILIP J. WALTERS, Town Clerk.

Guildhall

Wrexham. 18th July, 1961.

18th July, 1961. S8713 METROPOLITAN BOROUGH OF GREENWICH APPOINTMENT OF PRINCIPAL ARCHITECTURAL ASSISTANT Applications are invited for the appointment of a Principal Architectural Assistant in the Borough Engineer and Surveyor's Department. Salary grade A.P.T. V (£1,355-£1,525 per annum, includ-ing London weighting). Commencing salary in accordance with qualifications and experience. Candidates should be Rejistered Architects, preferably Associates of the R.I.B.A., with ex-perience in honsing and other manicipal projects. Application forms, obtainable from the Borough Engineer and Surveyor, Town Hall, Greenwich High Road, S.E.Io, are to be returned to him by non on Friday, August 18th. BOREER GORDON'S TECHNICAL COLLEGE.

Initial obscings with regard to both appoint-ments will be in accordance with qualifications and experience. The College is recognised for purposes of exemption from the R.I.B.A. Intermediate and Final Examinations. Candidates should possess the Degree or Diploma of a recognised School of Architecture and must be Associates of the Royal Institute of British Architects. Further contriculars and forms of application may be obtained from the undersigned, to whom completed applications should be returned on or before 22nd August, 1961. A. C. WEST, Director

A. C. WEST. Director

GLENROTHES DEVELOPMENT CORPORATION ARCHITECT (A.R.I.B.A.) required for a variety of work including Housing, Industrial, Shopping and Commercial Buildings. The vacancy offers an excellent opportunity to an Architect with imagination and enthusiasm. Salary up to £1,480 per annum according to experience.

exterience. House to rent available. Applications to Secretary and Legal Adviser, Glenrothes Development Corporation, Glenrothes, 8730

BOROUGH OF WALLSEND lications are invited for the following atments to the staff of the Borough Sur-Applicati

appointments to the staff of the Borough Sur-veyor. ARCHITECTURAL ASSISTANT. Salary will be within Grade A.P.T. III accord-ing to qualifications and experience. Candidates should have received appropriate training and have at least five years' experience. The Council arg prepared to assist with housing accommodation for married applicants and removal expenses will be paid. ENGINEERING ASSISTANT. Salary in accordance with A.P.T. Grades I or II according to qualifications and experience. Candidates should have received appropriate training and experience. together with the names of two referees, should reach me by Monday, 21st August. LOUX STOREER August

JOHN STOKER. Town Clerk.

 21st August.
 JOHN STOKER. Town Clerk.

 Town Clerk.
 Town Clerk.

 Town Yalsend.
 S8736

 OUANTITY SURVEYORS-OVERNEAS
 GUANTITY SURVEYORS-OVERNEAS

 AR MINISTRY require chartered Quantity surveyors for service initially in overseas areas to cation.
 Saic salary according to age and experience tranging from £961 at 25 to £1,296 at 34 or over to £1,470 max.). An increase of £95 p.a. (within max. of scale) after 2 years' satisfactory service subject to corporate membership of R.I.C.S. being held. In addition Tax Free foreign service allowance varying according to location, marital status. etc. e.g. tofal emoluments at 02,606 -2,361 for maried ma.

 Mamula Libéd-2,361 for maried ma.
 Mathematication arrangements. Five-day week, and annual leave initially four weeks and the opportunities for further tors overseas. Appointments are non-pensionable but the opportunities for further tors for years and promession prospects.

 Mamily of Labour. Technical and Scientific four to be followed by duties for further tors overseas. Appointments are non-pensionable but years and promotion and pension prospects.

 Mainstry of Labour. Technical and Scientific four to the followed by duties for further tors overseas. Appointments are non-pensionable but years and the promotion and pension prospects.

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Register (K), 26, King Street, London, S. W., auding J. 79/10/A. S7914 BOROUGH OF KIDDERMINSTER BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT Applications are invited for the position of ASSISTANT ARCHITECT, Grade III (2960-EL140). Applicants should have passed the Intermediate Examination of the R.I.B.A. and preferably part of the R.I.B.A. Final Examina-tion. This appointment will be subject to the Local Government Superannuation Acts and the National Scheme of Conditions of Service. Applications stating qualifications and experi-ence, accompanied by the name of two referees, should be delivered to the Borough Engineer and Surveyor, 110, Mill Street, Kidderminster, not later than 26th Angust, 1961. Town Hall

Town Hall. Kidderminster. 24th July, 1961.

Kidderminster. 24th July, 1961. 88776 COUNTY BOROUGH OF READING Applications are invited for the following posts: (a) ASSISTANT ARCHITECTS, A.P.T. III/IV (4960-e1.310); (b) ARCHITECTURAL ASSISTANTS, A.P.T. 1 (c645-e815), Commencing salaries for all posts according to qualifications and experience. Applicants for Post (a) to have passed parts I and II R.I.B.A., Final or Special Final Examination or equivalent, and have had at least five years' experience. Eligibility for A.P.T. IV dependent on two years' service in Local Government in post requiring abvect quali-fication. Housing accommodation will be con-sidered. Applicants for posts (a) to have ing medical examination and to N.J.C. Condi-tions of Service. Applications in writing in appropriately-endorsed envelope, stating age, qualifications and experience, together with names and addresses of two referees to the Borough Architect. P.O. Box 17, Town Hall, Reading, not later than August 12th, 1961. 8777 HORNCHURCH URBAN DISTRICT COUNCIL Pannation. 128000 Area. 20130 acres Reading, not later than August 12th, 1961, 8777 HORNCHURCH URBAN DISTRICT COUNCIL Population: 128,000, Area: 20,308 acres, APPOINTMENT OF TWO ARCHITECTURAL Salary within A.P.T. III (2960-£1,140 p.a.) plus equivalent to London "weighting," Interesting work in hand on multi-storey flats, new Civic Centre, public buildings, housing estates, etc. Five-day week. Pleasant working conditions in new offices, and the provision of heavier

in new offices. Consideration given to provision of housing

accommodation. Particulars and forms for these appointments from the undersigned. Closing date noon on 11th August, 1961.

P. L. COX. Clerk of the Council. Council Offices. Billet Lane. Hornchurch.

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P. D. WADSWORTH. Town Clerk.

The Council House. Dudley, Wores.

£1.300 per annum. (b) ASSISTANT ARCHITECT (new post). Salary £1.350 per annum. Superannuation—J.I.C. Conditions. House to let

I require annuarion - 5.1.C. Conditions. House to let i required as containing full particulars of age, qualifications and experience, with names of two referees, to Burgh Architect, 56, Brandon Street, Hamilton, by 14th August, 1961. 8744

Would you like to increase your knowledge of Civil, Structural, Electrical, Heating & Ventilating Engineering and Quantity Surveying by working alongside members of these professions. We can offer you this opportunity in our organisation, working on jobs which are international in scope and widely varied within the industrial field.

offices within easy reach of London Bridge and Waterloo luncheon vouchers voluntary contribution superannuation scheme 5 day week good salaries based on ability

If you are interested in joining us please write to

W. S. A. WILLIAMS, DIPL. ARCH. A.R.I.B.A. FREDERICK S. SNOW & PARTNERS ROSS HOUSE 144, SOUTHWARK STREET S.E.1



THE ARCHITECTS' JOURNAL for August 2, 1961

SENIOR ARCHITECTURAL ASSISTANT

required in the **Development Section** of a firm of Building and Civil Engineering Contractors in the West End of London. The successful applicant will be required to assist in the Architectural Department engaged upon the preparation of designs and working drawings for housing and flat projects.

Commencing salary £1,200 p.a. according to ability and experience, plus half-yearly bonus. The position is progressive and offers many opportunities of advancement to anyone who shows ability and initiative.

Also vacancies for Junior and Intermediate Assistants

Apply in writing to:-

JAMES MILLER & PARTNERS LTD. 7, Suffolk Street · Pall Mall · London, S.W.1



require

ARCHITECTURAL ASSISTANTS

age 25-40, commencing salary at least £1,000 per annum. Applicants should have a minimum qualification of Inter R.I.B.A., H.N.C. Building or equivalent and several years' experience in industrial building work.

JUNIOR ARCHITECTURAL ASSISTANTS

age 21-23, having a minimum of 12 months experience in a professional office. Commencing salary not less than £615 per annum at 21.

These appointments are permanent and pensionable. Housing assistance given in appropriate cases. 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, Michelin Tyre Co. Ltd., Stoke-on-Trent, Quoting Ref. B/634E/AJ.

91

COUNTY BOROUGH OF CROYDON plications are invited for the follo following an

the Consider Schemer and varies building programme. Grades A.P.T. HI/IV: £1,065-E1,355. Good general training necessary. Intermediate qualification not essential. The commencing salary in grade will be fixed according to qualifications and experience of the successful applicant. Pensionable posts. Five-day week. Assistance with housing accommodation will be considered. The Section (H. Thorley, A. R.I.B.A., Principal Architect) is organised on a group basis. Application forms from the Borough businesses application forms from the Borough businesses. Application forms from the Borough businesses and alterations and new works. Applicants should have thorough knowledge of building construction, industrial building surveys, and be capable of preparing site plans and a inch scale drawings. The salary range is £755-£950 per annum. Applications should be addressed to Divisional Staff Officer, British Road Services Limited. North Western Division, 47. Corporation Street, Manchester, 4, and should state age, qualifications and experience and give harms of two referees.

referees

tions and experience and give names of two referees. TARSHALTON URBAN DISTRICT COUNCIL ENGINEER & SURVEYOR'S DEPARTMENT ASSISTANT ARCHIFEUT (A.P.T. IV) Salary within range £1,165-£1,355 according to experience. Candidates must have passed Final R.I.B.A. or equivalent. Experience offered on design and supervision of housing, public buildings, etc., in large Urban District within the Greater London area. (Population approx. 60,000.) Car allowance payable, five-day week. Good working conditions. Staff canteen. Application forms obtainable from the under-signed to be returned by 21st August. Canvass-ing will disqualify. Car Alberta Convertioned Staff Canvers. Car Alberta Convertioned Staff Canteen. Application forms obtainable from the under-signed to be returned by 21st August. Canvass-ing will disqualify. Car Alberta Convert. Cark of the Council. District Council Offices.

District Council Offices, The Grove, Carshalton, Surrey. 8762

Carshalton, surrey. 8762 CENTRAL ELECTRICITY GENERATING BOARD SOUTH EASTERN REGION NORTH THAMES DIVISION Applications are invited for the following permanent Superannaable posts in the GENERATION DEPARTMENT (CONSTRUC-TION SECTION) at Cockfosters (NORTH LONDON) SENIOR CIVIL ENGINEERING AND BUILDING DRAIGUTSWANN

LONDON: CIVIL ENGINEERING AND BUILDING DRAUGHTSMAN (S.V. No. 1482) Salary range £1,055-£1,295 per annum. Applicants should have suitable technical train-ing and be thoroughly conversant with the design and detailing of civil and building works, including R.C. Structures and Foundations. A knowledge of Structural Steelwork will be an advantage.

knowledge of Structural Steerwork and advantage. JUNIOR CIVIL ENGINEERING AND BUILDING DRAUGHTSMAN (S.V. No. 1440 er annum. Applicants should have a knowledge of civil engineering and building construction and have had suitable technical training. The work for all posts is associated with H.V. Substations, Overhead Lines and Generating Stations.

Stations, Applications, quoting the appropriate reference S.V. No., stating age, qualifications, experience and present position, should be sent to the Per-sonnel Officer, Central Electricity Generating Board, South Eastern Region, North Thames Division, West Farm Place, Chalk Lane, Cock-fosters, Barnet, Herts., to arrive not later than 12th August, 1961.

fosters, Barnet, Herts., to arrive not later than 12th August. 1961.
 ROROUGH OF MANSFIELD BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT
 Applications are invited for the following appointments in the Architectural Section of the Borough Engineer and Surveyor's Department:---(a) ARCHITECTURAL ASSISTANT – Grades III/IV (9600–61.310 per annum);
 (b) GENERAL ARCHITECTURAL ASSISTANT – Grade A. P.T. I (1645–6916 per annum).
 (c) JUNIOR ARCHITECTURAL ASSISTANT – Grade A. P.T. I (1645–6915 per annum).
 Applicants for appointment (a) must be Cor-porate Members of the R.I.B.A. and for (b) must he caccessful applicant for appointment (c) details of training and experience should be stated. A bise on service fenance may the sufate, train-ing past and present appointment (c).
 Applications, stating age, marital state, train-ing past and present appointment (c). Applications, stating age, marital state, train-ing past and present to the Borough Engineer and experience, together with the names of three effects, should be sent to the Borough Engineer and Experience together with the names of three effects, should be sent to the Borough Engineer and State The State Area and the stated. Applications, stating age, marital state, train-ting past and present appointment (c). Applications, stating age, marital state, train-terefore the scele the with the names of three effects, should be sent to the Borough Engineer and State applicant (c) Heat State Area Applications, stating age, marital state, train-and experience together with the names of three effects when the sent to the Borough Engineer and State applicant for Barbon Mansfell Notis. to Define the scence applicant to the State Arbon Arbon

A. C. SHEPHERD. Town Clerk.

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Carr Bank. Mansfield

CITY OF BIRMINGHAM

CITY OF BIRMINGHAM Applications are invited from enthusiastic and inaginative fully qualified ARCHITECTS for a number of new appointments on the SENIOR OFFICERS' SCALE "C"-21,560 × 270 (3) × 455 (1)-41,825 per annum-to take part in a large programme of work being carried out by the CITY ARCHITECTS DEPARTMENT. The Architects appointed will be primarily con-cerned with Comprehensive Housing Development involving multi-storey fasts or with educational projects, Schools, etc. Commencing salaries within the Scale will be according to capabilities and experience. Pension Scheme. Fiveday week. Medical examination.

Pension Sexamination.

Applications stating age, present position and salary, qualifications, experience and names of two referees, to reach the undersigned by 25th August, 1961.

A. G. SHEPPARD FIDLER, City Architect.

88798

Baskerville House, Civic Centre, Birmingham, 1.

COUNTY ROROUGH OF HALIFAX BOROUGH ENGINEER'S DEPARTMENT Applications are invited for the appointment of ARCHITECTURAL ASSISTANT, Grade A.P.T. I

(2645-0215). Applications, giving details in relation to age, education, training, qualifications, present and past appointments (with dates and salaries) and experience, along with the names of two persons to whom reference may be made, should be delivered to the Borough Engineer, Crossley Street, Halifax, not later than Monday, 14th August 1961 August, 1961

the seconding to experience of the successful according to experience of the successful and a salary, and details of qualifications and experi-ence, together with the names of two persons to whom reference may be made, should reach the undersigned not later than 25th August 1961. A. G. SHEPPARD FIDLER. *City Architect.*

Baskerville House. Civic Centre. Birmingham.

Civic Centre. Birmingham, L. 88797 STAFFORDSHIRE COUNTY COUNCIL COUNTY ARCHITECTS DEPARTMENT VACANCIES ARCHITECTURAL, ASSISTANTS. 6815–6960. Intermediate R.I.B.A. required ARCHITECTURAL DRAUGHTSMEN, 6555– 6625. Four years' experience in a similar capacity is required expenses, etc. The Council has a scheme for loans to employees wishing to purchase their own houses. Forms of application from P. Woodcock. Closing date 16th August. 1961. T. H. EVANS. Clerk of the Council 2005

COUNTY BOROUGH OF ROTHERHAM ARCHITECTS Applications are invited for the following

Applications are invited for the following appointments:-(a) SENIOR ASSISTANT ARCHITECT-A.P.T. V (2130-c1480). (b) ARCHITECTURAL ASSISTANTS-A.P.T. III/IV (£960-c1,310). The department has a varied and expanding programme of architectural work including schools and large central redevelopment areas. Candidates for (a) are required to be Associate Members of the R.I.B.A. and with a good general experience in design and construction: (b) are required to have passed Parts I and II of the R.I.B.A. Final Examination. The commencing salary in the grades will be according to canabilities and experience. Housing accommodation will be available if necessary.

Housing accommodation will be available in necessary. Applications to be endorsed "ARCHITECTS," stating are, qualifications and details of experi-ence, together with names of two referees, should be received by me not later than Friday, 12th August, 1961. and decalls e received by me ucust, 1961. Canvassing will disqualify. JOHN S. WALL. Town Clerk.

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Municipal Offices. Rotherham July, 1961.

EAST RIDING OF YORKSHIRE COUNTY COUNCIL Applications are invited for the appointment of a CHIEF QUANTITY SURVEYOR on the staff of the County Architet. The salary will be in accordance with Scale "A" (£1,340be in £1.565)

Applicants must be members of the Royal Applicants must be members of the Royal Institution of Chartered Surveyors and have had wide experience in the preparation of estimates, bills of quantities, cost analysis, adjustment of final accounts and other work incidental to such an appointment, including the control of staff. Applications, giving particulars of age, past and present appointments with salaries, details of experience, together with the names of three referees, should be sent to the County Architect, County Hail, Beverley, not later than Thursday, Jist August, 1961. County Hall, Ber 31st August, 1961.

THOMAS STEPHENSON, Clerk of the County Council.

- ARMAGH URBAN DISTRICT COUNCIL (a) ARCHITECT to the above Council: £1.210 × #45 to £1.525 (under review).
 (b) ARCHITECT IRAL ASSISTANT: A.P.T. III (a), £960 to £1.055.
 Applications are invited for the above posts in a new Department to be set up by the Council. Post (a)-Candidates must be Associate Mem-bers of the R.I.B.A. and preference will be given to those holding A.M.T.P.I. Commencing salary within the scale accord-ing to qualifications and experience. The appointment is subject to the approval of the Ministry of Health, and Local Govern-ment.

the Ministry of Arabication and the passed the Intermediate Examination of the R.I.B.A. Commencing salary according to experience. Consideration will be given to the allocation f housing accommodation to successful appli-

of nousing accommunation of a context cants. Other qualifications being equal, preference will be given to Ex-Servicemen. Forms of application and Conditions of Appoint-ment can be obtained from the undersigned to whom completed forms should be returned not later than noon on Monday, 21st August, 1961. Dated this 26th day of July, 1961. V. M. CONRAN. Town Clerk.

Clerk

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City Hall Armagh.

CORBY. Northants.

Shirehall. Shrewsbury

 Northants.
 8786

 SALOP COUNTY COUNCIL COUNTY PLANNING DEPARTMENT
 (a) ASSISTANT COUNTY PLANNING OFFICER, Scale B (£1,455—£1,670), in charge of Development Plan Section, Applicantis must be charlered Town Planners with first class experi-ence in Development Plan work (including Town Maps, central area and other redevelopment schemes). An architectural qualification will be an additional advantage.

 (b) SENIOR PLANNING ASSISTANT, A.P.T. V (£1,310—£1,480), in Development Plan Section. X.M.T.P.I. and good experience.

 M.T.P.I. and good experience.

 M.T.B.S. Conditions of service: medical examina-tallowance.

 Mathematication available:

 G.C. GODBER

 M.T.P.L. and good experience.

 M.T.B. Arewsbury, not later than the 2nd Sep-tember. 1961.

 G.C. GODBER

G. C. GODBER. Clerk of the County Council. Shirehall, BOROUGH OF EDMONTON BOROUGH ARCHITECT'S DEPARTMENT TOWN PLANNING ASSISTATY Applications are invited from fully qualified persons for the appointment of a Town Planning salary within Grade A.P.t. IV-6.1485-61.355 appointed will be engaged primarily on develop-ing the comprehensive redevelopment of the main persons do business area. The Council are presented of grant loans up to 100 per cent. of the comprehensive redevelopment of the main persons to facilitate house purchase. Marchitect, Town Hall, Edmonton, to be development of the salary of the salary Marchitect Schemer Schemer Schemer Schemer Marchitect Schemer Schemer Schemer Schemer Schemer Marchitect Schemer Schemer Schemer Schemer Schemer Schemer Marchitect Schemer Sc

BRACKNELL NEW TOWN (MARK II) BERKSHIRE

Applications are invited from

ARCHITECTS, ARCHITECT/PLANNERS and ASSISTANTS

for posts under the direction of the Chief Architect, E. A. Ferriby, B. Arch., A.R.I.B.A., A.M.T.P.I., within the following grades:—

> A.P.T. Grade I, £645-£815 p.a. A.P.T. Grade IV, £1,140-£1,310 p.a. A.P.T. Grade VI, £1,305-£1,565 p.a.

- The work of the Corporation has just been extended to increase the target of 25,000 population (at present 21,000) by approximately a further 29,000. This will include large scale housing and flat development for general and upper income groups, neighbourhood shops, community centres, factories, laboratories, warehouses, and Town Centre shops and offices, etc.
- Individuals can be placed according to their special interests and experience.
- Progressive design opportunities exist in accordance with ability.
- Promotion by merit. Annual salary reviews within grades.
- Good landscaped housing accommodation available to rent. Houses also built for sale.
- Five-day week and generous annual leave (previous holiday arrangements respected).
- Superannuation scheme transferable with Local Government.
- Pleasant offices and conditions.
- Car allowances when duties necessitate.
- Interviews Wednesday 16th August for those shortlisted.

Applications stating grade applied for, age, education, qualifications, experience, details of present and former employment and salaries, together with the names and addresses of two referees must reach the General Manager (A), Bracknell Development Corporation, Farley Hall, Bracknell, Berks, not later than 8th August 1961.

SENIOR ARCHITECTS

required in large private practice. Successful Applicants will be responsible for new major projects, under Partner direction. Salary will be by arrangement but minimum of



per annum

Knowledge of Hospital Planning an advantage, but not essential

> Apply in confidence giving details of age experience etc to Box No:-S8726

IMPERIAL CHEMICAL INDUSTRIES LIMITED (Plastics Division)

Has a vacancy for a STRUCTURAL/ CIVIL ENGINEERING DESIGN DRAUGHTSMAN at Welwyn Garden City. Applicants should be of O.N.C. or, preferably H.N.C. standard and have experience in the design of reinforced concrete and structural steel work for industrial buildings, chemical plant structure and office buildings.

Five day, 37½ hour weak.

Pension and Profit Sharing Schemes in operation.

Apply briefly, quoting reference No. 5130AJ. to the

Personnel Manager, IMPERIAL CHEMICAL INDUSTRIES LIMITED Plastics Division, Bessemer Road · Welwyn Garden City · Herts.

ARCHITECTS

salary scale

$\pounds 800 - \pounds 1000 - \pounds 1500$

according to experience and ability. Senior appointments eligible to partake in Bonus scheme. Five day week with Three weeks holiday per annum. Pension scheme for Senior Staff in addition to Government G.P. scheme. Vacancies at Cardiff, Swansea and Shrewsbury. Write please, giving full information re age, qualifications, experience, appointments held etc., to the

Secretary

Sir Percy Thomas & Son 10, Cathedral Road Cardiff.

COSTAIN

Assistant ARCHITECTS

Richard Costain (Construction) Ltd., are carrying out a large and varied programme of commercial and industrial development work throughout the U.K. Much of this is designed in our own Architect's Department, in which we now have available two additional appointments for ASSISTANT ARCHITECT Starting salaries will be in the range of f900-f1 300 n a Starting salaries will be in the range of £900-£1,300 p.a. assessed on previous experience.

These posts will particularly interest young men who are qualified or near qualifying, and who wish to broaden their experience by having direct contact with staff engaged on all stages of construction—estimators, contract managers, planning staff and site engineers. In this way an Assistant Architect gets a thorough grounding in every aspect of design and supervision. Prospects are excellent for a progressive career with more senior positions frequently becoming available as the result of the steady expansion of the Costain Group.

Please write to

PERSONNEL MANAGER **III WESTMINSTER BRIDGE ROAD,** LONDON, S.E.I

Architectural Assistant

Architectural Assistant required in Company Architect's Department to work on an interesting industrial and commercial building programme. Good working conditions. Fares paid for evening classes. Five day week, pension scheme. Applicants with three years' office experience are asked to write giving particulars of age, experience and salary required to :---

Company Architect COATES BROTHERS & CO. LTD. ST. MARY CRAY, Nr. ORPINGTON. KENT

LEEDS REGIONAL HOSPITAL BOARD

(Regional Architect-P. B. Nash, A.R.I.B.A.)

In order to deal with a large capital programme spread ove the next 20 years the Regional Architect's Department has been expanded to carry out a proportion of this work. The work offers scope to architects with initiative and particularly those with an appreciation of contemporary architecture. The work to be carried out includes complete new hospitals as well as many associated buildings of wide variety. variety

Applications are invited for the under-mentioned appoint-

(a) Senior Assistant Architects -Salary-£1,300 × 60 (5)-£1.600

Candidates must possess the ability to handle contracts valued at £100,000 or more and experience of contemporary design is essential.

(b) Assistant Architects

-Salary-£905 x 35 (1) x 45 (6) x 50 (2)-£1,310 Candidates for the above appointments must be registered architects and associate members of th R.I.B.A.

(Qualified architects awaiting registration may be appointed as Architectural Assistant at a salary of £865 per annum.)

(c) Architectural Assistants

-Salary-£615 × 30 (8) × 35 (1)-£900

Candidates must have passed the intermediate Examination of the R.I.B.A.

Applications stating age, qualifications, previous experience and the names of two referees to the Secretary, Park Parade, Harrogate, by 18th August, 1961.

COREX NEW TOWN ASSISTANT ARCHITECTS There are vacancies for Assistant Architects within the department of the Chief Architect at salaries within Grade A.P.T. IV (£1,140-£1,310). The appointments offer exceptional experience and extensive development work will continue for many years. Housing is available and removal expenses will be paid. There is a Superannuation Scheme either under the conditions of the Local Government Sension Fund.

Pension Fund. Apply by Tuesday, 15th August, 1961, stating age, present appointment and salary, details of qualifications and experience and the names of

Mainfeations and experience and the na-wo referees, to— R, F. Brooks Grundy, General Manager, Corby Development Corporation, Spencer House, CORBY, Northants.

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1961

NORTHWICH RURAL DISTRICT COUNCIL Applications are invited for the appointment of ARCHITECTURAL ASSISTANT within A.P.T. Grade II, e315 to £960. Applicants should have experience in connec-tion with local authority housing work. The appointment is superannuable, subject to medical examination and will be terminable by one calendar month's notice in writing on either side.

one calendar month's notice in writing on either side. Housing accommodation will be made avail-able if required, and a car allowance as for an Essential User of a car not exceeding 10 h.p. will be made. Five-day week is in operation, Applicants must state in their application whether to their knowledge they are related to any member or senior officer of the Council. Canvassing will be a disqualification, Applications, stating age, qualifications, ex-perience and other particulars and giving the names of two referees, must reach the Clerk of the Council. Whitehall, Hartford, Northwich, Cheshire, not later than the first post on Wed-nesday, the 23rd August, 1961. W. F. CRAWFORD, Clerk of the Council.

Whitehall, Hartford, Northwich, Cheshire.

Cheshire. 5/85 BOROUGH OF SOUTHGATE BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT ARCHITECTURAL ASSISTANT Applications are invited for the following appointment in the Department of the Borough Engineer and Surveyor. Weiphting.

A.P.T. GRADE II, £815—£960 plus London Weighting.
 The post is established and superannuated and the starting salary will be fixed in accordance with qualifications and experience.
 Honsing accommodation will be available in suitable cases if required.
 Forms of application may be obtained from the Borough Engineer and Surveyor and should be returned to the undersigned not later than 12 noon on Monday, 21st August, 1961.
 Canvassing, directly or indirectly, will be a disqualification.
 GORDON H. TAYLOR.

GORDON H. TAYLOR. Town Clerk.

Town Hall. Palmers Green, London, N.13. August, 1961.

August, 1961. NORTH THAMES GAS BOARD An ARCHITECTURAL ASSISTANT is required in the Architectural Section of the Chief Engineer's Department at Westminster, S.W.1. Applicants should be suitably qualified and capable of preparing working drawings and speci-fications and supervising the work on contracts. Experience in design and planning of industrial buildings would be an advantage. Starting salary, depending on qualifications, will be within the range of 2665 to 21,050 per annum and the successful candidate will be required to joan the Staff Pension Scheme. Applications, stating age, qualifications and experience, should be sent to the Staff Con-troller, North Thames Gas Board, 39, Kensington Church Street, W.8, quoting reference AJ 1022.

COUNTY BOROUGH OF MERTHYR TYDFIL APPOINTMENT OF DEPUTY BOROUGH Applications are invited from Associates of the R.I.B.A. with appropriate experience for the above post, at a salary in accordance with a scale based on two-thirds of the Borough Architect's salary (i.e. two-thirds of £2,170 × £75 (4) to £2,470). Application forms may be obtained from the undersigned and must be returned by the 14th August, 1961. The appointment is subject to the provision

August, 1961. The appointment is subject to the provision of the Local Government Superannuation Acts and to the bassing of a medical examination and is terminable by three months' notice on either

de. Canvassing in any form will disqualify. T. S. EVANS. Town Clerk

Town Hall. Merthyr Tydfil. 24th July, 1961.

SCOTTISH SPECIAL HOUSING ASSOCIATION LTD. ARCHITECTURAL DIVISION APPOINTMENT OF ARCHITECT Applications are invited from qualified Archi-tects for the following appointment on the permanent staff.--ARCHITECT, Grade II-Salary Scale £895--£1.385

£1,385. The post is superannuable under the Local Government Superannuation Acts, and placing will be related to experience. The Association is a Government sponsored and financed body, providing houses and flats throughout Scotland as directed by the Secretary of State

throughout Scotland as directed by the Secretary of State. The Association has at present a large and interesting programme comprising a number of major housing projects, including central redevelopment in Glasgow and other towns, to-gether with an important programme of work in connection with Glasgow's "Overspill." Designs for mixed development layouts, including multi-storey blocks of flats up to 26-storeys in height, are being prepared, and cost analysis, techniques are being used in the preparation of drawings. The post advertised offers consider-able valuable experience and opportunities for persons interested in civic design, landscaping and three dimensional planning of urban developments.

e Headquarters of the Association are in burgh where housing accommodation could

devenue. The Headquarters ... Edinburgh where housing accommon. be provided if required. Application forms with full details of the appointment from Harold E. Buteux, A.R.I.B.A., A.M.T.P.I. A.R.I.A.S. Chief Technical Officer. Scottish Special Housing Association Ltd., 15/21. Palmerston Place. Edinburgh, 12. S8740 S87400 S87400 S87400 S87400 S87400 S87400 S87400 S87400

Palmerston Place. Edinburgh, 12. 88740 UNIVERSITY OF DURHAM Applications are invited for the post of READER IN BUILDING SCIENCE tenable in the Newcastle Division of the University. It is desirable that candidates should have a Science degree or a degree in Architecture, and relevant research experience (c2025) × 675-62.400 × 425-62.425 per year) with family allowance and membership of F.S.S.U. Further particulars can be obtained from the undersigned with whom apolications (12 copies) containing the names of not more than three referees should be lodged not later than 21st Sentember, 1961. (Candidates outside the British isles may submit one copy only.) DEPUTY REGISTRAR.

DEPUTY REGISTRAR.

University Office. 1A, Kensington Terrace, Newcastle upon Tyne, 2.

21.7.61. 58743

4878 LONDON COUNTY COUNCIL (PARKS DEPARTMENT) RUILDING SURVEYOR (A.R.I.C.S.) salary rising to 41,500; commencing according to ex-perience. Apoly Chief Officer (A1/J/2198/8), L.C.C., Parks Deot. County Hall, S.E.I. (Phone WAT 5000 ext. 8076.)

CHELMSFORD CORPORATION TOWN PLANNING OFFICER, J.N.C. lettered Grade A (£1,435 by two annual increments of £65 to £1,565) required in a progressive and rapidly growing County Town. Planning proposals in-clude central area redevelopment. Half abproved removal expenses; housing offered to married applicants, and car allowance. For further particulars write to Borough Engineer and Surveyor, Municipal Offices, Chelmsford, Closing date for applications, Tuesday, 29th August, 1961.

PUBLIC NOTICE

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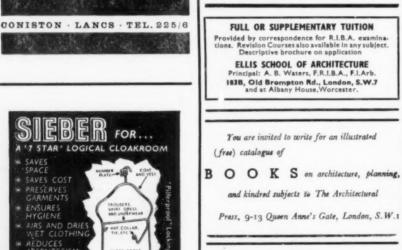
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"Oh, why won't they lay PHENCO floors?"

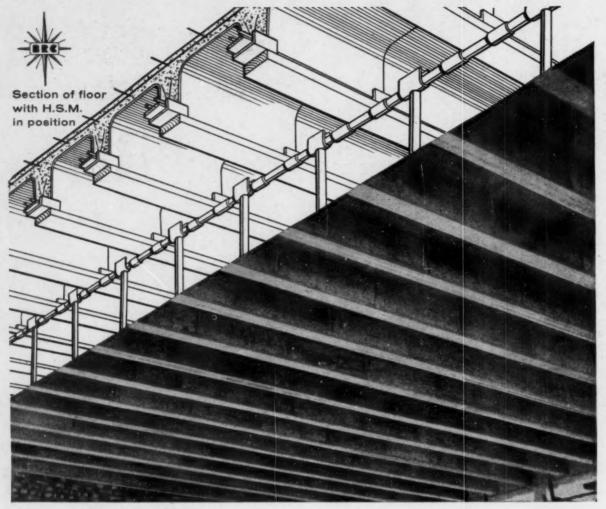
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Section of floor with moulds removed

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live loads are light and long spans with

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Printed in Great Britain for the Proprietors of "THE ARCHITECTS' JOURNAL." (The Architectural Press Ltd.), 9, 11 and 13, Queen Anne'a Gate, Westminster, S.W.1, by HARRISON & SONS LTD., by Appointment to Her Majesty The Queen, Printers, London, Hayes (Midsx), and High Wycombe, Editorial illustrations engraved by THE ENGRAVERS' GUILD LTD., Windsor House, 23/26, Cursitor Street, London, E.C.4.

