ARCHI



standard

contents

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

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CURRENT BUILDINGS HOUSING STATISTICS

Architectural Appointments Wanted Vacant and

No. 3074] [Vol. 119 ARCHITECTURAL 9, 11 and 13, Queen Anne's Gate Westminster, S. W. I. 'Phone: Whitehall 0611

TDA TPI TTF

WDC

ZDA

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

١	mentioned 1	the word LONDON is implicit in the address.
١	IGE IHVE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1. Sloane 8266 Institution of Heating and Ventilating Engineers. 49, Cadogan Square,
١	IIBD	Sloane 1601/3158 Incorporated Institute of British Decorators. Drayton House, Gordon Street,
١	ILA I of Arb	Institute of Landscape Architects. 12, Gower Street, W.C.1. Euston 2450 Museum 1783 Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street,
	IOB IR IRA ISE IWA LIDC	Strand, W.C.2. Temple Bar 4071 Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197/5176 Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3. Avenue 6851 Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172 Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128 Inland Waterways Association. 14, Great James' Street, W.C.2. Chancery 7718 Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.
	LMBA MARS	Whitehall 7264/4175 London Master Builders' Association. 47, Bedford Square, W.C.I. Museum 3891 Modern Architectural Research Group (English Branch of CIAM). Secretary:
	MOA MOE MOH MOHLG MOLNS MOS MOT MOW NAMMC	Gontran Goulden, Building Centre, 26, Store Street, W.C.1. Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. Ministry of Education. Curzon Street House, Curzon Street, W.I. Ministry of Health. 23, Savile Row, W.I. Ministry of Housing and Local Government. Whitehall, S.W.1. Ministry of Labour and National Service, 8, St. James' Square, S.W.1. Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. Ministry of Transport. Berkeley Square House, Berkeley Square, W.I. Mayfair 9494 Ministry of Works. Lambeth Bridge House, S.E.1. Natural Asphalte Mine-Owners and Manufacturers Council. 94-98, Petty France, S.W.1. Museum 5400 Whitehall 3400 Regent 8411 Whitehall 4300 Regent 8411 Whitehall 6200 Regent 8411 Whitehall 4300 Regent 8411 Whitehall 4300
	NAS NBR NCBMP NFBTE	National Association of Shopfitters. 9, Victoria Street, S.W.1. Abbey 4813 National Buildings Record. 37, Onslow Gardens, S.W.7. Kensington 8161 National Council of Building Material Producers, 10, Princes St., S.W.1. Abbey 5111 National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham 4041/4054
	NFBTO	National Federation of Building Trades Operatives. Federal House,
	NFHS NHBRC	Cedars Road, Clapham, S.W.4. Macaulay 4451 National Federation of Housing Societies. 13, Suffolk St., S.W.1. Whitehall 1693 National House Builders Registration Council. 82, New Cavendish Street, W.1.
	NPL NSA NSAS	National Physical Laboratory. Head Office, Teddington. National Sawmilling Association. 14, New Bridge Street, E.C.4. National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1. Abbey 1359
	NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1. Whitehall 0211
	PEP RCA RIAS	Political and Economic Planning. 16, Queen Anne's Gate, S.W.I. Whitehall 7245 Reinforced Concrete Association. 94, Petty France, S.W.I. Abbey 4504 Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. Edinburgh 20396
*	RIBA RICS	Royal Institute of British Architects. 66, Portland Place, W.1. Langham 5721 Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1. Whitehall 5322/9242
3	RFAC RS RSA RSI RIB SBPM	Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1. Whitehall 3935 Royal Society. Burlington House, Piccadilly, W.1. Regent 3335 Royal Society of Arts. 6, John Adam Street, W.C.2. Trafalgar 2366 Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1. Sloane 5134 Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. Wimbledon 5101 Society of British Paint Manufacturers. Grosvenor Gardens House,
t	SCR	Grosvenor Gardens, S.W.1. Victoria 2186 Society for Cultural Relations with the USSR, 14, Kensington Square, London,
	SE SFMA	W.8. Western 1571 Society of Engineers. 17, Victoria Street, Westminster, S.W.1. Abbey 7244 School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3. Mansion House 3921
)	SIA SIA SNHTPC	Structural Insulation Association. 32, Queen Anne Street, W.1. Langham 7616 Society of Industrial Artists. 7, Woburn Square, W.C.1. Langham 1984
S	SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.
,	TCPA	Town and Country Planning Association. 28, King Street, Covent Garden,

Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2. Temple Bar 5006

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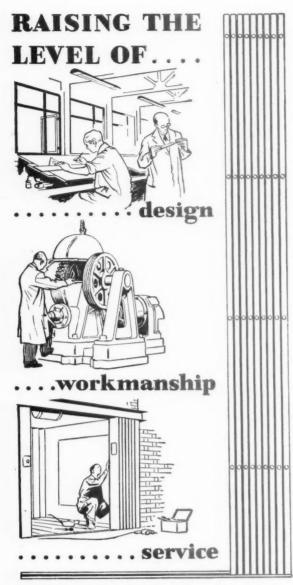
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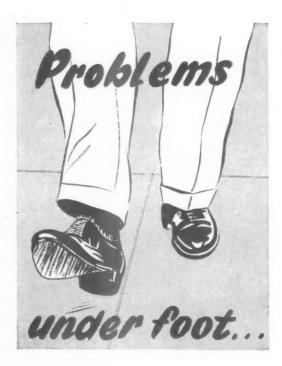
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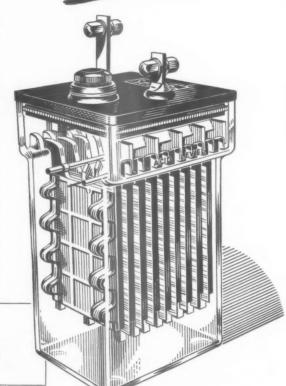


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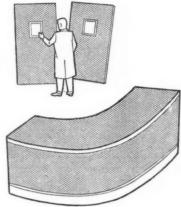
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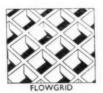
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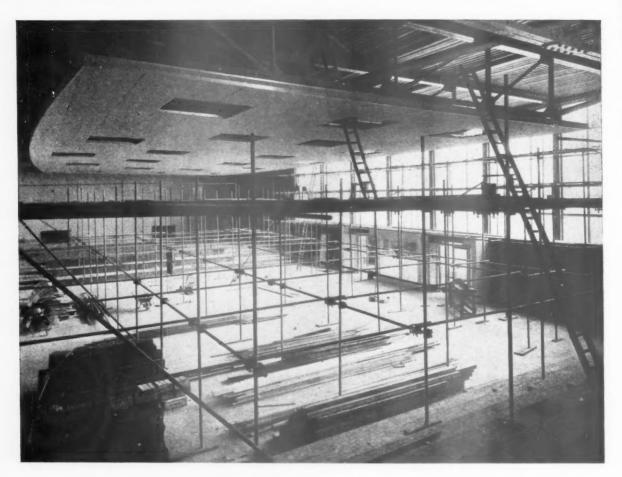
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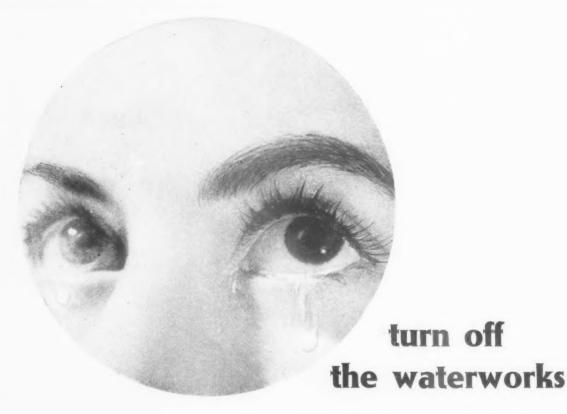
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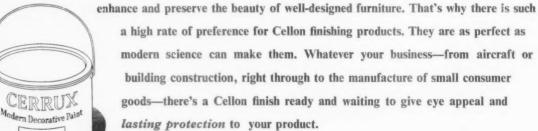
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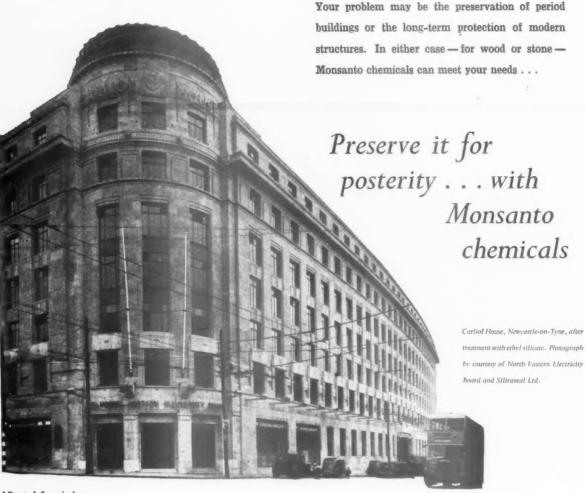
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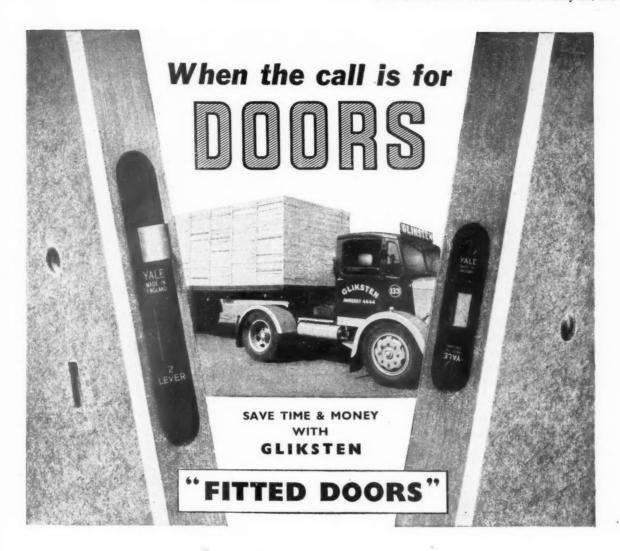




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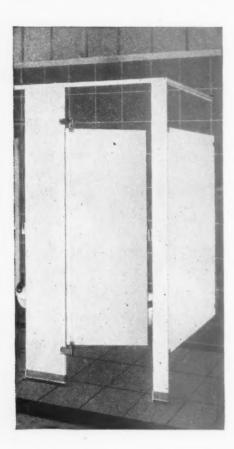
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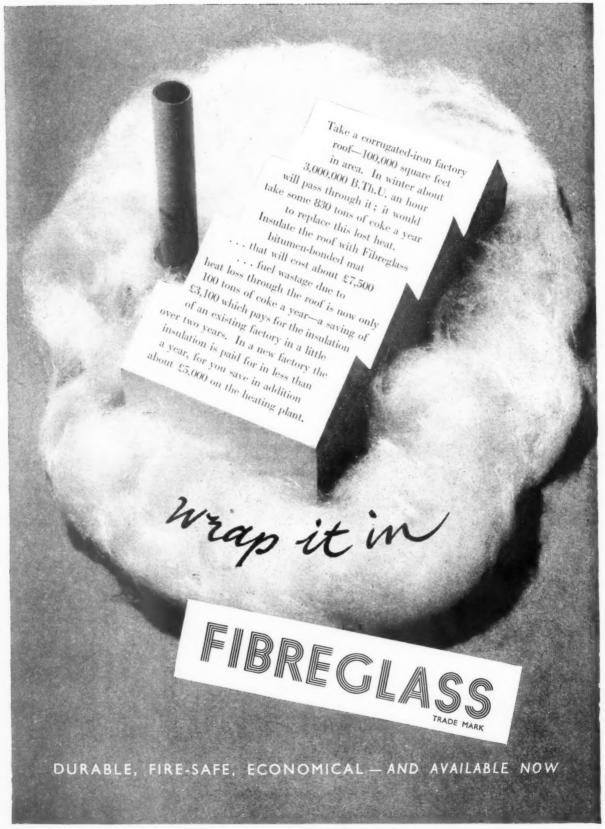
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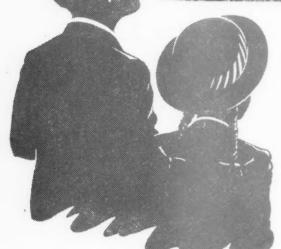




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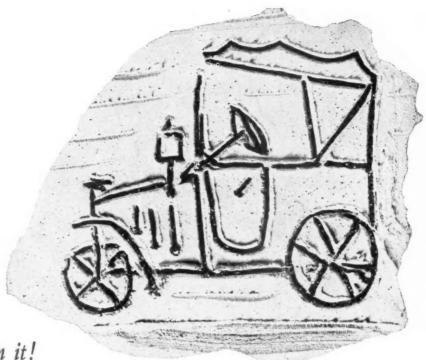
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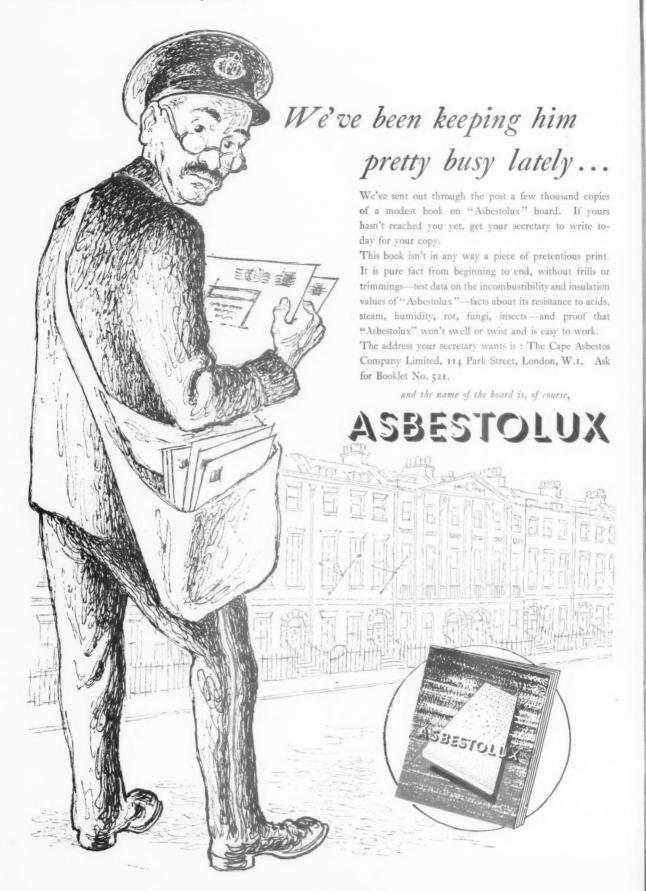
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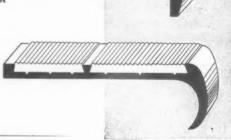
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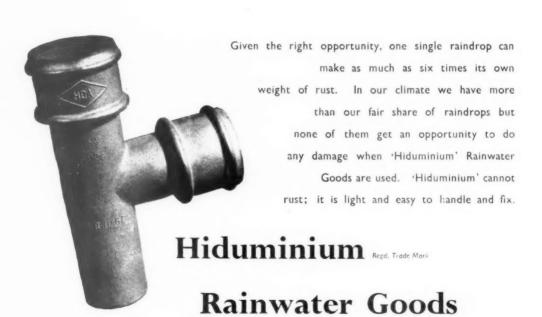
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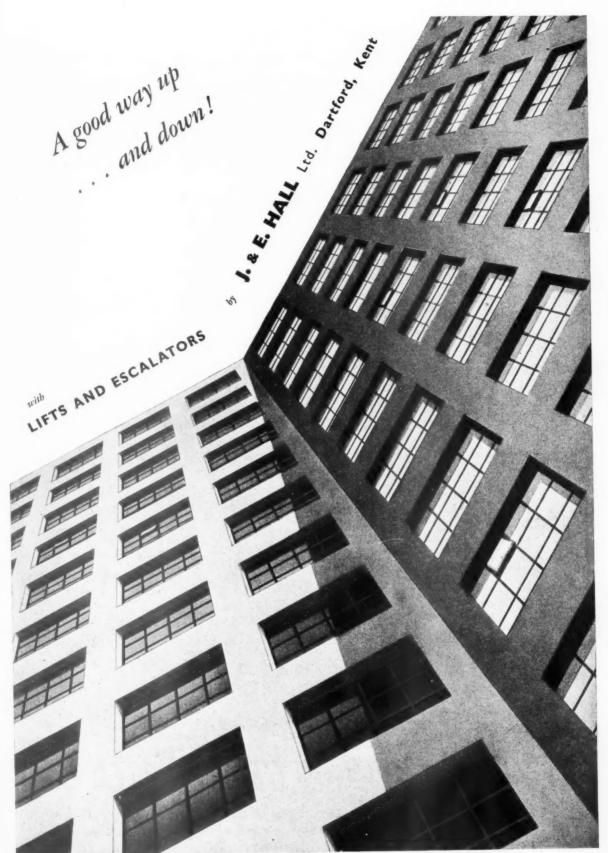
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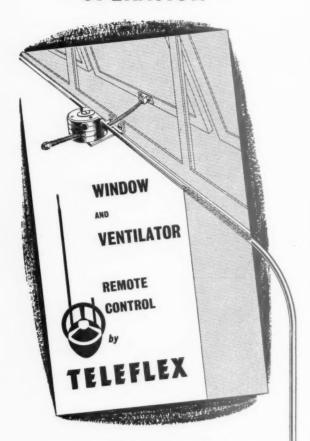


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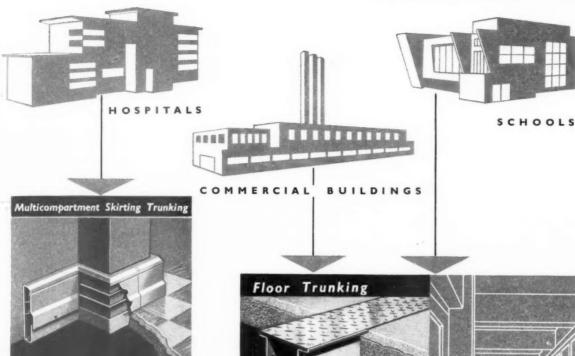
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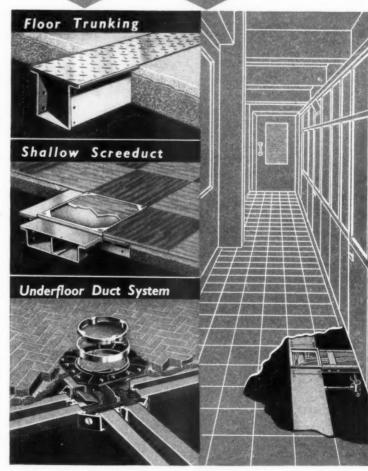
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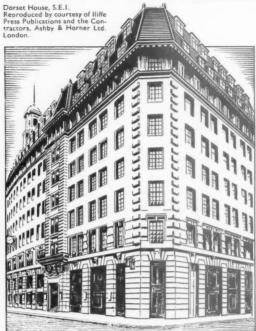




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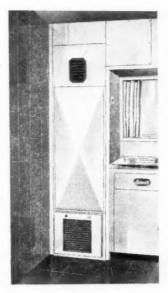
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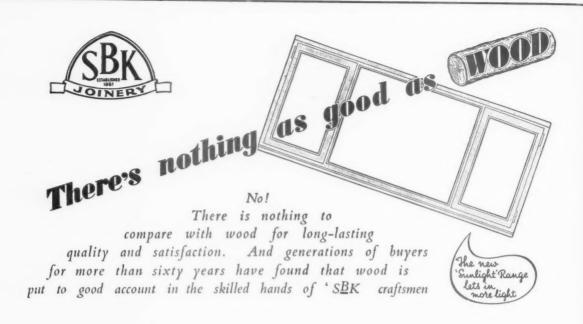
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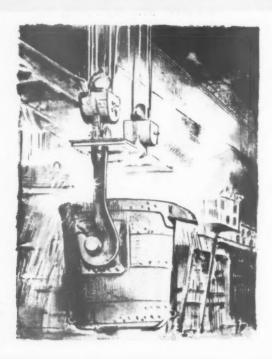
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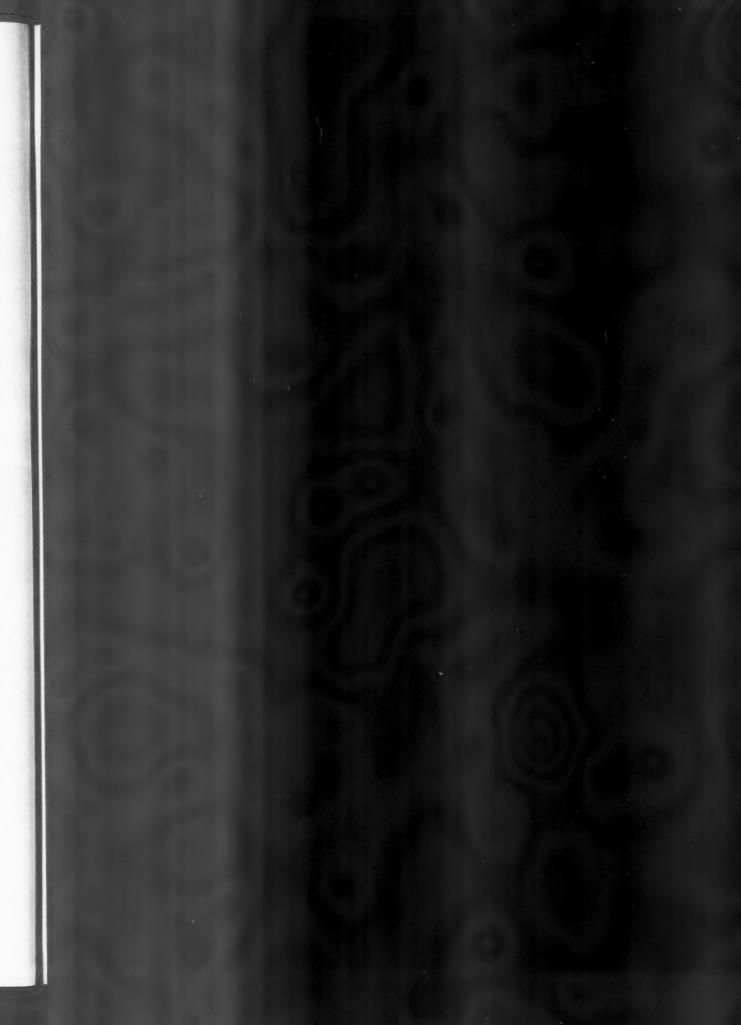
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SIR DAVID SLINGS A STONE

Only about two years ago, at a meeting of the Architecture Club, certain remarks by Sir David Eccles on the subject of design, induced gloom in ASTRAGAL'S mind. His present attitude is infinitely more encouraging. All architects of sensitivity-not, as Howard Robertson suggests, "the vast majority "-will welcome Sir David's statement upon the City of London: "I fear that unless swift and effective action is taken we shall see fat and familiar, mediocre and characterless neo-Georgian architecture rising from Hitler's ruins to betray the confident spirit of the new reign."

Fine words! Can they be made to

butter any parsnips? The first point is that in this sort of controversy it is essential, but difficult, to avoid pompous clichés; the "spirit of the new reign," for example, is not "confident"; it is frustrated, worried and confused. Sir David's sincerity is not in question, nor is the judgment of the RFAC, but it must be realized that the crux of the matter is that the powers of both are tenuous to the point of being non-existent. There is alsoand nobody so far has dared to admit it-a dialectic of architecture: fat and mediocre buildings are the inevitable product of fat and mediocre clients.

History teaches that, if it teaches nothing else. Good buildings in isolation are consistent with the liberty of the individual, but-let us face it-the building of a good city, being a communal thing, is not. If the City is to be saved from the spiritual heirs of the thugs who wrecked Wren's planand that was in an age of taste-then a coup du Ministre is a necessity. Such a coup is contrary to our traditions, but our traditions do not take account of rebuilding a town destroyed by bombardment; they have never had to. The building-owners of the City of London have not, by their recentlycompleted structures, proved themselves fit to build; the City must be rebuilt for the owners, not by them, and then be given back to them to work in.

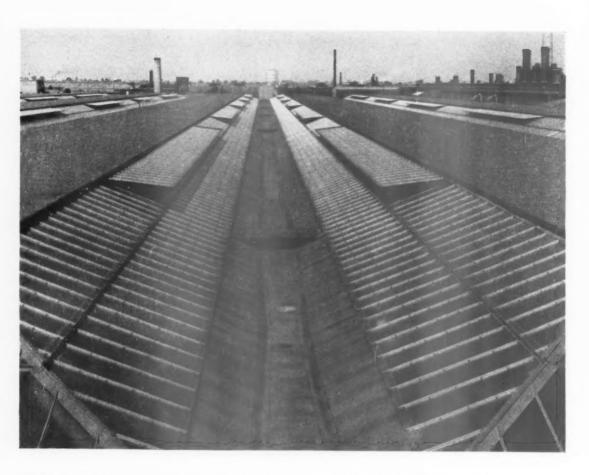
Sir David Eccles, of course, knows the position quite well . . . hence his proposal for a "co-ordinating committee." Sincere, well-intentioned, inadequate, unless—and this is where the *coup* is

needed—the powers of the buildingowners are vested in that committee. Then, and then only, can a different sort of architect be brought in. To "co-ordinate" the present type of designs is merely an Augean stables job.

. . . AND THE FOLLOW-UP

That is the unpleasant situation that has not yet been faced in the correspondence column of The Times. Howard Robertson's contributions to that column, during his presidency, have been all that his admirers could hope for; his latest one, in support of the Minister's suggestions, is less admirable. Perhaps a president must always pull his punches a little: "Building owners will surely feel that behind the proposals lies a genuine and publicspirited desire to make the rebuilt City worthy of this age." But will they? Will those who have already had designs prepared then change them following polite suggestions from Mr. Robertson or the Minister?

One other point about the President's letter. "There need be no fear of free individual expression within a framework of harmony and order." Whereupon the President takes up his position firmly upon the stylistic fence. There should be such fear: individual expression, in a job of this magnitude, must subordinate itself. Our instinctive liberalism must not blind us to the fact that where the job is a whole city, and not just a building, then the first thing to do is to suppress that stylistic anarchy which, for all its occasional virility, has for centuries eaten away the vitals of Wren's City.



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Finally, let one word be said in defence of architects faced with the actual problem of "tooth-filling" redevelopment in the City. Nobody has yet, in ASTRAGAL'S view, made enough of the fact that new building in the City of London has perhaps a poorer chance of becoming architecture than anywhere else in the United Kingdom. First, because site values are so fantastically high; secondly, because the developers are, generally speaking, thinking-justifiably no doubt in their view-of their shareholders first and their city second—few of them have the direct personal interest in their buildings that a real client has; and thirdly, because on individual sites in congested areas like the City, the LCC fire regulations and model bye-laws dictate so much of the architecture.

" Plans have been pre-

pared," says this advertisement from the back page of The Times for December 16, "building contracts signed and

tenants are waiting to occupy these premises. The offices are to be built on blitzed sites in the City of London by the City of London Real Property Com-The two top

and the bottom left illustrations are of designs by Howard, Souster and Fairbairn, and the remaining one is by the Company's

own architect's depart-ASTRAGAL

asks readers if these

buildings match up to Sir David Eccles' re-

quest for a standard of architecture "worthy

of the new age.'

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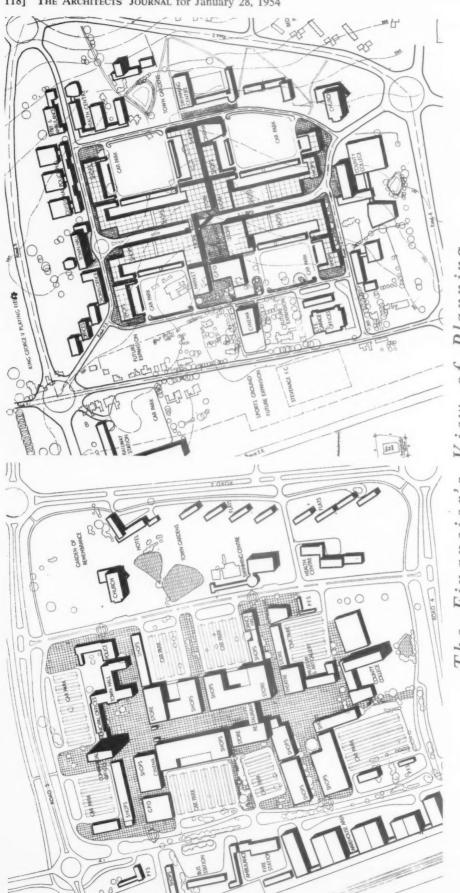
Window sizes and positions, cornice heights, and silhouette, etc., are more or less unalterable and only minor stylistic changes seem to be possible. This does not, of course, prevent a great deal of ugly building going up for which there is no such excuse, but it does seem to prevent the achievement of elegance and spirit . . . and of course also of exciting silhouettes.

SILHOUETTE SEASON

Incidentally, as no doubt many of you noticed—or are you one of those snobs who pretend they never listen to the radio-"Spike" Betjeman's plea for more interesting silhouettes in modern architecture spread last week to the BBC and "We Beg to Differ." It was interesting to note that all present went on record as lovers of the Albert Memorial—apologizing the while for such fashionable taste-and all praised the Hyde Park Hotel and St. Pancras when seen "not too close up." Shell-Mex House got its usual bashing-how the directors must look forward to their planned atonement on the South Bank-as also did Regent Street. Fair comment on Shell-Mex House; not so fair on Regent Street. If it's silhouettes you're after, the chimneys and cupolas of Blomfield's Regent Street are not-when seen in perspective—uninteresting, nor all that dissimilar from what the beloved Norman Shaw would have done in the circumstances-and indeed did do in the Piccadilly Hotel. But Blomfield, as an architect, is still in the trough of disrepute, and whether the pendulum of taste will swing him up again into favour remains to be seen. T. G. Jackson is already on the up and up, so presumably we shall not have long to wait. At least there are some things to be said in favour of these early 20th century architects-they studied the history of their art, they could write as well as they could draw, and they were individuals, not slaves. Much turgid stonework and fat pomposity of detail can be forgiven them, when weighed against these now almost vanished but once essential qualities of the architect.

WIDE AND OPEN

ASTRAGAL always reads with chuckles, often with disagreement, the dissertations of George Schwarz in The Sunday Times. He recently departed from his usual theme of Economics Without Tears for a visit to the New Towns.



Planning The Financier's

but with two roads driven through the centre. The decision to submit this vehicular The right-hand plan shows a somewhat similar disposition of buildings and north Hertfordshire) and a centre of shops, cinemas and civic buildings, exclusively ultra-conservation and a policy of quick returns. meeting will appear in next week's Journal. for pedestrians. Should a New Town be designed as its growing population wants (or at least the most This question is raised by the recent controversy at Stevenage, where a meeting was held in the Town The ago, on the lines recommended by Holliday, Stein and Stephenson. From recent but the general principles are immediately apparent: a ring road, off which are car parks (to cater for a further large increase in the number of car-owners in Stevenage Corporation have redesigned the proposed town centre so as to have vehicular roads through the middle, instead of having a shopping centre for pedestrians only, as originally Left, above, is such a pedestrian precinct for Stevenage, prepared two years experience the central pedestrian way is perhaps wider than would be planned today, Hall to protest against a planning proposal of the Development Corporation. vocal section of it) or as its Development Corporation decrees?

plan to the Minister of Housing and Local Government for approval was made by the Corporation as a result of the advice of professional property developers on the economic effect of adopting a pedestrian scheme. It is difficult to believe that such a retrograde architects, as it pleases neither the Stevenage citizens (who are sending a deputation in protest to the Minister), nor those who look for more from the New Towns than planning step would be preferred by the Corporation's own planning officers and A report of the town's protest view Mr. 1 Arch the has big has it hu origi

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experience the central pedestrian way is perhaps wider than would be planned today, but the general principles are immediately apparent: a ring road, off which are car parks (to cater for a further large increase in the number of car-owners in Stevenage

"Too Wide and Open" was his title. It explains his view. It is ASTRAGAL'S view, but not, however, the view of either Mr. F. J. Osborne or of Mr. Desmond Donnelly, both of whom came back with a fierce reply to Mr. Schwarz. No one blames either Messrs. Osborne and Donnelly, or the TCPA, for loyal adherence to the Garden City ideal. It was, in its day, a noble and necessary ideal. What they do not realize is that "openness" in itself does not make a Garden City and it was good to see the Architectural Review reply to them in this sense the following Sunday.

There can be no doubt that the Architectural Review's attack the planning of the New Towns has gone home, and gone home big (as the saying is) because it has hit them in the place where it hurts most-esthetics. Although the original attack was three-pronged and beat up the New Towns on the score of sociology and economics as well, the issue lies quite clearly between the compact and agoraphobic preferences of the Review, and the genuine loathing of man and all his works (unless there are fewer than 42 of one and 12 of the other to the acre) which seems to animate TCPA.

The latter body has lashed out spiritedly in the current issue of Town and Country Planning, with the usual accusations of misrepresentationalways suggestive that the victim has been wounded on a point of faith, not fact. All the Review's social and economic objections are carefully refuted in a leading article, but could easily be substantiated by quotations from other parts of the magazine, especially the tenants' letters at the back-which suggests that statistics, as usual, are what you make them. The issue remains what it was when the brawl startedwhat is a New Town to look like?

Nevertheless, ASTRAGAL, like Eric Barker's Old Fogey, likes to hear, however imperfectly, the other chap's point of view and recommends one and all to read the TCPA January issue and join in the argument.

ASTRAGAL

The Editors

KNOW YOURSELVES

OR a year now a comparative stranger to architects, Professor Ian Bowen, has been studying the profession. His conclusions form the bulk of this issue of the They make interesting if hardly flattering reading. We frequently hear complaints from architects about the state of the world in which they live. Engineers, surveyors and self-sufficient builders have for ages taken a large portion of the architects' work away from him; and that new arrival, the prefabricator of whole buildings, begins to threaten to take away yet more. The profession itself suffers from a selfcreated mass of barely-repressed fears and complexes. and private architects divide the profession vertically, and principals and assistants create a horizontal division yet further complicated by grouping into classes, as fellows, associates, licentiates, students and an unrevealed numbers of probationers. And yet further divisions are introduced by the several Institutes and Societies professing to represent the interests of architects. If principals complain of lack of work, or lack of properly-trained assistants, the assistants in their turn complain of insufficient pay for professional status and professional responsibilities, and of lack of opportunities. All complain, apparently, about every system of training students. Professional fees and scales of charges, office procedure, the

profession's relations with industry, the structure of the public or private office; these are but a few more of the many subjects on which the profession is undecided.

We will not now complicate things still further by introducing

the subject of architecture itself.

It is, perhaps, sufficient to say that the structure of the profession, and of professional practice, is still in a state of flux, as indeed, it is bound to be when only twenty years or so have passed since the walls of professionalism were finally made secure. During these formative years, therefore, it is essential to give a little time now and again to looking at the profession as it is, so as to be able to assess more accurately the course to take in order to try to make the profession what it should be. Professor Bowen here provides that opportunity. We sincerely advise you to spend a little while reading how the profession appears to a dispassionate observer. If you have not realized that there is virtually nobody solely responsible for the profession's economic interests, then you should read this article. If you do not know the function of the ARCUK and its relation with the RIBA; if you are not aware that there is practically no architectural research being carried out in this country; if you do not know how to find out what the profession's incomes are; then read this article.

Professor Bowen and Martyn Webb have, in the last year, given sufficient information to enable architects to say that they are as well informed, or even better informed, about themselves than any profession. It is to be hoped that architects can profit from thus "knowing themselves."

FOCUS ON YOU

Professor Bowen this week concludes his year as Guest Editor of the Journal with an illuminating and comprehensive report of all that he, Martyn Webb, and their team of assistants have discovered about the architectural profession during

1953. He is concerned not just with the bare facts resulting from the original survey but, from the detached viewpoint of an outsider, he describes the fundamental problems which the relatively new profession of architecture is having to study and gives stimulating suggestions for their solution. In the preparation of this and previous articles, both he and the Journal are indebted to the generous and conscientious support received from the several hundred architects who answered the original questionnaire, and from officials in Portland Place.

Lastly, thanks are due to the architects who kindly commented on the report which resulted from this survey, some of whose views appear in this article.

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The subject of last year's Guest Editorship was "The Structure of the Architectural Profession and its Future Prospects" and we set out to give special attention to five points. First, the danger of unemployment or under-employment in the profession; second, the rate of increase in the size of the profession in relation to the building needs of the country; third, methods of entry; fourth, architectural education in relation to architectural prospects, and, fifth, the distribution of the profession by type of employment. These were the principal topics of the enquiry.

Our main conclusions were that:-

1. Unemployment in the profession is now only a little above the 1949/51 average figure.

2. The level of unemployment is influenced not only by the rate of entry into the profession but by other factors (such as the number of architects seeking a change in employment).

3. Under-employment is, however, quite extensive.

4. The size of the profession, correctly estimated, has increased since 1938, but only by some 10% (not by 50%).

5. The number of registered architects may rise to about 19,600 by 1956 and the number of qualified architects by that date may exceed 21,500.

6. The output of trained architects annually in 1956 will probably be about 100 a year less than at present (i.e., about 870 or 880 as against 970).

7. An automatic and continual increase in the volume of the building work begun each year is not to be expected; therefore the key to the absorption of new architects into employment lies in extending the proportion of total building work passing through architects' hands (especially such categories as factories, offices, places of entertainment, middle class housing, conversions and additions).

8. The volume of new building work begun is, however,

partly dependent upon its price; architects have therefore a direct interest in promoting the economic efficiency of the building industry.

9. Present methods of entry are almost entirely on the basis of RIBA finals, but the profession still consists of one-third men not so qualified, many of them in senior positions.

10. Schools-trained finalists at present provide about twothirds of the new registrations, but, temporarily at least, the proportion of office-trained (and part-time students) is likely to increase.

11. The present length of training, particularly of external students, makes the adjustment of the supply of architects to changing demand difficult; the current output of architects tends to relate to conditions prevailing at least five years earlier, and further more, there seems to be little evidence of successful co-ordination between the schools and the offices as to the numbers accepted for training.

12. Schools education was admitted to be very good, and to have raised the standards of the profession; but there are deficiencies on the practical side of the schools training.

What is an architect?

Early in our enquiry, and for practical reasons, we had



Professor Ian Bowen

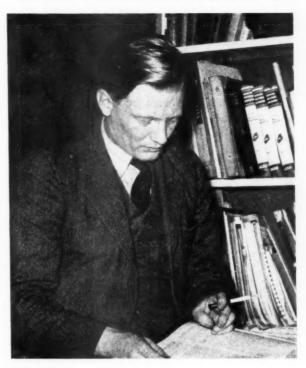
to ask ourselves what seems, deceptively enough, a simple question, namely, what is an architect? We had to answer this question in order to take a sample of the profession, and as readers of our articles will know, the working definition adopted for our sample survey was the legal definition, and we worked from the official ARCUK register of architects. This at once makes an interesting contrast with the approach to the same problem of the RIBA committee of 1949, which equally naturally took for its terms of reference the membership of the RIBA. The two lists of names of course overlap, but by no means coincide. A registered architect is not necessarily a member of the RIBA, and a member is not necessarily a registered architect.

As the enquiry proceeded, questions of definition began to assume more and more significance, and became worthy of much closer investigation. They amount to far more than a mere administrative inconvenience, for they originate from differing views of the correct answer to the question: what is an architect?

The boundary that includes the profession is different, (if it includes all architects on the register of ARCUK), from that which only includes all members of the RIBA. There are other boundary lines that might appropriately be drawn for different discussions—for example, "all registered architects in practice in Great Britain," or, "all architects in practice or teaching in Great Britain," and so on. Each separate boundary would include a different group.

Is only the private practitioner an architect?

Moreover, each actual group of architects corresponds more or less adequately to the differing ideas of architects that people have. Sometimes, in speaking of architects, a commentator will have in mind, in particular, the private practitioners of good standing, as typical of what the



Martyn Webb

profession should be; while some other writer, or speaker, may think of all architects who have qualified by examination, whether assistants, or practising on their own account, or in public service, as "architects" par excellence—all other categories remaining tolerated, perhaps, but outside that particular pale. So not only are there actual different groups of people, who may be called "the" profession in practice; each of these different groups may reflect a particular ideal of what the profession should be, according to someone's subjective idea.

Not a Royal Commission

These different definitions of what an architect is, involve not only practical, but, it might even be said, philosophical issues, well beyond the scope of the enquiry, and on which the Guest Editor and his helpers did not feel that they were competent to express authoritative views. It must be emphasised that our enquiry was not either the equivalent of, or a substitute for, a Royal Commission. The results given below must not be expected to clear up every outstanding controversy or even to lay down definitive lines of policy for others to consider. But the results of the enquiry may, it is hoped, crystallize some issues which ought to be enquired further into by an authoritative body.

This is not to suggest that the great work done over the last fifteen years by the RIBA and by ARCUK has been either wasted or misguided. On the contrary, without the enormous process of reorganization occurring since 1931, the problem would not have presented itself in such a clear light as it does today. But this profession is growing and, in a changing society, its functions must inevitably be changing, perhaps more rapidly than those of some other professions. It is certain that in fifteen years time further changes will have taken place. So perhaps this year of preliminary survey will assist those members of the profession who are giving a part of their energy to policy matters,

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to think further about the next steps to be taken. Perhaps, too, the survey will assist all members of the profession who are concerned with the basic problem of what architecture is, to appreciate the social and economic framework of their activities a little more fully than before.

Over to you

Above all, now seems the moment to say "over to you." The profession has many problems visible to the outside observer, but only soluble by a concerted effort from within. Its institutions and practices must be yet further adapted if they are to meet the needs of 1960 and 1970 even so well as they met the needs of 1940 and 1950. But only the profession itself can undertake the next stages of enquiry and action.

PART I

Plan of this article

Part I deals with the question: "What is an Architect?" under five headings:

- (i) Professional Organization
- (ii) Education
- (iii) Status and Function
- (iv) Type of Employment
- (v) Economic Prospects.

In this part the results of the survey will be drawn upon, and also such facts as can be gleaned from the voluntary returns made to the JOURNAL by readers. In a second part the more controversial question is to be studied, of what changes should be made, again following through the five headings already listed.

In a third part of the article some of the comments on our factual survey will be quoted and commented upon.

(i) Professional Organization. The practical significance of defining an architect is perhaps best thought out by considering the number of British architects according to some of the various definitions. On one set of definitions there are perhaps as many as 26,000 " architects" in the country. There are 17,639 registered architects of whom over 11,500 are members of the RIBA. Both the registration and the RIBA membership of 15,284 include residents overseas (amounting to about 9 or 10% of the registered). accompanying chart, opposite page, shows some of the principal inter-relationships between the RIBA Council of 79 members and the ARCUK Council of 52 members. It will be seen that the two councils each have committees to deal with education, professional conduct (or discipline) and registrations (or admissions). This overlapping of the functions of the chief committees of the two councils does not in itself prove that either set of them is unnecessary or that any of the administrative work done could be avoided. But the correspondence that has been received as a result of the enquiry suggests that certainly the great body of architects, or any representative sample of them, are far from clear as to the separate purpose of the two councils and the duplicate organization.

Who represents the profession's economic interests?

Despite the quite heavy administrative burden imposed upon eminent architects by the present organization of the profession, there are notable gaps in the functions performed by either of the councils. Neither is clearly responsible for representing the profession's economic interests. The RIBA being primarily a learned society, cannot simultaneously

Opposite page, a chart showing the basic structure of the RIBA and of the ARCUK, giving the interrelationships of these two bodies, the similarity of their organization and their connection with other professional, educational and official bodies and with the architectural profession as a whole. The control of ARCUK and the RIBA is in reality in the hands of their respective councils and of three subordinate committees of: registration (or admission), education and discipline. Practically speaking, these are the only committees of the ARCUK. In the RIBA, however, there are many others, such as those for prizes, awards, hospitals, science and so on. The control of the RIBA, as a professional body, nevertheless rests with the council and the three committees mentioned above. This diagram attempts to show, in a simplified form, (a) how the controlling bodies are elected, nominated or appointed, (b) who are the electing bodies referred to in the diagram as "The Electorate" and, (c) the inter-relationships of the various bodies concerned. With few exceptions, the representatives on committees are nominated by the councils of the bodies shown, and not directly by the members of the bodies themselves. The diagram makes the following special points:-I. That only with regard to the admission (registration in the case of the RIBA) committees do the ARCUK and the RIBA have different functions.

2. That the RIBA practice committee applies the same code of conduct as does the ARCUK discipline committee.

3. That the RIBA board of Education is composed largely of those members of RIBA who are already on the ARCUK board of Education, plus a proportion elected from the council of the RIBA. At present, both the chairman and the salaried secretary of the ARCUK and the RIBA boards of education are the same. This, together with similarity of the names of the two boards leads persons to believe that there is only one Board; whereas there are, in fact, two.

4. That the ARCUK is the only professional body possessing the widest representation of all profes-

THE "ELECTORATE" ARCUK COUNCIL 52 R.I.B.A. COUNCIL 79 R.I.B.A. Committees R. I. B. A. Members Allied Societies Allied Societies in Dominions Architectural Association Assoc. of Building Technicians Inc. Assoc. of Architects & Surveyors Fac. of Architects & Surveyors "Unattached" Royal Soc. of Ulster Architects ARCUK ADMISSIONS 23 R.I. B. A. REGISTRATIONS Royal Inst. of Chartered Surveyors COMMITTEE Inst. of Structural Engineers Inst. of Municipal Engineers Society of Engineers Institute of Builders R.I.B.A. PROFESSIONAL ARCUK DISCIPLINE N.F. B. T. E. COMMITTEE CONDUCT N. F. B. T. O Ministry of Education Dept. of Education (Scotland) Ministry of Health Ministry of Works Health (Scotland) Northern Ireland President Law Society University Representatives School Teachers and Head Masters Representatives Tech. Institutes Representatives Schools of Architecture Society of Arts ARCUK BOARD OF EDUCATION 75 RIBA BOARD OF EDUCATION 64 British School (Rome) Royal Academy of Arts Workers' Educational Assoc Education Exec. Co-op Union Union of Educational Insts Master Art Works Guild Town Planning Institute Education Officer L.C.C Royal Inc. of Architects . Scotland Nat. Soc. Art Education Royal Inst. Arch. Ireland JOINT FULL TIME SECRETARY

sional bodies. In fact, it is the smaller outside representation on the RIBA committees which broadly distinguishes it from the ARCUK. 5. That, and this applies particularly to the ARCUK, the shape of control of the committees is not the common pyramid, i.e., when all sub-committees are appointed direct from the top. Representation on committees is in many cases specified to that committee and no others. Some bodies, it will be noticed, send representatives to all the ARCUK committees; others to only one committee. 6. This diagram stresses most clearly, despite its simplification, the complexity of the organization of the architectural profession. Nevertheless, it does not include all known architectural bodies, such as the Institute of Registered Architects.

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only ne ofesfunction as a Trade Union. The ARCUK, being a statutory body, has no life of its own, as it were, which permits it to act in the general interests of its members, other than by performing its statutory obligations in respect of registration, professional conduct and education.

Generally speaking, the popular view of ARCUK among architects would seem to be that it is, in effect, an off-shoot of the RIBA created as a necessary consequence of statutory changes in the registration of architects. It is not, therefore, a body capable of further growth in most people's eyes.

The RIBA, on the other hand, is modifiable in composition and, perhaps, in function, from time to time, but it is forever debarred, by its very nature, from becoming the voice of the profession for the sordid purpose of bargaining on salary scales and terms of employment. It is the lofty conscience of the profession rather than its vulgar vocal organ.

No monopoly on monopolies

Perhaps an instance of the widespread misunderstanding that exists of the functions of the RIBA was the Minister of Works' request that it investigate monopoly practices in the building industry. Some of the RIBA members must individually know a great deal about building costs and allied matters, but the RIBA has never set itself out as a depository of information on this subject. Nor has building economics played much part in the educational curricula that are recommended. This may be a necessary omission, but the point is that, as a learned society, it does not claim expertise in this branch of study. It has no organization (such as a standing committee) through which to formulate a fully qualified, or a representative, opinion on this important topic. To look to the RIBA for authoritative guidance on such matters as monopoly or competition in either the building, or the building materials industries, is to look (at present, at any rate) to the wrong place. Some architects could individually perform valuable service in assisting any joint committee studying these matters, but their approach would need to be supplemented (as things are organized at present) by the views of quantity surveyors, economists, business men and perhaps civil servants, versed in the organization of certain industries. To this alternative, indeed, the Government, in fact, has had to agree.

(ii) *Education*. The changing pattern of architectural training became very apparent from the figures derived from our survey.

Deficiency in schools training unanimously agreed

Further, there was wide agreement among those who commented upon the matter, whether themselves old or young, schools trained or otherwise, that, first, the full schools training was a great improvement on older and more haphazard methods of acquiring education, but that, secondly, the schools training was sadly deficient in providing "practical" qualifications. The critics were divided, however, among themselves as to what type of practical experience was lacking. Some, for example, thought that it was unfortunate that the schools-trained architect should not have any working knowledge of the procedure of an

architectural office. (This particular kind of knowledge, however, most educationalists would assume to lie outside the scope of normal professional education.) Other critics meant by practical experience either knowledge of difficulties arising in problems of design, or such matters as building costing and the comparative costs of different classes of building materials.

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The unanimity of view that there was a grave deficiency in present schools training was however remarkable, even if this difference of opinion as to what exactly was lacking remains unresolved. It may be that some private architects who advocate that students should do more work in offices are not without some vested interest in the matter that ought to be more plainly declared, but it may be supposed that the same could be said, from a different point of view, of the educationalists themselves. Private architects want the assistance of articled students; professors want pupils.

This is a question which ought to be considered from the point of view of what is the best and most practical form of education over the next few years. As things are at present, even with the large grants made towards education by ARCUK, 49% of those going through the architectural schools seem to be dependent on private means, and a considerable percentage of entrants into the profession necessarily take part-time training. Of the latter, nearly a third make use of correspondence courses. This is inevitable in view of the present economic circumstances of the aspirants to the profession.

Future lower proportion of school-trained architects

Another point is, as is well known, that the number of entrants to full-time architectural courses had already passed its peak by the time that the 1953 enquiry began. It follows that if total entrants to the profession are maintained, temporarily at least, the proportion of fully schoolstrained entrants will decline. Only the long-term trend, however, is the other way. This is perhaps an important fact, the full consequences of which have not yet been grasped.

This point can be re-stated another way. Policy has decreed that entrance by examination should be the main method of entry into the profession. To get in by the way of examination involves study, preferably full-time study. Hence, the average number of full-time students of architecture in the 1950's has exceeded the average at the end of the 1930's, and the funds available to assist such education are growing with the size of the register. This is the long-term trend; but, temporarily at least, it is being reversed, for the annual number of entrants to full-time courses has declined.

The architect's status

So far, there has been no suggestion that entry to the profession should be diminished, and if it is to stay up, evidently (even if temporarily) the proportion of part-timers to full-timers in education would have to rise, contrary to the trend established by policy.

(iii) Status and Function of the Architect.—Status and function are abstract concepts and not readily susceptible to statistical measurement. One of the great difficulties

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and ptible of the enquiry was to find some means of measuring a man's progress in the profession. For example, it might reasonably be assumed that the status of a "principal" was distinct from that of an "assistant." Information that has been supplied to us makes it clear, however, that the terms vary very much in their import, particularly between private and public employment. A man who is graded as an assistant architect in a public office, perhaps three or four levels down in the hierarchy from the head of his division, may, nevertheless, have a degree of responsibility for the work which he does that far exceeds from an architectural, and even from a business, point of view, the responsibility he would have as a partner in some private firm, and certainly far greater than he would have as an assistant in a private firm in most cases. It is therefore very difficult to find a common measure of the status attained by architects at different stages of their career, since even the same terms may mean different things as between one office and another. The status structure of those of the architects in our sample in private practice showed that 75 per cent. were principals, according to the information that they supplied themselves, whereas only 25 per cent. were assistants, whether senior or otherwise. An appreciable proportion of the principals in private practice (16 per cent.) were over 63 years of age, while at the other end of the scale 42 per cent. of them were less than 44 years of age. In Local and Central Government, principals, on the other hand, were mainly concentrated in the middle age groups, 42 per cent. of them being age 44-53 and 32 per cent. being 54-63. These figures reflect not only the past history of the profession but the very different types of career followed in public and private practice.

Schools training means early qualifying

To sum up the facts that were collected in the survey, it seems clear that, at the present stage in the history of the profession, schools-trained men qualify younger than those taking part-time courses, but that a large proportion of architects will qualify through part-time courses at a later age, by which time they may well have assumed family responsibilities and not be likely to be willing to branch out in private practice on their own.

In this situation it is not surprising to find a widespread feeling of frustration in that part of the profession which includes assistant architects, where they are employed in circumstances that offer them little scope for initiative or responsibility. It would be wrong to identify this group as the group of assistants employed by public offices. A proportion of the frustrated group is so employed, but there is another part of the frustrated group which is employed in private offices, who see little hope of advance in independent status through lack of capital, through late attainment of full qualifications, or for some other particular reason. Although it was possible to obtain statistics of the percentages of "principals" and "assistants" in private and public employment, the figures are liable to be misleading owing to the different meanings that these words may have in the different contexts. But "salaried assistants," while including persons in positions of satisfactory status to themselves, and of genuine responsibility, is also evidently a term that includes many dissatisfied men who see little prospect of responsibility.

Insultingly low salaries

One correspondent remarked that "salaries with few exceptions appear to be almost insultingly low for qualified assistants in private practice "-a contention that was supported by the (admittedly non-representative) evidence supplied to us by readers of the JOURNAL. From this state of affairs it follows that the young architect may gain some initial advantage by entering local government immediately after qualifying. Stultification may then set in a few years later (according to the complaints received) because of the tendency to consider candidates for higher posts, when these become vacant, mainly from other areas, existing staff rarely being promoted. It was a common observation that advancement required shifting from one authority to another. This may have some advantages in providing wider experience, but it leads apparently to unsettled conditions, discontent, and hence to the production of poor work.

The amount of salaries or earnings is a delicate question, and one which was not put to the architects in our random sample. Some architects (134 in all) however, volunteered information on this subject in the questionnaire published in the JOURNAL. Their salaries, or net earnings, were distributed as follows:—

alary (or income) rai	nge	Percentage	Average Age of Group (in years)
Below £650		33	29
£650-£1,000		44	34
£1,000-£1,750		18	42
£1,750 and above		5	46
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Since these figures are based on voluntary returns, it may be assumed that they err on the low rather than on the high side; it is likely that the less contented wrote in, rather than a fully representative proportion of the better-off architects. On the face of it, 77 per cent. of the profession were receiving less than £1,000 a year, but this percentage is very likely, for the reason just given, an over-statement. Supposing that the correct percentages and amounts could be ascertained, they might throw an interesting light on the seriousness of the financial position of the younger groups of architects. As they stand, the percentages given suggest that there may be an unduly high proportion of fully qualified men in the low salary ranges, but they are not sufficient to prove the point. To find out the actual income of the profession would be a most desirable, and relatively simple project of research, but it would need to be done by the profession itself.

(This is indeed a case of "over to you," since the Inland Revenue Board might supply sufficient statistical information to answer this point from its own statistics. It is not possible to state that it would do so, but it certainly would not do so unless officially requested for the information by the RIBA. In the case of the doctors' award some important statistical information on incomes was made available, once the profession itself had pressed for it.)

Rise in status wanted

The salaried assistant, then, is not necessarily a person of insufficient status or inadequate salary. But there are, in this class of architects, discontented people whose status and salary are not satisfactory. Should they ever have become fully trained architects? Have they somehow been misled as to their prospects? Does their discontent arise directly from material causes, or from the more subtle pressures of society, so that for some reason or other the salaried assistant loses caste? When correspondents write about the "rise in status" desired by salaried assistants do they simply mean "rise in salary"? In our intensely class-organized society, in which to mention class distinctions is taboo and very bad form, status naturally counts; it goes with economic position, but is not identical with it. These are questions that the members of the profession itself must think about and try to answer. (In Part II (iii) of this article below they will be discussed further.)

The function of the architect

Next, comes the question of the functions of the architect. The architect, it may be thought, is (or should be !—idealism keeps intruding) an "aesthete," or, less aggressively, a creative artist. A creative artist must find new forms of expression. New forms are always a revolt against traditional, or existing standards. Hence, a creative artist must always be at war with current public opinion, though a later generation may accept his standards and so make them in turn respectable and traditional. So (in an extremely over-simplified version) runs the familiar argument; it is a recognizable caricature of a real problem.

The function of the architect in society, looked at more realistically, would seem at present to be to design new buildings only in those cases where the client thinks that he will get a more economical job done if he employs an architect, than if he does not. There seems to be a fringe of clients who would employ an architect on aesthetic grounds even where there was no apparent economic motive. But such clients are so rare as to be negligible from the point of view of surveying the profession as a whole.

The architect's economic contribution

It does not seem necessary to believe that the architect's economic function is in direct opposition to his function as an artist; economics are but one generalized form of limitation upon the artist's material resources. Presumably, the builders of mediaeval cathedrals had grave limitations of resources to overcome. The great private patrons of later centuries had limits to their rent-rolls. When the patron is the modern public authority, or industrialist, tastes may have changed, and the economic limitation may be different, but good design is not thereby made an enemy of efficiency.

This aspect of the architect's function in society was frequently mentioned by those who responded to the survey who had been working in the profession for some years, as well as by those who had recently qualified. From their comments it was clear that many of them were alive to the economic as well as to the social value of their work, but that few were satisfied that the public was aware of the

economic contribution which ideally an architect should be able to make.

Frustration arose again because the education received by architects did not seem well devised to enable them to carry out their proper function in society. And, secondly, because a vast amount of building work is done in this country and lost to architects, because they have not acquired in real life an unchallenged reputation for fulfilling the part which society expects them to fulfil.

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(iv) Type of employment. Which are numerically the most important types of employment of architects today? 52% of architects are in private practice and 39% employed by central or local government, national boards or new town development corporations, the remainder being engaged in commerce, industry, estate management and teaching. These percentages apply, of course, to the profession as we defined it, and not necessarily to the profession defined in some other way. They are proportions of the persons making active returns (i.e., proportions of the 77% of returns received in our enquiry; the remaining 23% included persons who had gone abroad, withdrawn from the register or died.) But it cannot be deducted from this that private practice is so important as the figures would suggest, since many of the private architectural offices may have been engaged upon public work. Nevertheless, it is important to realize that private practice maintains so great an importance in an age when capital expenditure on building comes so largely from public funds. Problems of training, of status, and of economic prospects have to be solved for a profession in which employment still is mainly an affair of private offices, while the social structure in which the system of private offices first evolved has long since been fundamentally modified.

No double-counting

The table from which the above percentages are taken related to the *main* form of occupation to which each person belonged. The figures thus avoided any form of "double counting." For example, an architect in local government service who also had an occasional private practice was entered under the main heading only; similarly, a retired person with occasional private work was entered as "no longer in full-time architectural practice" (this category amounted to 13% of the total). The table differs in this respect from those published in the RIBA survey in its occupational analysis.

The part-time activities of architects really demand a separate discussion. Here it may merely be remarked to be a peculiarity of this profession that many practise architecture not as a full-time occupation, and that those in public employment sometimes keep alive a private practice.

If the employment of architects in 1938 and in 1953 is compared, it could be confirmed from our sample that one of the most important changes was the (net) movement from private practice towards central and local government offices. Another steep rise for this group of architects (i.e. the group employed in architecture both in 1938 and 1953) was in the percentage "not in full-time practice," which rose from 1% to 11%. In any period of fifteen years there are, of course, liable to be declines in the more active

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53 is t one ment ment itects 3 and tice," years active categories of employment, owing to retirement and normal wastage. The fall in the percentage engaged in private practice (from 58% to 40%) cannot therefore be attributed solely to the increase in government service. The returns showed, moreover, that while there was considerable movement from private practice into government service, there was also a movement the other way, even during the war years, and more marked from 1946 to 1952.

(v) Economic prospects. According to the figures of entry received early in the year the number of registered architects in the profession may rise to about 19,600 by 1956 (and possibly 22,000 by 1963).

A fear of slow advancement

According to the views expressed by architects the outlook for individuals varies very considerably. Many correspondents said that it had never been better and that they could see no sign of a falling off in the work of their offices. The frustrated groups of assistant architects did not complain of insecurity so much as fear of slow advance.

The economic prospects of architects cannot be discussed out of relationship to the question of their training and functions. The country seems likely to embark upon a considerable amount of building work on reconditioning old houses and replanning building sites that have been used before. A surprising number of middle-class people, who are putting up their own houses, would never think of employing an architect, but would rely on a local builder, and on their own ingenuity, to get the result which they think they want.

This well-known fact has been commented on many times. It does not seem to be realized that it has little parallel in other professions. Few educated people nowadays try to prescribe medicines for themselves or act as their own lawyers. If the architect is not fully established in the field of middle-class building expenditure, this does suggest that the value of his function in society is for some reason overlooked, or else that it is not properly carried out.

No diagnosis from chemists

In medicine, the mixer of medicine is, indeed, prohibited from diagnosing. The builder labours under no such restriction. He might say that "the mixture as before" is often prescribed for a number of cases, which leads him to suppose that he can satisfy the client; but a chemist could not use the same type of argument. The question that architects should ask themselves is: what is the advantage that they can offer to the client? More practice would be secured if the advantages were self-evident.

A strong case could be made for the view that most middle-class housing not architect-designed would have been more satisfactory to the client if a good architect had been employed. Should, then, the ultimate aim of the profession be to have non-architect designed building of some categories prohibited, or at least penalised in some way? Should an architect's fee, perhaps, be payable to a central fund whether or not an architect is employed? These are issues for debate, now that the country is agreeable to training an increasing number of highly qualified men and women.

Future financial outlook

On a long term view, building work may slow down in relation to civil engineering work, but the total volume of building work seems likely to remain high for some decades. On such numerical calculations as can be made, and always provided that architects get an always slightly increasing proportion of the building work to be done into their offices, the outlook certainly does not seem bad. The level of unemployment among architects was found to be influenced not only by the amount of building work currently in hand, or projected, and by the annual rate of output of trained architects, but also by the number of architects seeking "a change." When this number is high the period of unemployment of the younger architect may easily be increased, and the total number looking for new appointments rises. The reasons why larger numbers seek "a change" in some years, than in others, are no doubt themselves partly economic, and include also the estimate of future activity made by architects themselves. If a great increase in new work is anticipated, more will seek to gain wider experience, or high receipts, or both, but if the outlook is not so good, the advantages of security will become more apparent.

Prospects fairly good

Objectively, the volume of building work that this country is likely to pay for over the next few decades would fully justify the present high numbers of architects being trained, subject to some qualifications that must be explained later as to the proportion of assistants to principals, and on the assumption that the economic contribution of architects will be a real one. But this is not the same as suggesting that the high rewards of the plum jobs in the profession will become available to all, or even to a substantially greater number than now enjoy them, nor even that the average income level of the successful architect will rise. What is being suggested is that employment prospects are fairly good, at salaries adequate to attract and keep entrants to the profession at their work, although not perhaps at that level of life which they feel entitled to expect. This, after all, seems to be the likely fate of other professions, too, even the doctors having discovered recently that there may be more medical men being trained than can be supported—a strange conclusion in view of the over-worked condition of the National Health Service practitioners in nearly all industrial communities.

Raising educational standards

There may be some good reasons for reconsidering entry to the architectural profession with a view to raising still further the educational standards demanded, with the result that the rate of entry becomes somewhat less than at present. But on employment grounds alone there would not seem to be much case for such a policy; nor would it seem advisable to restrict entry merely for the sake of inventing an artificial scarcity of architects. In this connection it is difficult not to recall the disastrous results that accrued from the fact that in the great "planning" epoch of the

1940's only a few architects were available for town-planning activities, with the consequence that their talents were spread too thinly over too wide a geographical area. A similar scarcity, artificially induced, could only help to ruin the good name of architecture. Sober and fully-trained competence exhibited by as large a number of fully-trained architects as possible, could do far more in the long run for the good name of architecture than forty or fifty "inspired" plans drawn up by individuals who lacked the time to master their problems of design or of execution. There is, of course, room always for the great architect at the head of his profession to make his personal imprint on his time, and within the limit of his energies, to accept a large share of work. Such men are few in any generation and in any profession. There is no need for restriction on entry to keep their numbers down.

The employment prospects of the profession, as a whole, are a different story. There may well be good reasons for extending, and re-organizing, the period of training and education, so, perhaps, weeding out a proportion of those who now qualify. At present, in my judgment (which may be wrong) there seems to be no reason to fear that the sheer numbers of entrants are too great for the building needs of the country. At some point, however, perhaps by about 1958, the number of entrants will need to be brought down to the replacement rate, which would mean an annual intake nearer to 750 than to 870.

PART II

Suggestions for better organization

In this part are to be set out some of the suggestions that have been made, or that have occurred to us, on means for bringing the profession to a higher state of organization and of success. That many correspondents should have taken the time to write at some length to us on the implications of our survey shows both the concern that is felt on these matters, and a willingness to contribute ideas. It is regretted that not all of the interesting points that have been raised can be answered in detail (although some attempt has been made to discuss some of them in Part III). Here, proposals for changing some of the arrangements are discussed in quite general terms. It will be realised that it is with extreme diffidence that we discuss these matters; we do so only to set up proposals for some fully qualified body to investigate at much greater leisure.

(i) Professional Organizations.—There seems to be considerable confusion as to the respective functions of the different bodies through which architects are organized. For example, there is evidently no agreement whether ABT, or NALGO or some other quite different body, should most appropriately speak for the interests of salaried architects in public employment. Again, it can hardly be denied that the division of responsibility of functions between the RIBA and ARCUK is neither logical in principle nor satisfactory in practice. Perhaps a useful approach might be to ask what would be the most rational division of functions between two such organizing bodies, were the profession to be in a position of organizing itself entirely

afresh, and absolutely unfettered by the past history of the existing organization. If this were being done it would seem, in the first place, to be unnecessary to create two bodies with separate memberships, except that body A might include students and architects working overseas, whereas body B might not be available for membership by these two categories.

A rational division of functions

Secondly, body A might be expected to be the professional body with the main functions of maintaining standards both of professional conduct and of education, of granting awards and scholarships, and of promoting research. If body A were to undertake these activities body B would be in no way concerned with them.

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Thirdly, the functions of body B would suggest themselves as being those of promoting the material interests of the members of the profession; negotiating on their behalf with Government Departments and Public Authorities; maintaining standards, not of conduct but of the conditions in which architects work; preventing any insidious practices by other vested industries, or borough surveyors, from encroaching upon the architect's function; and generally looking after the wellbeing of the profession in relation to its normal working day activities.

Thus body A would clearly be not a Trade Union but a learned society maintaining professional quality, and intellectual and academic standards, while body B would be concerned with actual working arrangements and with the interests of its members.

Maintenance of the Register

Since membership of the two bodies for architects working in Britain would be identical, the question of who should be responsible for maintenance of the register would be a minor one, but presumably body B would be the more appropriate of the executive arms to carry out this function, always accepting advice from body A should anyone be found guilty by that body of unprofessional conduct by its own standards.

This is not supposed to be a perfect solution to the profession as it is now organized. Clearly, the past history of the various architectural societies cannot just be disregarded, but the above sketch of a reasonably logical plan of organization perhaps provides a starting-off point for careful reconsideration of the way in which to improve the present almost flagrant anomalies in the organization of the profession.

(ii) Education. There are of course innumerable schemes for education that could be theoretically laid down. To take cognisance of the criticism that present architectural education lacks practical content, would seem to suggest some form of sandwich course. Some of our correspondents advocated full-time training for three years followed either by a year's practical work or several years' part-time work up to the finals standard. I think it would be found that teachers of architecture would object very strongly to this proposal and would prefer, if some combination of part-time and full-time training were to be given, for four or five years to be taken up to the inter-

mediate standard on a part-time course, followed by at least two full-time years for the finals. This would indeed seem to be a much sounder education.

Little architectural research going on

Education, to be first class, must come from teachers who are themselves interested in increasing the sum total of human knowledge. The production of original academic work, nowadays ineptly called research, is a necessary background to the higher forms of teaching.

It is not quite, but very nearly, true to say that there is no organized architectural research going on in this country outside the departments of one or two universities, which are themselves endowed in a pitifully inadequate manner for this purpose in comparison with either the natural sciences or some of the other social sciences.

The promotion of research and of education are not two alternative ways of raising educational standards in architecture, but complementary. This argument provides, incidentally, a criterion for the recognition of university-level architecture courses in different parts of the country. It would be far better, for example, to have, say, three or four well-endowed university architectural departments, than five or six which could do little more than the hand-to-mouth work of routine lecturing and teaching.

(iii) Status and Functions. It might be said that there are in existence at least three definitions of architects, the legal definition, the definition implied by membership of the RIBA and the definition somewhat nebulously adopted within the profession itself, which regards recognition either by ARCUK or by the RIBA as an additional stamp rather than as a necessary talisman. The different definitions may be set out as follows: An architect can be regarded as a person who is either (a) registered with the Architects' Registration Council or a member of the RIBA (or both), and (b) known as The Architect in his relationship with his client, and (c) responsible for drawing up and supervising plans and periodic inspection of works, whether or not he delegates this responsibility.

Preventing the unqualified designing

One problem evidently is to ensure that no one carries out functions (b) and (c) unless he comes into category (a). This is the way in which the problem is generally seen, resulting in the Registration Acts. What does not seem to have been grasped is that it is equally important that the converse should not possibly be true. It should be completely true, in fact, as well as in name, that no one unfitted to pass the qualifications leading to (a) should be capable of carrying out functions (b) and (c), particularly (c). In other words, the high skill now necessary to plan and supervise building work should, in effect be obtainable in one way only, and should be a real skill in the sense that it saves the client money to employ it. (The term, "saving money" must include not only original building costs but also costs in relation to the cost and satisfaction of using the finished building.)

On giving opportunity to the deserving

Another problem is that many who, by reason of training and general qualification fall into category (a) never succeed in attaining the status of category (b), or even substantially of category (c). Many of them are (and more of them feel themselves to be) capable of fulfilling the requirements of (b) and (c). Yet they languish in category (a) somewhere in subordinate assistantships. How can it be secured that the number who so languish is no greater than the number who deserve no greater advancement?

It would seem that it is highly undesirable in any way to under-rate the degree of skill required for an architect to function as he should. No policy would surely be more harmful than that of lowering, or keeping back, the naturally rising standard of education required for satisfactory performance as an architect. Architects can, in the long run, only attain an absolutely unprecedented status in society if they are really good.

As a great architect wrote at the age of 16 in the year 1885 of his own education ". . . and that it only shows how necessary it is for me to concentrate my whole attention, energy and time on possessing that confidence and also to obtain that great amount of knowledge required to help make a 'successful architect.' And an architect without that success (not financially necessarily) is, well I can't describe it." (Letter from Lutyens to his mother.)

A successful architect indeed, requires a great amount of knowledge, an extraordinary gift for selection of the knowledge that is going to be useful to him, and the assiduity and strong nerves of any student studying a complex social science under modern conditions. Good architects can, therefore, only be produced by a highly selective process, and one which should take place preferably during the years of education, rather than after them.

(iv) Type of Employment.—A common complaint in respect of a junior official architect is that his initiative may be curtailed as a result of either dictation by a non-qualified head of department (perhaps an engineer turned principal), or indirectly by a lay body (a housing or education committee). But no general rule can be laid down to the effect that public employment always and inevitably offers less scope than private. As one architect remarked, this entirely depends on particular circumstances; getting public employment may mean selling your soul for a mess of pottage or it may open the door to real opportunity. Many architects in their middle years seem to find that the prospects in Government departments not merely offer more security but are more favourable to initiative.

The dangers of public employment

But while it is quite possible for a public office to be so organized that groups of architects have scope to express themselves and have perhaps even wider opportunities than they could ever have hoped to secure in private employment, there are some dangers in the trend towards public employment. There were many complaints that prospects for the private architect were being diminished by the encroachment of the Government and Local Authorities, which in some provincial cities is indeed very marked. There are complaints (even from those who admit that,

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in public offices, opportunity is ample for the young members of teams or groups, and prospects good) that advancement in the public service changes the architect inevitably into the administrator. But how to mitigate the evils of bureaucracy in those departments where they are rife is unlikely to be discovered without a general overhaul of administrative procedure; it would seem that some Government departments have much to teach others on this point.

So little work by public architects

Complaints of the growing size of public offices are perhaps somewhat beside the point. If the work done by official architects were always carried out in conditions that were favourable to initiative, the growing size of public employment would not necessarily be against the best interests of the profession. It is presumably just as important to campaign for these favourable conditions as to grumble that public offices are taking on too much work. Indeed, there is a sense in which there would be quite general agreement that too little work is done by official architects, for it is common knowledge that many local authorities which could properly employ qualified architects, in fact, fail to do so.

There is little doubt that official architecture (as a career) can be complementary to private practice and vice versa. The view that progress will only be made if nearly all work is placed in the hands of the private practitioner may now definitely be described as old-fashioned (it was expressed by only one contributor to our sample, aged 69). From a career point of view private practice still provides a wonderful opportunity to the courageous or determined man, and many, of course, are still very successful at seizing it. But the average ability and achievement of those in public or commercial offices may well be (as one architect suggested) better than the average elsewhere; not excluding the ability to design. Firms of private architects with whom some public architects have to be in constant touch are not always so up-to-date, or efficient, as their official colleagues. This kind of fact needs to be borne in mind, side by side with the contrast between the brilliant private practitioner and the occasionally hidebound and humdrum Whitehall nominee.

There is much to be said in favour of careers becoming even more mixed than they are at present, that is, for architects to spend a part of their careers in official and a part in private employment.

The code of professional conduct

With regard to private offices, one question that could not help arising was how far the code of professional conduct is effectively observed in the spirit as well as in the letter. For example, Article Seven lays down that an architect must not carry on or engage in any trade or business inconsistent, or out of keeping with, the discharge of his professional duties (a builder's, building material's manufacturing, or land dealing business are among those mentioned as examples of "unfitting" activities). Yet one registered architect wrote that he was financing his own construction with directly employed labour, and "with most satisfactory results." The large operators

with adequate capital may, and apparently do, acquire interests in estates, whether urban, industrial or agricultural, of a substantial kind without infringing the rule that they must not be financially interested to "so great an extent" as manifestly affects their professional judgment. The code bears hardly upon the man in a small town where a practice might survive if it could be legitimately linked with some other allied enterprise.

The anomaly of the architectural consultant

It would not be easy to amend the code; nevertheless, it is not clear that all its provisions are realistic. The term "architectural consultant" (which is permitted) evidently now conceals a variety of business connections between architects and manufacturing interests; is there any provision that a client must be made fully aware of these connections? Might it not be better if the connections were more openly entered into but at the same time more openly displayed?

Under the present code the architect must be "impartial" between his client and the contractor. This position is still not satisfactory, if, as has been suggested, the architect's economic function is to satisfy the client and to keep building costs to a minimum.

Architects' fees should be revised

One of the most unfortunate features of present arrangements is that architects have been given a vested interest in maintaining building costs high, or as high as their clients are likely to stand, and, in many cases (through the operation of the income-tax laws) in the spinning out of work over a number of years. This situation ought to, and could only, be changed by a complete revision of the present basis of architectural fees. Some financial benefits should accrue to an architect, the more economical a job is, and the more quickly it is satisfactorily completed, instead of conversely. The fee may be payable on some sliding scale, based on a formula related to target time and target cost for the contract. (This kind of reform could only be of much value if fixed-price contracts replaced our present system.)

Should draughtsmen be architects?

Finally, there is that large type of employment represented by assistantships, both in private and public offices. Some assistants have prospects in front of them, but many of them have not. They may be roughly divided into two classes: those who are employed below the limit of their capacity, but in relatively important posts; and secondly, those who are, in effect, working always for someone more senior, and are acting as true assistants, whether for a long or short period. The problem for the first of these classes is mainly financial. They have little grounds for complaint about their work or their prospects. To raise their remuneration will only be feasible (in the long run) if the economic function of architects is well performed. As for the second class, they too complain of under-payment. The question is whether they are not in some cases wrongly educated. Should they have taken full architectural training to spend their working lives as draughtsmen, or assistants in the true sense? This question does seem to need most serious e rule great great ment. town

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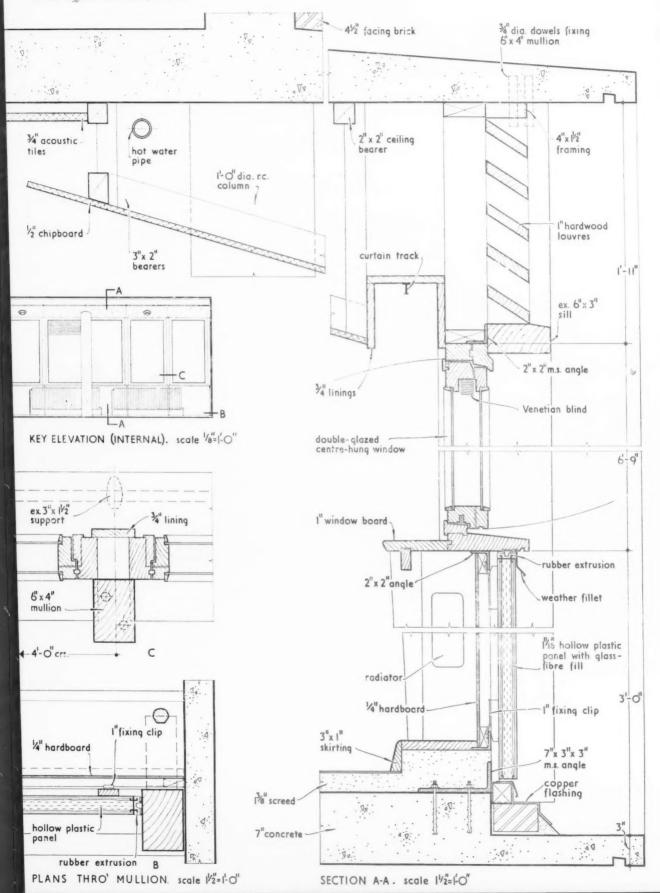
WINDOWS: 19

WINDOWS IN CONFERENCE ROOM: RESEARCH LABORATORIES AT WELWYN GARDEN CITY E. D. Jefferiss Mathews, architect



The purpose of the sloping baffle is to direct smoke and used air, rising in the centre of the room, outward to the louvres. Should natural ventilation prove insufficient, allowance has been made for the fitting of an extract fun.

WINDOWS IN CONFERENCE ROOM: RESEARCH LABORATORIES AT WELWYN GARDEN CITY E. D. Jefferiss Mathews, architect



WORKING DETAIL

FURNITURE AND FITTINGS: 40

FUME CUPBOARD: RESEARCH LABORATORIES AT WELWYN GARDEN CITY

K. E. Amos, designer : E. D. Jefferiss Mathews, architect to the building

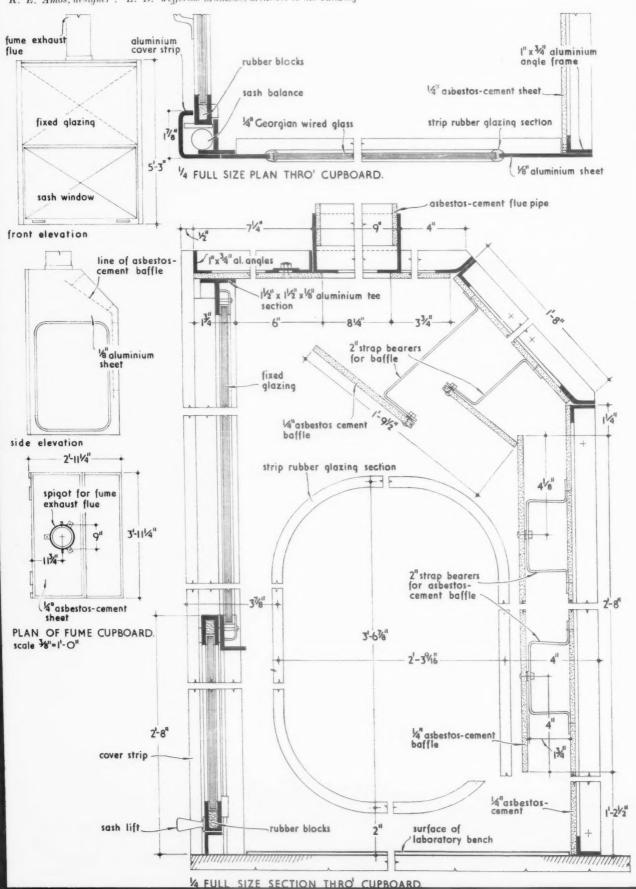


The fume cupboard is designed to be morable and is not fixed down to the bench. It is ventilated by a flue at the top that connects it to an air-extraction plant serving a number of similar cupboards. In the past, fume cupboards have usually been made of timber (more especially of teak). These are among the first to be made of glass and metal, all metal parts being protected with rubberbased paint. The asbestos-cement baffle is designed to direct fumes away from the hands of those working at the cupboard.

WORKING DETAIL

FUME CUPBOARD: RESEARCH LABORATORIES AT WELWYN GARDEN CITY

K. E. Amos, designer: E. D. Jefferiss Mathews, architect to the building





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re-examination, not with a view to stifling the enterprise of the really ambitious assistant, but in order to provide a more economical use of both types of man-power (the very highly skilled architect and the skilled assistant).

Of economic prospects, enough has already been said. They are, in the long run, bound up with the other reforms which have been, most tentatively, put up for discussion. If the "full-blooded architect," as one correspondent put it, is to have parity, by training or responsibility, with

other fully-trained professional men, his status must not be diminished by confusing him with draughtsmen, officials no longer practising architecture, or other such categories. Much depends in life upon our own opinion of ourselves. Unless architects pay themselves very high respect, and reserve the name only for the most highly accredited persons, they can hardly expect (especially without advertising) the rest of the world to regard their skills with the awe to which those skills are properly entitled.

PART III

A report on the statistical results of the sample enquiry of 1953 was drawn up by Martyn Webb. Many of the tables and conclusions embodied in his report have been quoted in the series of articles published in the Journal. The full report was circulated to a number of architects and copies of it can be borrowed on request to the Editor of the Journal. In this part, comments kindly made by some of these architects on the report are set out with some counter-observations of Professor Bowen's.

S. W. MILBURN (F) PRIVATE ARCHITECT, SUNDERLAND. (RIBA COUNCIL, 1952–53.)

"My thoughts have been further stimulated by the survey to consider the many solutions to this question, such as pressing for a stronger measure of registration, which would increase the 25 per cent. of building work now undertaken by architects. However, one of the simplest and quickest methods of bringing about a desired change in outlook is, in my opinion, more competitions as advocated in the RIBA report.

Through the schools we are turning out a fine and enthusiastic group of young architects who, with comparatively few exceptions, have no reasonable prospect of exercising the undoubted right of any person qualified in a learned profession of becoming a principal in private practice or in a public office

There is no reason at all why there should not be dozens of open competitions annually, and public and private offices should offer wider facilities and opportunities to young architects to compete, and, if working in conjunction with the principals, a share in successful results."

IAN BOWEN.—Mr. Milburn is, I am sure, quite right in emphasising the frustration that exists among young architects, who are not asking to be put at the head of their profession before their time, but for a reasonable chance to compete. The question of open competitions was not directly discussed in our survey, but there is no doubt that the RIBA's suggestion is widely supported. It might be a question for consideration whether more could not be done by the RIBA, to bring to the notice of intending building clients the advantages that a competition might confer upon them. But open competitions can be wasteful of time, and are certainly not a sovereign remedy for all the ills of the profession.



ANTHONY COX, PRIVATE ARCHITECT, LONDON.—"The report expresses some doubt whether an assistant to an architect is necessarily an architect, and goes on to summarise, from comments made by the sample, a definition—albeit tentative—of the skills each profession requires of an assistant. Contrasting this definition with its definition of an 'Architect,' it concludes that there are two distinct levels of skill required for the practice

of architecture—or almost distinct types—and that these two levels or types should logically be reflected in training.

This all sounds very tidy and reasonable but I do not believe it

IAN BOWEN.—Mr Cox's argument is stimulating, and his substantive point is well made, namely that among modern architects there is undoubtedly a movement towards teamwork both in private and public offices; that for this teamwork many fully-trained architects are required and that a hierarchical analogy does not fit the profession. When this has been said some doubtful points still remain. The field-marshal's baton analogy was not originated by ourselves, but found to be commonplace in discussion of the question of architectural education. It was this idea which could perhaps more accurately, but less succinctly, be described as opportunity for all those engaged in architecture, in however humble a capacity, to enter freely into the

in fact to be correct . . . I think the sample's hypothetical assistant is a wishful abstraction. I would guess that most men who can ' interpret design detail from a draft plan or sketch' (whatever that means—and it means precious little to me) will do so the more satisfactorily for having had 'a field-marshal's training,' and that with that training they will also, in the long run, be better equipped not only to interpret but to implement . . . Surely one of the most significant aspects of both public and private offices today is that a great deal of initiative and responsibility necessarily lies with those whom the report describes as occupying a 'subordinate position.' But they are not so much private soldiers in a hierarchical army as members of a team. The team may have its hierarchy too, but if it is to function properly it must pass the ball from one to another and back again, not merely from seniors to juniors. If, in short, it was more of an efficient team and less of a blundering armythe profession might be handling rather more than 25 per cent. of the total value of building contracts . . . Of course, field-marshals are dreadfully badly trained anyway."



A. G. SHEPPARD-FIDLER, CITY ARCHITECT, BIRMINGHAM.—(RIBA COUNCIL). "It is clear that Professor Bowen feels that there may be a place in our ranks for the architectural assistant as distinct from the fully-qualified assistant architect who is, in effect" a prospective principal, and he demonstrates convincingly the inherent disadvantages of any raising of the age at which qualification becomes possible. If official offices seem to offer

fewer prospects of promotion to principal than does private practice, it may be because the survey does not, and cannot, show why the 'group leader' in a large office is, in effect, rather like a junior partner in a private firm. The economists suggest that the amount of work done by architects in this country does not really depend on the level of activity of the building industry—so long as only about one quarter of all building is carried out to the design of an architect, and this is a matter which should engage the urgent attention of the profession as a whole. If the architect, can, in practice, prove himself to be an essential factor in good and economic building—then there is little reason why the profession should not expand."



L. HUGH WILSON, CITY ARCHITECT, CANTERBURY.—" it is suggested, with a cautionary note, that nearly one quarter of the principals in government service reached that position before the age of 31. Although it is appreciated that these figures are based on a sample of the profession, the conclusions appear to be unrealistic and further information would be useful."

profession, provided that they could attain certain examination standards. This amounted to a policy of an open instead of a closed shop, mitigated only by the ability of the profession to raise its examination standards if entry became too large. Once a young man was in the profession he could theoretically have a chance of reaching the top of the tree by his own efforts. What is not clear from Mr. Cox's letter is whether or not he is in favour of this policy, and the argument adduced in favour of it. What he is saying in effect, is that modern architects are so democratic that any insignia of rank has no meaning, and in effect the members of the team are all equally field-marshals. it is presumably all right for them all to have had the same elaborate training.

It seems strange that there is no part of the work of an architectural office which could be devolved upon less fully qualified personnel. Evidently for the kind of office which Mr. Cox describes the present system of education has very few de-merits. But it seems doubtful whether the procedures followed in this office would be economical of the use of highly-skilled manpower if extended to all types of architectural work.

IAN BOWEN.—The importance of the group leader was fully recognized by the authors of the survey, but it was not possible to assess its numerical extent among public employees.

On the basis of the survey it would not be possible dogmatically to assert that a new race of architectural assistants should be created, but the semi-official argument about the "marshal's baton" remains unconvincing. After all, a doctor does not expect every nurse, or every medical orderly, to be a potential doctor. There seems to be plenty of room for fully-qualified architects to serve as "assistants" in both public and private offices, with varying degrees of responsibility. But there also seems to be room for qualified assistants at a different level and perhaps with a different technical training.

IAN BOWEN.—The total to which Mr. Wilson refers gives the percentage of architects (in our sample) who are now in government service, including local and central, who "became principals" before the age of 31. The question did not refer to the date at which people reached their present position. A man might have become a principal in a small private office and have later moved into a large public office as an assistant.

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L. HUGH WILSON.—" If a building is to be a satisfactory work of architecture, all its parts must receive consideration by persons trained and skilled in three-dimensional design. This is the prime function of an architect and one that distinguishes him from other technicians. Principals and assistants must both act in this process of design, and the contribution of the assistant can be of great importance. He cannot play this part, however, if his training is to be restricted to that of a draughtsman, with a possible knowledge of materials and construction.

This report will be justified if it makes architects think about this and the direction in which the profession is heading..."

IAN BOWEN.—In so far as assistants are given work of the responsibility implied by Mr. Wilson, he is of course, absolutely right in arguing that they need a full architectural training. I do not know that this quite meets the point of the necessity to employ a given proportion of draughtsmen and other technicians in an architectural office for whom less rigid training than the full architectural course might suffice.



MAJOR EDWARD PROCTER, (L), PRESIDENT, INSTITUTE OF REGISTERED ARCHITECTS.—" I strongly opposed the first bill on its inception on the grounds that it would not prevent the unqualified person from acting as an architect: he could so act under any name or title . . . The survey reveals that there exists a variety of 'architects' amongst them being those who use the term preceded by some adjective or other. Many of these,

as the survey shows, are not actually on the ARCUK register, and, in consequence would not appear legally entitled to use the name architect. A decided case in the Courts would be of interest."

MAJOR E. PROCTER.—" I very seriously question the wisdom and morality of the present system of turning upon the world a large number of students from schools, colleges and institutes, many of whom will have no possible chance of making a living from architecture . . . Definitely holding the view that there can be no comparison between the school-trained architects and those who enter by the older system of articled pupilage in an office offering wide experience with ample time given to attend classes. I am convinced this is the better, although the much harder way, to train the future architect. It is not now a question of the rich and the poor, since most practising architects today would be pleased to give articles without premium to a promising pupil with a salary, payment of school fees and reasonable time for the student's study."

MAJOR E. PROCTER.—" The most thorny question connected with the official architect is that either he or members of his staff may practise privately, and, as there is no lack of evidence, cut their fees below the level generally recognized by the profession. In my judgment, this is one of the most serious threats to our profession, not to be waved aside by a spate of denials of its existence."

IAN BOWEN.—Regrettably enough, several illegalities of the kind referred to by Major Procter, and others which would appear much more clearly to lie outside the scope of the present law, were brought to our notice during the survey. As all information was entirely confidential, the matter cannot be taken any further, but there seems to be grounds for some official investigation of the position.

IAN BOWEN.—There seems to be quite a high wastage from the profession in view of the considerable volume of architectural work now being done. But whether this could be avoided by reducing drastically the number of pupils in the schools seems to be rather doubtful. Major Procter's view on this question seems to run counter to that of most of the profession as a whole, who undoubtedly hold as a majority view that the schools-trained architect is superior to an articled pupil.

IAN BOWEN.—No information was received in the survey as to the level of fees charged by official architects undertaking private work. It does appear, however, that some official architects take articled pupils and receive fees to their own profit. Both this, and the undertaking of work at a fee, are presumably regarded by the public employing authorities as harmless or beneficial in that the official architect thereby widens his professional interest. The practices would seem to deserve, however, some reconsideration.

IAN BOWEN.—Most architects tend to look to the RIBA to carry out any such function as this, but of course, advertising has been prohibited for individual architects as unprofessional and is not even on a collective basis the kind of action which a learned society would readily undertake. Any fruitful development from Major Procter's suggestion

MAJOR E. PROCTER.—" Personally, I could wish to see the ARCUK more concerned with the prosperity of the profession and less with education of new entrants. I understand certain bodies connected with the law have recently advocated advertising the need for the public to consult and make use of lawyers to a greater extent, than is done at present Surely a rich field is open to architects in this direction."

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GEORGE C. FOX, PRESIDENT OF THE FACULTY OF ARCHITECTS AND SUR-VEYORS—(Comments made in a personal capacity.)—" It is interesting to learn that architects favouring private practice still exceed those in favour of official appointments and that there is a marked tendency for the newer recruits to the profession to favour private practice, an indication that this field offers a greater scope for the expression of the

individualist in spite of the growth of architectural departments in all branches of Central and Local Government during and since World War II."

GEORGE C. FOX.—" This being the case, how best can the work of the creative artist be utilised in the service of the community? For after all, the profession, while striving to maintain the traditions of beauty and culture of its art in our surroundings, cannot lose sight of the contribution it makes in the everyday life of the community in the better use to which not only our buildings, but our land can be put, not an inconsiderable matter in small islands such as ours. This probably calls for a revision of the relationship between the private and official architect, and a broader basis for the distribution of employment on the part of the Central and Local Governments . . ."

GEORGE C. FOX.—"The respective merits of training have long been exercising the minds of those responsible for architectural education, and while it cannot be denied that a full-time school training produces a high degree of academic knowledge and earlier qualification for registration, office training on the other hand equips an architect to handle the practical application of his art at an earlier age thereby increasing his usefulness, particularly as an assistant. A school trained architect can, after twelve months experience in an office; open an office and practise as a principal. Is twelve months sufficient to equip an architect to cope with the many and diverse problems... in .. organizing and carrying out ... building projects today? The experiment has, I believe, been successfully carried out in other fields of combining the school training with regular periods of practical training in offices during the progress of the course."

GEORGE C. FOX.—" Several points stand out which require close investigation. (a) Over 2,000 architects no longer follow full-time architectural employment. (b) Approximately 4,000 corporate members of the RIBA are not on the register, which means that they cannot be practising architecture. (c) Only 25 per cent. of the total value of building work carried out in this country is under the control of architects. Item (a) can, and has been, reasonably explained, but if the supposition that (a) and (b) should be combined is correct then the proportion of architects not following their natural vocation is alarmingly high. Item (c) gives a great

could surely only come about if the functions of the ARCUK and of the RIBA were more logically arranged than they are today, as a prior measure.

IAN BOWEN.—Mr. Fox's explanation of the facts may be correct, but the distribution of new entrants between private and public employment is perhaps more closely determined by vacancies in public employment than by the wishes of entrants to take up one or other career.

IAN BOWEN.—Mr. Fox seems to be advocating a closer relationship between the private and the official architect; if any means can be found to implement this suggestion in a practical way, it is surely desirable to do so.

IAN BOWEN.—The conclusion at which Mr. Fox arrives, namely, the desirability of some combination of practical with theoretical training, is almost universally supported by the profession as a whole. His view that the school-trained man is not, as a general rule, capable of assuming full responsibility for a building project after only twelve months' experience is no doubt also fairly widely accepted. But in preparing the ground for any reform of this situation, great care must be taken to ensure that the practical training offered is the right kind of practical training: and that the complexities of "organizing and carrying out building projects" are not learned only by the hard way of trial and error, but also by the orderly study of the principles involved in good organization and managerial efficiency.

IAN BOWEN.—The facts relating to the profession seem strongly to support Mr. Fox's view of the questions which ought now to be answered. Two comments should, perhaps, be made: a full explanation of the 4,000 or so unregistered corporate members of the RIBA is not available, and this figure was not quoted in our report. What arrived at there was an estimated 4,000 registered architects who for one reason or another no longer followed full-time architectural employment (i.e.,

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deal of food for thought and does suggest that at present, as the report says, the architectural profession is only a limb, and a small one at that, of the building industry instead of being the head. Does this mean that the Registration Act has failed and that a large proportion of building work is still being carried out by quasi 'architects' under flowery and misleading titles? . . . Have we as a profession neglected to educate and inspire the public in the proper function and use of the profession? Or, let us face it, is the profession failing to impress the public of the need and desirability to employ an architect unquestionably as the head and inspiration of every building project?"

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MALCOLM GILLING (F) PRIVATE ARCHITECT, LIVERPOOL.—" The Report does not stress a point I feel should be mentioned, namely the wide difference that exists between private practice and public authority (an all embracing term). The private architect's knowledge of office organization is lamentable. I know very few who have a clear idea of income tax, PAYE, general certification routine, insurance . . . administra-

tion . . . All these things and much more a private architect must know, or muddle through. Where and how is he to learn?"

MALCOLM GILLING.—" The survey discloses that a large proportion of architects qualify as a result of training in private offices. It suggests that the reason is largely financial but this is not true. I know many young men who cannot get into the schools, which are already overcrowded and are cutting down their entry numbers into the bargain."

MALCOLM GILLING.—" Mr. Webb included in his report the remark that 'In essence the present method of training not only assumes that every soldier should carry a field-marshal's baton in his knapsack, but, by encouraging him to take RIBA finals, equips every soldier with the insignia of rank as well." This statement is poppycock. We already know that LA's etc., don't even try to train assistants. The poor old private architect does his best but could never hope to produce the results of years of experience which have gone into the preparation of curriculum to train men and women to RIBA final stage."

MALCOLM GILLING.—" It has been said that there is no substitute for experience, and that may be true so far as the pure mechanics of building are concerned. But let us remember that architects require something else—that intangible ability to reorganize and understand beauty and to be able to visualise in all its dimensions a creation long before the mundane and solid building details come to be finished. This ability does not come from experience

Mr. Fox's category (a) plus some other categories). It seems questionable whether members of the RIBA who are unregistered should all be assumed not to be practising. They might be practising in firms the leading members (or member) of which were on the register. As for the 25 per cent. of work alleged to be going to architects, this very rough guess cannot be substantiated, and, as was pointed out in an earlier article, is a most unreliable figure. To ascertain the total earnings of the profession, the RIBA would need to ask the Board of Inland Revenue for information that might well be made available.

IAN BOWEN.—Mr. Gilling certainly raises a pertinent and very difficult point. As he points out, administrative routine has to be mastered by the modern private architect, whereas the public authority architect takes over the machine complete (whether running efficiently or not—but at least with expert advice ready to hand). The burden of administrative routine lies heavily on more than one profession, on doctors and university teachers as well as architects. This burden demands inevitably a larger organization—or at least puts a higher premium upon its advantages—for only the larger firm can afford to carry the office head, or secretary, upon whom some of the routine of administration can be devolved.

IAN BOWEN.—I have not written round to the schools to discover how serious the bottleneck mentioned by Mr. Gilling really is at the moment; undoubtedly it was quite a serious factor a few years ago. Our own impression that finance was often a barrier seems to be confirmed by developments in university level education generally.

IAN BOWEN.—Although not totally unwilling to find my respected colleague, Mr. Webb, guilty of writing poppycock, Mr. Gilling's comments do not convince me that he has done so on this occasion. As stated above, the field-marshal's baton argument was no invention of our own, but was the analogy quoted to us whenever we suggested that those who were undoubtedly going to pass their lives as assistants (if there were any such) might appropriately receive a different training from those who were going to become architects in a fuller sense. Mr. Gilling, and some of Mr. Webb's other critics, seem to have read a different meaning into his words from that which was intended,

IAN BOWEN.—Mr. Gilling seems to draw a clear, and to most people, acceptable distinction between the outstandingly gifted architect and the more mundane types; there is hope for the latter, he argues, because it takes all sorts to make up an architectural office. Nothing in our survey ran directly counter to this argument. It was not

and can never be learnt by practice. If it is there training and experience will bring it out if it is not there, nothing in my opinion will produce it But we should not think, therefore, that men lacking this aesthetic inborn quality must remain lower-grade assistants. There is room in every business, be it private or public authority, for principals with the right experience for the right job."

suggested, for example, that the less-than-whollyinspired architect should have taken some "lower" form of training and proceeded to become a "lower" grade assistant. Anyone capable of becoming a fully-fledged architect, that is a principal, whether inspired or uninspired, was regarded in the survey as fully entitled to a full-time architectural training. But while Mr. Gilling's point is quite consistent with the conclusions of the survey. had all its implications yet been thought out? If it is correct to divide architects along these lines what types of work should be relegated to the non-creative, the less than inspired, architects? Are they to take over work of little public importance, or are they, after all, to keep the administrative machinery of the office ticking? I do not know the answer, but there seem to be some questions here on which policy-makers should have a definite view; if fully-trained architects are to include specialists on the purely business side of affairs (a possible solution), then new options should surely be made available for their educational curriculum.

NEWS

LMBA

How Prices may be Reduced

At the LMBA's AGM on January 19, the president, Gerald Hill, said in his retiring presidential address:

"In the past year our industry has obtained a far greater measure of freedom from controls than we have enjoyed since the carefree days before the war. This new-found freedom is a challenge to us; let us make the best possible use of it. There is not going to be an orgy of reckless building. For one thing neither the men nor the materials are there, and for another, which is equally important, building is a social service and first things must still come first. "It is probable that the public authorities."

"It is probable that the public authorities, whether the Government or the Local Councils, will still be our principal client, and that client is going to look more and more keenly at our prices. So it is with the private owner too, who, although he may be free to build without licence up to £1,000 or £25,000, will still look even more carefully at these sums before he decides to put his work in hand. If in his judgment the price is too high, he will postpone the work until happier days.

"This aspect brings us right up against the question of costs, which is undoubtedly the most important of the problems facing us today. How is the cost of building to be reduced? It cannot be by cutting wages, which would be undesirable, even if it were possible. Nor, I fear, by any substantial reduction in the price of the materials we use. As far as I can see it is only the question of administration and organization which remains, and as this is entirely within our control it seems to be a way in which prices might well be brought down.

"I will not hear it suggested that the building industry is inefficient. It certainly is not, but there is surely a great deal more which the best of us could still do.

"The organization of many building sites provides another field for improvement.

The bits and pieces lying about a site are all a "dead loss" and present an atmosphere of untidiness. Every piece of material that has to be moved before it is used, because the delivery point was not thought out beforehand, is another dead loss. Herein lies a field for self-examination."

After the report for 1953 had been adopted, R. S. Williams, chairman and managing director of the West London firm of J. P. Williams Ltd., was elected president of the LMBA for 1954, and Laurence Holloway, K. C. F. Foster and W. K. Laing were elected vice-presidents. D. E. Woodbine Parish was elected hon, treasurer in succession to Nigel Hannen.

Minister Estimates Building Increase

Speaking at the LMBA's annual lunch last week, Sir David Eccles, Minister of Works, said that he could see no reason why the monthly amount of building work done in Greater London, now valued at £25 m., should not rise by at least £1m. The monthly labour force in London, he said, consisted of 210,000 men. The £25 m. could be broken down as follows: housing, new, and conversions and repairs, £5 m.; authorized work on nationalized industry and government offices, £3½ m.; maintenance and repairs, £1 m.; and £3½ m. on licensed new work other than housing. The remaining £12 m. was spent on building work below the controlled limit. As regards the value of work to be done, £15 m. was to be spent on churches in the Greater London area, of which £1½ m. would be spent this year. There was a demand for £7 m. worth of work for shops, and licences for £3 m. had been applied for, for further houses, clubs and places of entertainment.

FAS

Election of President

On December 10, 1953, George C. Fox was unanimously re-elected president of the Faculty of Architects and Surveyors for the ensuing year. At the same meeting N.

James Rushton was unanimously elected vice-chairman of the executive council and president elect.

DIARY

President's Address to Students. Criticism by Basil Spence of work submitted for prizes and studentships. Presentation of prizes. At the RIBA, 66, Portland Place, W.1. 6 p.m. FEBRUARY 2

Architectural Criticisms 111. Discussion on Bankside Power Station. At the ICA, 17-18, Dover Street, W.1. 8.15 p.m. FEBRUARY 4

Planning in Europe and Great Britain.
F. J. Osborn. At the Students' Planning
Group, 28, King Street, Covent Garden,
W.C.2. 6.30 p.m. FEBRUARY 8

Architecture in Elizabethan England. II. The Queen's Works. John Summerson. At the Courtauld Institute of Art, 20, Portman Square, W.1. 5.30 p.m.

FEBRUARY 9

Correction

The Secretary of State for Scotland, not the Town Council of Edinburgh, was responsible for the appointment of Professor Gordon Stephenson as assessor in the Meadowfield Enquiry, which Linda Westwater referred to in her Scottish Newsletter, on December 31.

The pithead baths at Birley Beighton, illustrated in an article (Jan. 14) on the architecture of the National Coal Board, was designed by J. A. Dempster; associated architects, Amery Taylor and Hatfield, and not as stated. Similarly, J. A. Dempster designed the Grange, Askern and Oakenshaw baths, the architects in charge being G. Devlin, C. Smith and G. Devlin respectively.

F. G. Frizell should have been included in the list of architects mentioned at the foot of page 48 in our issue of January 14.

Sir Alfred Bossom was made a Baronet in the Coronation Honours and is not a CBE as stated in the "Men of the Year" feature in our New Year issue, published last week.

TECHNICAL SECTION

The building operatives have submitted their claim for a wage increase of 9d. an hour and the employers have expressed their views on why so large a claim cannot be granted. Both sides are now considering the respective cases in detail. Few connected in any way with the building industry will question the general desirability of improving the status of the building operative to the highest level, and those whose sympathies lie more closely with the operatives quote the situation in the United States where building workers are among the elite of industrial workers. If that is the case there, say they, why is it not so here? The answers are not difficult. The American building worker has no fortnight's holiday with pay; he operates on a strict hire and fire, with nothing approaching the working rules of this country to safeguard his interests; he has no welfare facilities on the sites, while such things as travelling time and tool money are beyond his realm of experience. What chance, then, has the building operative in this country to improve his status? How can he get more money in his wage packet? He holds the answer to these questions himself. The general economic situation supports the view expressed by Sir David Eccles the other day that "wage increases must be earned." Building output has risen satisfactorily in the past twelve months, during which time the industry has shouldered the extra responsibility of finding the money for an extra week's holiday. A similar improvement in productivity, in 1954, would appreciably strengthen the operatives' case for a rise in a year's time.

This week's special article

18 CONSTRUCTION: THEORY economics of multi-storey flats

The number preceding the week's special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant Information Centre items Further and earlier information can be found by referring to the index published free each year. Some time ago Peter Dunican set out some notes on the structural economics of multi-storey flats. This week the same author continues his study by describing experiments abroad, in particular a four-storey, box frame, block of flats at Malmo, Sweden, where design, and site organization and co-ordination were thought out and intregated to an unusually high degree.

In my previous notes on this subject published in the JOURNAL of June 5, 1952, I suggested that the only way to make any real progress in the endeavour to build high blocks of flats cheaply was for local authorities to abandon the system of competitive tendering and to set up a construction

best solution of the particular problem and then build it. The prime purpose of this proposal was to enable the use of new building methods to be explored in the field. It is not possible to establish with certainty on paper whether any particular idea will be an improvement on existing methods; ultiteam whose task would be to find the mately, full-scale experiments must be

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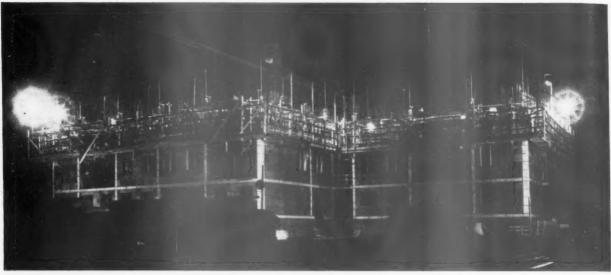


Fig. 1, above, night work in progress on a fifteen-storey point block at Roskildevej, Copenhagen. Below, Fig. 2, a block nearly completed. These blocks are similar to those at Bellahoj described by Peter Dunican in the accompanying article.



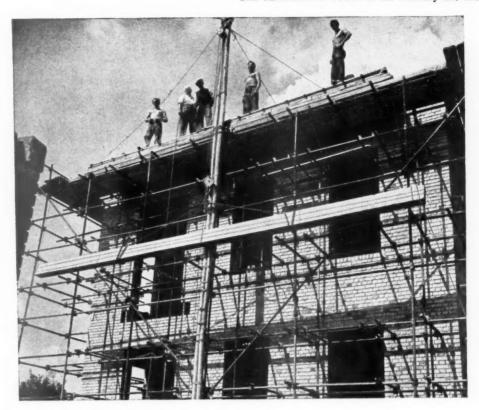
carried out. Unfortunately, the mid-Victorian, competitive-tender complex which still prevails here inhibits development work of this nature.

In Scandinavia, where perhaps, in certain respects, they are more fortunate (for instance, quantity surveyors, as we know them, do not exist), two very interesting housing schemes are nearing completion. On the first scheme, at Bellahoj Park, Copenhagen, three different systems of construction have been used for building the point blocks, which are eight, ten and twelve storeys high. Two of these systems are forms of the sliding shutter principle which has been successfully used in Sweden on similar work. The third system utilizes a precast concrete framework made in a factory away from the site.

One of the sliding shutter systems, which has been developed by the civil engineering contractors, Larsen & Nielsen, A/S, has also been used for building five fifteen-storey point blocks at Roskildevej, Copenhagen. These blocks are similar to the Bellahoj blocks in plan. Fig. 1 shows one of the blocks under construction, and Fig. 2 shows a block nearly completed.

BOX FRAMES FOR SLAB BLOCKS

Up to the present, multi-storey point blocks have not been widely used in England; the slab block is more prevalent. For this type, I contend that a box-frame structure is very suitable. It must be admitted, however, that this contention is based on the assumption that contractors will fully exploit the repetitive nature and inherent simplicity of the structure. I have been associated with the construction of a number of box-frame blocks, but, in my view, not one of the contractors involved in building them has taken complete advantage of the possibilities. There may be good reason for this, but I find it difficult to understand why



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they do not when such a suitable framework is provided. I think it is quite evident that without carrying out full-scale tests no real progress can be made. The BRS, through the Building Operations Research Unit, have undertaken some work of this nature. For instance, the use of mobile tower cranes on the Norwich housing scheme is one example, although this was a limited experiment which was undertaken mainly to establish whether mobile tower cranes were of use in traditional house construction. The houses were not specially designed to fully exploit the crane's capabilities.

In Malmo, Sweden, however, the Skanska Cementgjuteriet have just completed a four-storey box frame using two mobile cranes. The architectural planning, structural design and the construction techniques used were based on fully utilizing the capability and capacity of these cranes. Mechanization was not limited to the cranes, but they were the major items of plant. The smaller crane, a Wolff 15, was used mainly for the manufacture of precast elements, and the larger crane, a Wolff 45, for the main construction work (Fig. 3). All the site transportation was carried out with these cranes, their capacity determining the maximum size of the units to be handled.

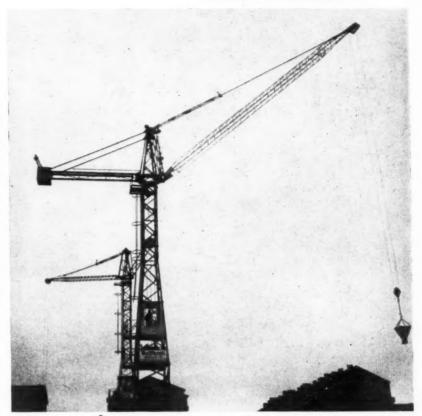
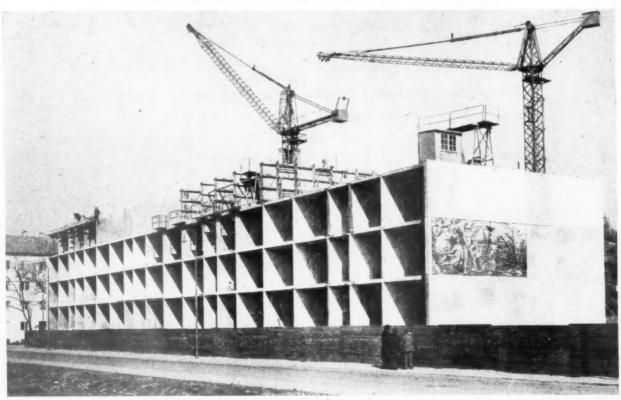
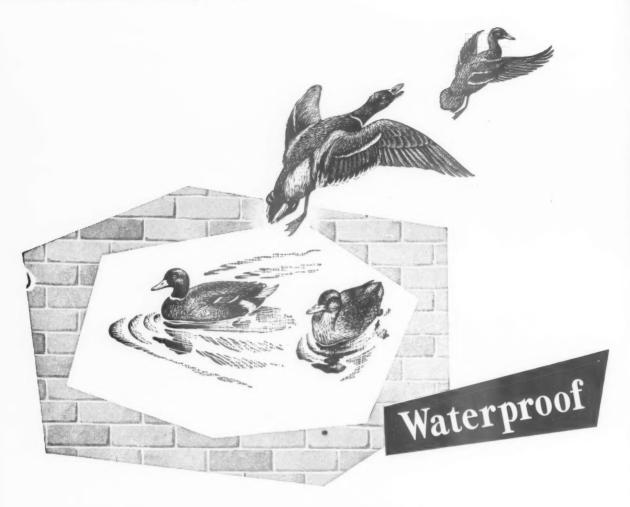


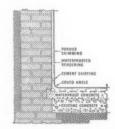
Fig. 3, above, a Wolff 45 crane, with beyond, a Wolff 15, used in the construction of a four-storey, box-framed block of flats at Malmo, Sweden. All transportation on the site was carried out by these two cranes. Below, Fig. 4, the block of flats under construction. Three floors are virtually complete, the internal walls finished, save for painting, the floors screeded and polished and the services partly installed. The fourth floor cross walls and the roof are in the process of being erected, the work proceeding from left to right in the photograph.





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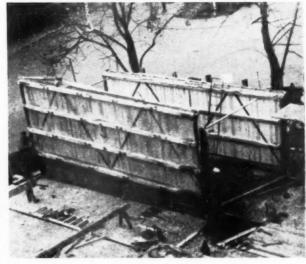
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Above, Fig. 6, the shuttering Above, left, Fig. 5, a combined weighbatching and mixing concrete plant on the Malmo site. was made in units to suit wall length and floor height, but at the same time was light enough to be handled by crane. Below, right, Fig. 7, the hessian which made a textured matrix for the inside faces of the walls.

CONCRETE IN-SITU CROSS WALLS

The block, which is 66 m. long and 12.6 m. wide, contains forty-eight tworoom flats. There are twelve flats per floor with staircase access. Three flats with one staircase form a typical unit, and this unit repeats four times in the length of the block. The planning is in accordance with the local byelaws. The structure is a straightforward box frame (Fig. 4). The internal cross walls are 12 cm. thick and are not reinforced. These walls were cast in place, but the non-structural longitudinal walls and partitions were precast vertically on the site and lifted into position by the crane. The gable walls were also precast complete with their external finish. The structural floor is in normal reinforced concrete, cast in place, using a rather unusual system of shuttering, which is referred to later.

It is clear that the largest single item in the construction is the concrete. Therefore, to obtain the maximum efficiency, a combined weighbatchingmixing plant was set up (Fig. 5). The whole plant was controlled by one man and it had an output of 10 cu. m. per hour. The concrete was transported in a specially designed skip by the Wolff 45 crane from the mixing plant to the required position.

HESSIAN-PATTERNED CONCRETE

The shuttering was made in large, crane-handable units (Fig. 6). wall shutters were made in single units to suit the floor height and the plan length of each wall. The wall concrete was poured before floor shuttering was fixed. The men placing the concrete worked from a scaffold supported from the shutters by light angle-brackets. The inside faces of the wall shuttering were covered with hessian, the textured

surface of which was imprinted in the concrete surface (Fig. 7). This technique produced an excellent surface; no plaster was used and the walls were finished by painting with a plastic

The floor shutters were similarly treated. The problem here, however, was to make the shutter in such a way that it could be handled by the crane. This, of course, was relatively easy before the floor was concreted, but thereafter the shutter is inaccessible from above.

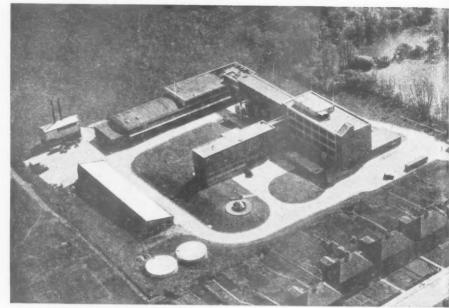
To overcome this difficulty the shutter was mounted on a mobile double-A frame which had retractable posts at the four corners (Fig. 8). To remove the shutter, these posts were retracted and the frame wheeled towards the



Fig. 8, below left, the mobile, double-A frame with retractable corner posts which supported the shuttering for the floor slabs. Fig. 9, below right, the floor shuttering on its mobile frame being slid out from under the floor slab prior to being picked up by a crane.







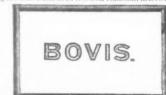
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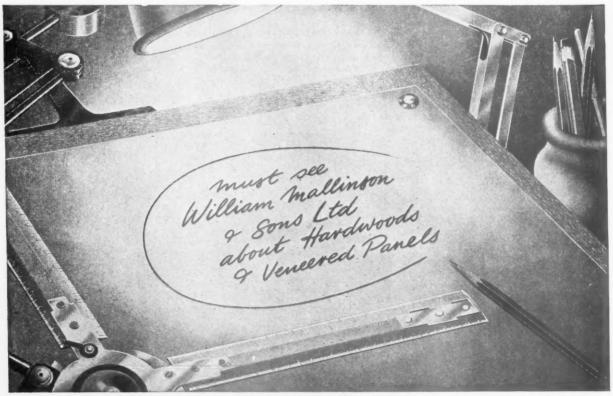
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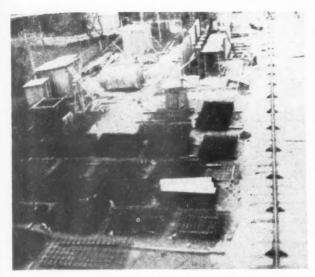


Fig. 10, the welded, cold drawn, wire mesh reinforcement which is stacked on the site until required. On the right is part of the crane's track.



Fig. 11, a floor screed being finished and polished by machine. The near floor slab is already finished, the further slab, with heating panel laid, awaits its screed.

outside of the building so that it could be picked up by the crane and finally swung clear of the structure (Fig. 9).

The slab reinforcement, consisting of electrically-welded, cold-drawn wire mesh, was delivered to the site in large sheets. Until required, the mesh was stacked on the site (Fig. 10). It was transported from the stack to its final position by the crane. Thus, the steelfixers' job could be carried out by labour without any previous experience. The structure, external cladding and

internal partitions accounted for approximately half the total manhours and half the cost. Therefore, it was important for the remainder of the work also to be rationalized. Finishing work proceeded with the main construction. For instance, the floor slabs were screeded, finished and polished by machine as the work proceeded and before the construction of the next lift of walls (Fig. 11). The bathrooms have a mastic floor. When the roof slab was completed the only outstanding work was the fixing of windows, doors, kitchen equipment and other joinery. These fittings were prefabricated off the site, and were fixed by unskilled labour, bolting them into threaded sleeves cast in the concrete. The electric conduit and pipes for all other services were built into the work as it proceeded.

The architects aimed at the highest possible functional standards. The flats are heated by radiant floor panels buried in the floor screed and the external walls are insulated with 15 to 17.5 cm. cellular concrete; the windows are treble glazed. A coldstorage room is provided in the basement and is maintained at 4° C. throughout the year for use by the tenants for the preservation of fruit, vegetables, and tinned food.

All the site works were undertaken in a similar manner to the main contract. The site offices and huts were of a standard size of 3.5 m. by 5.0 m. and were electrically heated. Time switches were installed to allow the huts to be warmed when required. The standard of finish in these huts was exceedingly high, and, in my opinion, it was as good as, if not better than, the average post-war house. It must be understood that the labour force on this contract at no time exceeded 15 men, and therefore it was perhaps easier to provide a higher standard of amenity for the workers. Nevertheless, this is a step in the right direction and is bound to lead to increased productivity.

The Architects' Journal for January 28, 1954

When I visited the site the ground floor walls were being constructed. My main impressions were of the complete order and discipline which prevailed and of the absence of workmen; I saw only nine operatives, including the crane drivers. By comparison, the normal site here, or in Sweden for that matter, appears to be an overpopulated semi-organized rubbish dump.

Analyses of costs and the time and motion studies carried out during the construction have not yet been completed. It is possible that cost per square foot of living space may be higher than the average. This is not unexpected in prototype construction, but it is evident that the results of this experiment will point the way towards increased productivity in the building industry, even if only in the negative sense of eliminating one of the many possible methods. In any case, the results should show the advantages to be gained by completely detailing and planning all the work before construction commences.

THE INDUSTRY

Brian Grant describes this week a recessed light fitting, a domestic washing machine, and the use of plastics for a fan and for a ventilating hood.

PAINTING SPECIFICATIONS

One of the few useful New Year desk diaries, as opposed to the pocket efforts for one's private life, comes from the paint-makers, Thomas Smith & Son, who preface it with 50-odd pages of notes on colour, preparation and application, estimating, and a series of draft received in a series of draft received in the series of the a series of draft specifications grouped under the various types of surface to be treated: normal, adverse (steamy or chemical atmospheres, damp walls, efflorescence, etc.) and textured finishes. The notes are agreeably factual and there is a postcard at the end of the diary section for the 1955 pages, so presumably this will last for ever. The loose leaf binding cover looks durable and Messrs. Smith have resisted the temptation to disfigure it with the deplorable script so many firms affect. (Thomas Smith & Sons Ltd., 288, Whitechapel Road, London, E.1.)

ROOF DRAINAGE

The latest issue of the Zinc Bulletin (No. 11) contains a very useful article by R. Fitz-maurice on gutter and rainwater pipe sizing for various areas of roof. The author points out that although total rainfall varies widely between different parts of the country, the maximum *intensity* during the height of a storm varies very little from place to place. He also argues that if an eaves gutter over-flows it matters very little, since the water almost certainly falls clear of the wall, but that it is most important for box gutters to be properly sized, since they will overflow into the building itself. The working rule proposed is that eaves gutters should be de-signed to cope with 4 inch of rain in five minutes, and box gutters with 1 inch in the same time. Heavy rainfall records show that the eaves gutters would overflow in a heavy

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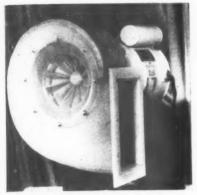
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storm about every two years, while the box gutters would not overflow more than once gutters would not overnow more than once in 100 years. The article concludes with a series of tables showing the size of gutters and downpipes (to BS 1431) required for various areas of roof and a similar table for box gutters, for which no BS exists. (Zinc Development Association, Lincoln House, Turl Street, Oxford.)

VENTILATING EQUIPMENT

The illustration below shows one of a range of Turbro exhaust fans, made with capacities ranging from 300 to 15,000 cu. ft. per minute. The fans are intended for use in corrosive atmospheres where the usual metals (whether protected or not) are unsuitable, and for this reason the casings, impellers, and impeller shafts are made from a recently introduced PVC sheet material known as Vyback VR215, produced by Bakelite Ltd. The material has excellent



An exhaust fan made from PVC sheet by Turner & Brown Ltd., for corrosive atmospheres.

strength and exceptional resistance to chemical attack and weathering, and the whole fan is so designed that no metallic parts are in contact with cor-rosive fumes. For duct work the sheet can be fabricated by the methods normally used for metal, although the work is very much easier. It may also be formed by heat-ing it until it softens, bending it round the desired contour or mould and allowing it to cool. It should not, since it is thermoplastic, be used unsupported in temperatures above 140° F. As well as being produced in sheet form the material is also made in tube and rod for pipe lines and valves. (Turner & Brown Ltd., Davenport Works, Davenport Street, Bolton, Lancs.)

DAMP-PROOF COURSES

The new Thermoglas damp course consists of bitumen on a base of glass fibre staple tissues felted together to give a flexible non-hygroscopic base, which, unlike the usual felt or hessian, is completely rot-proof. The strip



The Mazda recessed spotlight fitting.

N 1063

is finished with a special mica surfacing to give a good key for mortar and is supplied in 8 yard rolls cut to any width. (D. Anderson & Son Ltd., Stretford, Manchester.)

VENTILATING KITCHENS

The usual asbestos cement or metal ventilating hoods used in kitchens are satisfactory enough, but they none the less tend to reduce the light in the place where it is most needed, the cooker hot plates. This disadvantage is presumably the reason for the metal-framed corrugated Perspex hood at Leonard Howitt's Newall Green school in Manchester. The photograph explains the



Perspex used for a ventilating hood in the kitchen of a school in Manchester.

construction sufficiently, and one has only to construction sufficiently, and the light imagine the Perspex replaced by sheet metal to realize how ineffective the lighting of the cookers would become. (George Wragge cookers would become. (George Wragge Ltd., 295, Oldfield Road, Salford, Manchester.)

SPOTLIGHTING FITTINGS

SPOTLIGHTING FITTINGS
Illustrated below left, is the new Mazda Eyeball spot-light fitting, designed for recessing into a false ceiling. The fitting consists of a steel hemisphere with a central hole behind which the spotlight is mounted. This unit rests on a felt ring in an annular steel plate fixed flush with the ceiling and the spotlight may be trained in a cone of 30 degrees about the vertical axis. A grille across the opening in the-lamp unit protects the crown of the lamp. 75-watt internally silvered, spotlight lamps should be used, and the fittings are lamps should be used, and the fittings are



A washing machine, with heating element incorporated, by Wilkins & Mitchell, Ltd.

intended for shop use to emphasize special displays and at the same time to add a certain amount of sparkle to fluorescent lighting schemes. Re-lamping is easy and quick.

(The British Thomson-Houston Co. Ltd., Crown House, Aldwych, London, W.C.2.)

NEW WASHING MACHINE
Messrs. Wilkins and Mitchell have just announced a small Servis electric washing machine which is low enough to be stored under the draining board. The bowl will hold 6 lb. of dry wash in 10 gallons of water, and a further advantage is that there is also an electric heating element under the rotator, so that the washing water can be kept hot during the whole washing process, or the bowl can be filled with cold water and then heated if there happens to be no hot domestic supply. There is a thermal over-load cut out to prevent the heater element from being used if there is no water in the

The washer is filled by a hose from any convenient hot tap, and pumps itself out after use: the wringer has a two to one reduction gear between the handle and the rollers, so that it is very easy to turn, while the whole wringer unit can be fairly easily (four screws) reversed if it is to be used by someone who is left handed. Dimensions are 18 in. wide, 20 in. deep and 32 in. high. Price, including purchase tax (which did not come down for electrically-operated machines) is £50, or to be strictly accurate, £49 19s. 9d. (Wilkins & Mitchell Ltd., Darlaston, South Staffs.)

STRUCTURAL PLASTIC PANELS

Everyone is familiar with the use of Holoplast plastic panels for internal partitions, and readers will no doubt have noted in the JOURNAL of January 7 yet another example of the panels (packed with glass fibre) being used externally, in this instance for ICI research laboratories at Welwyn. I now learn that two-thirds of last year's production of panels was exported, and that duction of panels was exported, and that it is being used externally on multi-storey schools in this country and in such widely differing climates as Canada (for an air force depot) and in Kuwat (on a technical college).—(Holoplast Ltd., New Hythe. Nr. Maidstone, and also at 16, Victoria Street, London, S.W.1.)

ENQUIRY FORM

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

Please ask		manufacturers	to	send	further	
particu	lars to	:				

NAME PROFESSION or TRADE

ADDRESS

28.1.54

Announcements

H. B. Fleming, managing director of The Shap Granite Co. Ltd., relinquished his appointment as from January 1. He will continue to serve the company in an advisory capacity as Special Director. His place will be taken by J. W. Millray, director and secretary.

C. Gordon Williams, A.R.I.B.A., has recently moved to new premises at 39a, High Street, Bromsgrove, where he will be pleased to receive catalogues, technical data, etc.

W. A. McAdam, C.M.G., Agent General for British Columbia, opened a new London office for Colt Associated Companies in British Columbia House, Regent Street, recently. The offices were designed by Story & Co., Ltd. The head office of the Colt companies remains at Surbiton, Surrey.

The practice of Holmes, Son & Archer, architects and surveyors, of 1, East Parade, Sheffield, 1, and 12, The Strand, Derby, will be carried on under the style of Holmes, Son, Archer & Maidment as from January, 1954.

J. E. Greatorex has resigned from Roger Preston & Partners in order to take up an appointment with H. Q. A. Reeves, M.A., A.M.I.MECH.E., M.CONS.E., Consulting Engineer, of 22, Lovelace Gardens, Surbiton, Surrey.

Oliver Carey, A.R.I.B.A., has relinquished his appointment with the Stevenage Development Corporation and has opened a practice at Meadow Cottage, Wallington, Baldock, Hertfordshire (Tel.: Broadfield 235), where he will be pleased to receive trade catalogues.

Owing to the death of his partner, C. H. Watson, L.R.I.B.A., will in future direct the firm of Burgess, Holden & Watson, of Beaconsfield, Bucks.

Maxwell Ayrton and Partners announce that, upon dissolution of the partnership by mutual consent, the practice will be carried on under the title of Maxwell Ayrton & Courtney Theobald F./F.R.I.B.A., at 9, Church Row, N.W.3.

H. R. Lister, A.R.I.B.A., has commenced in private practice at 19, King Street, Great Yarmouth, Norfolk, where he will be pleased to receive trade catalogues, etc.

As from January, Williams & Williams Ltd's South London office will be situated at 81, High Street, Bromley, Kent. The area covered by this office is London, south of the Thames, and Kent north of a line drawn through Maidstone, Canterbury and Ramsgate.

As from January, Richard Henniker, F.R.I.B.A., will join L. A. Culliford and L. A. Chackett, F./F.R.I.B.A., as a partner. The combined practice will continue under the name of L. A. Culliford & Partners, at 47, Essex Street, Strand, W.C.2 (Tel.: Central 9061 and 1316).

Applications for membership are invited to The RAF Reserves Club, whose new premises are at 14, South Street, just off Park Lane. Good food and accommodation are provided at reasonable charges, and the activities of the Club include golf, sailing, squash, etc. For details apply to the Secretary, RAF Reserves Club, 14, South Street, Park Lane, W.1.

The firm of Banks, Wood & Gibson, quantity surveyors, of Gloucester House, 19, Charing Cross Road, W.C.2, will in future be carried on at the same address under the style of Banks, Wood & Partners.

Allom Brothers Ltd., lighting specialists, have enlisted the services of Peter Bell, M.S.I.A., as design consultant where tungsten fittings are involved.

Kenneth W. Clayton, B.ARCH.(MELB.) A.R.I.B.A., A.R.A.I.A., has taken chambers at Carbrey House, 12, St. George's Terrace, Perth, Western Australia, where he would be pleased to receive trade catalogues, etc.

J. R. T. White has been appointed manager of the London Area Sales Office of George Ellison Ltd.

J. H. S. Nordberg, technical representative for the Croft Granite, Brick & Concrete Co. Ltd., in the West Midlands, has changed his address to 363, Chester Road, Castle Bromwich (Tel.: Castle Bromwich 2835).

Horseley Bridge & Thomas Piggott Ltd. have appointed Jas. S. Christie and Vincent Senior as joint managing directors. J. W. Baillie has resigned from the position of managing director but will remain on the board.

The Timber Development Association has appointed Alan Roscoe-Hudson, A.R.I.B.A., as architect to the Association. Paul Morpurgo has been appointed Research Assistant and will assist in the comprehensive development programme planned by the TDA.

His Majesty the King of Sweden has been pleased to confer upon James Scrivener, of Electrolux Ltd., the Order of Vasa (First-Class) for his work in furthering Anglo-Swedish trade relations.

Dimplex Ltd., Totton, Southampton, announce the appointment of R. C. Flook as sales manager for southern England. Mr. Flook will operate from 100, Garthorne Road, Forest Hill, London, S.E.23.

His Grace the Duke of Norfolk and Major General the Right Hon. The Earl of Athlone, have accepted election as vice-presidents emeriti of the Royal Sanitary Institute, an honour conferred upon them by the Council of the Institute.



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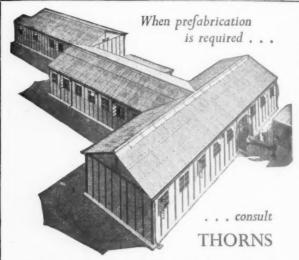
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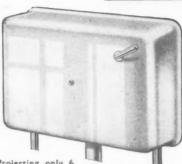
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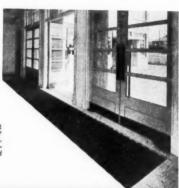
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Left: NUWAY matting protecting the highly polished parquet floor at Bridleymore School, Reddick, Worcestershire Education Committee. Architects: Richard Sheppard & Partners, London.



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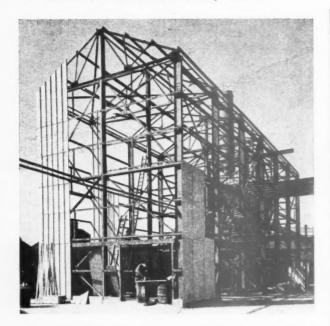
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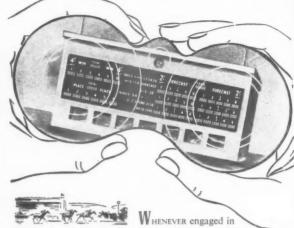
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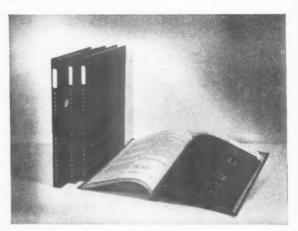
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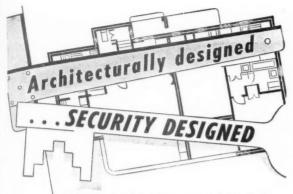


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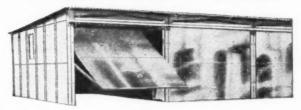


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Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1., and should reach there by first post on Friday morning for inclusion in the following Thursday's

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

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

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Applications, stating age, training, qualifications and previous experience, with the names of two referees, should be submitted to the Secretary, Oxford Regional Hospital Board, 43, Banbury Road, Oxford, not later than 28th January, 1954.

CAMBRIDGE COUNTY COUNCIL.
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(salary: £595 to £355 per annum), according to

and VIII. of the National Joint Council's scales (salary: £595 to £835 per annum), according to experience.

Candidates should be Corporate Members of the Royal Institute of British Architects, and preferably of the Town Planning Institute, and be able to drive a car. The successful candidate will be concerned with the Architectural aspects of the Department's responsibilities.

The post is a superannuable one, and the successful candidate will be required to pass a medical examination. The post is also subject to conditions of service from time to time approved by the Council, and to being terminated by either side giving to the other one month's notice in writing. Financial assistance, up to £2 weekly for a period not exceeding six months, may be given if the person appointed cannot obtain housing accommodation and has to maintain his present residence in addition to the expense of residence in Cambridge.

Applications, stating age, past and present appointments (with dates), experience qualifications, present salary, and the names of two referres, should be received by the undersigned, not later than the 8th February, 1954.

CHARLES PHYTHIAN,

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The successful candidate will be required to pass a medical examination.
Applications to be made on forms obtainable from G. F. Winters, B.E., A.M.I.C.E., Borough Engineer, Municipal Buildings, Swinburne Street, Gateshead, 8; should be returned not later than Wednesday, 10th February, 1954.

J. W. PORTER,
Town Clerk.

Town Hall, Gateshead, 8.

16th January. 1954.

COUNTY BOROUGH OF WEST HAM.

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BRITISH ELECTRICITY AUTHORITY.

EAST MIDLANDS DIVISION.

Applications are invited for the following positions within the Division.

CIVIL ENGINEER DRAUGHTSMEN. Construction Department. (Vacancy No. 1/54.)

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

The salary will be in accordance with Grade 5 (2557-4571, per annum) or Grade 6 (2433-2567 per annum) of Schedule D of the National Joint Board Agreement.

ENGINEERING DRAUGHTSMEN (ME-CHANICAL), Construction Department. (Vacancy No. 2/54).

Senior Draughtsmen are required in the Mechanical Section of the Construction Department at North Wilford Power Station. Candidates should have experience in none or more of the following:—

(i) Design and layout of Power Station equip-

ollowing:—

(i) Design and layout of Power Station equipment, including turbo-alternators, boiler plant, coal and ash plant, and general station auxiliaries.

(ii) H.P. and L.P. steam and feed pipework. Condensing plant and feed heating systems.

(iii) Conveyor plant, coal handling systems and material handling of station auxiliary equipment. material equipment.

equipment.
Salary and conditions of service will be in accordance with the National Joint Board Agreement. Grade 5 (£567.£671 per annum) and Grade 6 (£433-£567 per annum) of Schedule D, according

(£433-£567 per annum) of Schedule D. according to experience.

ENGINEERING DRAUGHTSMEN (ELECTRICAL). Construction Department. (Vacancy No. 3/54.)

Candidates should have experience in the preparation of layouts and diagrams for the installation of E.H.T. and L.T. Switchgear, transformers, E.H.T. and L.T. Switchgear, transformers, E.H.T. and L.T. Switchgear, transformers, The salary will be in accordance with Grade 5 (£557-£671 per annum) or Grade 6 (£433-£567 per annum) of Schedule D of the National Joint Board Agreement.

annum) of Schedule D of the National Joint Board Agreement.

The above positions will be pensionable within the provisions of the British Electricity Authority and Area Roards Superannuation Scheme.

Applications should be submitted on the official form, which may be obtained from the Divisional Establishments Officer. British Electricity Authority, Barker Gate, Nottingham, and should be refurned to the undersigned. Please quote Vacancy Number.

L. P. JEFFREY.

L. F. JEFFREY.
Divisional Controller.

Divisional Controller.

1506

ASSISTANT ARCHITECT required in Surveyor's department of METROPOLITAN WATER BOARD. With experience in design, nenaration of plans and working drawings, specifications and anantities for the erection of houses and offices. Salary scale: £778 × £27 – £832. The selected candidate must be and continue to be an Associate Member of the Royal Institute of British Architects whilst holding the position. Applications, stating candidate's age, present position, salary, qualifications, etc., and giving full particulars of experience, should be addressed to The Surveyor, New River Head, Rosebery Avenue, E.C.1, endorsed "Assistant Architect." not later than 10 days after appearance of this advertisement. Canvassing dissualifies, and relationship to any member. Officer or employee must be disclosed.

LONDON ELECTRICITY BOARD.

ARCHITECTIRAL DRAIGHTSMAN.
Applications are invited for the above position in the Architect's Section of the Chief Engineer's Department in Central London. Applicants should be neat draughtsmen, and preferably have had several years' experience in an Architect's office.

The post is graded under Schedule "D" of the

office.
The post is graded under Schedule "D" of the
National Joint Board agreement as Grade 6—£458
to £595 7s. per annum, inclusive of London allow-

ance.

Application forms obtainable from Secretary, 46, New Broad Street E.C.2 to be returned completed within 14 days of the publication of this advertisement. Please enclose addressed envelope and mote ref. V/1683/A. on envelope and all correspondence.

THE POLYTECHNIC LONDON. W.1.

SCHOOL OF ARCHITECTIRE. SURVEYING
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Candidates should have had practical experience
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Planning Institute.
The Dioloma in Planning awarded by the School
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of the Town Planning Institute.
Salary in accordance with the Burnham
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allowance of £36 or £48 per annum.
Further particulars and form of application may
be obtained by sending a stamped addressed
envelope to the undersigned.
J. C. JONES,
Director of Education.

SALOP COUNTY COUNCIL.

COUNTY ARCHITECTS DEPARTMENT.
Applications are invited for the following appointments to the Established Staff:

(1) SENIOR ASSISTANT ARCHITECTS.
A.P.T., Grade IX (2815 to 2935 p.a.). Applicants should be Registered Architects, preferably Members of the R.I.B.A., with good experience and a keen appreciation of the design and construction of modern buildings.

(2) SENIOR ASSISTANT QUANTITY SURVEYOR. A.P.T., Grade VIII or IX (2760 to 283; or £315 to £935 p.a.), depending on the qualifications and experience of the successful applicant, Applicants should be Members of the Royal Institution of Chartered Surveyors (Sub-Division III, Quantities), and must be thoroughly experienced in the preparation of Bills of Quantities, estimating, interim valuations, final accounts and general contract procedure for large building projects.

general contract procedure for large building projects.

It is expected that housing accommodation in the form of a flat will be available in the near future if required by the successful applicant for each of these appointments. Until the flat is available or other accommodation obtained, a separation allowance of not exceeding 30s. a week will be paid to a married officer taking up this appointment, together with third-class return rail-way fare once a month to visit his family, such allowances to be limited to a period of six months or until such time as the officer is able to obtain accommodation for himself and his family in Shropshire, whichever is the earlier.

Application forms and conditions of the appointments may be obtained from the County Architet. C. H. Simmens, A.R.I.B.A. Dip.T.P. Column House, London Road, Shrewsbury, to whom they must be returned, accompanied by copies of three ecent lestimonials, not later than Friday, 19th February, 1954.

MODELLER.—DEPARTMENT OF HEALTH

February, 1954.

MODELLER.—DEPARTMENT OF HEALTH FOR SCOTLAND invite applications for post of Assistant Modeller (unestablished). Applicants should have basic knowledge of woodwork and ability to make small components with accuracy. Experience in light metal work or cardboard modelling an advantage, but not essential. Work mainly concerned with architectural, town planning and landscape models. Inclusive salary within range \$275-£550 per amum. Placing according to experience. Form of application from Establishment Officer (Room 30), St. Andrew's House. Edinburgh, 1, must be returned by 13th February, 1954.

MIDDLESBROUGH EDUCATION COM-MITTEE—CLERK OF WORKS required, to supervise the erection of Middle Beck No. 2 County Secondary School (480 pupils), the contract period being approximately two years. Appli-cants should have experience of large contract works and a thorough knowledge of all building trades. Salary: £12 per week. Form of application and detailed information obtainable from Director of Education. Education Offices, Woodlands Road, Middlesbrough. Final date for application: 1st February, 1954.

Middlesbrough. Final date 10. app. 1466
February, 1954.

NORTHAMPTON BOROUGH ARCHITECT'S
DEPARTMENT.
SENIOR ASSISTANT ARCHITECT (EDUCATION), A.P.T., VII (2710-2785).
Particulars of appointment and form of application to be returned by 10th February may be obtained from the Borough Architect's Department, Guildhall, Northampton.

C. E. VIVIAN ROWE, Town Clerk.

LANARK COUNTY COUNCIL require ARCHI-TECTURAL ASSISTANTS for the County Pro-perty Department at Motherwell on the following

perty Department at Motherwell on the following salary grades:—
A.P.T., Grade VII (£745-£820).
A.P.T., Grade V(a) (£660-£720).
Must be A.R.I.B.A. and have thorough knowledge of Architectural work, with practical experience in design and preparation of working drawings.

A.P.T. Grade II (£520-£565)

A.P.T., Grade II (£520-£565).

Must have completed five years' pupilage and be conversant with Architectural practice up to Intermediate standard.

Posts superannuable. Medical examination. No

Posts superannuane. Actions age, qualifications, experience, together with names and addresses of three referees, should be sent to the County Architect, 34. Albert Street, Motherwell, Lanarkshire, not later than 13th February, 1954.

later than 13th February, 1954.

COUNTY OF CORNWALL.

Applications are invited for the appointment in the County Architect's Department of an ASSISTANT ARCHITECT, on Grade VII (2710-2785).

Applicants must be Associates of the R.I.B.A. or hold equivalent qualifications, and have good experience in the preparation of sketch plans, working drawings and details for all County buildings, including those for the Education Committee. The usual conditions of the Local Government service will apply.

Applications, accompanied by a copy of two recent testimonials and the names of two persons to whom reference can be made, should be received by the County Architect, County Hall, Truro, not later than Monday, the 15th February, 1954.

E. T. VERGER, Clerk of the County Council.

County Hall, Truro. 21st January, 1954.

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CITY OF LEICESTER.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments in the Housing Section, Municipal Offices, Charles Street, Leicester:—
(a) ASSISTANT ARCHITECT. A.P.T., Grade V. (£595 to £645 p.a.).
(b) ASSISTANT QUANTITY SURVEYOR.

A.P.T., Grades VI-VII (£670 to £785 p.a.).
(c) QUANTITY SURVEYING ASSISTANT.

A.P.T., Grades IV-V (£555 to £645 p.a.).
(d) QUANTITY SURVEYING ASSISTANT.

A.P.T., Grades I-III (£465 to £570 p.a.).
Applicants for (a) must be Registered Architects, and preference will be given to those holding a recognised Architectural qualification, and with housing experience.

a recognised Architectural housing experience.

Applicants for (b) must be Chartered Quantity

housing experience.

Applicants for (b) must be Chartered Quantity Surveyors.

The salary grade for (c) and (d) will be according to qualifications and experience. Applicants for Grades III and IV must have passed the Intermediate Examination R.I.C.S. (Quantities SubDivision), and those for Grade V must have passed the Final Examination R.I.C.S. (Quantities SubDivision).

The appointments will be subject to the National Scheme of Conditions of Service, the passing of a medical examination, and to one month's notice on either side.

Applications, stating age, experience and qualifications, past and present appointments, with present salary, together with copies of two recent testimonials, should be sent to the undersigned not later than Wednesday, 10th February, 1954.

J. H. LLOYD OWEN, B.Arch., A.R.I.B.A., City Architect.

1553

J. H. LLOYD OWEN, B.Arch., A.R.I.B.A..

10. Loseby Lane. Leicester.

11. CORPORATION OF GREENOCK.

11. CORPORATION OF GREENOCK.

11. BURGH ENGINEER AND MASTER OF WORKS DEPARTMENT.

11. QUANTITY SURVEYOR required for the office of the Burgh Engineer and Master of Works within the Grade A.P.T. VII (2475-8220).

11. Candidates should have experience in a Quantity Surveyor's office and be capable of taking off, billing, checking accounts, taking site measurements and preparation of final accounts with a minimum of supervision. Preference will be given to applicants who have passed the examinations of the Royal Institute of Chartered Surveyors.

Applications, stating age, qualifications, present and previous appointments, etc., together with the names of two referees, should be submitted to the undersigned on or before Monday, 15th February, 1954.

10. JOHN LIDDELL. Town Clerk.

JOHN LIDDELL, Town Clerk.

Municipal Buildings, Greenock.

22nd January, 1954.

COUNTY BOROUGH OF BOOTLE.
SCHOOL BUILDING PROGRAMME.
Applications are invited for the appointment of an ASSISTANT ARCHITECT, A.P.T., 19 (£555-£600) per annum).
The appointment is of a temporary nature for a minimum period of three years.
Application forms are obtainable from the Borough Surveyor, Town Hall, Bootle, to whom they should be returned by Friday, 12th February, 1954.
HAROLD PAPTINGTON

HAROLD PARTINGTON, Town Clerk

WARWICKSHIRE COUNTY COUNCIL. ARCHITECT'S DEPARTMENT. Applications are invited for the post of ARCHI-TECTURAL ASSISTANT, Grade A.P.T., II (£495

TECTURAL ASSISTANT, Grade A.F.L., 10 (5540).

The successful candidate will be required to pass a medical examination, and the appointment is subject to the conditions of the Local Government Superannuation Act, 1937.

Application forms are obtainable from G. R. Barnsley. F.R.I.B.A.. County Architect, Shire Hall, Warwick, to whom they should be returned by 8th February, 1954.

L. EDGAR STEPHENS,

Clerk of the Council.

Shire Hall, Warwick. 1551

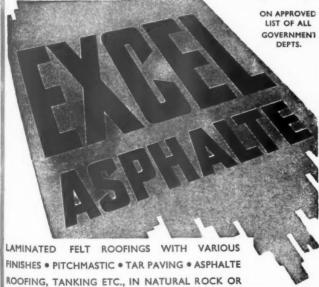
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nged 18-64 inclusive or a woman aged 18-69
inclusive unless he or she is, or the employment, is
excepted from the provisions of the Notification
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BOX No. 1164—10/12/53.

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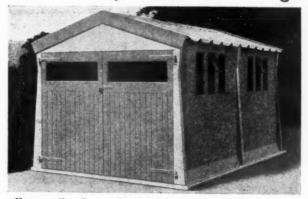


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A VACANCY exists for an experienced ARCHITECTURAL DRAUGHTSMAN or a qualified
ASSISTANT with a firm of Chartered Architects
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£50 and £65 per month, depending on experience.
Applications should be made in writing to P.O.
Box 980, Windhoek, stating previous experience,
and should be accompanied by samples of work.

1444

SENIOR ASSISTANT required by London Architects to work on contemporary schemes, Capable of controlling working drawing group. Salary £750 per annum. Box 1396.

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JUNIOR SHOPPITTING DRAUGHTSMAN—must have completed National Service.
The appointments are permanent, and offer prespects of up-grading.
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tion scheme.

Applications, stating age, experience, qualifications and salary required, to W. J. Reed, F.R.I.B.A. Chief Architect, Co-operative Wholesale Society, Ltd., 99, Leman Street, London, E.1.

1433

ARCHITECTS' office—ASSISTANT required.

Intermediate or Final standard, with know-ledge and experience domestic work. Particulars to Secretary, Bournville Village Trust, Estate Office, Bournville, Birmingham, 30.

UNIOR ASSISTANT required, country practice, Bedfordshire. Offers varied experience. Intermediate not essential. Reply, stating history and salary. Box 1480.

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A SSISTANT required in Chelmsford office of busy practice, with wide variety of work on hand. Scope for initiative. Apply, with full particulars, to Box 1481.

A RCHITECTURAL ASSISTANTS required by Architects. Five Ways, Birmingham, undertaking commercial and industrial work. Senior and Junior posts vacant. Box 1537.

A RCHITECTURAL ASSISTANT required by large firm of building and civil engineering contractors for the development of Housing Estates in the Midlands. Good salary and prospects for young Architect with realistic and commercial ideas. Reply to Box 1502.

A RCHITECTURAL ASSISTANT required. Intermediate standard. Full particulars to W. S. Hattrell & Partners, 1, Queens Road, (Towentry.) 1555

BIRMINGHAM office, busy on contemporary design, schools, Ecclesiastical and industrial projects, urgently require ASSISTANT, qualified or good Intermediate. Salary according to experience. Please reply, giving details of age, experience, and when free, to Box 1477.

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A RCHITECTURAL ASSISTANTS required for busy practice engaged upon schools, industrial buildings, offices, etc. Write, giving full particulars of qualifications, experience and salary required, to Johns & Slater, F./A.R.I.B.A., 32. Foundation Street, Ipswich.

A SSISTANT required for busy general practice in North Herts. R.I.B.A. Intermediate. Write, giving particulars and stating salary, Box 1548.

A RCHITECTURAL ASSISTANT. A RUHITEUTURAL ASSISTANT. Commercial, industrial and domestic practice. Able to deal with working drawings, detailing, etc. Salary: £350-£450, according to experience. Apply with full particulars to Newman, Levinson & Partners, 54, Baker Street, London, W.L. Tel.: WELbeck 0926/7.

MELBOCK 1926/7.

A RCHITECTURAL DRAUGHTSMEN required with at least 10 years' office experience in London. Salary range: £700 to £1,000. Long-established London office. 'Phone LaNgham 4861.

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ENIOR ARCHITECTURAL ASSISTANT (age 30/45) required by City firm of Chartered Surveyors to undertake important restoration and redevelopment projects in the London area. Permanent post of variety, interest and responsibility. Salary: £700-£800 v. Write giving age, experience, and qualifications. Box 1512.

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Full particulars, including age and details of experience, to box 1510.

Perience, to Box 1510.

A RCHITECTURAL ASSISTANT required for Architect's Department of large Maidstone Brewery. Applicants, who should be aged 30/40, must be good draugntsmen, with a sound knowledge of construction. Previous experience in the Licensed Trade not essential. The appointment is pensionable, and salary will be according to qualifications and experience. Reply with full details to Box 1511.

A SSISTANT ARCHITECT (A.R.I.B.A.) required for period April, 1954, to April, 1966,
Please write, giving experience and salary required, William & Segar Ower, Chartered Architects, Palmyra Square Chambers, Warrington.

A SSISTANT ARCHITECT required. Write stating experience and salary required, Portess & Richardson, Lloyds Bank Chamber

A RCHITECTURAL ASSISTANTS required, preferably qualified, in office with extensive general practice. Apply, stating full details of experience, age, and salary required, to Kitching & Co. 21, Albert Road, Middlesbrough, Yorks.

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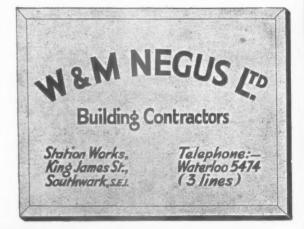


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THE Architects' Journal requires a DRAUGHTSMAN, to assist in the preparation of final ink drawings for Working Details and Information Sheets. Good draughtsmanship, a knowledge of building construction, and a keen interest in the above type of work are necessary. Write to the Editor (Information Sheets), 9, Queen Anne's Gate, S.W.I. stating age, architectural training, and experience (if any).

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DRAUGHTSWOMAN required for busy Architects' office. London. Five-day week. Full

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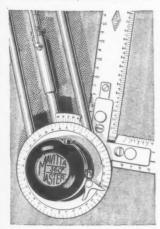
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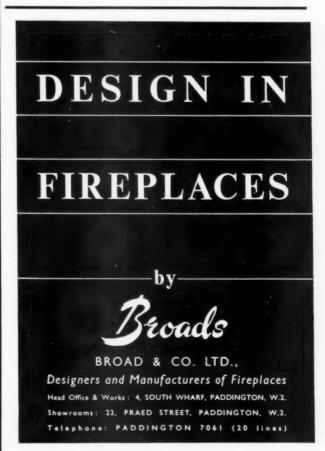


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