

The Architects' JOURNAL for February 25, 1954

THE ARCHITECTURAL JOURNAL



standard contents

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

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[Vol. 119

THE ARCHITECTURAL PRESS

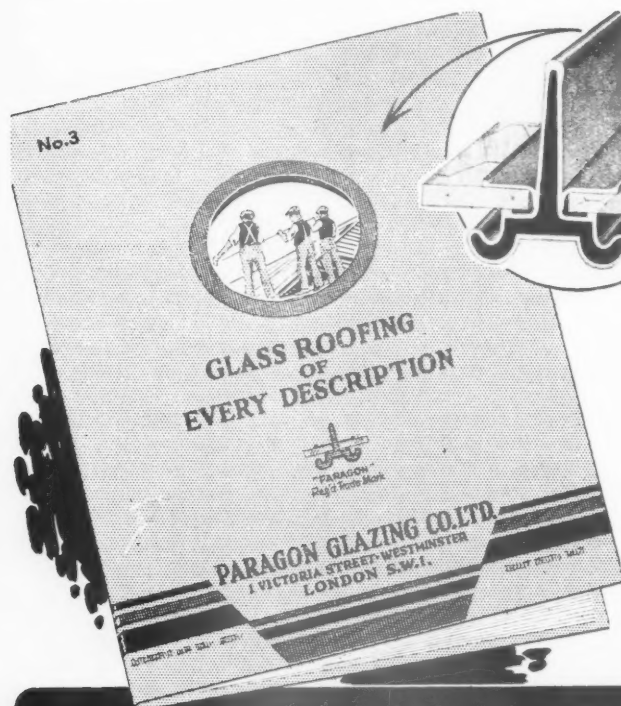
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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ig to Z the next. In all cases where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

IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square, Sloane 1601/3158	
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1. Euston 2450	
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
I of Arb	Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2. Temple Bar 4071	
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197/5176
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
IWA	Inland Waterways Association. 14, Great James' Street, W.C.2.	Chancery 7718
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MARS	Modern Architectural Research Group (English Branch of CIAM). Secretary: Gontran Goulden, Building Centre, 26, Store Street, W.C.1. Museum 5400	
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. 23, Savile Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James' Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94-98, Petty France, S.W.1. Abbey 1010	
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 4813
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 8161
NCBMP	National Council of Building Material Producers, 10, Princes St., S.W.1.	Abbey 5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham 4041/4054	
NFBTO	National Federation of Building Trades Operatives. Federal House, Cedars Road, Clapham, S.W.4. Macaulay 4451	
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 1693
NHBRG	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4341
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NSA	National Sawmilling Association. 14, New Bridge Street, E.C.4.	City 1476
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1. Abbey 1359	
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1. Whitehall 0211	
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. Edinburgh 20396	
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1.	Whitehall 5322/9242
RFAC	Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1. Victoria 2186	
SCR	Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8. Western 1571	
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3.	Mansion House 3921
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1.	Langham 7616
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	Langham 1984
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2. Temple Bar 5006	
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 75, Cannon Street, E.C.4.	City 5051
WDC	War Damage Commission. 6, Carlton House Terrace, S.W.1.	Whitehall 4341
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988



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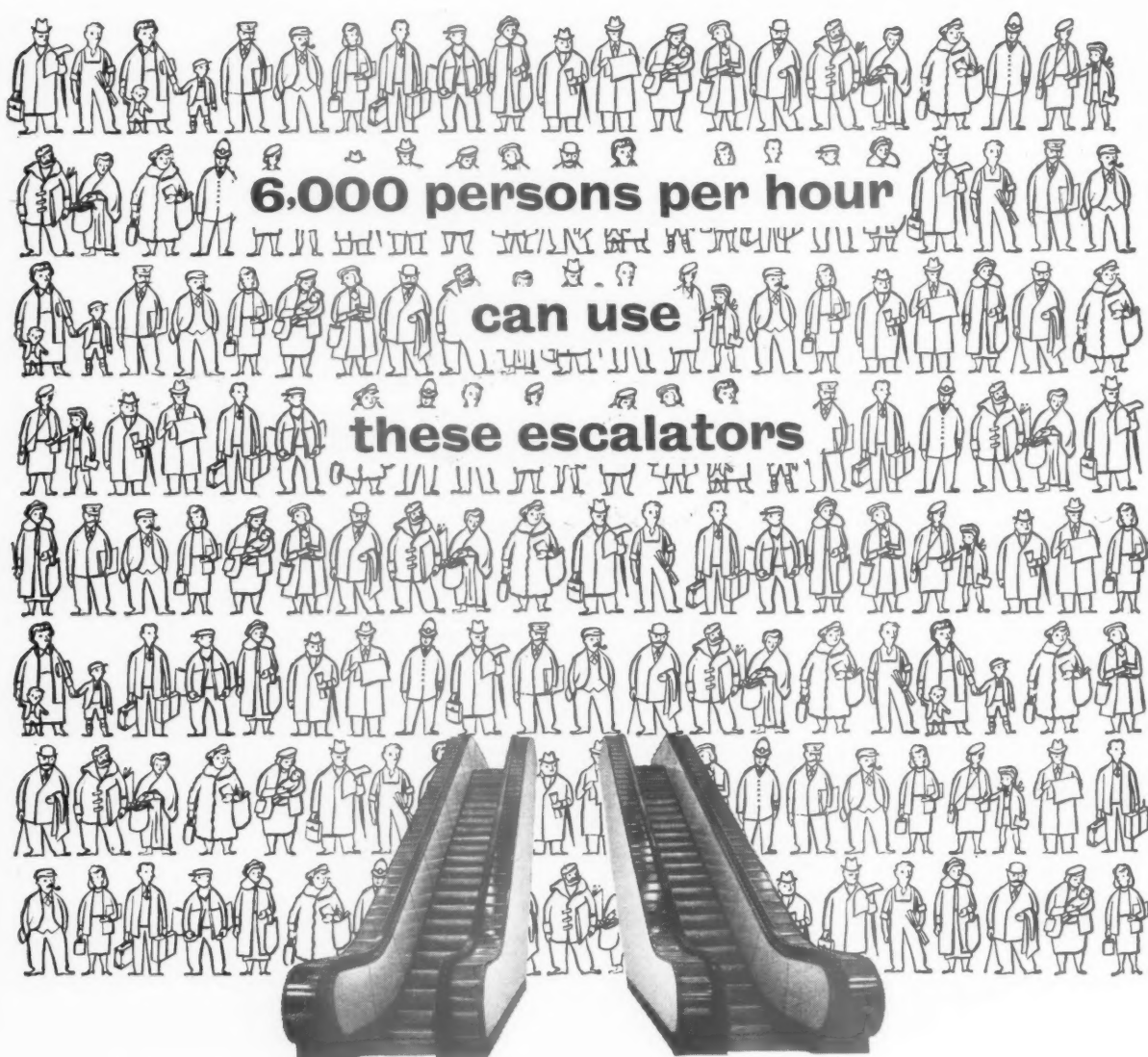
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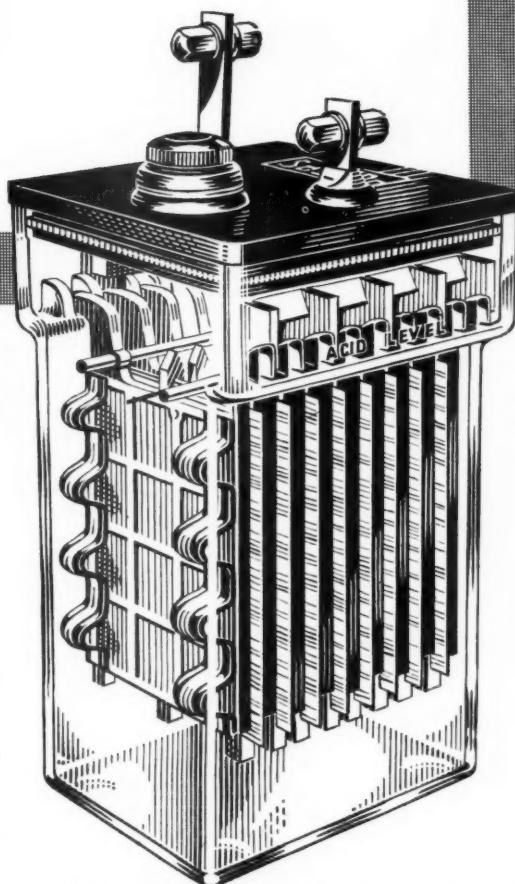
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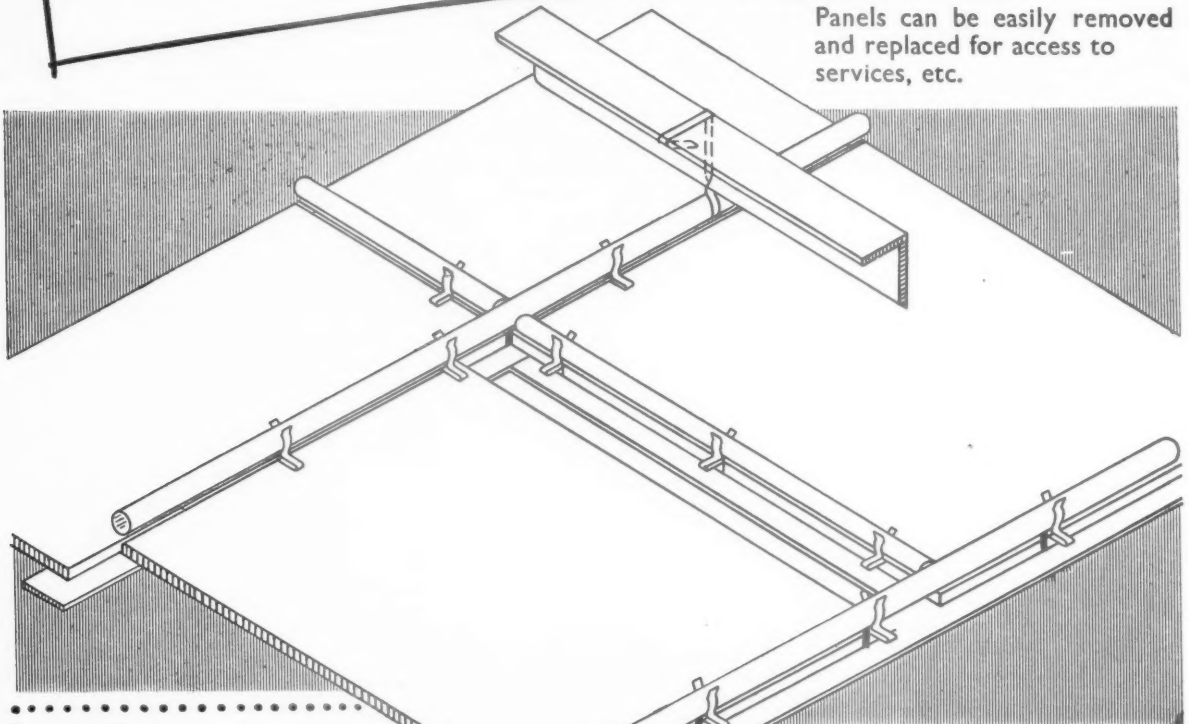
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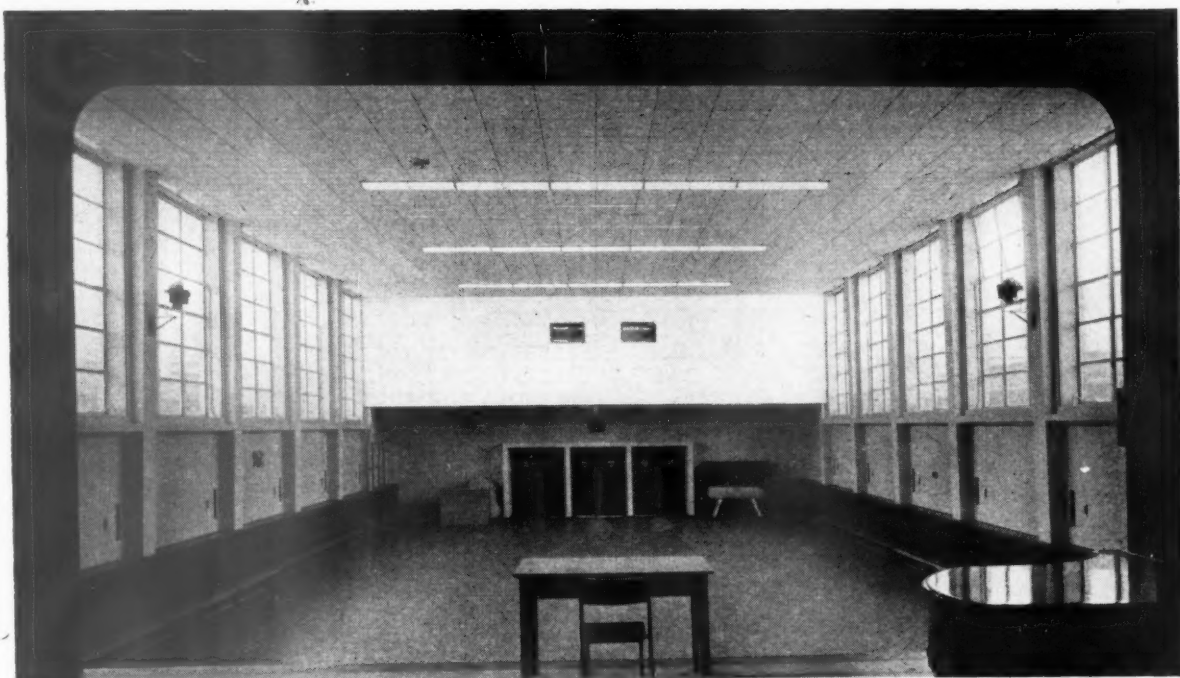
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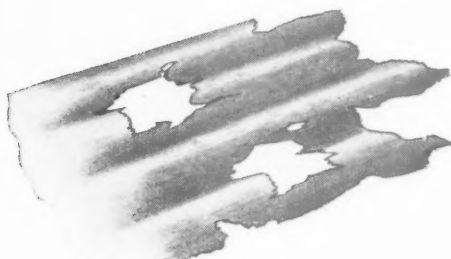


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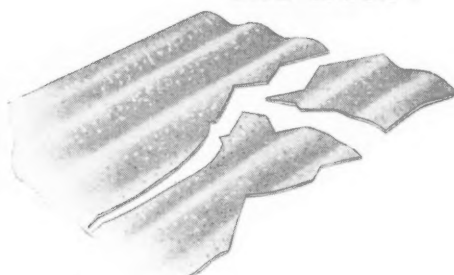
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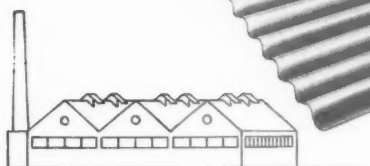
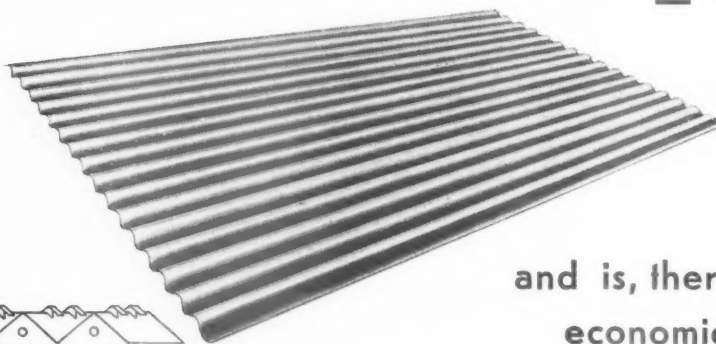
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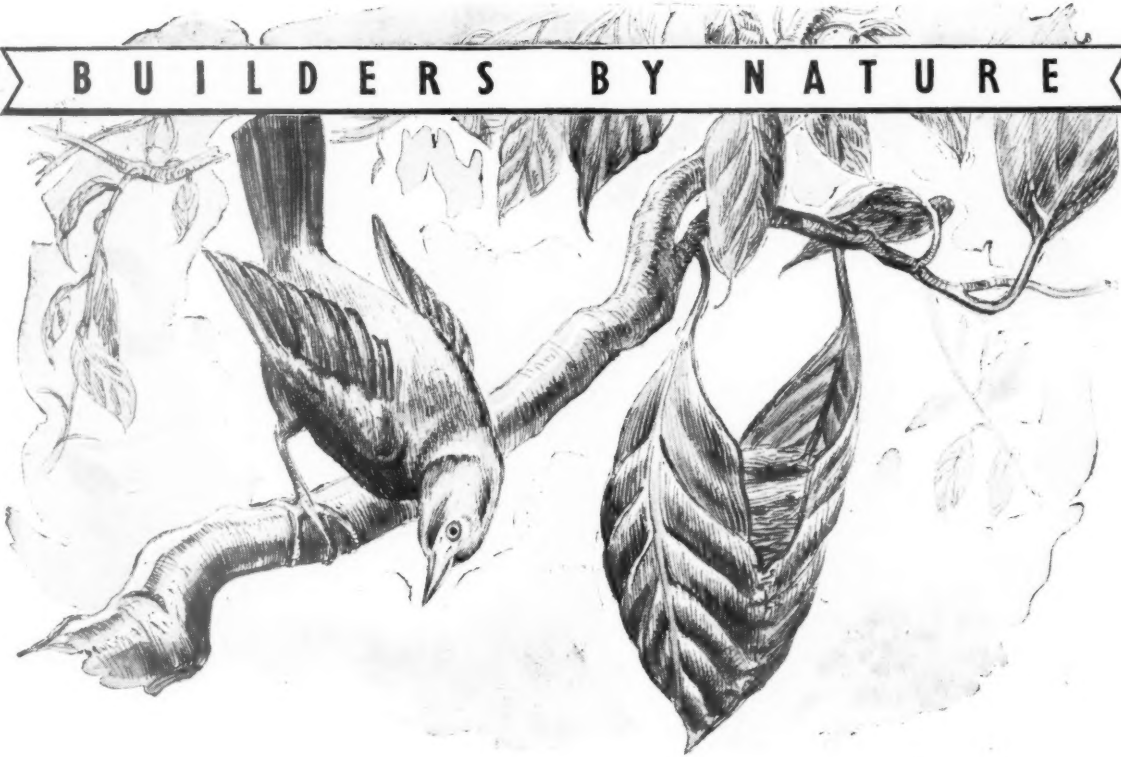
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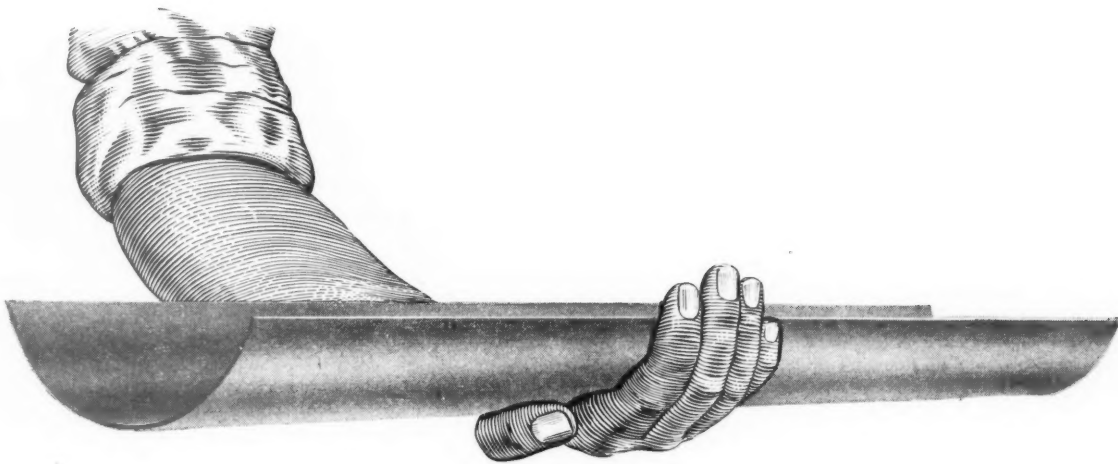
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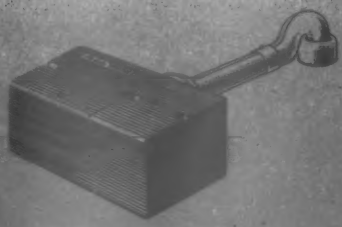



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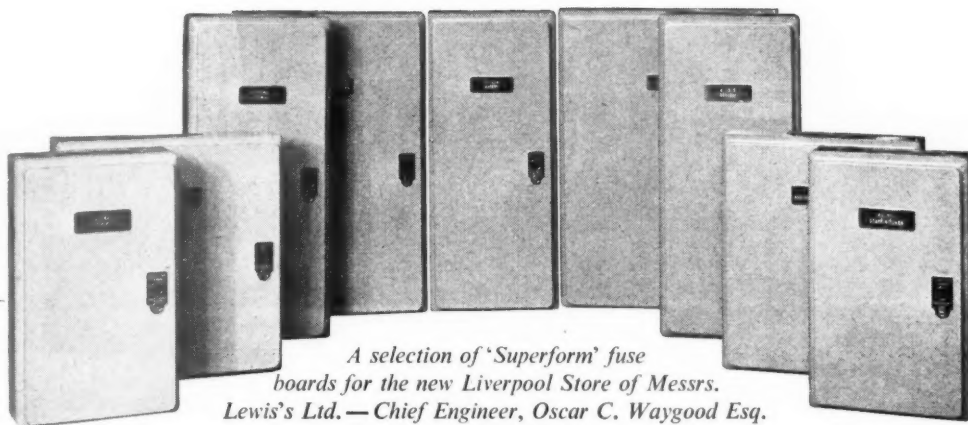
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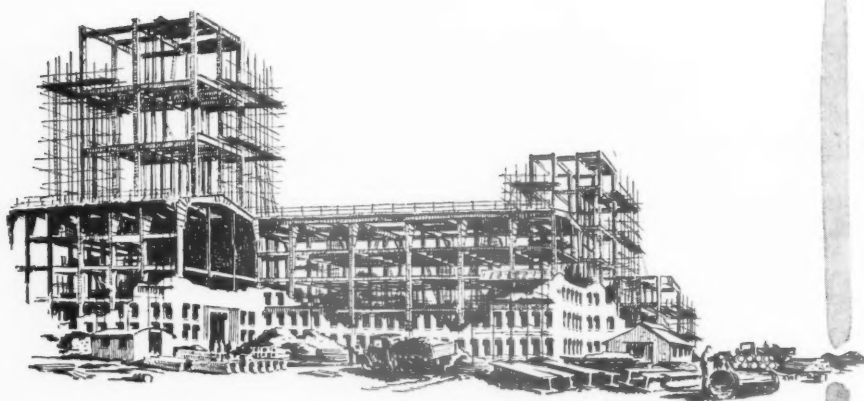
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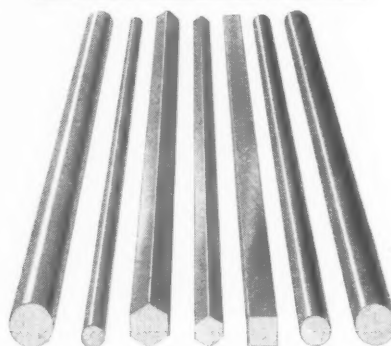


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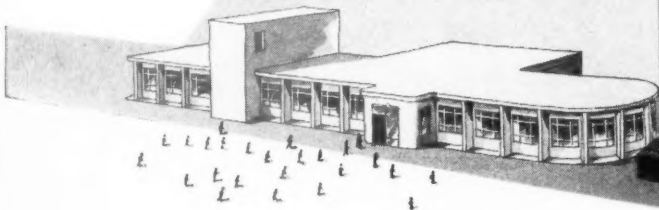
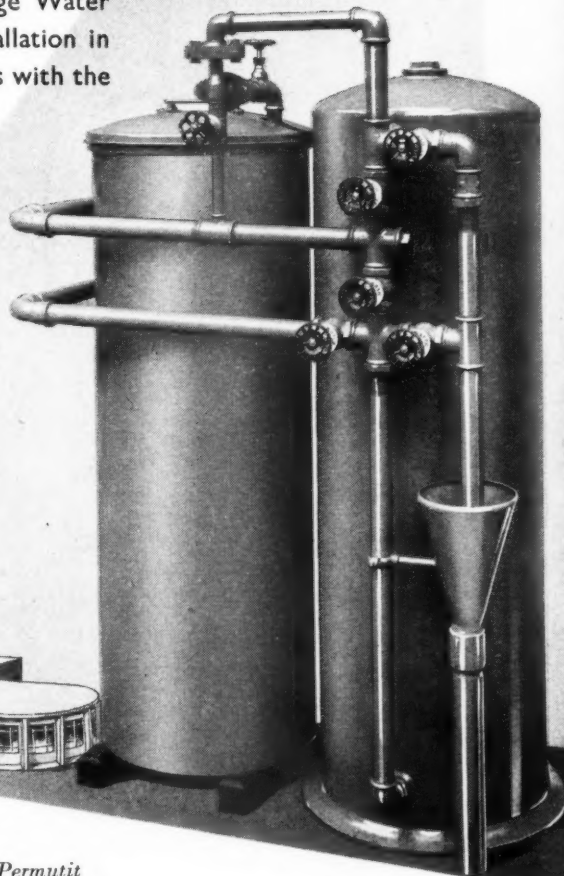
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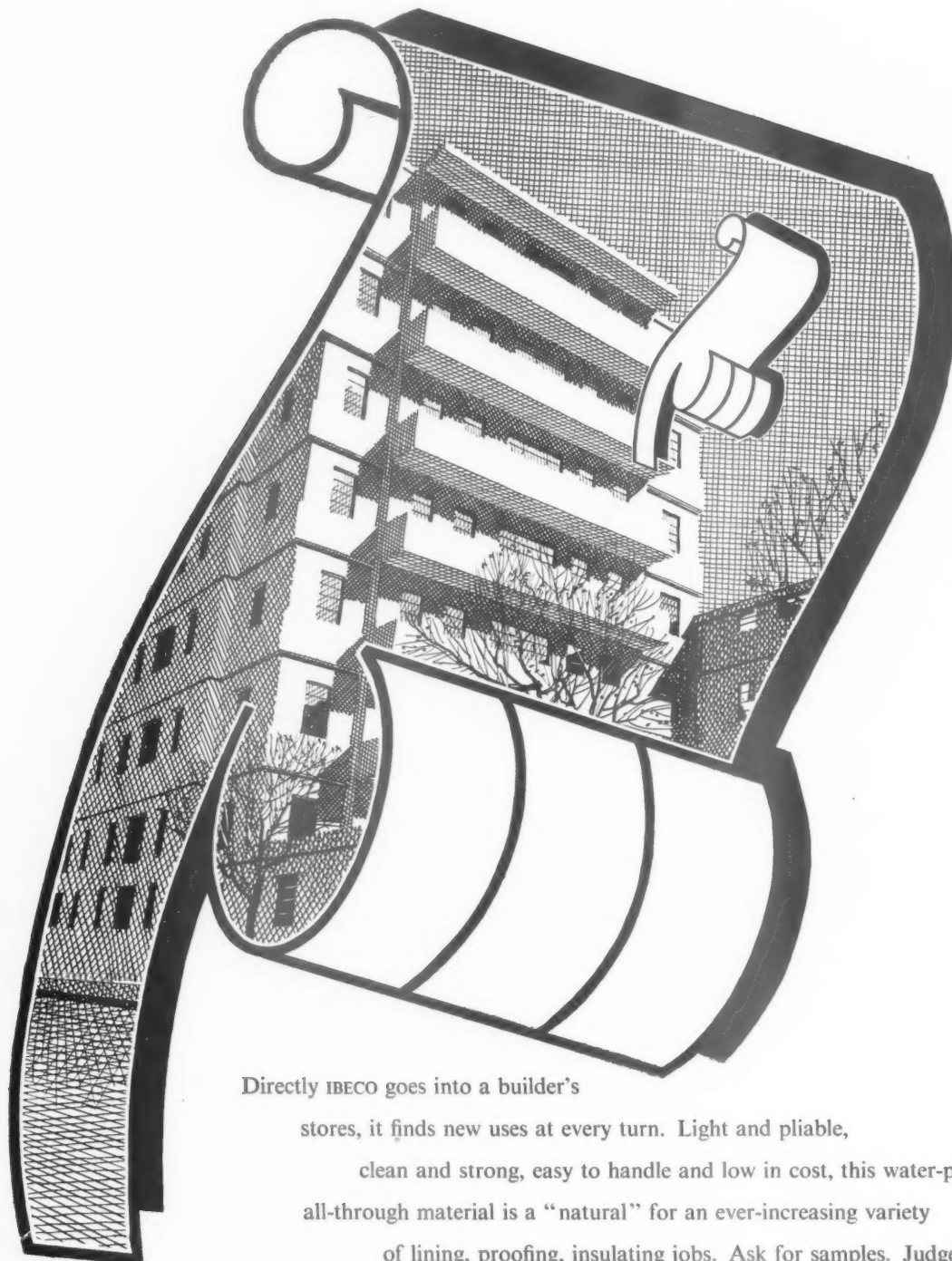
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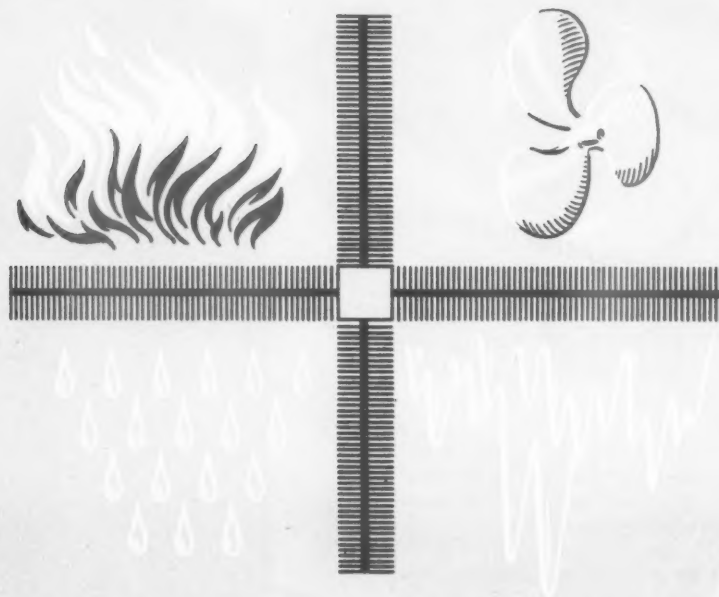
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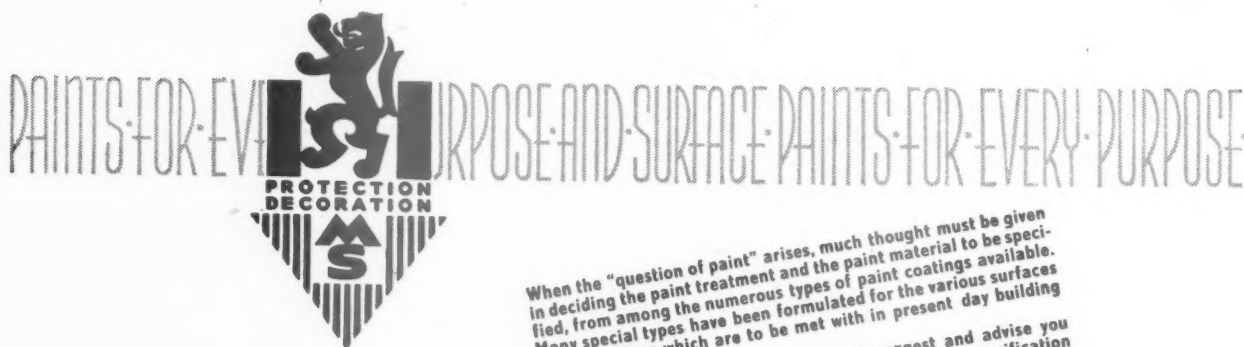
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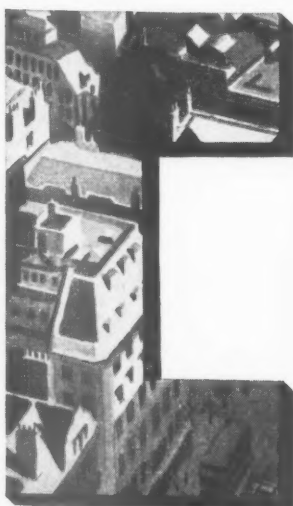
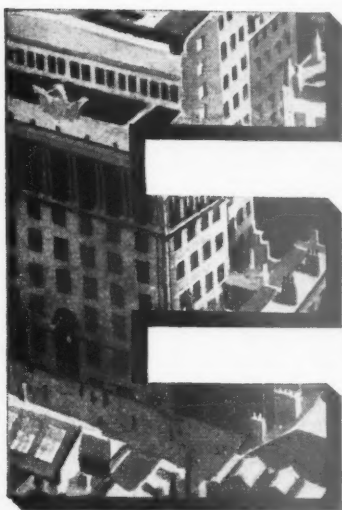
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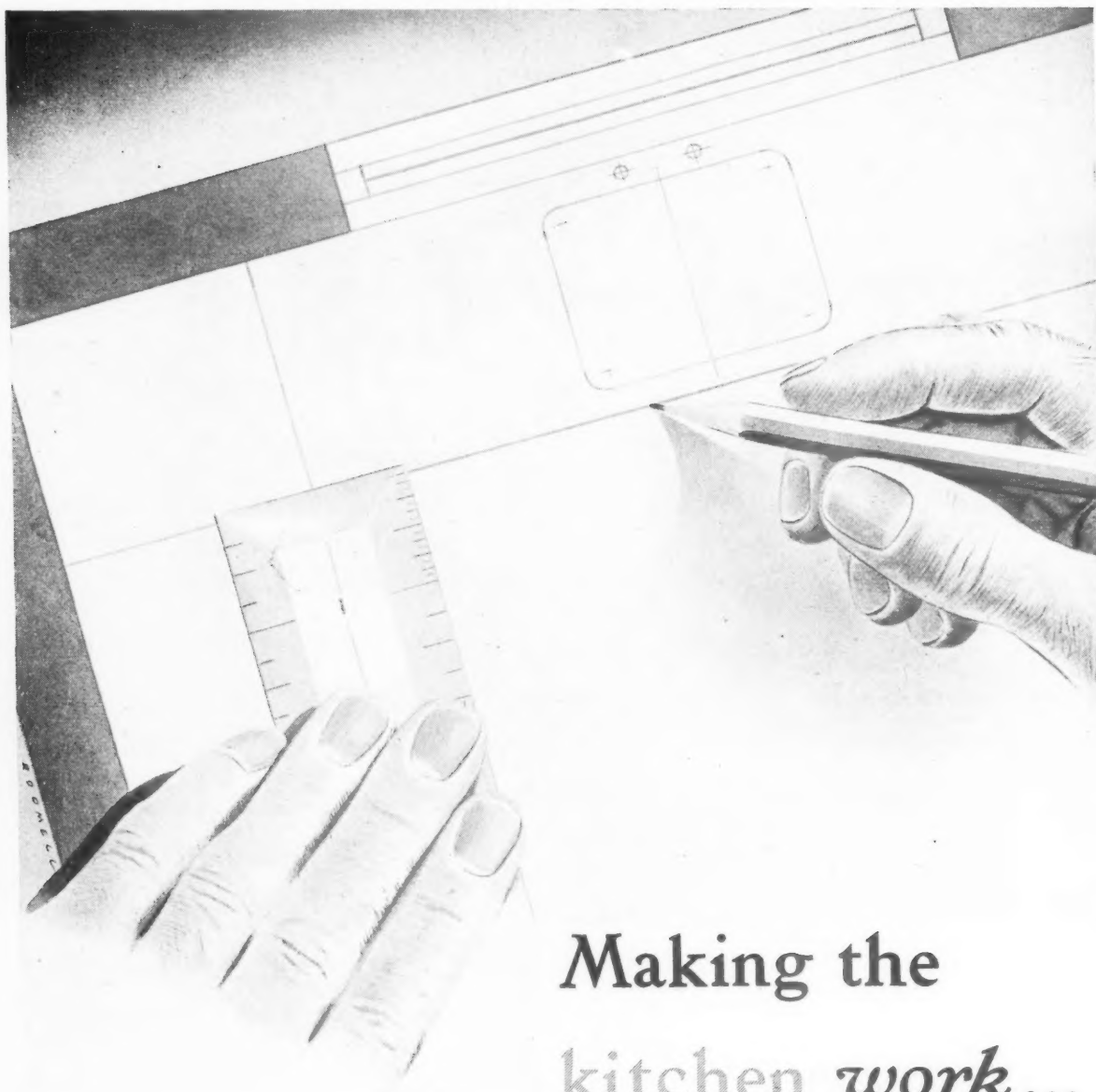
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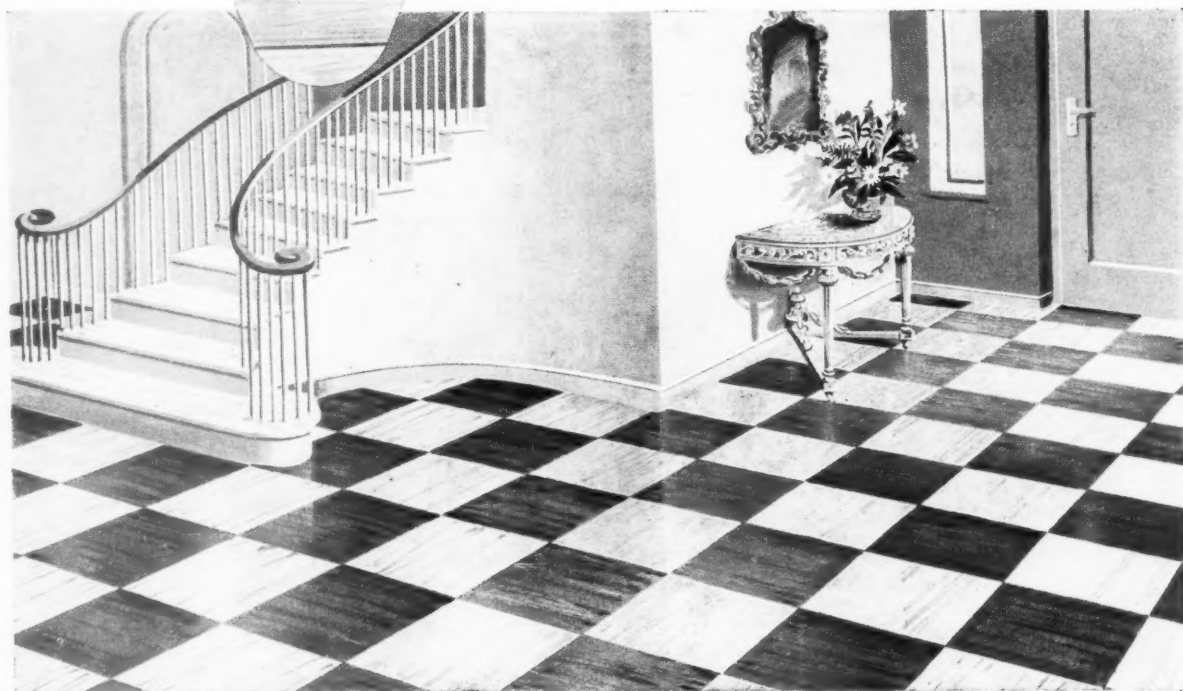
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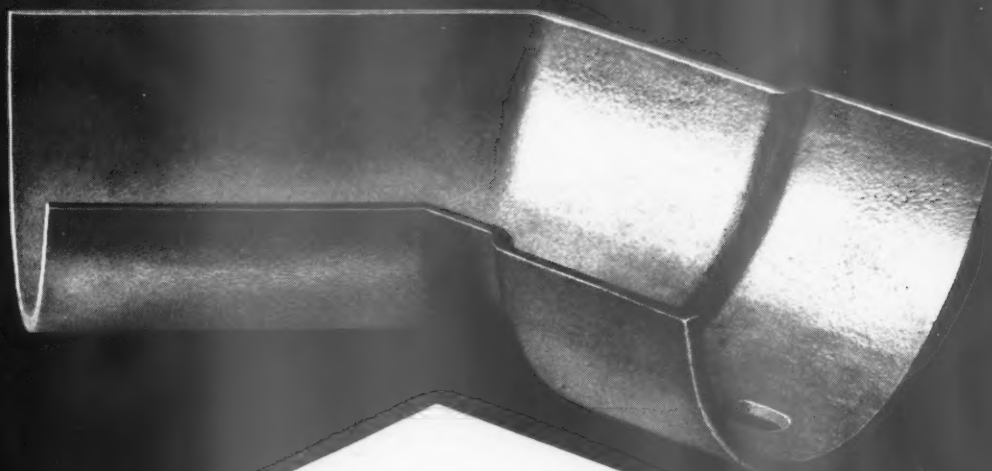
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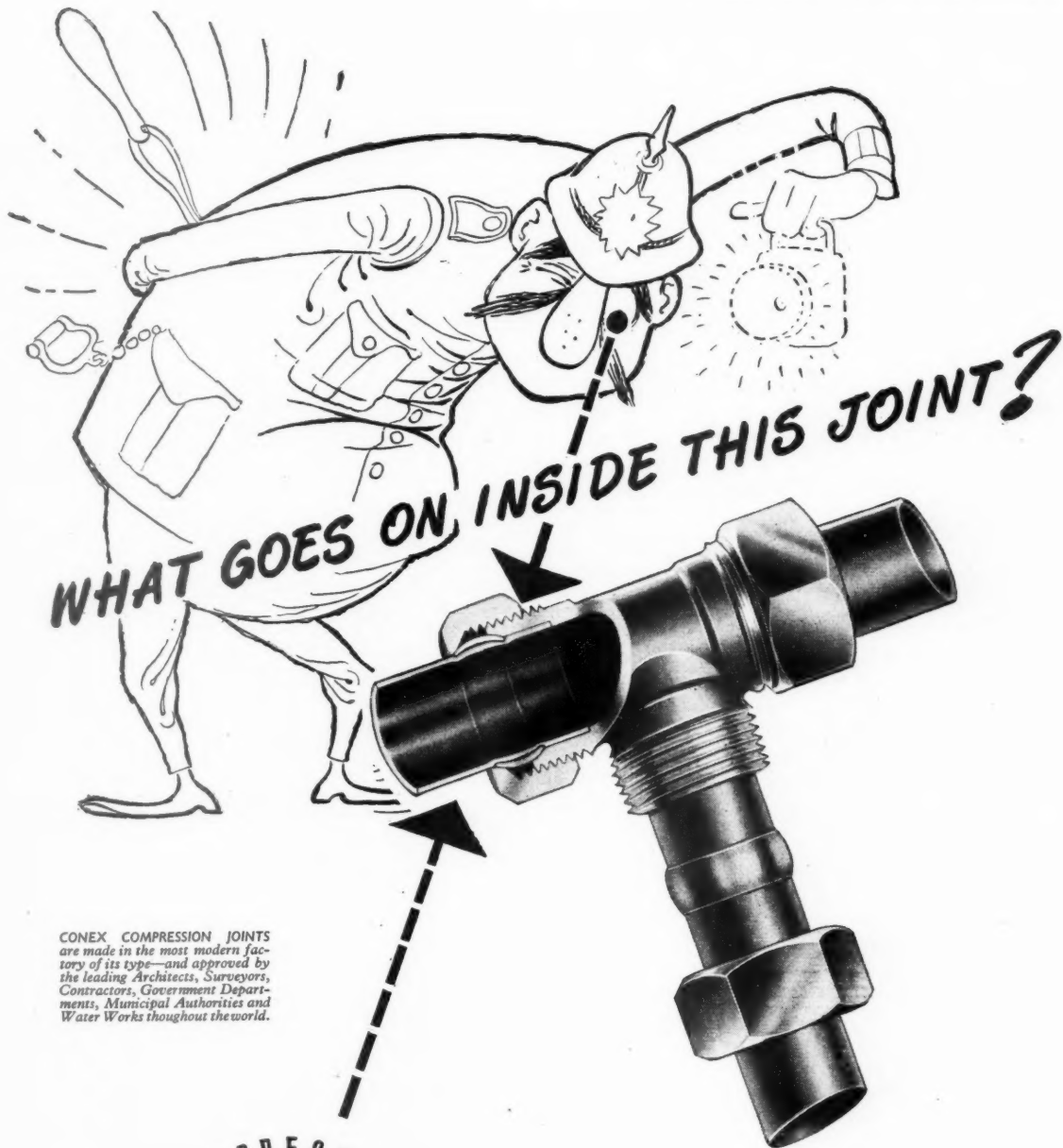


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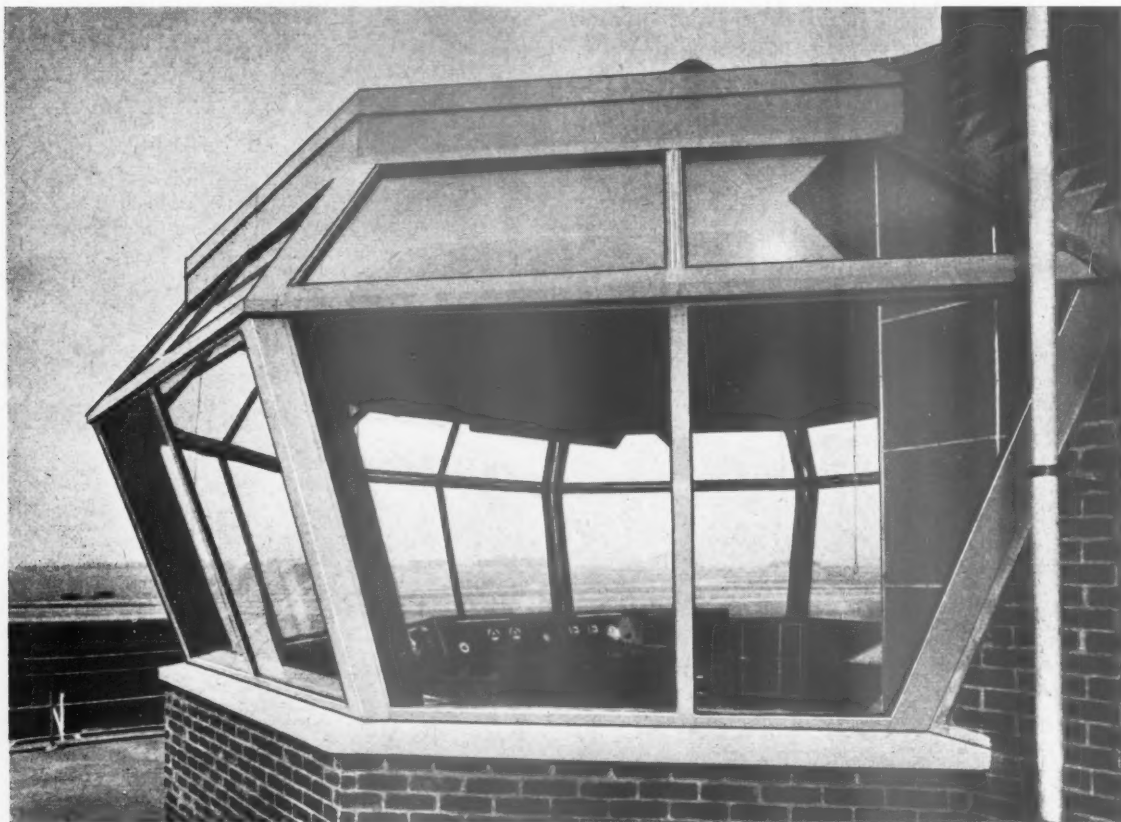
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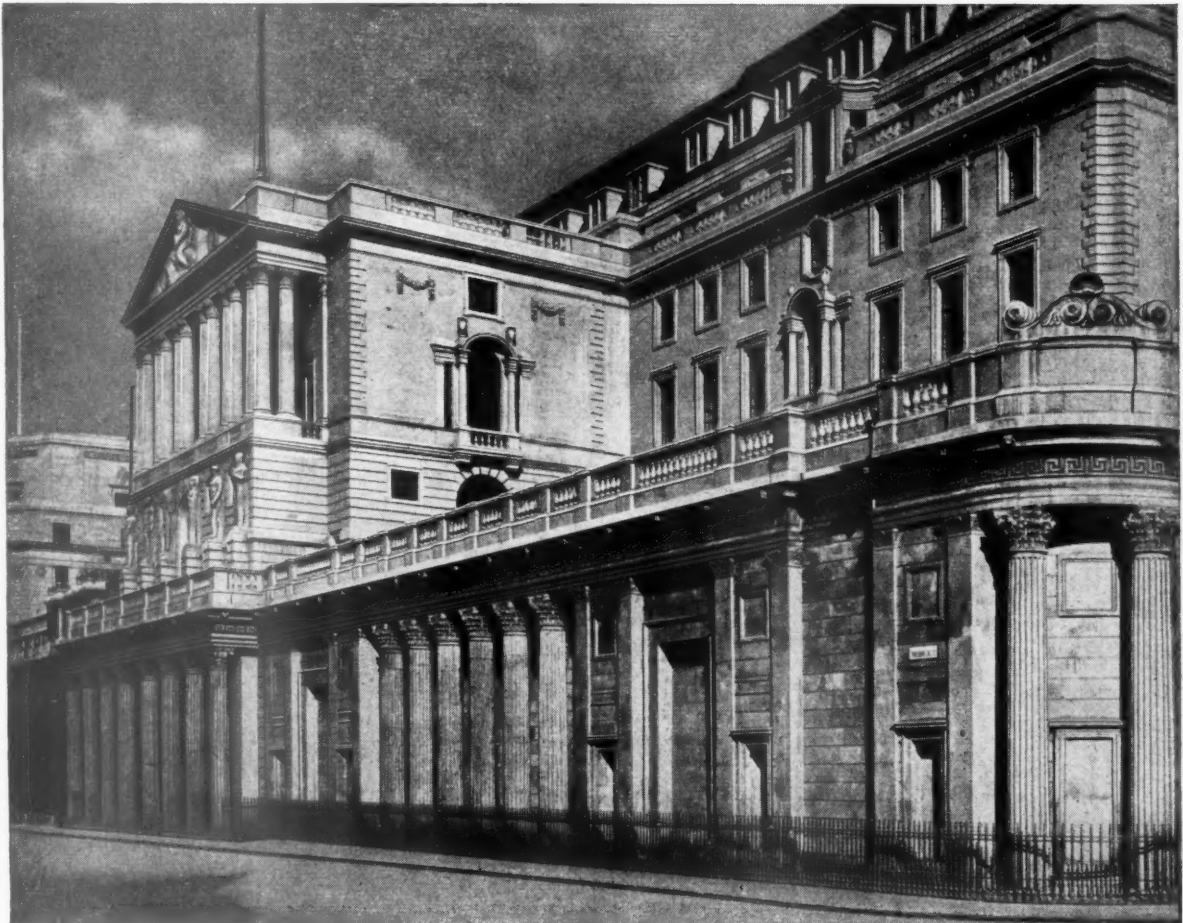
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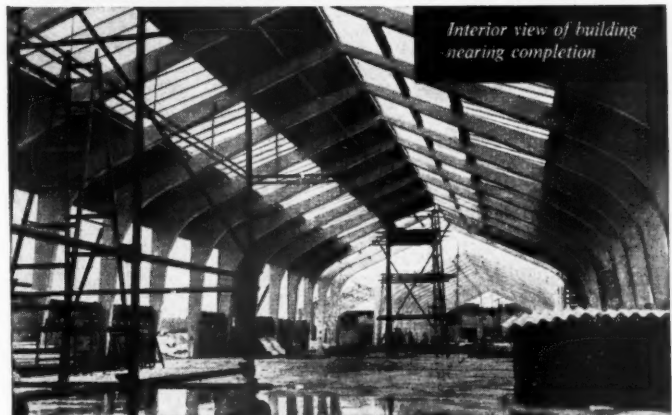
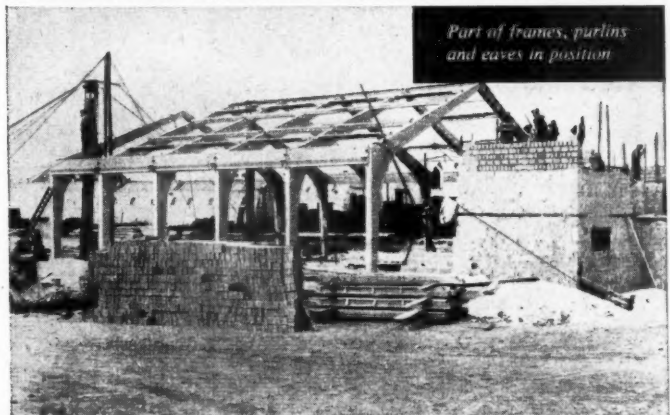
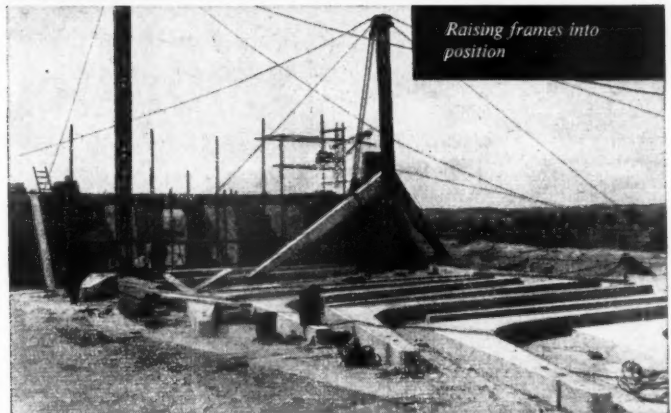
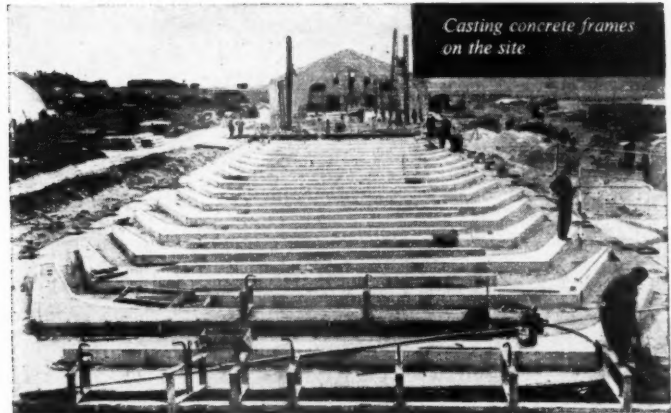
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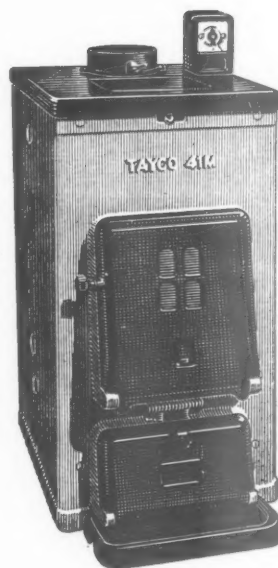
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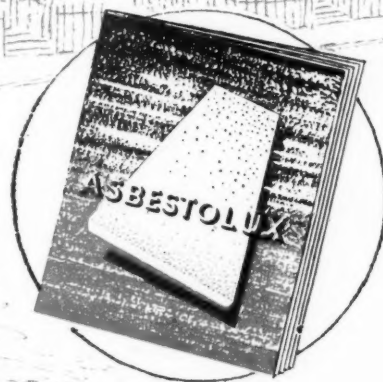
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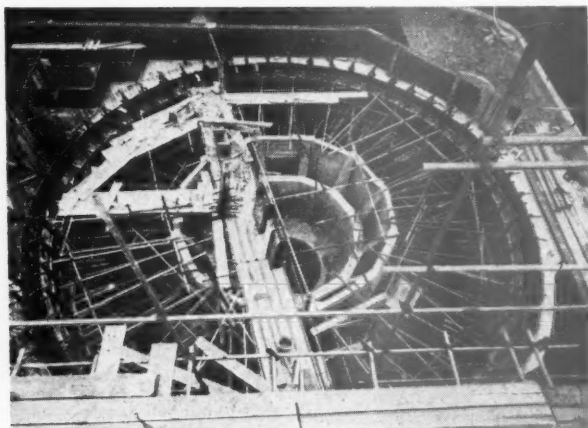
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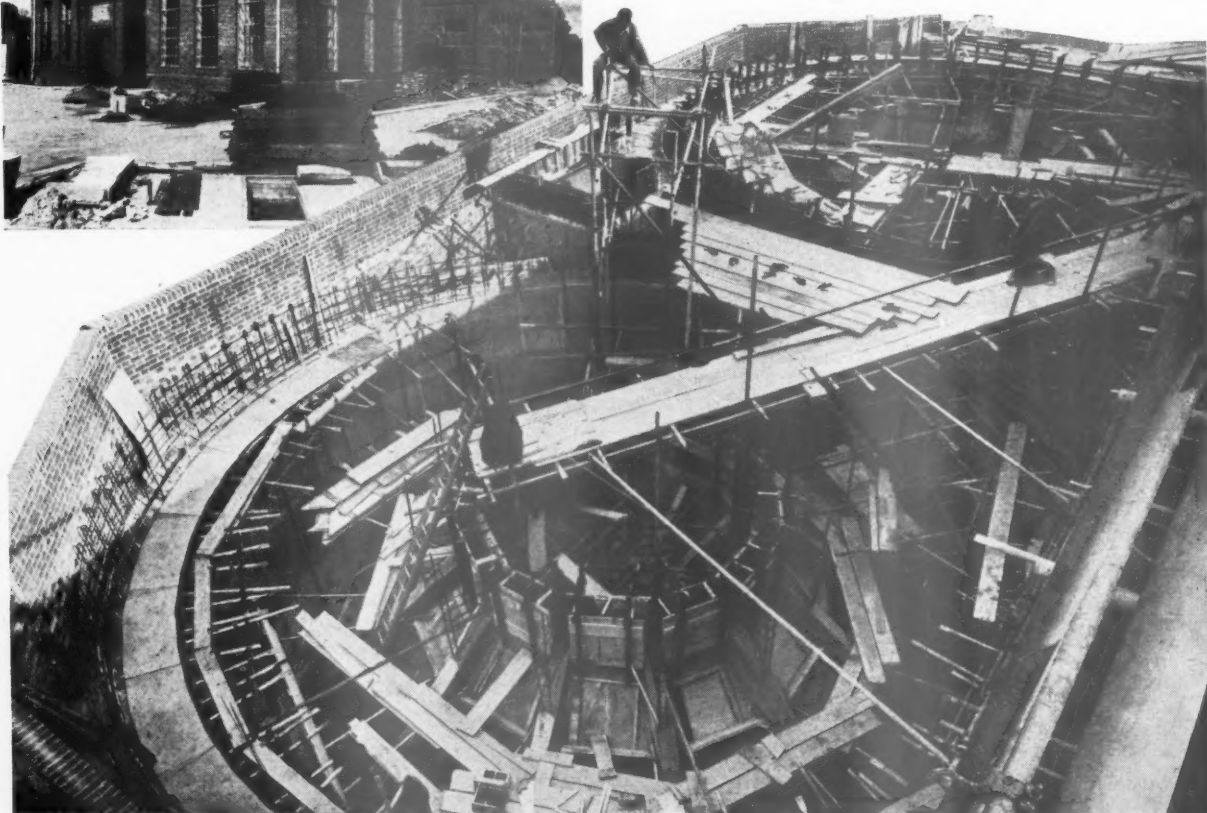
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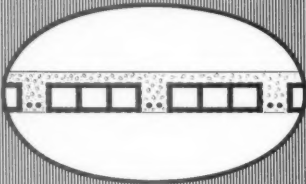
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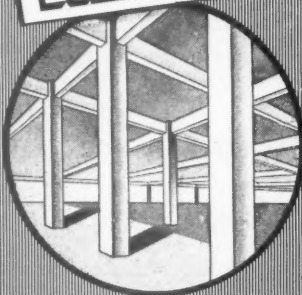
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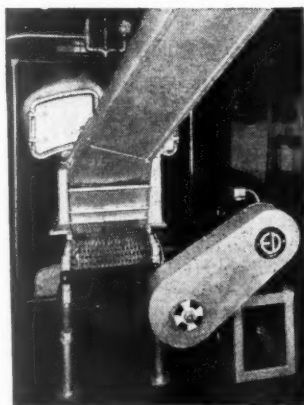
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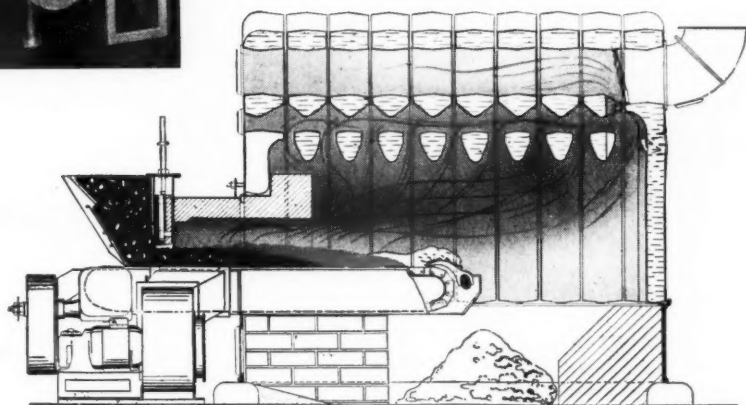
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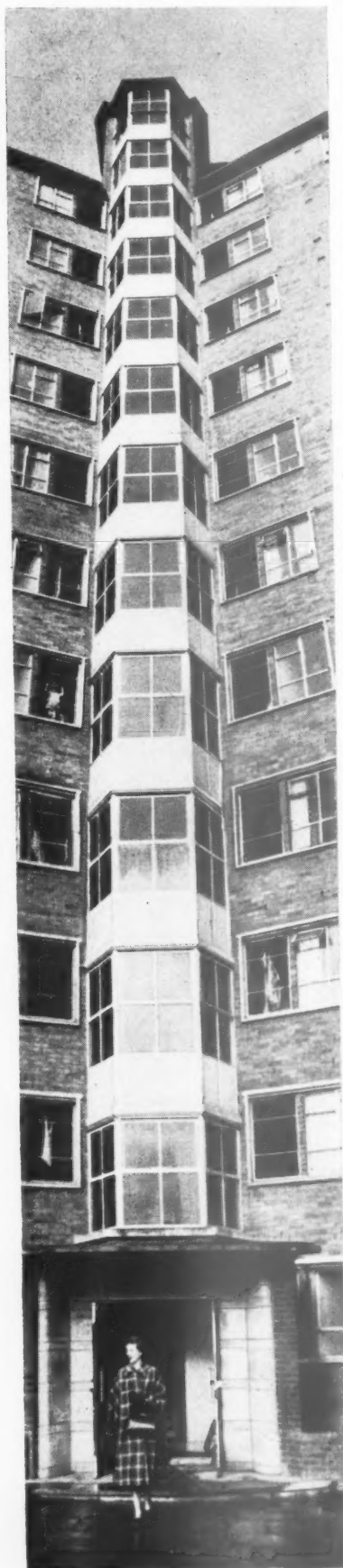
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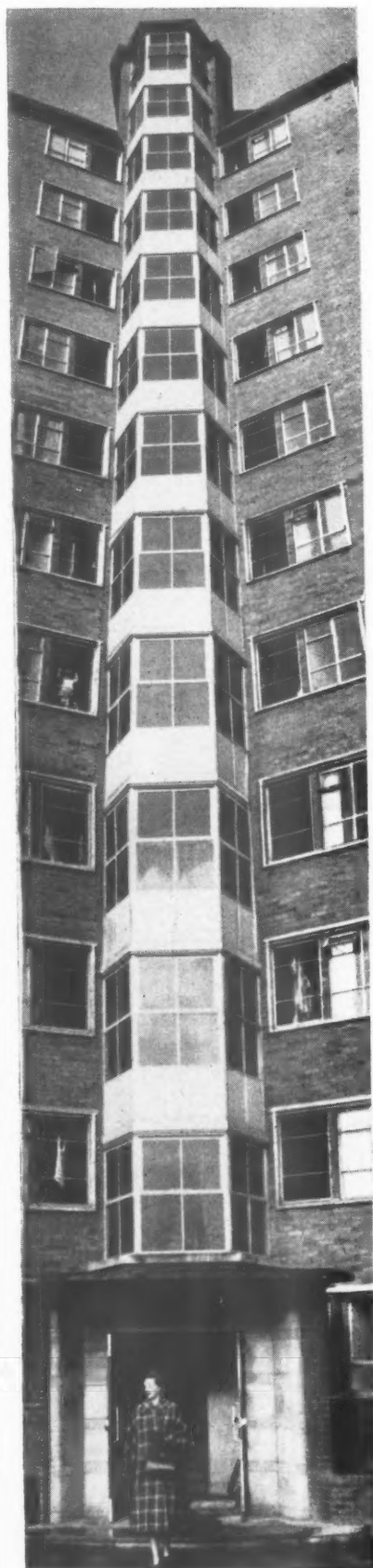


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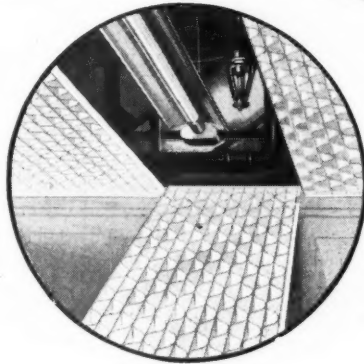
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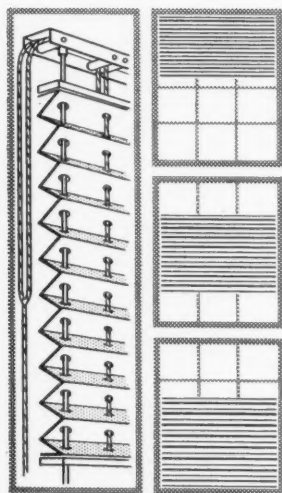
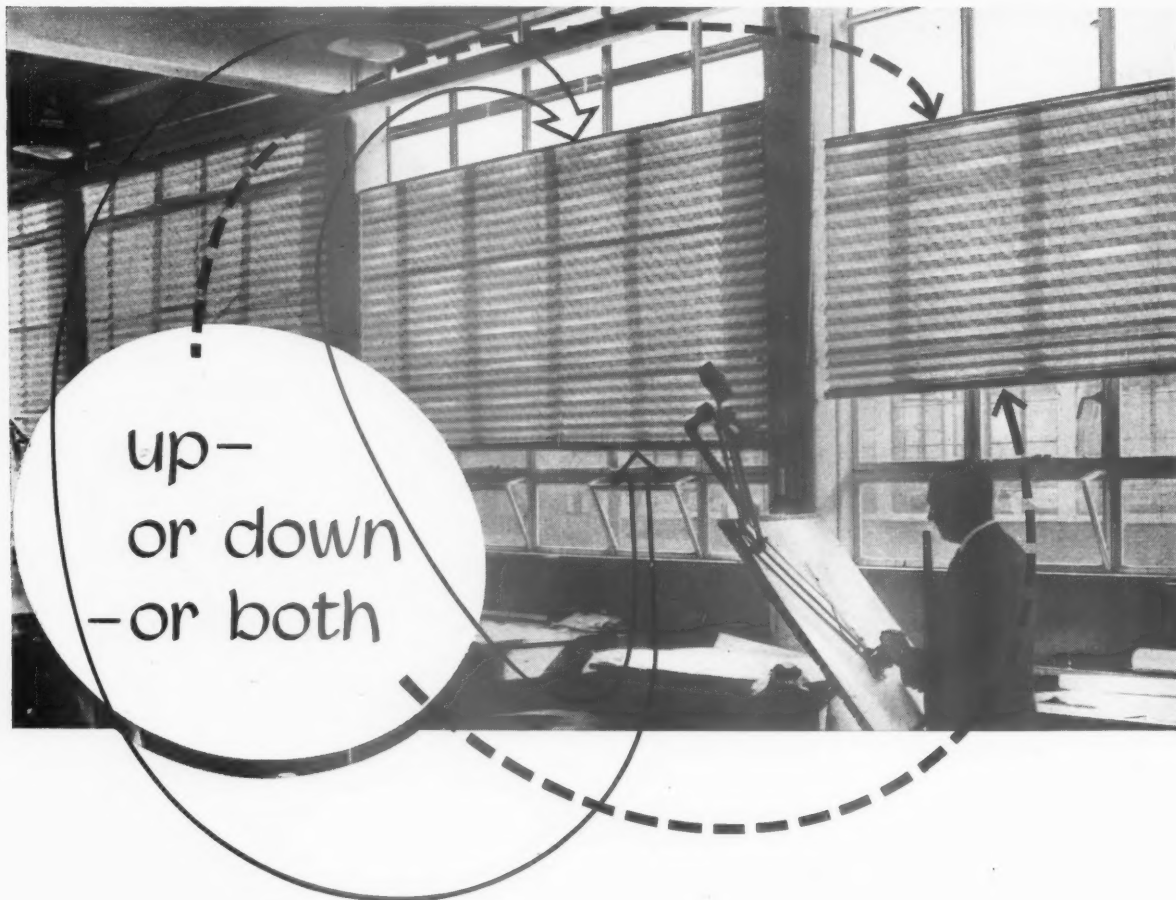


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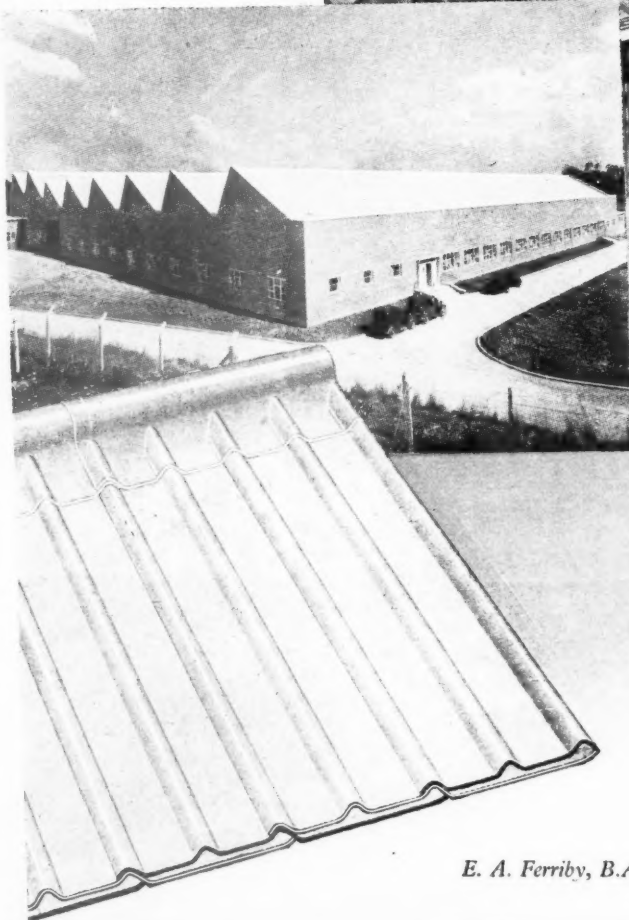
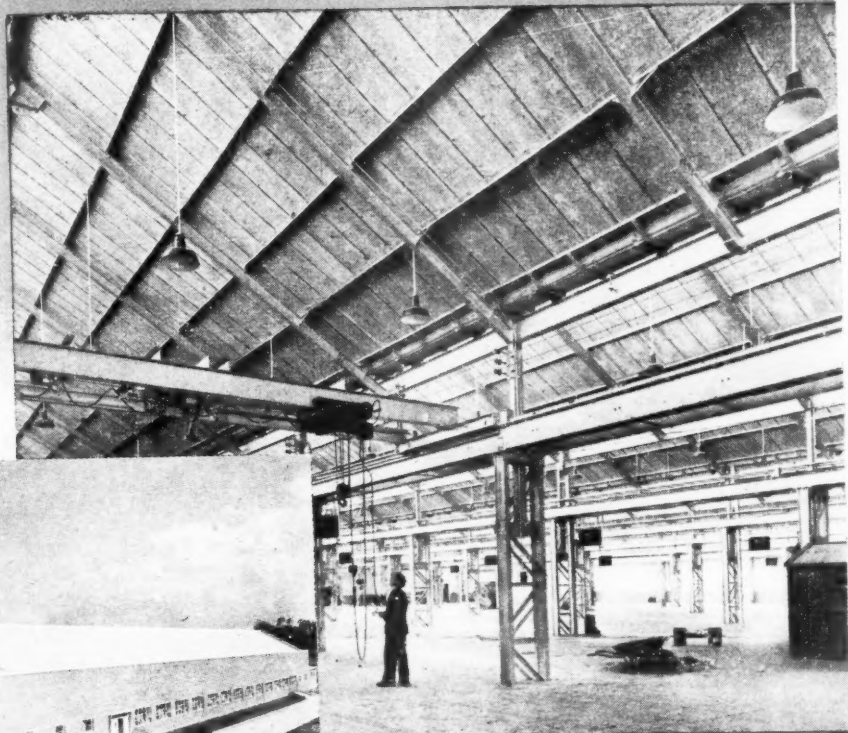
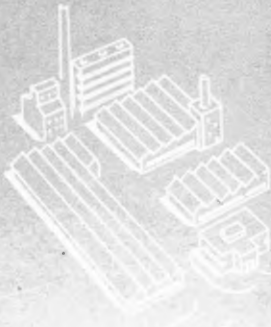
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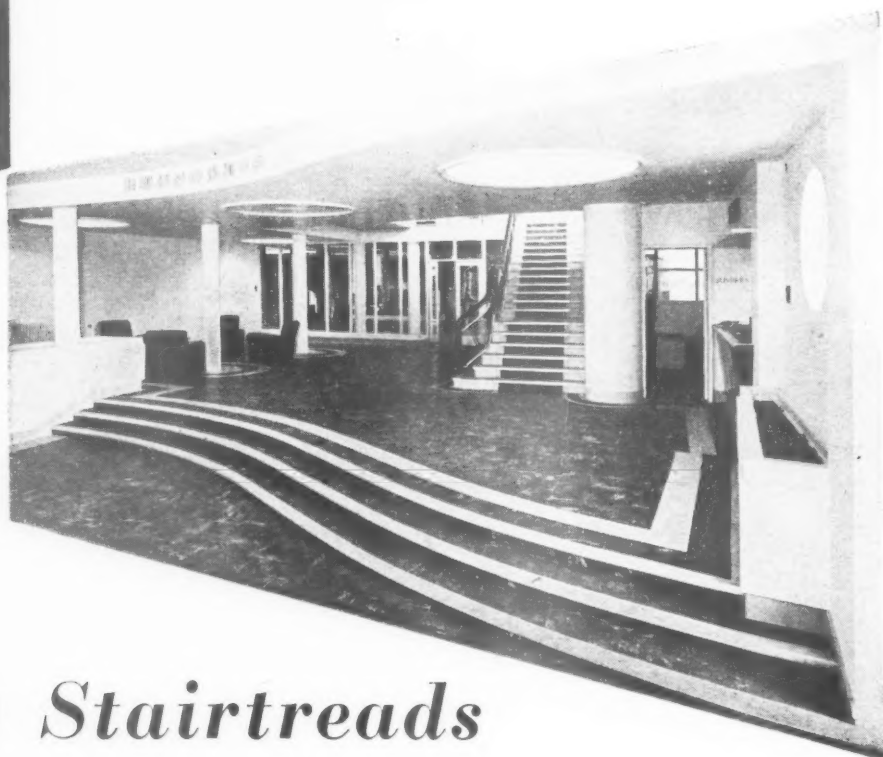
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COVENTRY HOLD-UP

The sudden opposition of Coventry Council to the proposal to begin site-work on the new cathedral this spring is very hard to understand. The city has everything to gain if this great undertaking goes ahead rapidly, and nothing to lose.

It will cost the city no money; the cathedral is being financed out of war-damage payments supplemented by private donations. It will not draw away building labour required for more utilitarian purposes because at first it will be all masons' work and later nearly all work by highly specialized artist-craftsmen, the introduction of whom into Coventry will greatly enrich

the life and resources of the city. There is not to be a single brick in the cathedral.

If the opposition is simply a political gesture the Council should think again. Such gestures tend only to injure the reputation of those who make them. Incidentally, what can the president of the RIBA feel about this blow at his campaign to get more encouragement given to the craft of stonemasonry?

NOSTALGIA IN PORTLAND PLACE

Since Professor Wittkower took up Palladian architecture in a big way and made it an utterly respectable academic study, we have all been able to rave publicly about the villas of the Veneto without being regarded as sentimentalists or holiday-bores. But ASTRAGAL often wonders whether that far-away look which can be detected behind even the thickest pebble-lenses when such discussions are proceeding isn't really something to do with *Asti Spumanti*, and the smell of cypress on a hot afternoon on the Monte Berico, and nothing to do with modules or harmonic proportions at all.

That is certainly how it affected this citizen when he had a quick preview of the marvellous exhibition of photographs of Venetian Villas which opens at the RIBA today. If you have that *nostalgie de Venise*, which is often as bad as angina pectoris about this time of an English winter, then you can indulge yourself till you are carried out sobbing. The photographs will also serve to remind you that Palladio was not the only one who could work the country-house caper to perfection, and

that Vicenza isn't the whole of the Veneto, for the Venetian villa is a phenomenon which covers a wide area of space and time.

The exhibition will also remind you that quite a lot of the villas are nowadays no longer country pleasaunces—anything but, for many are on the way to disappearance through slummy intermediate stages of decay and misuse. One of the reasons for organizing the exhibition was to draw attention to the appalling plight of these forsaken houses, and to remind us that a topographical-architectural masterpiece, comparable to the Loire valley and its chateaux, is being allowed to moulder away. ASTRAGAL, aware of the fact that we English have cribbed most of our ideas about gracious living in the country from these Venetian villas, felt a stirring of conscience, and hopes some private person or public body will do something to canalise a feeling of alarm which others will surely share.

MOD. CORD. IN ANTWERP

ASTRAGAL's interest in the Modular Society's lectures has revived considerably with the recent policy of studying actual buildings instead of discussing generalities. The last talk (given at the RSA, needless to say, and not in the building under discussion, as has become customary) was by Van Kuyck, the Belgian architect and engineer, who described his experiments in modular co-ordination in the building of a neighbourhood unit in Antwerp. Although Van Kuyck, in an excellent general survey, described modular co-ordination in relation to all aspects of a building; his team, of

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architect-engineer and production expert, appears to have concentrated on co-ordinating the services, and, in particular, the plumbing. No doubt there will be more about this in the JOURNAL shortly.

*

There were one or two little side issues mentioned, however, which should be studied over here. For instance, in this neighbourhood they have provided small, single-man workshops which are lettable to anyone—a neat answer to the backyard work-shacks of our suburbia. Then they make space in that under-used room, the bathroom, so that it can serve as a laundry. In the flats they have arranged all the electric and gas meters so that they can be read from outside—actually from the lift-shaft—there is an opening in the rear of the lift-cage.

*

Lastly—and not, of course, a side issue—all their experiments are leading to cheaper building.

RIBA DINNER

The third post-war dinner of the RIBA—held at Grosvenor House last Friday—passed off without incident. There was little more to it than that. A typical “function” meal of soup, sole, chicken and ice cream was followed by typical speeches. The Minister of Defence—Field Marshal Lord Alexander—proposed the toast to the RIBA (“I must confess architecture is a subject on which I know very little”) and the president, Howard Robertson, replied. Sir Hugh Casson proposed the toast of the Guests in what is known as a “light-hearted vein,” and in a way “felicitously remote from the subject,” as Lord Asquith (“I yield to no man in my ignorance of the principles of architecture”) said in response.

*

We may well ask: what is the purpose of this function? If it is to allow architects to entertain, semi-officially, favourite clients, builders and colleagues, then why not concentrate on first-class wine and food and lightweight speakers of the Gilbert Harding class? If it is to enable architects to meet the President and have a jolly professional get-together, then dispense with guest-speakers. If the object is good publicity (and plenty of reporters were present) then make sure something is said for them to report.

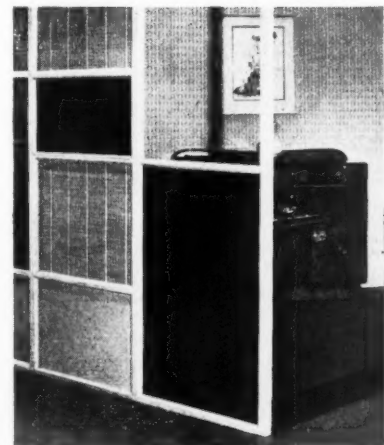
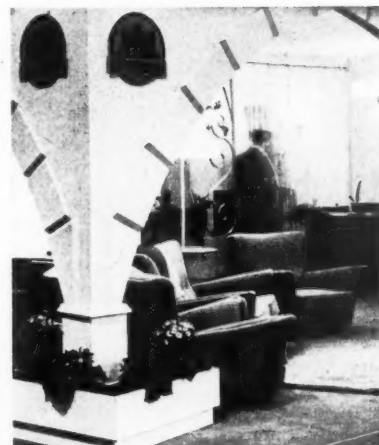
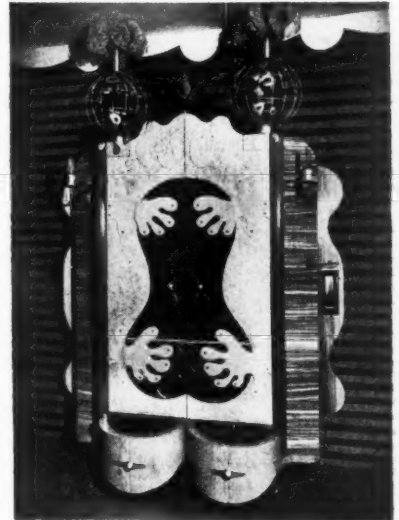
The heavyweights on the President's right and left, the Minister of Defence, the Duke of Wellington, the French and Irish Ambassadors, the Lord of Appeal, with over half a dozen presidents of this and that and a parliamentary secretary or two, make impressive reading on a table plan; but what benefit have they (or anyone else) received from the evening? Standard food, poor dears, and, because architecture is an esoteric subject in this country, standard speeches.

*

If the RIBA doesn't want to follow the LMBA pattern (dull food, a

The piece of furniture on the right is one of many startling new designs at this year's British Furniture Exhibition, Earls Court. No other new pieces share its most interesting feature—a built-in “suggestions” box. But this is the only deliberate joke in the show. ASTRAGAL was interested to find many examples of furniture designers and stand designers being amusingly out of step. A number of “period” stands display contemporary furniture. (See below and bottom left.) But at least one stand (bottom right) does quite the reverse.

Minister of Works or Housing and some journalistically reportable facts and figures) then let it cut its own caper or two. First-rate food and drink, in fact (preferably at the RIBA), and insist on the guest speakers talking on their own subject. F.M. Alexander on the Army's new rifle would have been fascinating to all architects,





Ideal Homes, 1953 and 1954

One of these houses was built for E. & L. Berg, Ltd., at last year's Ideal Home Exhibition, Olympia. The other is to be built for the same firm for this year's exhibition (March 2-27). The first (top) was an architect's design (W. M. Carter); the second is not. One's immediate reaction to this news is to suppose that Messrs. Berg made a commendable effort last year to bring their spec. building up-to-date, but have been so swamped by demands for Tudorbethan designs that they have beaten a strategic

retreat. But in fact the people who should be complimented for last year's contemporary splash in the Ideal Home "village" are not Messrs. Berg, but the exhibition's organizers, who particularly asked, as it was Coronation year, for "a New Elizabethan house." It is sad to see that the organizers welcome so easily a return to the "Olde" Elizabethan manner in their village, particularly at a time when spec. building is getting back to its pre-war scale, and the public is again able to buy houses over the counter.

who naturally appreciate a well-designed job, whatever it is; and a Lord of Appeal would surely not be listened to in vain.

SPREADING THE TOWNSCAPE GOSPEL

Some months ago our crusading contemporary, the *Architectural Review*, in collaboration with the Extra-Mural Department of Birmingham University, launched a series of Townscape studies of some of the smaller country towns of the Midlands—Ludlow, Evesham and Bewdley being the first to go under the searching scalpel of Gordon Cullen and his colleagues. Considerable local interest was aroused, and many Midland eyebrows were raised; and to keep this going—and indeed to follow interest with action—the University has been organizing a programme of town meetings to discuss the *Review's* proposals.

These meetings are preceded by a softening-up process of free hand-outs and a small exhibition of the *Review* scheme, and to judge by the success of the first (at Ludlow) it looks as if the organisers have started a lively series. Despite a foggy night the hall was full, the Mayor was on the platform, Sir Hugh Casson conducted the discussion, Gordon Cullen drew on a blackboard and questions were spirited and sincere—not, as so often happens, flippant or playing for a laugh. Ludlow citizens are evidently proud (rightly) of their town and not resentful of interfering and well-meaning Townscapists—but it was clear from the discussion that half-timber is still dear to the Ludlow heart, and the thought of some of it lying still buried and unseen behind some Georgian, Victorian or later facade is, for some at least, very hard to bear. Time will show whether the urge to strip has been stifled or merely checked by the *Review's* arguments against.

Incidentally, is not this something that the regional schools of architecture could follow up by organising with the help of the Extra Mural Department further meetings in these towns, or by extending the treatment to others—perhaps to villages? The Birmingham area is bung-full of suitable problems—good training for the boys and girls and a really splendid stimulus for the local inhabitants.

ASTRAGAL

POINTS FROM THIS ISSUE

Venetian Villas Exhibition at RIBA	pages 235 and 241
Contracting: the present position	page 242
Tall flats in London, Birmingham and Glasgow ..	pages 246, 249 and 250
Economy in Building: report of talk by H. F. Broughton ..	page 257

The Editors

ON LIVING HIGH

THE high blocks of flats illustrated this week in the JOURNAL lend emphasis to a sensible short article in the current issue of the *Housing Centre Review*. The author, Margaret Willis, has conducted a small study of tenant-reactions to living in high blocks of flats. The conclusions are, briefly, that tenants like living in high blocks, and those living on the lower floors are more anxious to move up higher than the upper floor people are to move lower. The tenants gave the following reasons for living high—in order of popularity—better air and healthier, quiet, a view, and, light and sunshine. The tenants also make the following remarks:—they are nervous of cleaning the outsides of the windows (due largely, of course, to giddiness and fear of heights), the lifts are unreliable and break down, sometimes as often as once a month. Balconies are too small, and so placed that children on them cannot be supervised from the kitchen. Lifts are too small to take prams. Finally, as parents in high blocks cannot supervise the children playing at ground level, the layouts of flat blocks are criticized because of inadequate play area facilities and because there is so little done to prevent children wandering into the streets.

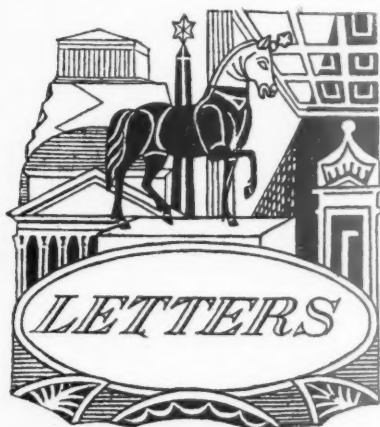
What is rather surprising is that such an article as Margaret Willis writes is necessary today. The first high blocks of flats have been in existence for several years and the cause of all criticisms should have been removed, by now, from all subsequent high blocks. Or must it be said that architects and housing committees have not yet made up their minds on how to design for, and handle, high-density building? Obviously, large families should never be catered for in the present type, at any rate, of high block. High blocks—by which we mean 10 to 20 storeys—are for adults only, and should consist largely of single-room, one-bedroom, and possibly, two-bedroom flats. The larger families are best placed in houses and four-storey maisonette blocks. Such planning removes some of the tenants' criticisms. The remainder can be corrected by more efficient detailing. Except, of course, for the shattering indictment against the lift manufacturers, which needs further study.

HOMES FOR THE DISPOSSESSED

The official focus today is on rehabilitation and slum clearance, with a modicum of patching, and this is the subject the JOURNAL's guest editor, Felix Walter, will be discussing during

the coming year. Such a policy brings once again into the limelight the problem of the disposal of overspill. High-density slums, when redeveloped, may force as many as 40 per cent. of the residents to new areas, and it is not unusual to find that the majority of slum dwellers prefer to remain where they are. The younger families, earning sufficient to meet higher rents and increased travelling expenses, can more readily be persuaded to move out in their children's interests, but the number of such families does not form anything like a sufficiently high proportion of the whole slum-dwelling population to solve the problem of overspill.

The proposal that a local authority should be empowered to requisition the private landlord's property—when it falls vacant—in which to put the homeless from a clearance area, has received no encouragement. Indeed, the answer to the problem of overspill is not likely to be found in any one action, but more probably in a series of co-ordinated activities. Initial redevelopment by multi-storey flats will keep the overspill to a minimum, as will the high priority on waiting lists for new houses and re-lets given to slum dwellers. (Ronald Bradbury, the Liverpool city architect, speaking at the HC last week on slum clearance said that 90 per cent. of the city's new accommodation was so allocated.) And rehabilitation by conversion, running concurrently with reconstruction, could, of course, absorb further numbers. Whether this would suffice depends upon the careful timing and assessment of each operation. Dealing, as we are, with human beings rather than cattle, we must be assured that the increased amenities in a new environment outweigh by far the loss of instinctive roots severed in the transfer.



The Profession's Backbones

SIR.—It would be most interesting to hear from Douglas Jones how, on the one hand, he reconciles his views on part-time schools put forward in the JOURNAL for February 11 with his vice-chairmanship of the Board of Architectural Education, whose policy he presumably supports (and whose opinions these are surely not), and how, on the other hand, he tolerates an evening school similar to some of those he condemns,

within the school of which he is Head. It should be pointed out again to Mr. Jones that the backbones of the drawing offices of most architects in practice are the young men entering the profession by the very means which he would presumably withdraw. This unrealistic and out-dated view which he supports has been held too long by too many of those responsible for architectural education.

Wolverhampton.

G. A. G. MILLER.

Too Much Glass

SIR.—I wonder how many people compelled to work, "school," or live in the glass-walled factories and, offices, schools, and houses, during the past few weeks have enjoyed their experience.

This naive cliché of using large areas of glass by so-called progressive and modern architects (first noticeable, I think, about 1934) is beyond comprehension, especially considering the very high cost and shortage of solid fuels.

Fuel experts have been pointing out to us for at least ten years now that this situation will get worse!

"MAINTENANCE SURVEYOR."

The Uses of 3-D

SIR.—I noticed in the article on 3-D in the THE ARCHITECTS' JOURNAL for January 21 that the author appears to give the impression that the Anaglyph is not used for serious work. Readers may be interested to know that the Anaglyph is used extensively in Air Survey, the overlapping stereo "pairs" of photographs being projected on to a baseboard alternately through red and blue-green filters.

The result when viewed with the appropriate spectacles is most impressive. The contour heights can be "traced" from the three-dimensional model and maps produced complete with contours.

A. B. WOOD.

Newcastle-on-Tyne.

What the Smithson's Think

SIR.—We are intrigued by the views expressed in your New Year issue by "the bright young hopes of the profession," Alison and Peter Smithson.

We would, however, like to point out that the uninitiated general public (our prospective clients in fact), do occasionally read the technical press. Unlike ourselves they may not appreciate the evident modest humour of the Smithson's ideas. Lacking suitable guidance they may even be tempted to take these ideas seriously, perhaps even as typical of the younger architect. This, we feel, would not be the best of advertisements for the profession.

A man contemplating the engagement of an architect may perhaps consider that it would be useful to him if that architect "tried to know about technical matters." He might even expect such knowledge. He may perhaps feel that the ten-year gestation period of the Smithson's ideas does not accord well with his building programme. Reading about the dearth of good architects and the poor quality of competition winners he may abandon the architectural profession altogether and approach a local "Building Consultant" who will discuss his project in language he can understand. This, we feel, would be a pity.

"FIVE ARCHITECTS AND GENTLEMEN," Carshalton, Surrey

SIR.—Referring back to your recent personal interview with the self-styled "Best Architects in England," we should like to remark on their touching belief that the aesthetic sensibilities of specialist sub-contractors are not enough to produce architecture. This attitude of innocent bewilderment in the face of technological progress is analogous with the fashionable "anti-scientific dogmatism" of certain contemporary writers, and could lead us back to the nineteenth century dilettante architect, happy in a dream-world of façades and stage scenery.

If we have not enough skill and conviction to initiate and collaborate to get our architectural conceptions across, we can surely not expect the other members of the team to bother as much.

There is another aspect also, as architecture is an intuitive art, the fuller one's know-

ledge becomes of the technical possibilities and limitations of materials and methods, the more refined and sensitive becomes one's creative instinct towards design.

The architect, whether he likes it or not, has to come to grips with the problems created by the increasingly technological aspect of building, else there is no constructive place for him in contemporary society.

"SEVEN ARCHITECTS."

London.

Focus on Philosophy?

SIR,—Focus for you on the one really important sentence in Professor Bowen's article of January 28:—"The function of the architect in society, looked at more realistically, would seem 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."

Client and architect are thus at loggerheads from the start, since, presumably, what an architect wants to do, if he has integrity, is to design beautiful buildings; he wants to do more than earn a modest living for himself and save other people money. If those who employ him fail to respect him as an artist, the future of architecture will be discouraging.

How can we change this attitude towards the architect's function? Some may say: "By propaganda such as public exhibitions held at the RIBA." But will this get us far? I doubt it. A culture expresses itself more clearly through its architecture than through any other art, and I would therefore say that the solution of the architectural and town planning problems of today is not primarily architectural at all. It is economic. It is therefore political. It is therefore philosophical, philosophy being at the base of any culture and being defined, in G. Santayana's words, as "a declaration of policy in the presence of the facts."

We must begin to think about architecture in relation to our culture as a whole and not just as an isolated part of it.

May I suggest the title for a new series: "Focus on Philosophy." If we want architecture, then we must be realistic. If we merely want jobs with pensions then, I suppose, we are doing moderately well. But there is almost certainly a heavy slump on the way, thanks to our false values. What then?

ERIC DE MARE.

London.

Architect-Engineer Controversy: Thought Wanted

SIR,—Is it not time that we devoted some constructional thought to the problem of resolving the conflict between the engineer and the architect as to who should hold the reins in the Borough office? No good can result from the slogging match at present in full swing which, for the sake of convenience, touched down on the Borough of Bermondsey in the JOURNAL of December 24.

It is true to say that any architect with a sense of professional integrity and responsibility deplores the prospect of working under a Borough Engineer. Indeed, his fears are justified when one regards the results of misapplied enthusiasm on the part of engineers in the past in their efforts to promote the life and prosperity of their towns and cities.

However, not content with finding ways and means of combining with him to correct these faults and create towns worth living in, the architect seeks to depose the engineer and so call trumps in his own favour at every opportunity. The engineer, he claims, is a technician whose responsibility should begin and end with the provision of roads, drains, refuse disposal and street lighting—a thoroughbred "Dan" in fact, permanently committed to a life at or below ground level except when he



This example of none-too-pleasing decay is the courtyard gate of the Villa del Bene at Verona, one of the additions made by Michele Sanmiceli to an existing group of buildings, and unfortunately typical of the condition of many of the Villas of the Veneto, as revealed in the current exhibition at the RIBA. ASTRAGAL refers to this exhibition, which will remain open until March 27, on page 235.

is allowed to change the bulbs in the lamp standards.

In view of the long-standing tradition of engineers in public service and the fact that in this country at least, traditions die hard, this approach to the problem would seem to be doomed to failure. Occasionally, the architect may find himself on top but with an aggrieved engineer at the bottom, the position may soon be reversed. The motion is that of a see-saw.

The fault does not appear to lie primarily with the inherent deficiencies in the engineer's training, but in the severe limitations imposed by the title of his office. The fundamental question is, "should the official department responsible for the town's physical and, to no small extent, moral well-being be termed the 'Engineer's Department'?" There is ample evidence to suggest that it should not. Nor is there any justification for calling it the "Architect's Department." The title should be professionally anonymous since the head of the department should be an administrator, able to co-ordinate the activities not only of the engineer and the architect, but also of the other specialists who should form part of the design team.

Having purged the department of its misnomer, councils would not then be bound to appoint an engineer at the head. Furthermore, with the word "Engineer" erased from or, at least, reduced in size of print and less oft repeated in the reports and minutes of committee meetings, councils might realize that the best man to head their technical department is not necessarily an engineer. He may even be an architect! Nor would they be bound to consider the formation of a separate "Architect's" department in response to effective professional propaganda. The claim that the many aspects of development are best dealt with under one roof is not without merit, particularly if the head of the department is chosen from a wide field of professional activity.

Only in this way will the architect and the engineer be able to regard one another, without suspicion, as individuals each with a contribution to make to town development. Each will have the opportunity to compete for the senior positions, the criterion for selection being the ability to co-ordinate a variety of specialist activities.

B. PRINCE.

Stafford.



CONTRACTING

The Present Position

Readers will remember that an exposure of the activities of the London Builders' Conference took place in November, 1952. In March, 1953, a committee was set up, with the RIBA's president, Howard Robertson, as its chairman, to review contracting arrangements in the building industry and to consider methods of reducing building costs. In the same month, the President of the Board of Trade asked the Monopolies Commission to report on restrictive practices in the building industry in the London area. The Robertson Committee was originally expected to submit its report by June of last year; but although eight months have now elapsed, the RIBA is not prepared to make any statement as to when the report will, in fact, appear.

Sir Alfred Hurst, chairman of the London Builders' Conference, has given a representative of the JOURNAL the following details of the present situation:—

The MOW is still asking all builders who submit tenders to the Ministry to sign a form of declaration to the effect (i) that they will not inform any party of the amounts of their tenders before submitting them; (ii) that they will not adjust the amounts of their tenders as a result of reference, directly or indirectly, to any other tenderers; (iii) that, in the event of their winning a contract, they will not pay any sum towards the tendering costs of other firms.

The Ministry is not, however, refusing to accept tenders from firms that refuse to sign the declaration; nor is it passing over tenders from such firms, when theirs are the lowest, in favour of firms that do sign the declaration.

According to Sir Alfred, only two county councils and "a few" metropolitan borough councils are refusing to accept tenders from firms that will not sign forms of declaration.

Meanwhile, most of the members of the London Builders' Conference are prepared to sign a form of declaration, provided it is modified so that they are not debarred from paying money towards the tendering costs of unsuccessful tenderers. Some members, however, are refusing to sign any form of declaration.

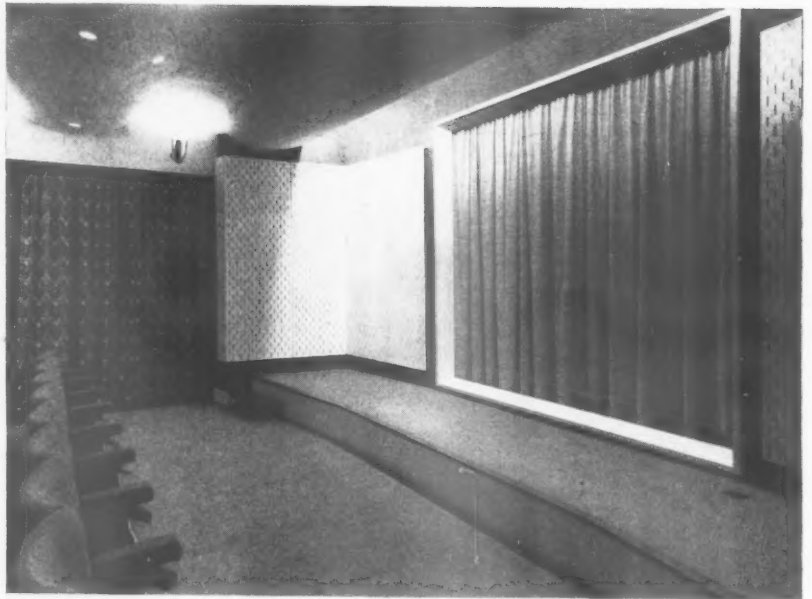
MODULAR SOCIETY

Talk by Van Kuyck

On February 17, Professor Hugo van Kuyck addressed the Modular Society on "An Experiment in Modular Co-ordination at Antwerp" at the Royal Society of Arts.

(Continued on page 244)

BUILDINGS IN THE NEWS



Private Cinema for Shell-Mex House, London

This cinema, for 102 people, which is on the mezzanine floor of Shell-Mex House, was designed by W. S. Hattrell and Partners.

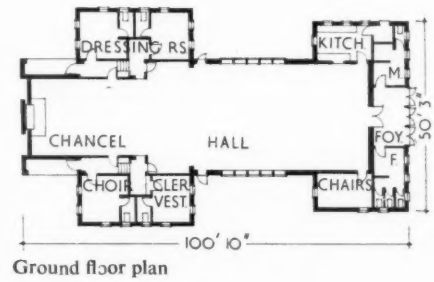
The ceiling is lilac, the walls are green and white and the seats are grey.

Caretaker's House at Kidderminster, Worcs.

This caretaker's house was designed by Yorke, Rosenberg and Mardall for the primary school at Kidderminster, for which they were also the architects.

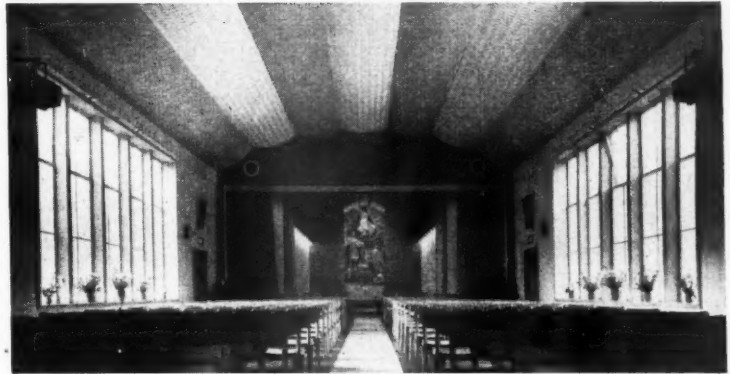


Ground floor plan [Scale: $\frac{1}{4}$ " = 1' 0"]



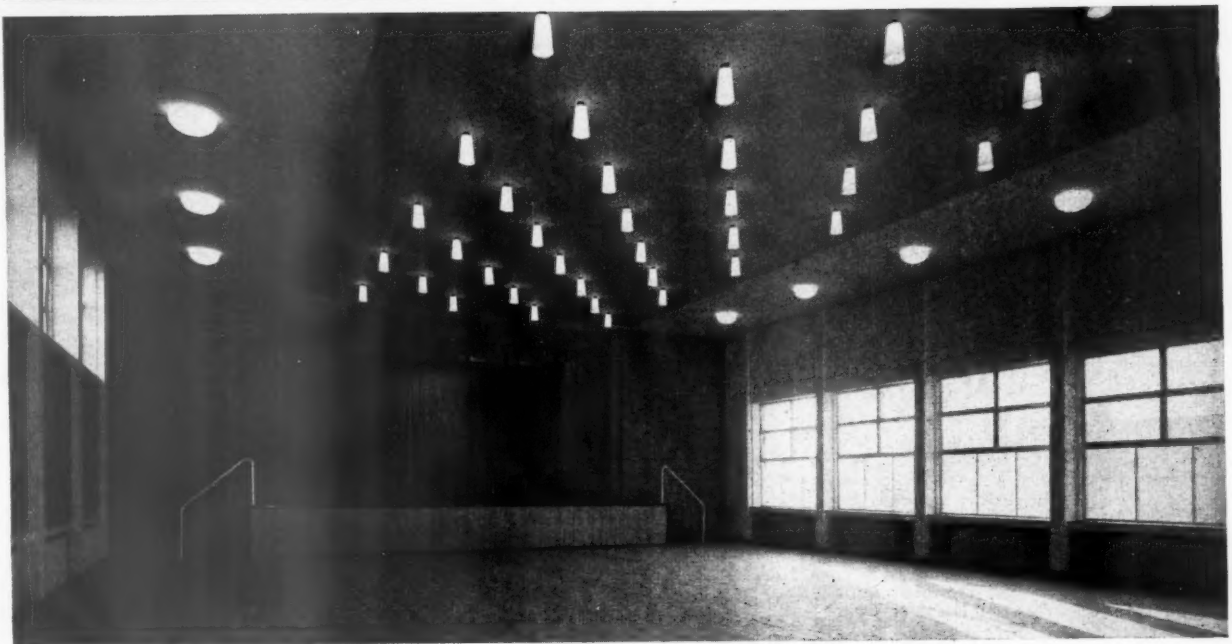
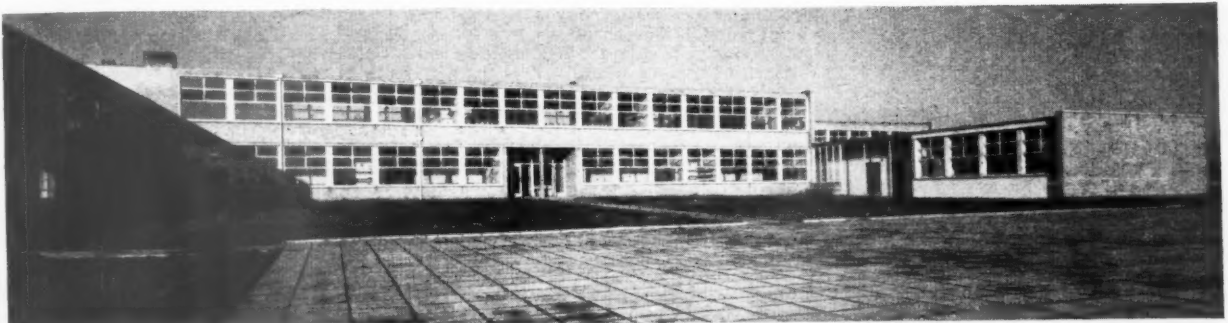
Church at White City

This church, designed by Seely and Paget, is a dual-purpose building. A stage, which is stored under the vestry and the dressing rooms, can be rolled into place when needed. On weekdays the sanctuary is cut off from the auditorium by a steel roller shutter and is used as a chapel.



School at Widnes, Lancs.

The Fairfield Secondary Modern (Boys) School has just been completed to the designs of the borough architect, H. Neville Player.



The chief subject matter of the lecture was the large Luchtbal neighbourhood which is under construction in the port of Antwerp. (The speaker is both architect and engineer for this building.)

Professor van Kuyck presented the case for modular co-ordination as the concomitant of the industrializing of building, and he described the wartime developments in Sweden as providing the point of departure for his own experiments in Antwerp. He explained that in the Luchtbal project the standard of co-ordination was given by the lift shafts and the services, and described how it was possible, by using the "Chokkabeton" system of precast concrete units, to induce a sufficient precision in those parts of the load bearing structure which immediately abut these elements.

During the questions which followed the lecture, Professor van Kuyck estimated that savings to date amounted to about 28-30 per cent. as against traditional building, and said he expected that by the time the project came to an end they would rise to 55-60 per cent.

It is hoped that parts of his lecture will be reprinted in the technical section of the JOURNAL.

COID

Goods to be Displayed "In the Round"

The COID hopes, before very long, to have an exhibition centre in London showing a considerable collection of British goods, all of them in production and all well designed. This will form an extension of the present pictorial card index known as Design Review.

LCC

New Housing Director

R. J. Allerton, at present housing manager of the city of Birmingham, is to be the LCC's director of housing.

From April 1 two separate departments—a housing management department and a valuation department—are to be set up in place of the present housing and valuation department at the LCC.

The present director of housing and valuer—a position held by Cyril H. Walker who retires on March 31—has two jobs: he is the council's chief officer for housing work, and is also valuer and estate agent.

Under new arrangements the director will be responsible for giving advice on housing policy in general and assessment of housing need; the management, including lettings, rent collection and maintenance, of over 200 housing estates; a direct labour scheme for the erection of up to 300 dwellings a year and the modernization of old dwellings; and control of development entrusted to private architects.

R. J. Allerton is 55 years of age. He is a Fellow of the Royal Institution of Chartered Surveyors, a Fellow and Past President of the Institute of Housing, an Associate Member of the Institution of Municipal Engineers and a Registered Architect.

London's War Memorial

An open space, suitably planned as a memorial to Londoners who lost their lives in the last war, is an integral part of the proposals for the development of the South Bank which were put before the LCC last November, and "the architect is under instruction to report on the matter, including a memorial in an appropriate position."

This was announced by Victor Mishcon, in answer to a question asked at a recent meeting of the LCC's General Purposes Committee.

POLAND

Architects as Guests

Students of architecture and town planning, members of housing committees and officials and directors of housing organizations will be invited by the Polish Society of Architects to a conference to be held in Warsaw from May 30 to June 10. About twenty-five people from Great Britain will be able to take advantage of this opportunity to visit Poland, and to take part in a two-day conference and six-day tour of works of reconstruction there. Those visiting Poland are expected to pay their own return fares to Warsaw (if by air) or to the border (if by other means of transport). Group travel would probably result in a reduction. In addition, there would be three days' hotel expenses for the first two days of the conference in Warsaw and the last day in Warsaw. This works out at 43s. per day, which includes all meals, hotel accommodation, public transport and normal out-of-pocket expenses.

The Polish Society of Architects have offered to pay all expenses for the six-day tour of reconstruction works in Poland. Those wishing to join the British party going to Poland on May 30 should write at once to Max Lock, 7, Victoria Square, S.W.1.

COMPETITIONS

Report from Dublin

Our Dublin correspondent writes:

Last May when the Dublin Port and Docks Board promoted a competition for a £200,000 scheme on an interesting site along the quay wall immediately east both of the Custom house and of Michael Scott's Bus station, things were un-brisk in the building game and one felt that maybe all of the Republic's 300 architects not involved in the endless hospital enterprise would have a go, particularly as the competition was more or less closed to the outside world.

The assessors were senior men, serious architects, past presidents of the RIAI, the conditions were reasonable and there was the whole summer to play with. Less than thirty played, for some reason or other best known to themselves, and the exhibition of their drawings in the National Museum last week had the unique effect of emphasizing the exquisite quality of Irish gold and silver work in the 12th to 16th centuries. The award had

been announced before the exhibition: the £700 first prize was withheld and the drawings were marked from second (£500) onwards. Competitors and their friends fumed—the assessors had insulted the profession.

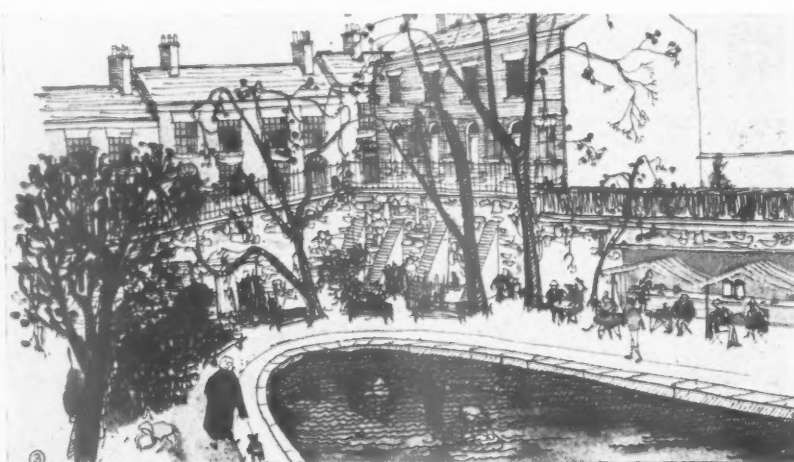
Un-fuming set in rapidly when the Museum opened its doors last week and embarrassed designers saw their own and their colleagues' immodest proposals for cluttering up the quays—"classical" 8-plans (with enclosed courtyards), "classical" plans with "modern" elevations, Beaux Arts projects with squeezed-in axial plans, clumsily articulated junctions between adjoining building groups, halls lit by windows not reading on elevation and the really healthy clerk's dream—the 100-yard un-lit corridor. Elevations ran from embarrassed classical through neo-Georgian and ciné-Egyptian to cash-register contemporary, with the oddest echoes of Perret and Pimlico. Apart from those premiated, the schemes weren't even well presented—scratchy drawing and rushed lettering could be noted even by a galloping horse, used by the writer of this note.

[The second prize-winning design was illustrated in the JOURNAL for February 11.]

Furniture Design

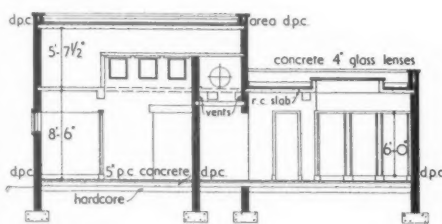
Results of the latex foam furniture design competition for students have been announced by the British Rubber Development Board. These are the details of the awards:—First prize (£50) to Aidron Duckworth, aged 33, of London, student at the Royal College of Art. (Design for a general purpose chair with pre-formed plywood back and seat upholstered in latex foam.) Second prize (£25) to David Davenport, aged 20, of Slough, student at High Wycombe College of Further Education. (Design for an occasional easy chair using latex foam on coil spring seat and tension spring back.) Third prize (£15) to Alan Henry Tilbury, aged 18, of London, student at Kingston School of Art. (Design for rocking chair with latex foam upholstered seat and back.) Fourth prize (£10) to Sven Ivar Dysthe, aged 22, of London, student at the Royal College of Art. (Design for two-seater steel frame settee using latex foam on rubber webbing.) An additional supplementary award (£5) to Colin Richard Docwra Stratton, aged 21, of Slough, student at High Wycombe College of Further Education. (Design for occasional arm chair with back in pre-formed ply with seat in latex foam in rubber webbing.)

This drawing by Peter Dovell is part of the winning design in a competition for the improvement of Woolton village, near Liverpool. Lord Woolton sponsored this competition for students of the Liverpool School of Architecture and Design and gave the first prize. Liverpool Civic Society gave the second prize.

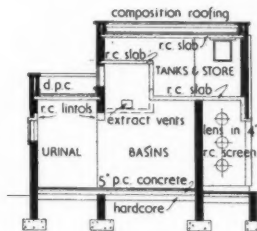


PUBLIC LAVATORY IN SOUTHBURY ROAD, ENFIELD, MIDDLESEX

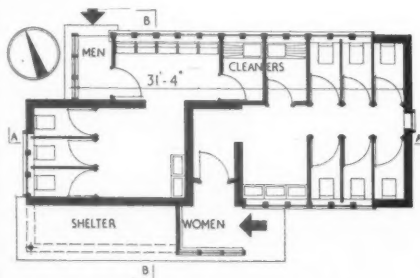
This public lavatory for the Urban District Council of Enfield was designed under the direction of Frank Lee, Engineer and Surveyor to the Council, assistant architect, H. T. Townsend. A shelter, built into the structure, serves an adjacent bus stop. Below, right, is a view from the south. The tank room over the men's lavatory is of sufficient height and size to accommodate a large sectional steel tank with space for dismantling if required, together with storage space. Air is provided through inlets in the external walls and air is extracted by a fan housed in a chamber in the tank room. Contract price, £3,269. General contractors, C. Hunt & Sons. Sub-contractors, page 264.



Section A-A



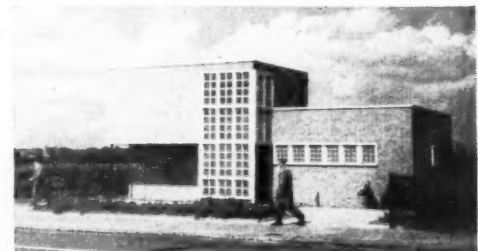
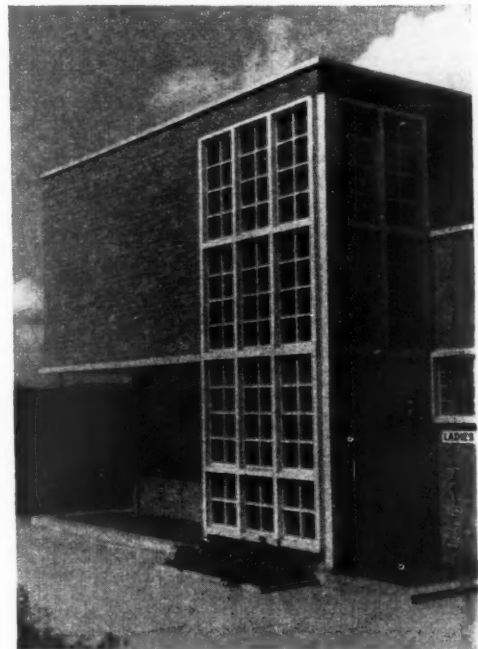
Section B-B



Ground floor plan (Scale: 1/4" = 1' 0")



First floor plan



LEGAL CASE

Sub-contractors under RIBA Contracts

Ernest Watkins writes:

The RIBA standard form of conditions of contract has again been before the Courts, this time for an interpretation of the position of a sub-contractor where the contractor is a company which goes into liquidation. The principal clauses under review were Clauses 11, 21 and 24. Shortly, the facts were that the contractor went into liquidation in December, 1952, having failed to pay the sub-contractor for work covered by an architect's certificate issued in the previous June. The sub-contractor's claim was that the employer was entitled to pay the sub-contractor direct out of any moneys still due under the contract, including retention moneys, that the contractor (and so the liquidator of the company) was a trustee of the retention moneys for the sub-contractor to the extent of the unpaid bills covered by certificates, and that accordingly payments by the employer to the liquidator should be held by him for the benefit of the sub-contractor, not for the benefit of the general body of creditors. That view was upheld by the Court.

PRESERVATION

Subject of Conference

A correspondent writes: The noise made in the last few years about the destruction of our architectural heritage begins to have effect: what has so far been the worry of a few enthusiasts only, interested in visual matters, becomes gradually the concern of wider circles. As witness the fact that the recent meeting of the "Standing Conference of Local Historians" was largely given to this problem; first the Earl of Euston had been invited to give a talk on behalf of the Society for the Preservation of Ancient Monuments: three points stood out as worthy of particular notice—the need for early notification of impending dangers to a building, the overwhelming importance of expert (that is architectural) advice, and the possibility of postponing thorough restoration, if "first-aid" measures were taken in time.

The County Archivist of Worcestershire, E. H. Sargent, explained the scheme he had inaugurated—a complete photographic survey of the county. Not only single buildings, but townscape, whole villages, even customs are recorded, so that eventually a complete visual image of Worcestershire will exist. Although other counties are engaged in similar schemes, nowhere, apparently, is it being done so thoroughly.

DIARY

Christopher Wren. Professor Nikolaus Pevsner. (In aid of Shoreditch, Hackney and Highbury Housing Association.) At National Book League, 7, Albemarle Street, W.1. (Tickets, reserved, 7s. 6d., from Miss V. Z. Pompei, 10, Lyons Square, S.W.1. SLOane 3138.) 6 p.m. MARCH 1

Architecture in Elizabethan England. V. Elizabethan Ornament. John Summer-son. At the Courtauld Institute of Art, 20, Portman Square, W.1. 5.30 p.m. MARCH 2

Venice Preserved. J. M. Richards. BBC, Third Programme. 8.50 p.m. MARCH 2

Housing in Northern Ireland. Dame Dehra Parker. At the HC, 13, Suffolk Street, S.W.1. 1.15 p.m. MARCH 2

Coventry Cathedral. Basil Spence. At RS, Burlington House, W.1. (Sponsor: DIA. Notify secretary at Whitehall 0540 if you wish to attend.) 12.30 p.m. MARCH 2

Glass in the Home. At the BC, Store Street, W.C.1. Monday to Friday, 9.30 a.m. to 5 p.m.; Saturdays, 9.30 a.m. to 1 p.m. MARCH 6 TO 27

Timber Preservation—Brains Trust. At the RIBA, 66, Portland Place, W.1. (Sponsor: British Wood Preserving Association.) 7 p.m. MARCH 24

TALL FLATS

1. in OLD STREET, FINSBURY, LONDON, E.C.1

designed by JOSEPH EMBERTON

2. in GREAT LISTER STREET, BIRMINGHAM

designed by S. N. COOKE and PARTNERS

3. at MOSS HEIGHTS, BERRYKNOWES ROAD, GLASGOW

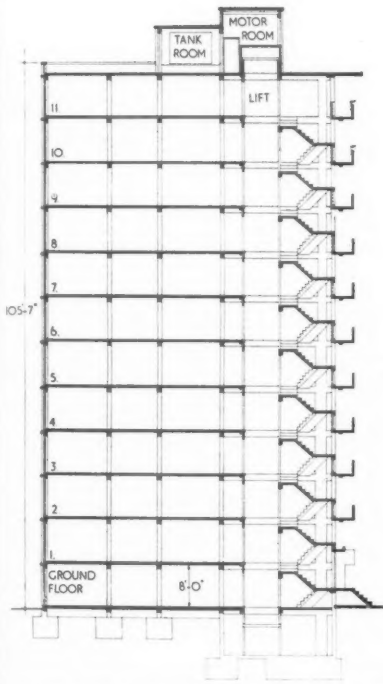
designed by ARCHIBALD G. JURY, city architect

The Stafford Cripps Estate in Old Street, for the Finsbury Borough Council, consists of three identical blocks, each 12-storeys high and containing 60 flats. The general object of the scheme was to provide a maximum number of flats on a site zoned for the highest density in London (200 persons to the acre), and to ensure that every room satisfied the daylight requirements laid down by the Town Planning authority. Each block contains twelve 4-room flats, twenty-four 3-room flats and twenty-four 2-room flats. The flats illustrated on pages 249 and 250 are other examples of tall blocks recently completed.

Old Street, blocks A and C, from the south-west.

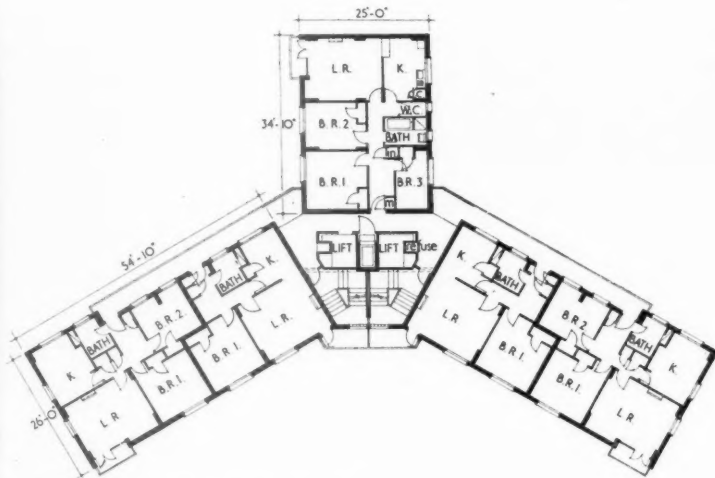
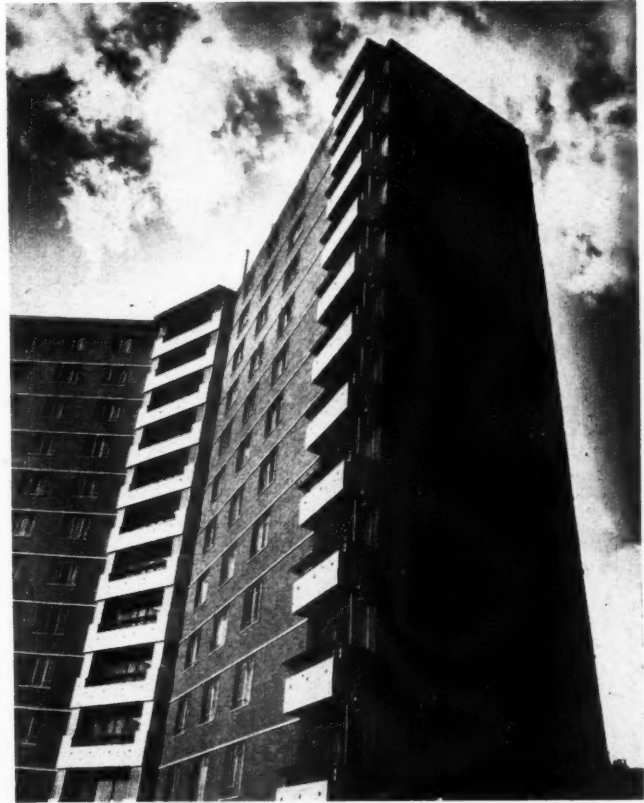


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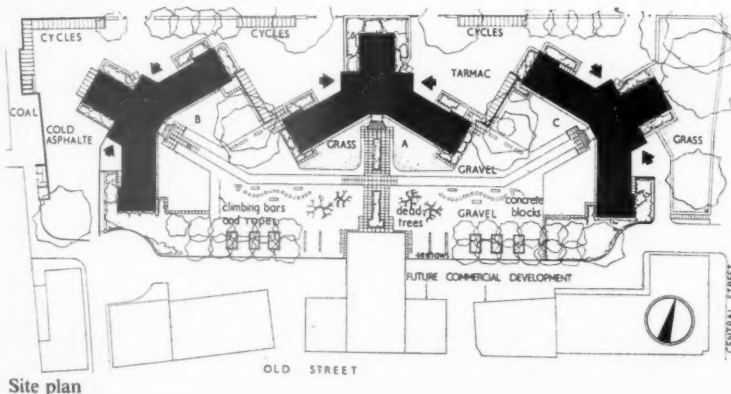


Longitudinal section through short wing of typical block

Right, part of block B, from the south-east. Below right, all three blocks from the south-west.



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



Site plan



TALL FLATS

I. in OLD STREET, LONDON, E.C.1
designed by JOSEPH EMBERTON

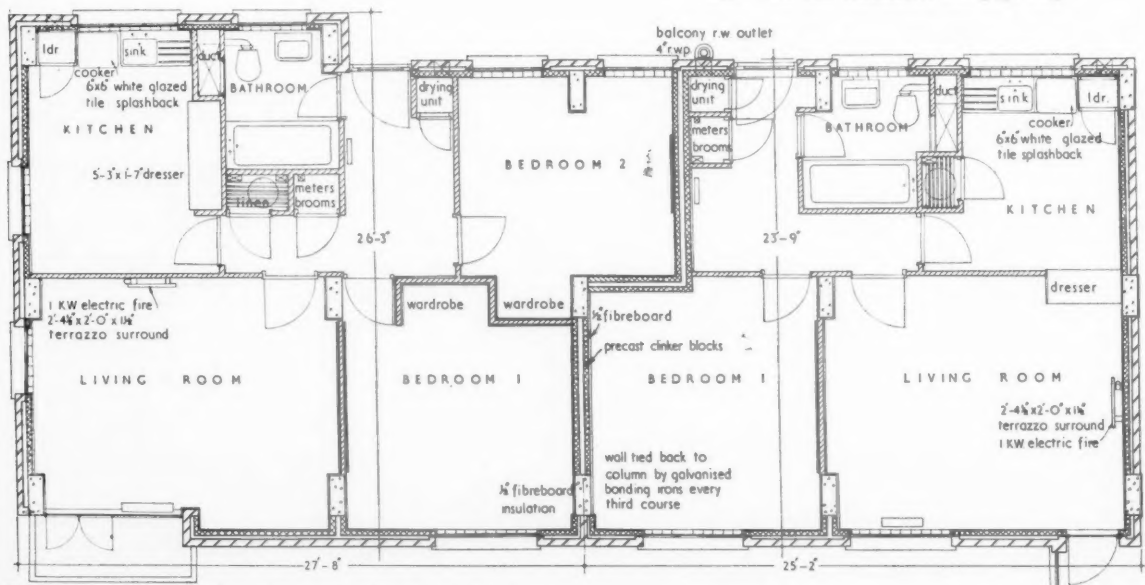
GENERAL.—In view of the very expensive nature of the site and the need for ensuring that the rents of the flats could be afforded by families most urgently in need of accommodation, it was essential to adopt as economic a form of building as possible. The blocks were designed to be identical, saving shuttering and enabling services to be prefabricated under factory conditions. The Y-shaped plan was adopted to ensure a maximum of sunlight to every room and to avoid the barrack-like effect which the architect considers to result from long rectangular buildings. Steel was in short supply at the time the scheme was conceived so a reinforced concrete frame was adopted, and pile foundations were used



TALL FLATS

in OLD STREET, LONDON, E.C.1
designed by JOSEPH EMBERTON

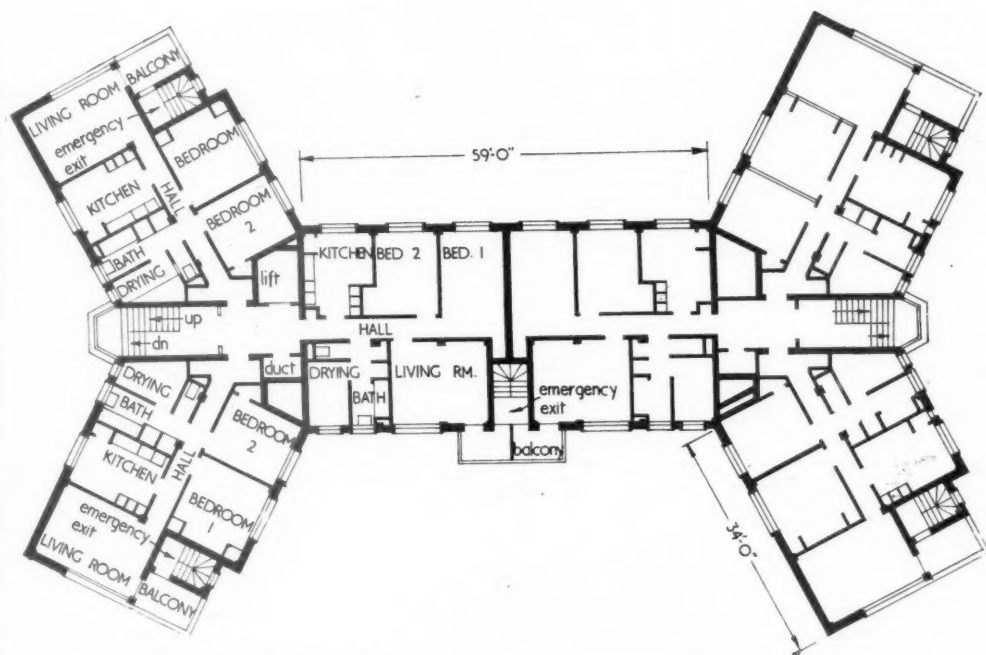
Above, a further view of blocks A and C, from the south-west. The flats have a reinforced concrete frame and cavity, brick-faced, panel walls.



Typical one-bedroom and two-bedroom flats [Scale: $\frac{1}{8}$ " = 1' 0"]

because the site consists of made-up ground. Balconies, large enough to take a perambulator, are provided to every living room. Cavity panel walls are used, with an outer skin of $4\frac{1}{2}$ -in. facing bricks and an inner skin of clinker blocks. Where the concrete frame is exposed externally, it is treated so as to produce a texture like Portland stone. Halls, corridors and escape staircases are finished with fair-faced brickwork. Living room walls are plastered and finished with emulsion paint. Floors are covered with thermoplastic tiles. Built-in furniture is provided in kitchens and single bedrooms to ensure the most efficient use of space. A central boiler house supplies low temperature hot water to radiators in living rooms and halls. An electric fire is also provided in each living-room and there are wall points in each bedroom. Hot water is provided by a small calorifier in each flat, served from the same source as the radiators, and gas heated drying cupboards are also provided. Two automatic lifts, each large enough to take a perambulator and serving alternate floors are provided in each flat. Refuse is disposed of by two chutes on the landings on each floor. Although the main contract time was 2 years, the job was finished in approximately 19 months. The contract price was £384,000, which is a price per cu. ft. (after deducting abnormal expenditure, such as site preparation and piling) of 5s. $2\frac{1}{2}$ d. The advantages of repetition was proved by the fact that whereas the r.c. structure for the ground floor of the first block took $5\frac{1}{2}$ weeks and the enclosing walls 2 weeks, towards the end of the job the former was taking 9 days and the latter 4 days.

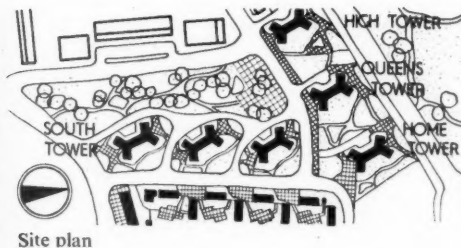
The general contractors were Y. J. Lovell & Son, Ltd. For sub-contractors see page 264.

Typical upper floor plan (Scale: $\frac{1}{4}$ " = 1' 0")

GENERAL.—Queen's Tower, which was opened by Harold Macmillan early this month, is the first 12-storey block of flats to be completed in the Duddeston and Nechells Redevelopment Area of 263 acres. So far, 114 dwellings have been completed and contracts are in hand for a further 492. Six blocks, similar to Queen's Tower, will occupy a site of 8.2 acres, with a density of 153 persons per acre. Each block contains 66 flats, of which 62 are two-bedroom flats and 4 one-bedroom flats. The centre portion of the ground floor is used for cycle and other stores. Owing to the low bearing capacity of the soil, pile and beam foundations are used. The buildings are steel framed with external walls of 11-in. cavity brickwork, and internal partitions of 3-in. hollow pot construction. The steel frame is entirely encased in concrete or hollow tiles for fire resistance, and each flat has an escape staircase leading off the private balcony. Facilities have been provided in the layout for fire engines and escapes to reach all sides of each block. Standard steel windows are used in reconstructed stone surrounds. There are two automatic lifts in each block, constructed to carry 10 persons and to accommodate a pram. The heating and hot water systems and Garchey refuse disposal are centred in a main boiler house under Home Tower. The boilers are stoked mechanically and the consumption of fuel is controlled by changes in outside temperature. Cost per flat is £2,651 (one bedroom) and £3,382 (two-bedroom). The general contractors were W. J. Whittall & Son, Ltd. Sub-contractors, page 264.

TALL FLATS

2. in GREAT LISTER STREET, BIRMINGHAM,
designed by S. N. COOKE and PARTNERS



Site plan

Below, Queen's Tower from the north-east. Left, a view of the south-west wing.





TALL FLATS

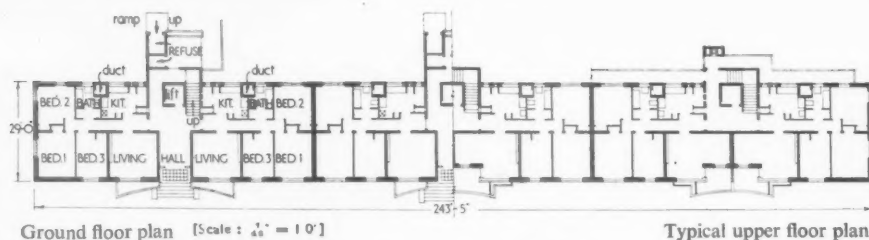
3. ON MOSS HEIGHTS

BERRYKNOWES ROAD

GLASGOW

designed by ARCHIBALD G. JURY

city architect and planning officer

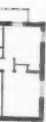


GENERAL.—The Moss Heights flats in Glasgow, although not so high as those illustrated on the previous pages, are in the form of slab blocks, 10 storeys in height, in a development which also contains two 4-storey blocks. There are 267 flats altogether, of which 219 are in the 3 ten-storey blocks and consist of two- and three-bedroom flats. The tall blocks have 7-in. reinforced concrete walls, roofs and floor slabs. The external walls are faced with 2-in. precast concrete slabs with a Dorset pea finish. Floors are finished with $\frac{3}{4}$ -in. thick boards

on $1\frac{1}{2}$ -in. timber battens on insulating pads and floor clips. Heating and domestic hot water is supplied to all flats from a central boiler house attached to one of the blocks. Lifts are provided at the rate of one per 20 flats. In addition to the central heating, all flats have a small electric fire in living rooms and, in the absence of open fires, a small gas incinerator. Each kitchen has a large drying cupboard heated by a coil from the domestic hot water system. The cost was approximately £3,500 per flat. The general contractors were Holland & Hannen and Cubitts Ltd.

Top, one of the 10-storey blocks, which contains 60 flats, seen from the south-west. Right, the three 10-storey block with one of the 4-storey blocks in the foreground, seen from the south-west.





plan

WORKING DETAIL

COVERED WAYS AND CANOPIES: 11

CANOPY OVER ENTRANCE: SCHOOL AT OLDBURY, WORCESTER

F. R. S. Yorke, E. Rosenberg and C. S. Mardall in association with F. W. B. Yorke and H. M. Barker, architects



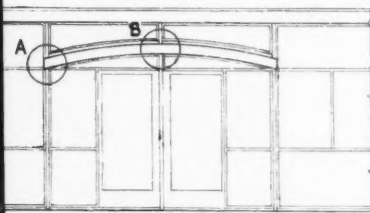
The canopy extends inside the building to the full depth of the wind lobby. The mild steel frame of the canopy was fabricated in two parts and was then riveted to the six supporting columns. All contacts between the upper surface of the canopy and the glazed wall are covered with soldered zinc flashings.

WORKING DETAIL

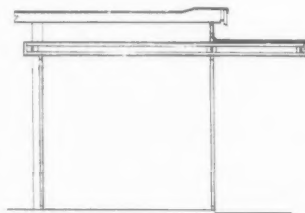
COVERED WAYS AND CANOPIES: 11

CANOPY OVER ENTRANCE: SCHOOL AT OLDBURY, WORCESTER

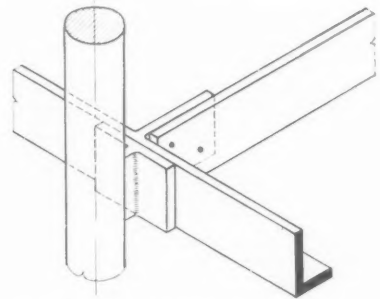
F. R. S. Yorke, E. Rosenberg and C. S. Mardall in association with F. W. B. Yorke and H. M. Barker, architects



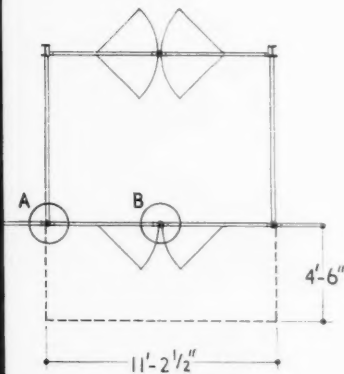
ELEVATION OF CANOPY.
scale $\frac{1}{8}" = 1'-0"$



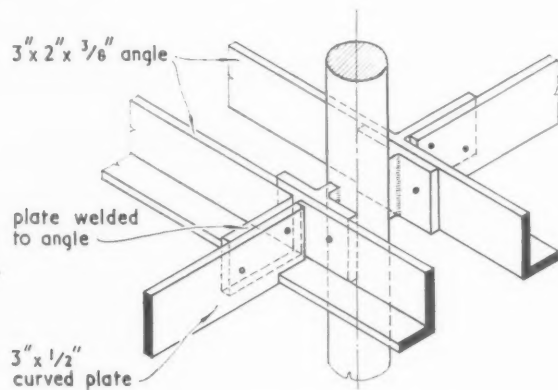
SECTION THRO' CANOPY.
scale $\frac{1}{8}" = 1'-0"$



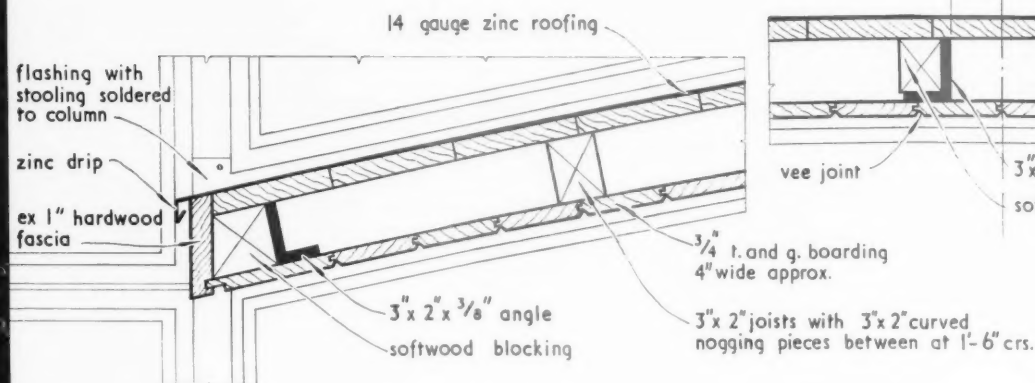
STEELWORK DETAIL AT A.



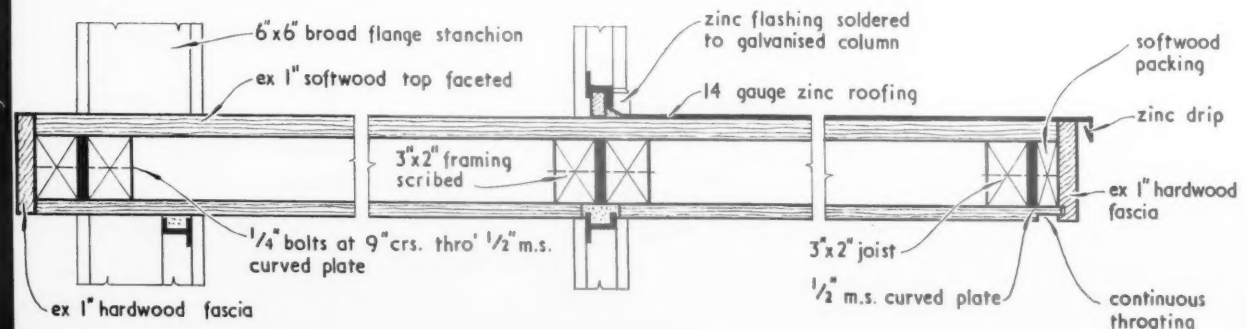
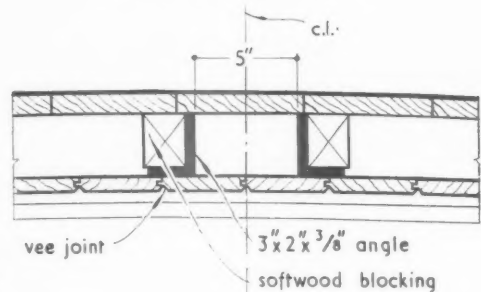
PLAN AT DOOR LEVEL.
scale $\frac{1}{8}" = 1'-0"$



STEELWORK DETAIL AT B.



CROSS SECTION THRO' CANOPY. scale $\frac{1}{2}" = 1'-0"$



LONGITUDINAL SECTION THRO' CANOPY. scale $\frac{1}{2}" = 1'-0"$

WORKING DETAIL

WINDOWS: 21

WINDOWS IN LOUNGE: HOSPITAL IN LONDON, S.W.12

Devereux and Davies, architects



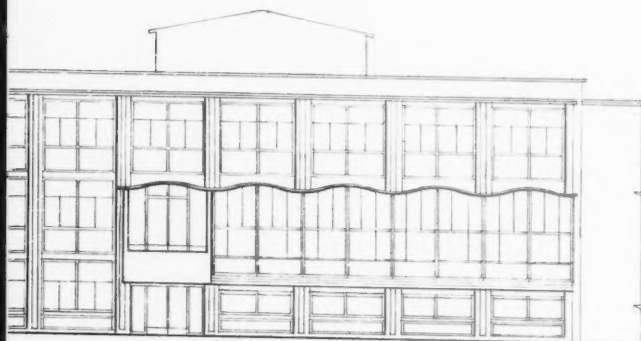
The roofing of the projecting bays is 2-in. cork-cored aluminium-faced slabbing, the vertical waves being pre-formed in the factory. The forward edge of the slabbing is also waved on plan, the waved contour being cut on the site. The fascia is effected with an aluminium I-section which is secured to the slab top and bottom with pop rivets, while the forward edge of the roofing is sealed by an extruded aluminium bead riveted to the top flange of the fascia.

WORKING DETAIL

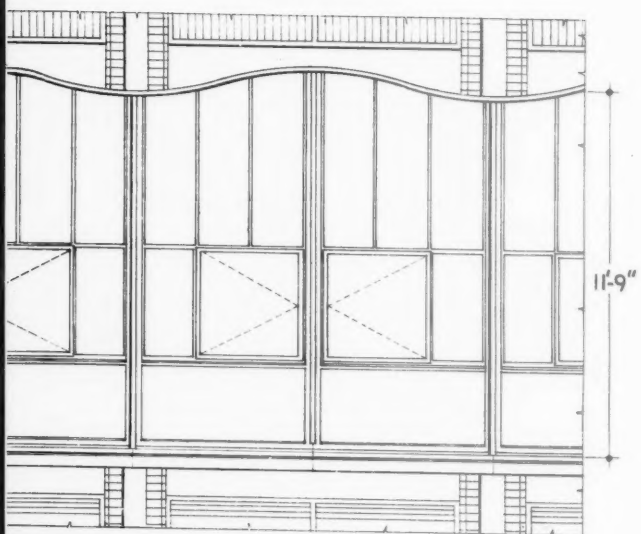
WINDOWS IN LOUNGE: HOSPITAL IN LONDON, S.W.12

Devereux and Davies, architects

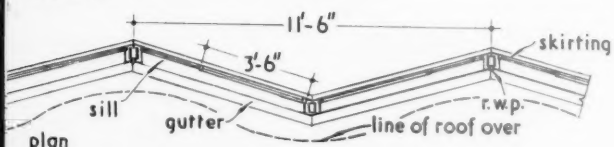
WINDOWS: 21



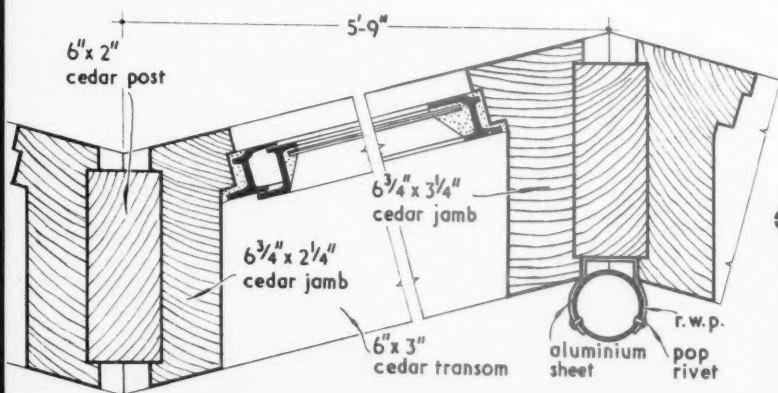
PART ELEVATION.



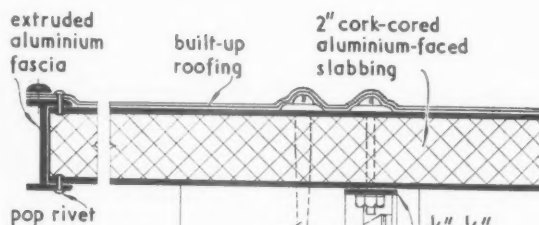
elevation



TYPICAL BAY. scale $\frac{3}{16}''=1'-0''$



PLAN AT CASEMENT WINDOW LEVEL.
scale $\frac{1}{4}$ full size



roofing screwed to jambs

fixed light

opening light

6" x 2 1/2" cedar jamb

6" x 2 3/4" cedar transom

3/8" x 7/8" abura bead

9/32" toughened plate glass bedded in mastic

6" x 3" cedar sill

3 3/8" x 1 5/8" abura skirting

3" x 2" metal gutter

7/8" cedar fascia

screed

6" r.c. slab

SECTION THRO' OPENING WINDOW.
scale $\frac{1}{4}$ full size



HOUSING ESTATE

at KING'S HEATH, NORTHAMPTON

designed by J. L. WOMERSLEY, formerly borough architect

GEOFFREY HOPKINSON, deputy borough architect, H. J. RYMILL

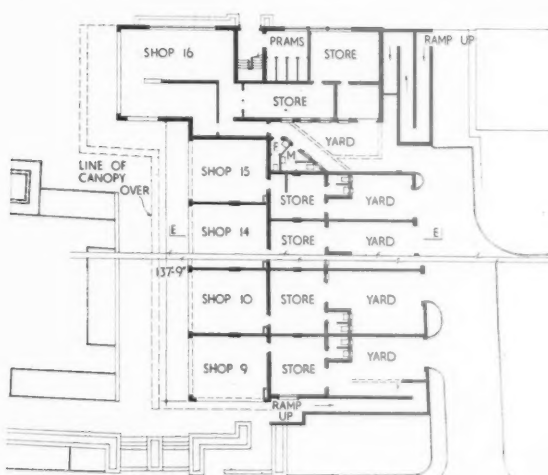
IVAN MORRIS and P. C. R. BRYAN, assistant architects, EDWARD A. PEARCE

and PARTNERS, consulting engineers, ERNEST HOWARD and SON, quantity surveyors

The site of the King's Heath Estate lies between the approach roads from Leicester, to the north, and Rugby, to the north-west, at about $1\frac{1}{2}$ miles from the town centre. Immediately after the war the Corporation bought about 250 acres of land in which they set out to build a comprehensive residential neighbourhood for 5,000 inhabitants, providing dwellings of different types and sizes, primary and secondary schools, shops, churches, community centre, public houses, residential centre for old persons, parks and recreation spaces. A bus service runs through the estate.

Aerial view of the estate from the south-east.





Ground floor plan, north-east terrace of shops

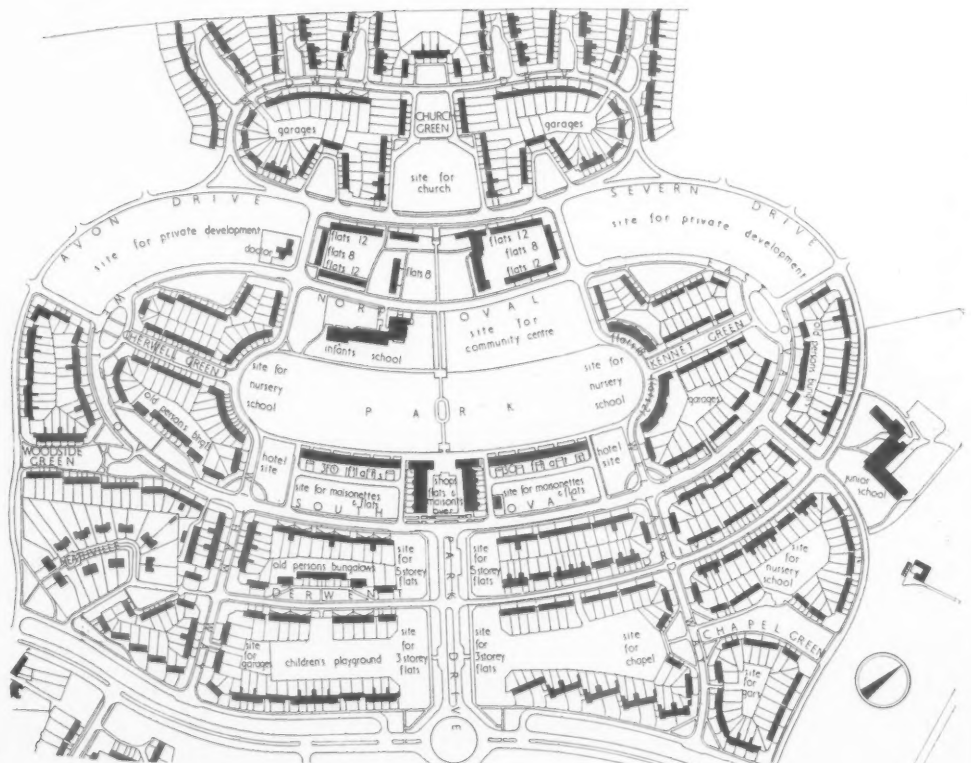


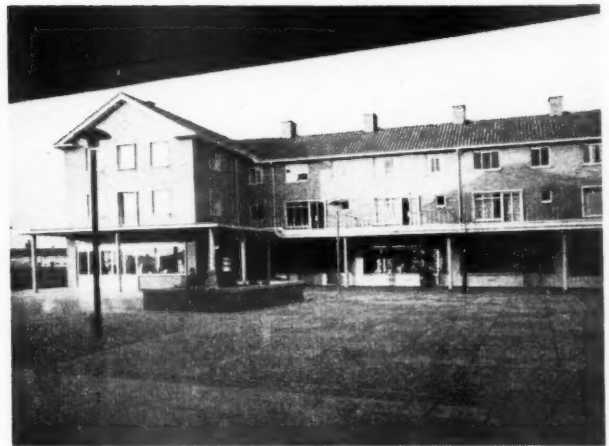
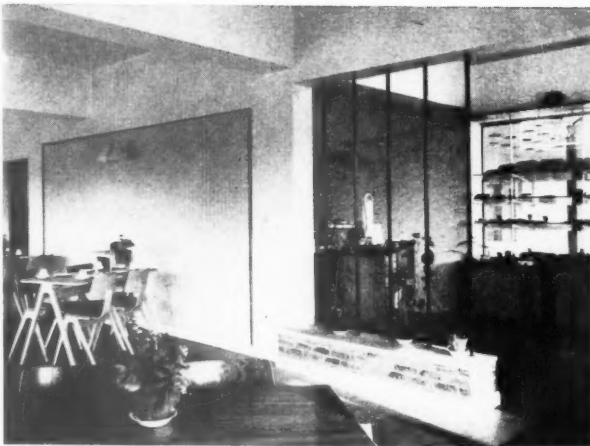
First and second floor plans of maisonettes [Scale: $\frac{1}{4}$ " = 1' 0"]

Top left, the shopping centre, known as Park Square, from the south-east. Top right, the shops along the north-east side of the square. The covered arcade, under which the shops are approached, also acts as a balcony to the maisonettes above.

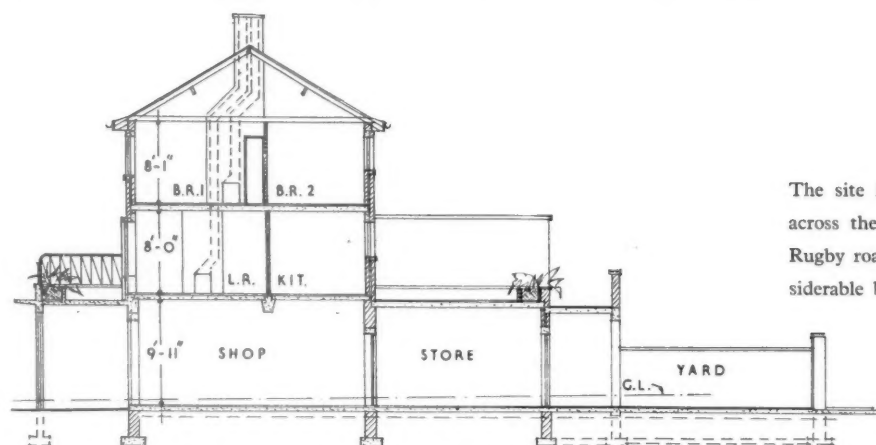
HOUSING ESTATE
at KING'S HEATH,
NORTHAMPTON
designed by
J. L. WOMERSLEY,
formerly borough architect

Site plan





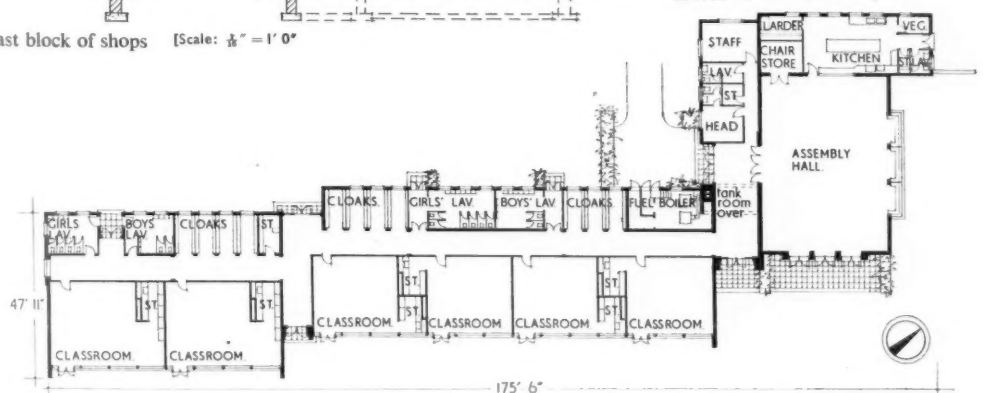
Above left, the cafe bakery at the north-east corner of the square. Above the north-east side of the shopping centre, from the south. Bottom the infants' school from the east.



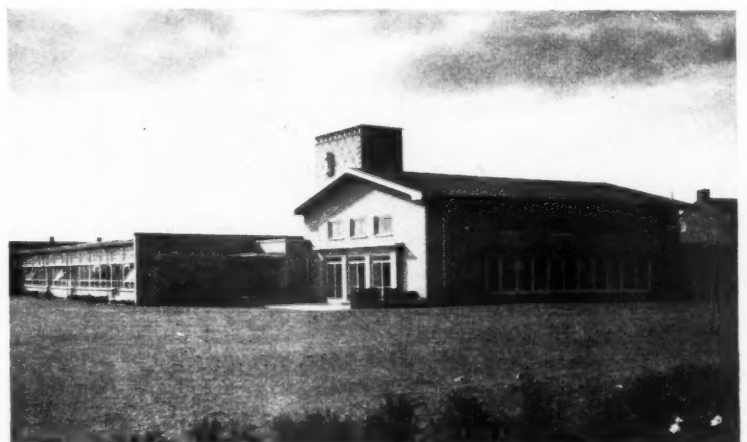
Section E-E, through north-east block of shops [Scale: $\frac{1}{8}'' = 1' 0''$]

The site is conspicuous from the Leicester road across the Nene valley to the east, and from the Rugby road to the west, which factors had a considerable bearing on the layout. The Corporation

Below, ground floor plan, infants' school [Scale: $\frac{1}{4}'' = 1' 0''$]



SITE.—The town of Northampton, which grew up on higher ground to the north-east of the confluence of the branches of the River Nene, has spread primarily in a north-easterly direction. To balance the growth of the town the Corporation bought new land for residential and industrial development. The site of the neighbourhood is in the form of a mound, the highest point being at the north-western extremity, from which the ground falls steadily towards the main branch of the River Nene on the north-east, towards a smaller tributary of the Nene on the south-west and towards the town to the south-east. There are a few mature and scattered forest trees, which have been carefully preserved.

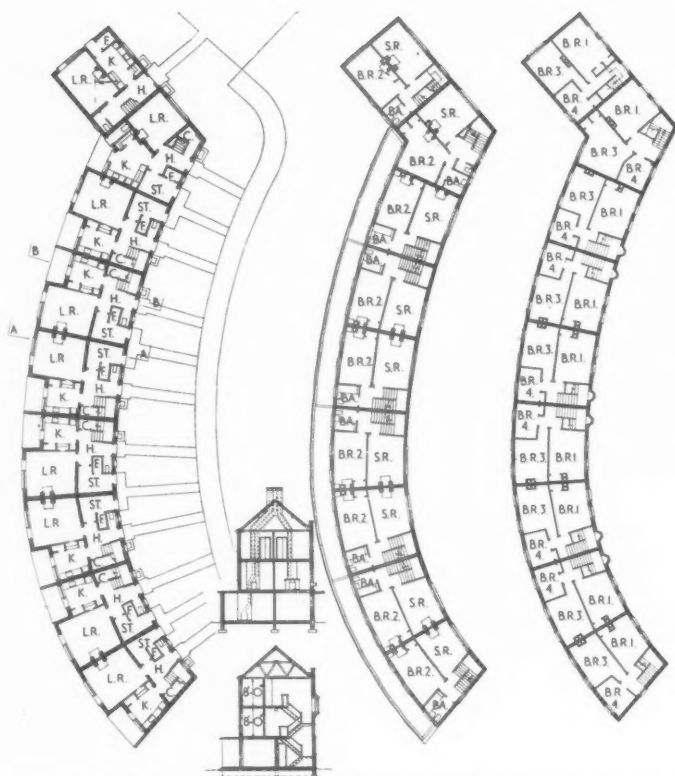


HOUSING ESTATE

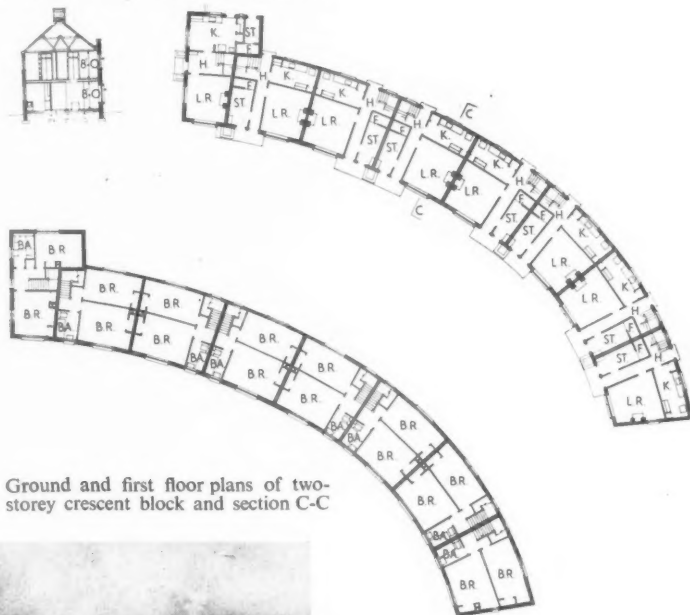
at KING'S HEATH, NORTHAMPTON,
designed by J. L. WOMERSLEY,
formerly borough architect

were anxious not to create a one-class neighbourhood and have, in consequence, reserved areas on the north-east and north-west of the neighbourhood for the erection of larger houses, to be let at economic rents. The formal central park, shopping square and adjacent infants' school and community centre create a pedestrian precinct and common meeting ground for the inhabitants. The proposed church will stand on the highest point, which is a traditional feature of the county landscape. There are sites for groups of garages distributed about the estate on the basis of one garage to 20 dwellings.

PLAN.—Since the scheme was largely planned and detailed in 1946-8 it represents ideas, such as a density of 11 dwellings per acre, which have since been modified. The wide-fronted houses, so popular with tenants, conflict with present-day needs for increased density and lower costs of roads and services per dwelling. Where the houses are grouped round greens and closes, road widths have been reduced and footpath access is used. The



Ground, first and second floor plans of three-storey crescent block. Section A-A (top) and section B-B [Scale: $\frac{1}{4}$ " = 1' 0"]



Ground and first floor plans of two-storey crescent block and section C-C

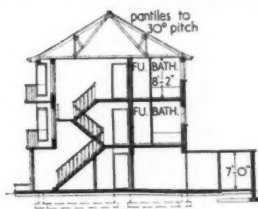


Above left, crescent block of 3-storey houses on the south-west side of the park. Left, crescent terrace of 2-bedroom houses to the north-west of Cherwell Green.

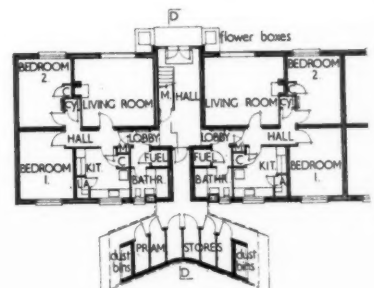
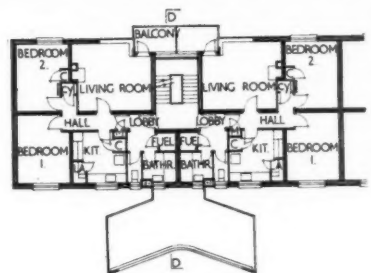
Right, two-bedroom flats on the south-east side of the park area, to the north of the shopping centre, seen from the south



community, when complete, will comprise 1,300 dwellings, 16 shops, 3 nursery schools, an infants' school, junior school, secondary school, a Church of England church, church hall and vicarage, non-conformist church, community centre and 2 inns. Between the estate and a pre-war housing scheme is a light industrial estate, now under development. All houses have individual back gardens, well screened by link walls or outbuildings, while in front of the houses the ground is not fenced. This is the first time such an experiment has been tried in Northampton, and it seems popular with tenants. The types of dwellings provided are as follows: bed-recess flats (18 dwellings) and 1-bedroom flats (52), both for old persons for a population of 131; bed-sitting room flats (64), 1-bedroom flats (138), 2-bedroom flats (86) and 3-bedroom flats (2) for a



Section D-D



Ground and first floor plans of two-bedroom flats
[Scale: $\frac{1}{8}'' = 1' 0''$]



Left, one-bedroom flats for old people to the west of the infants' school, seen from the south-west. Below, a terrace of two-bedroom houses.

HOUSING ESTATE

at KING'S HEATH, NORTHAMPTON,
designed by J. L. WOMERSLEY
formerly borough architect.

population of 666; 2-bedroom maisonnettes (14), 2-bedroom houses (454), 3-bedroom houses (466), 4-bedroom houses (52), 5-bedroom houses and 2-bedroom maisonnettes over shops (12) for a population of 4,614. The larger houses, of 3 and 4 bedrooms for higher income groups are included in the figures above. The total population to be accommodated is 5,411 at 42.52 persons per acre.

CONSTRUCTION and FINISHES.—All buildings are of traditional construction, facing bricks from various Leicestershire brickyards being used throughout, the different colours (ranging from light buff to red) and textures being carefully grouped. Roofs are partly covered with pantiles to a $32\frac{1}{2}^\circ$ pitch and partly of plain tiles to a 40° pitch. Apart from the curved blocks to the east and west of the central park, which have parapets, all buildings have projecting eaves and plastered soffits. Windows are painted in three or four colours used in groups and tenants chose their front door colour from a list of five strong colours selected by the architect.

A list of general contractors and sub-contractors appears on page 264.



Ground and first floor plan, typical old people's flats. [Scale: $\frac{1}{16}'' = 1' 0''$]



TECHNICAL SECTION

In the stimulating paper on Economy in Building given at the RIBA last month by H. F. Broughton, to which we referred in the JOURNAL of February 4, great emphasis was laid on the role the architect could play in ensuring low building costs. So little is said on the subject today that is both authoritative and carefully considered from the architect's point of view, that we are reproducing this article in full. Mr. Broughton not only gives advice to the architect on economic designing, but he also suggests the action the architect should take to ensure, by means of a programme of building work prepared in collaboration with the builder, that economy is maintained throughout the whole designing and building operation. What Mr. Broughton does not mention is the question of maintenance costs. This is a matter which would merit much further study. Throughout the country, clients, whether public bodies or private, are endeavouring to ensure the lowest possible capital expenditure on their buildings. When so few clients are prepared to decide in advance the economic life of the building which they wish to erect (as is not uncommon practice in America), and when it is far from common for clients to specify in advance to the architect what they are prepared to spend on annual maintenance, it is indeed difficult for the architect to know what is best for his client's interests as regards the quality—and, therefore, longevity—of the materials and finishes which must be specified for the building.

This week's
special feature

7 PRACTICE economy in building

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.

H. F. Broughton of the BRS gave a talk on Economy in Building at the RIBA last month. It is of such exceptional importance to architects that we publish it below in full. The paper appears by permission of the Director of BRS and is Crown Copyright Reserved.

According to the dictionary the meaning of the word "economy" is the "judicious expenditure of money," or the "careful management of labour, time and money" and this is the keynote of my talk. Economy in building does not necessarily mean austerity. True economy is the provision, at the lowest possible cost, of accommodation and services which will allow the building to fulfil its function adequately over a pre-

determined period with the minimum of maintenance. Today the cost of building is high and we are often told that the industry runs the risk of pricing itself out of business. It is obviously, therefore, the prime duty of all those concerned with design, construction and research to reduce costs, and this can be done without endangering the strength and stability of the structure, without lowering the aesthetic quality of the

design and without reducing the comfort of the finished product.

The search for possible savings should start from the early planning stages; from the initial conception of the project, whether it be a power station, a factory, a block of flats or a housing development. Actually it should start earlier, even with the building owner. A "cheap site," a site purchased without a real knowledge of actual requirements, can result in a costly final product. I will not, however, extend our range, as we already have a wide enough field to cover. Assuming, therefore, the normal circumstances; the building owner already has the site and he requires a building or buildings to serve a specific function. Within these conditions the architect has, to all intents and purposes, a free hand. It is at this stage that the search for where to economize must begin. I use the word "search" with a purpose. A close investigation at this initial stage, involving, as it should, an examination and cost comparison of all reasonable alternatives will pay handsome dividends not only in money but in building time.

DESIGN

We are prone to blame the contractor for high cost, for poor organization, for delayed completions but this is not by any means the whole story. Whilst obviously good planning—functional planning and due regard to aesthetics—are the basic functions of the architect, consideration for the builder's problems in implementing the design and carrying out the work will operate as an incentive, encourage good organization and speedier work, and therefore result in lower costs. There are some of us who think that the architect should not only specify the form of construction and the materials, but also play a more direct part in determining the methods to be used. The opponents of this idea say the builder knows what is the cheapest method—leave it to him. This may, of course, be quite true where the work is of a traditional or conventional form. Where an architect or his consulting engineer uses a new or non-conventional form of construction he will have considered ways and means of constructing it, the organization of the construction, and the type of plant, mechanical or otherwise, which could be most efficiently used. In fact, the design of his structure may well have been influenced by the particular method of building. It is obvious, therefore, that the method of construction which the designer has in mind, should, at the very least be considered by the contractor who eventually carries out the work.

THE LCC DESIGN TEAM

The ideal method, of course, would be to bring the contractor in at the design stage, but, under our present methods of competitive tendering this is not normally possible. As you know, the LCC are experimenting with a design team of which a nominated contractor is a member from the very earliest planning stage. The purpose of the experiment is to find the cheapest and speediest method of building multi-storey flats. Every aspect of construction, of equipment, of services and of finishings is being considered in detail and each member of the team will bring his expert knowledge to bear on every problem so that the result should be the most efficient and economic building that it is possible to design and construct.

The team consists of the architect, the engineer, the contractor, the quantity surveyor, the cost estimator and research workers. Now the services of all these people, with the exception of the contractor, are available in some form to any designer—to any architect—and much expert

advice is already available to him. The unusual feature of this project is the bringing together of all concerned as a design team from the beginning. We look forward, therefore, to the result of the London County Council experiment with interest as it may well establish the method by which the contractor can best be brought in to the earliest stages of a project.

MOE DEVELOPMENT GROUP

So much for this particular experiment. Let us return to what the architect can do under present conditions to create and encourage economy. Let us look for a moment at the work of the MOE development group. There is little doubt that this group has done much to develop economy in the design and construction of school buildings. One important method of achieving this is by "Cost Study" as set out in Building Bulletin No. 4. This study divides itself into two parts. First, *cost analysis* which aims at examining the cost of schools already planned and built and for which priced bills of quantities are available, and second, *cost planning* which uses the knowledge gained by cost analysis to control the design of future schools.

Every architect can do what this group has done. Not in such a wide field, perhaps, but within his own field. He can have available cost data of the work he has done, as a basis for the comparison of the costs of different forms of construction, of different types of equipment and services and different qualities of finishes and use the knowledge so gained in his future planning.

One more word on the MOE Bulletin. On pages 12 and 13 there is an appendix in which the effect of plan shape on cost is discussed. It is concerned with the extent of external wall area and its cost in relation to the floor area which the walls enclose. (Figure 1). Both plan areas are 10,000 sq. ft.,

DIAGRAM A

DIAGRAM B



Fig. 1, two areas of 10,000 sq. ft. The enclosing wall area of (a) is 11,000 sq. ft., that of (b) 12,000 sq. ft.

but the area of enclosing walls on Plan A is 11,000 sq. ft. while that of Plan B is 12,000 sq. ft.; a saving of 1,000 ft. of walling. On a straight price difference we could expect a saving of say £350 to £400, but there are other factors which affect cost—look at the number of external and internal angles on Plan B and compare them with those on Plan A. Any contractor will tell you that angles and breaks in walling are costly. You may well say that every architect is aware of, and acts upon, such a first principle of economic design, but there are innumerable examples where this is not so. Recently, I had occasion to examine two plans for blocks of multi-storey flats. One

A

B

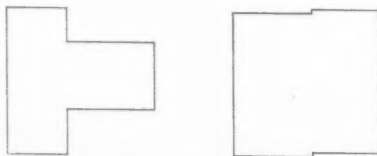


Fig. 2, two plans with the same wall area (a) has 268 sq. yds. of external walling, (b) 240 sq. yds.

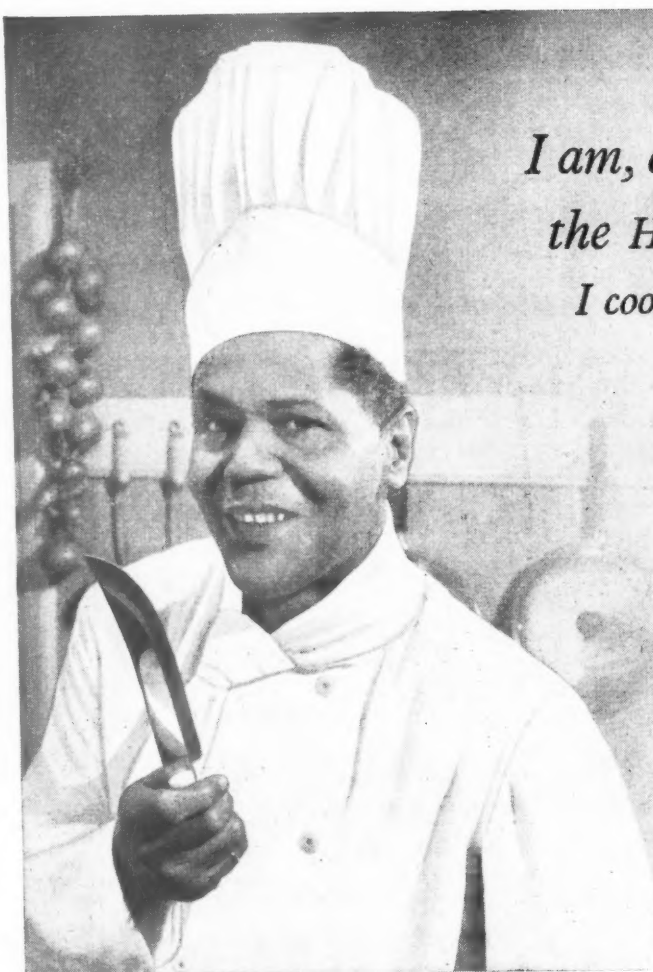
plan (Fig. 2) had three flats per floor and the other (Fig. 2B) had four flats per floor. The floor areas of all flats were approximately the same, and the accommodation was similar. But the one plan had 268 sq. yd. of external walling to encompass three flats while, in the other, four flats required only 240 sq. yd. of external walling. The relative area of walling per flat was—Plan A—89 sq. yds.—Plan B—60 sq. yds., and the saving in money was approximately £66 per flat, or over £1,000 per block.

THE ARCHITECT AND THE BUILDING PROGRAMME

I suggested earlier that architects might well consider the advantages of taking a direct interest in the planning of the work. For instance, they might call, under the terms of the contract, for a complete programme of all operations and stages of the work. This is not a new idea, time always used to be the essence of any contract. The architect should award a contract not only on the basis of price, but also on the basis of completion time. It was a contractual obligation with some Ministries during the war for the successful tenderer to submit a detailed programme of the work to show how he proposed to implement the time factor which he had stated in his tender and upon which he had been awarded the contract. This was a wonderful incentive to planning and it brought the architect and the contractor much closer together. They became a team. A detailed programme, prepared by the contractor, discussed jointly by him and the architect, possibly amended to suit the requirements of both, became in most instances a vital document. The contractor saw that his efficiency, or lack of it, could be actually measured and not guessed at, and the architect immediately realised that he would have to make changes, or specify alternative materials to avoid the responsibility of keeping the contractor waiting. It is worth trying, and I am certain that most contractors would welcome the idea. It is, however, important that the programme is a real one and not just a mere pictorial timetable. Against each operation must be set not only the time factor for each operation but also the number and types of operative, the quantities and types of materials, and the static and mechanical plant required to implement the time factor. The mere act of planning in such detail (and it is quite simple) emphasizes the need to phase operations accurately one with another. It forces the careful planning of material placing and it also assists in establishing rational bonus targets.

PROGRAMME FOR HOUSING PROJECT

Fig. 3 provides a typical example of a programme for a small housing project. It is, of course, very often argued that it is not worth while spending time on formulating a programme when it is "certain to break down during the first week." Of course, a programme may break down—not necessarily the first week—but if properly detailed you will find that the contractor will do his utmost to get back on to his programme in the shortest possible time. It will become a point of honour with him, particularly if the architect has a copy of the programme and is progressing the work against it every time he visits the job. It is often asserted, too, that material shortages make programming impossible and that the preparation of the programme itself requires considerable time and skill. I do not myself agree with this view, and I have had experience of the successful application of a comprehensive programme on several jobs recently. The influence of such a target on all those concerned with the control of the work is remarkable, and has to be experienced to be believed.



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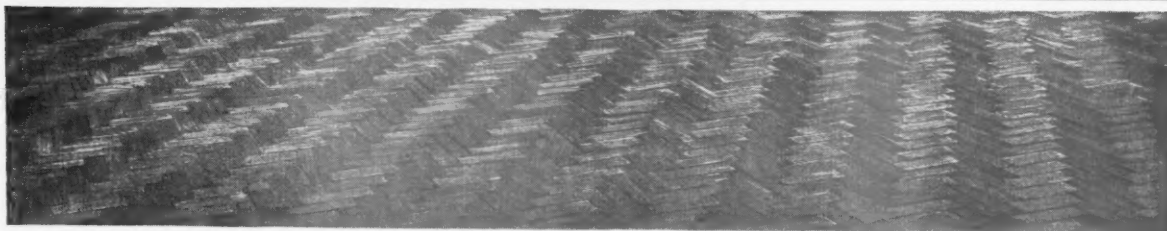
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then, does the builder obtain and maintain a high level of production from his operatives? Obviously, he should provide adequate and efficient supervision, since this helps to ensure that his programme is implemented, waste avoided, building time saved and the quality of the work maintained. But this supervision will be much more effective and economic if the right types of incentive are provided for the operatives, if labour relations are good and adequate welfare facilities are afforded.

In the second report on productivity in house-building, NBS. Special Report No. 21, it was shown that productivity was increased by the use of well designed monetary incentive schemes in which rational targets are established for all operations.

It was found that in those contracts and trades where target bonus schemes had been applied in which the bonus paid was directly related to output, the manhours for similar work were on the average 15 per cent. lower than where no such scheme operated. It was clear, however, that the majority of the schemes had weaknesses and there is little doubt that productivity would have been appreciably higher if they had been more thoroughly planned. In my opinion the basis of an efficient incentive scheme should be:—

(a) The scheme should be as comprehensive as possible and targets be applied to all operations.

(b) The target levels should be agreed between the operatives and employer before the commencement of the work. These targets should be properly balanced between trades to ensure equal opportunities for earning bonus to all operatives.

(c) The operations to which the agreed targets relate should be fully understood by all operatives and be easily identifiable so that progress at any given time can be visually assessed without resort to detailed measurement.

(d) Bonus should be paid as soon as possible after the execution of the work in which it has been earned and, providing rational target levels have been set, the operatives should be paid the greater proportion of the cash saving.

MECHANICAL PLANT

The overall efficiency of a site can be dependent also on the use of mechanical plant but this is a subject which cannot be dealt with fully here. The potentialities of improving organization and increasing production are enormous. The chief reason is, of course, that the use of a machine provides an organizational framework within which the operations can be more accurately pre-planned or programmed: the ability to adhere to a programme is greatly improved where mechanical plant is used. This is particularly the case where the machine does the whole of the handling operation, that is, from stack or mixing point to placing point as, for example, with a crane which conveys both horizontally and vertically. Where a handling operation is only partly mechanized, that is, where the machine conveys only vertically and not horizontally, then the machine ceases to exercise effective control. A good example of this is the mechanical hoist which requires materials to be handled manually to its base and again manually distributed at scaffold level. In this case the organization of the work becomes more complex and the time cycle much more difficult to maintain.

Another good example of machines controlling production is in the mixing and placing of concrete at ground level. Where a power barrow or mobile skip is used to carry the complete batch from mixer to placing point the machines can be synchronized to work within a predetermined time cycle and thereby control the speed of the operation. A good combination for jobs of a moderate size is a 10/7 mixer working

in conjunction with a power barrow with a 7 cu. ft. skip. With a gang of 7 men and a 3 minute time cycle this combination mixes and places at the rate of $\frac{1}{4}$ cu. yd. per man-hour compared with, shall we say, $\frac{1}{4}$ cu. yd. if transported manually.

MACHINE-TIMED BUILDING

The aim, therefore, in purchasing, and for that matter in designing, mechanical handling equipment should be to deal with the complete operation. This means either a machine which will both carry and lift, or two machines which are of equal capacity and can be so synchronized in operation that they do, in fact, act as a single machine. The machine or machines then serve a dual function; they not only handle the materials and thereby lighten the work of the operatives, they also create a machine time cycle within which any ancillary manual operations are designed to take their part.

Before leaving the subject of plant I would like to refer briefly to what I may call static plant. I mean, of course, scaffolding, formwork, ladders, barrows and tools in general. I am afraid that on far too many jobs there is a shortage. The operatives have to make do, they have to improvise. On three jobs with which I have been concerned recently, progress has been delayed by shortage of plant—mainly scaffolding. Sometimes, this is unavoidable but there is a tendency, in fact, there always has been a tendency, to try to carry out four contracts simultaneously with plant which is only really adequate for three. Today this is particularly misguided. Labour is too costly to allow it to be hampered by causes which can be avoided. Without good and adequate equipment and tools it is impossible to maintain high production and therefore to achieve economy.

COST CONTROL

Finally, I must mention cost control—probably one of the most important factors in the drive for economy and one which is all too infrequently applied. Cost control is part of good site organization; it is a measure of production and to be effective need be concerned primarily only with labour and mechanical plant. It is a current measure of production taken, say, twice a week, which enables the general foreman or agent to compare with his targets, and to take immediate action where necessary by altering his methods, or size of gangs, or deal with any weakness which has been pinpointed by the figures.

Cost control is not so formidable a task as is often imagined. If, for instance, an efficient and comprehensive bonus scheme is operated, cost control can be incorporated in the scheme. Again it is not essential to develop costs on all operations, all the time. Every builder will know that when he starts a contract certain operations or sections of the work are likely to be difficult. To start with, production can be measured daily on these items alone. When these operations are working economically and within the target, another batch of operations can be dealt with in the same way, and so on, until the whole job is running smoothly. Thereafter, spot checks can be taken on various operations to ensure that production is being maintained. As I implied earlier, the method of measuring production can be relatively simple. A schedule of operations for the whole of the work is drawn up, each operation being numbered and very briefly described—the bonus schedule will suffice for this—and against each operation is set a target in manhours or money calculated from the rates in the bill of quantities. Copies of this schedule are posted in convenient places about the job so that all operatives can refer to it, and become familiar with it. The operatives themselves record on daily time cards instead of weekly time sheets—daily records are much more

accurate than weekly. Each operative is handed a card when he clocks on in the morning and returns it, filled in, when he clocks off at the end of the day. Each evening there is in the foreman's office a complete record of the day's production and the time for any operation can be quickly checked against the appropriate target. This is an extremely cheap method of cost control and as you will appreciate it can be elaborated to almost any degree.

CONCLUSION

There are many other aspects of economy, but I have endeavoured to emphasize those which I consider the most important. The judicious expenditure of the client's money depends on architect and builder. With the architect it means an understanding of method as well as of form and materials, coupled with a full appreciation of cost, and with the builder it means efficient organization, and particularly site organization, in all its aspects.

INFORMATION CENTRE

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

12.57 materials: metals

ALUMINIUM ROOFING

Fully Supported Aluminium Roof Covering. Aluminium Development Association. Nov., 1953, 2s. 6d.)

A useful brochure giving information on the suitable types of material and well illustrated.
(continued on page 263)

ENQUIRY FORM

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

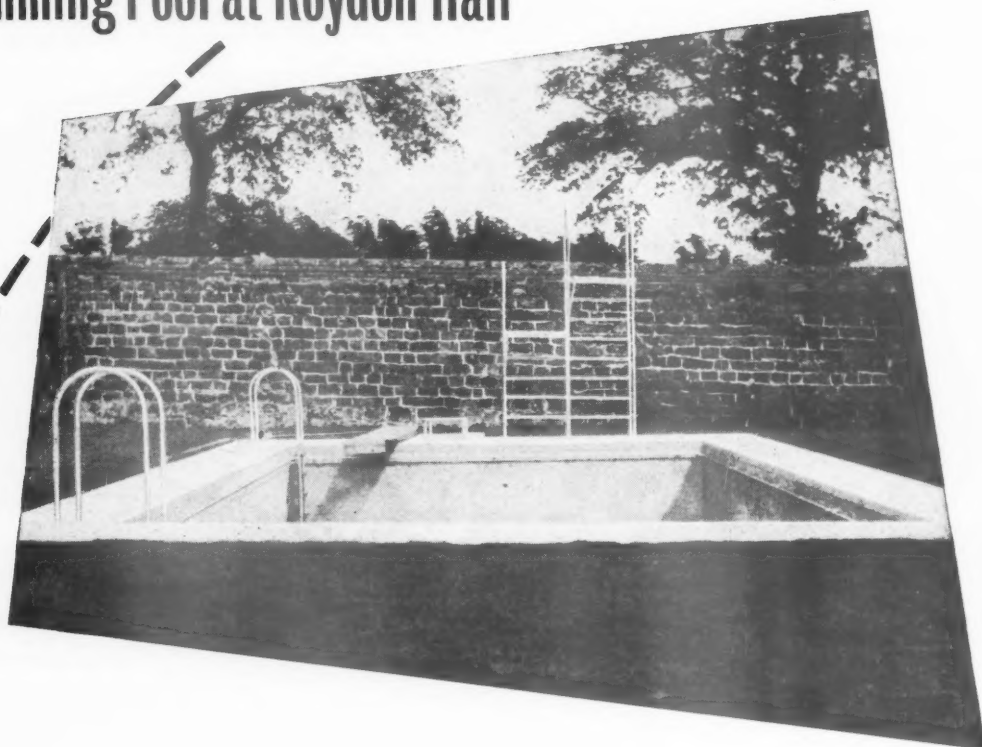
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Swimming Pool at Roydon Hall



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

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

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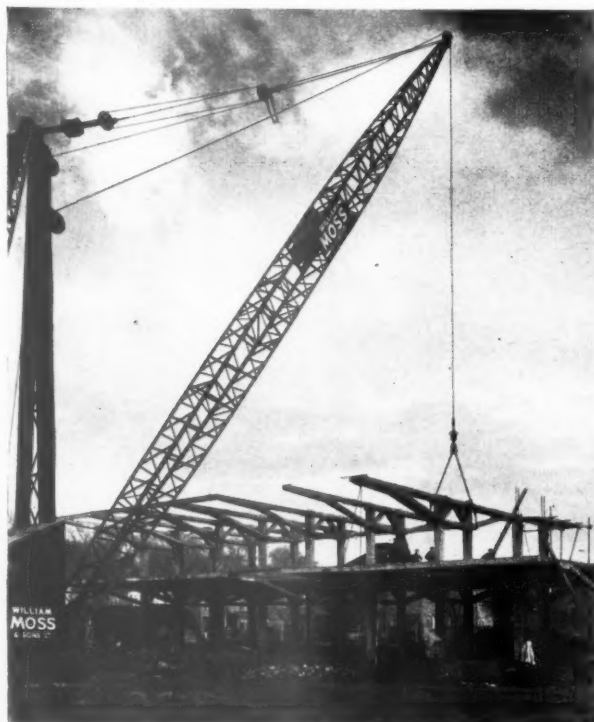
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PRESTRESSED CANTILEVERED BEAMS FOR MIDDLESEX SECONDARY SCHOOL



The structure of the Staveley Road secondary modern school, Chiswick, was designed by the architects of the school, in consul-



tation with the engineer, Felix J. Samuely. The architects are John and Elizabeth Eastwick-Field (in collaboration with C. G. Stillman, County Architect, Middlesex). The photographs show a three-storey classroom and workshop block being erected. One reason for the unusual construction of two rows of columns in the centre, with beams cantilevering out, is the very bad sub-soil conditions. The shape of the beams, which taper to a mere 7 in. at the outer edge, allows maximum light penetration, and it is from these beams that the external walls will be hung, thus avoiding the need for wall foundations. The walls will be of light timber framing, glazed throughout, with horizontally pivoted, double-glazed opening lights which will contain blinds within the double glazing. An internal leaf, to cill height, will be of clinker block, rendered and painted. The columns—at 12 ft. centres—are of in-situ construction, but the beams are precast. The top chords of the latticed beams are taking tension, and are prestressed, the remaining part being cast on in the factory. The final 54-ft., double-cantilever beam is brought by lorry to the site and erected by crane, left, directly from the lorry. The floor construction is of inverted concrete tees, prestressed and laid in a rebate in the top chord of the beam, covered with in-situ concrete to a total floor thickness of 4 in.

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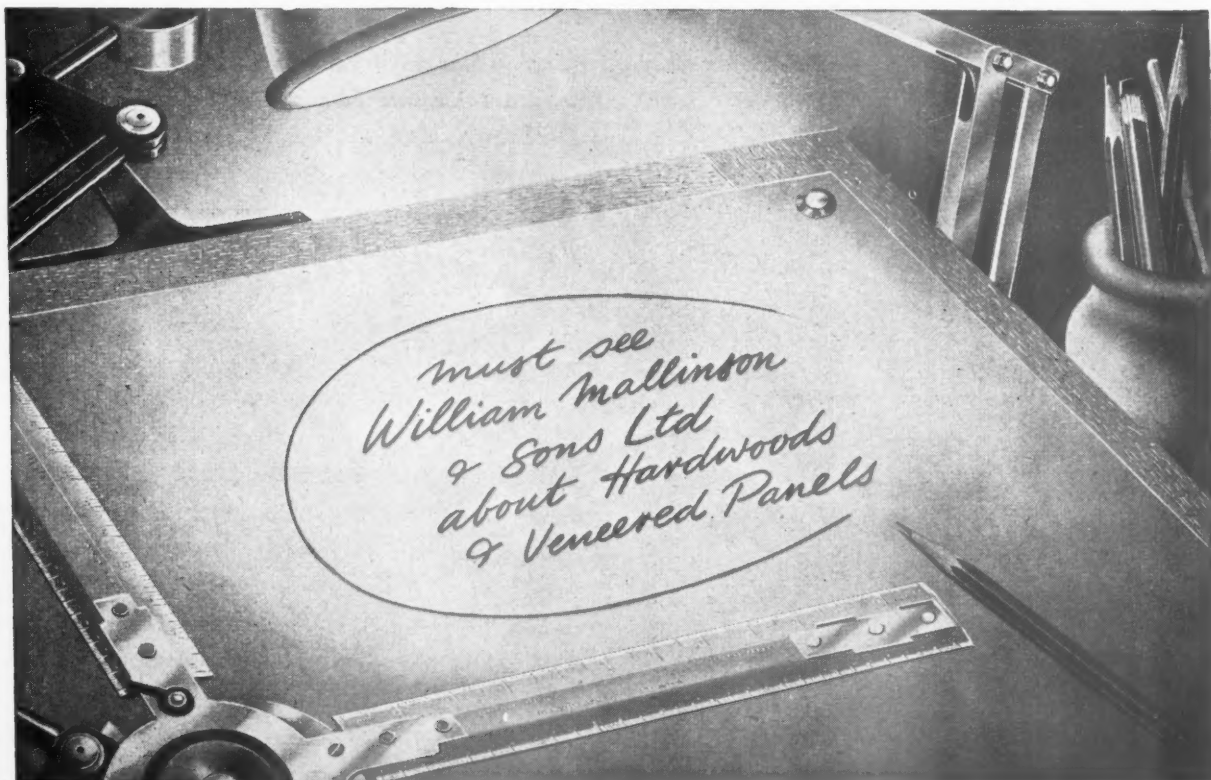
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trated examples of how to lay it for all normal conditions. A very useful inclusion is a list of items such as welts, standing seams, drips, rolls, etc., with information on the proper type of material to use and the dimensions to allow, this includes the areas of panels recommended for various gauges of metal, and the spacing of fixing clips.

18.145 construction: theory STRUCTURAL DESIGN

Theory and practice of structural design applied to reinforced concrete. B. Eriksen. (Concrete Publications Ltd. 1953. 25s.)

Text book of structural theory as applied to reinforced concrete suitable for advanced students of architecture or engineering.

This book of 402 pages, 252 illustrations and 38 tables provides sufficient scope of the subject to advance from the very elementary to the highly specialised and will be of particular use to the advanced student. Although reinforced concrete is mentioned in the title the principles demonstrated apply equally well to all materials which are assumed to obey Hook's Law but sufficient of the theory of reinforced concrete is given and the examples are directed mainly to reinforced concrete design. Part I of the book deals with fundamental principles and statically determinate structures. The author commences with the composition and resolution of forces, graphical statics, the equilibrium of internal forces, and deformations and stresses then follows with the theory of single beams and reinforced concrete and concludes with a chapter on foundations.

Part II is devoted to statically indeterminate structures and several methods of solution are presented, the method of fixed points being given particular prominence. Continuous beams, slabs, frames and arches are analysed and an appendix provides a worked example of a portal frame bridge with beams of varying depth and supported on piled foundations.

19.171 construction: details WINDOWS

Fenster Aus Holz Und Metall (5th edition). Adolf G. Schneek. (Julius Hoffman, Stuttgart, 1953.)

First published in 1942 this comprehensive publication on windows in wood and metal is now re-issued in an enlarged and considerably revised form. Extremely well illustrated by clear diagrams and photographs it will be of interest to architects in spite of many differences in window types from those normally in use in Britain. Much of the illustrated ironmongery is very interesting and it is to be hoped that our manufacturers will study what is shown here and develop some similar lines. 195 pp. almost entirely of illustrations.

25.103 water supply and sanitation COPPER PIPE FITTINGS

Capillary and Compression Fittings of Copper and Copper Alloy. BS 864:1953. (British Standards Institution. 4s.)

Revision of 1945 BS. Deals with fittings for use with BS copper pipes for water, gas and sanitation. Does not attempt complete dimensional standardization because of great variety in design and methods of production already established.

QUESTIONS & ANSWERS

Questions to the Technical Editor are answered confidentially and free of charge.

3078 BUILDING-UP GROUND

Q Can you advise me whether town planning law gives a property owner any protection from the loss of amenities that can follow the action of his neighbour in building up the adjacent ground level above normal ground level?

In the case with which I am concerned a householder has a long garden flanked by his own 9 in. brick wall about 5 ft. 6 in. high. The adjoining owner (a boatyard) has, over a period of years, built up his level with the soil from excavations and other waste matter, using the householder's wall as a retaining wall, so that the adjoining land is now level with the top of the wall and in some places is even higher than the wall. The householder claims that this is damaging his interests in three ways:—

(i) It is liable in due course to have a damaging effect on the wall.

(ii) The seeds of the weeds that grow thickly on the high adjoining level blow continuously to the lower garden and make normal gardening virtually impossible.

(iii) The lower garden is completely overlooked, and this loss of privacy has now been made critical by the placing of a caravan on the adjoining property directly overlooking the householder's private sitting terrace. In view of the fact that a major part of the boatyard's income must come from rents, the householder fears that other caravans may be placed along the whole length of his wall, thus making the garden worthless for private family enjoyment.

Could you confirm that the householder can legally force the adjoining owner to remove the soil from against his wall, thus getting over the first objection?

The householder is, however, apprehensive about enforcing this action if there can be no legal restraint of the raising of levels, as he fears that the adjoining owner may well excavate a trench along the wall and place the surplus soil at a still higher level, thus aggravating the second and third objections. Could you also tell me, therefore, whether there are any relevant legal restraints on the building up of levels where such action is damaging to the amenities of others.

It may be relevant to know that the level has been raised gradually. The only definite information I have is that during the last five years it has gained about 2 ft. in height.

A The adjoining owner would be liable for any damage to the householder's brick wall by piling earth or waste matter against the wall.

Section 12(3)(b) of the Town and Country Planning Act provides that the deposit of refuse or waste materials on land involves a material change of use of the land and would, therefore, require planning permission. Permission is not required where a site is already used for that purpose, if the height of the deposit does not exceed the level of the land adjoining the site and the superficial area of the deposit is not extended. The word "already" would

appear to refer to the date when the Act came into force, i.e. July 1, 1948.

Under Section 23 of the 1947 Act, as amended by the Planning Act of 1951, enforcement action can be taken by the local planning authority if the provisions of the Act have not been complied with.

It is suggested you report the matter to the local planning authority and ask them to take action under their planning powers.

Buildings Illustrated

Public Lavatory in Southbury Road, Enfield, Middlesex, for the Enfield UDC. (Page 245.) Architect: Frank Lee, A.M.I.C.E., L.R.I.B.A., Engineer and Surveyor to Enfield Council, assisted by H. T. Townsend, A.R.I.B.A. General contractor: C. Hunt & Sons. Sub-contractors: sanitary ware, B. Finch & Co. Ltd.; wall and floor tiling, Cope & Co. Ltd.; glass bricks and glazed screens, Lenscrete Ltd.; electrical installation, A. Tindall & Sons; artificial stonework, Enfield Stone Co. Ltd.; ironmongery, Nettlefold & Moser Ltd.; doors, Evos Ltd.; lighting fittings, Frederick Thomas & Co. Ltd.; concrete reinforcement, The Square Grip Reinforcement Co. (London) Ltd.; patent roofing, D. Anderson & Son Ltd.; sectional steel tank, Thos. W. Ward Ltd.

Flats on the Stafford Cripps Estate, Old Street, Finsbury, London, E.C.1, for the Finsbury Borough Council. Pages 246-248.) Architect, Joseph Emberton, F.R.I.B.A. Quantity Surveyors: Gardiner & Theobald; General Contractors: Y. J. Lovell & Son Ltd.; Clerk of Works: J. E. Alderson; General Foreman, T. H. Pearce. Sub-contractors: demolition and excavation, Goodman Price Ltd.; foundations, The Cementation Co. Ltd.; dampcourses, Brooks Phillips & Co. Ltd.; asphalt roofing, Permanite Ltd.; Broad-Acheson blocks, Broad & Co. Ltd.; meta blocks, Lightweight Pre-cast Concrete Co. Ltd.; reinforced concrete, Twistell Reinforcement Ltd. (design), Holland & Hannen and Cubitts Ltd. (construction); bricks, Eastwoods Ltd.; artificial stone, Joseph Mears Ltd.; glass, George Farmiloe & Co. Ltd.; thermoplastic floor tiling, Armstrong Cork Co. Ltd.; central heating, boilers, plumbing, Ellis (Kensington) Ltd.; stoves, mantels, Hall & Co. Ltd.; electric wiring, light fixtures, electric heating, Troughton & Young Ltd.; ventilation, Greenwood and Airvac Ventilating Co. Ltd.; sanitary fittings, John Bolding & Sons Ltd.; door furniture, Rowson, Drew & Clydesdale Ltd.; window furniture, casements, Crittall Manufacturing Co. Ltd.; iron staircases, metalwork, Clark, Hunt & Co. Ltd.; plaster, John Harmer Ltd.; decorative plaster, J. C. McDonough Ltd.; joinery, Y. J. Lovell & Son Ltd.; glazed tiling, S. A. Forbes & Son; shrubs and trees, Gavin Jones Nurseries Ltd.; lifts, J. & E. Hall Ltd.; signs, Lettering Centre, Morris Singer Ltd.

"Queen's Tower," Flats, Great Lister Street, Duddleston and Nchells Redevelopment Area, Birmingham (Page 249.) Architects: S. N. Cooke & Partners. Consulting Engineers, City of Birmingham Public Works Department. Quantity Surveyors: L. C. Wakeman & Partners. General contractors: W. J. Whittall & Sons Ltd. Sub-contractors: piling, The Franki Compressed Pile Co. Ltd.; steelwork, Charles Wade & Co. Ltd.; floors, The Kleine Co. Ltd.; windows, Stelwin Construction Ltd.; pressed steel door frames, Henry Hope & Sons Ltd.; sanitary fittings, A. D. Foulkes Ltd.; electric lifts, Hammond & Champness Ltd.; reconstructed stonework, The Empire Stone Co. Ltd.; Garchey system, and heating,

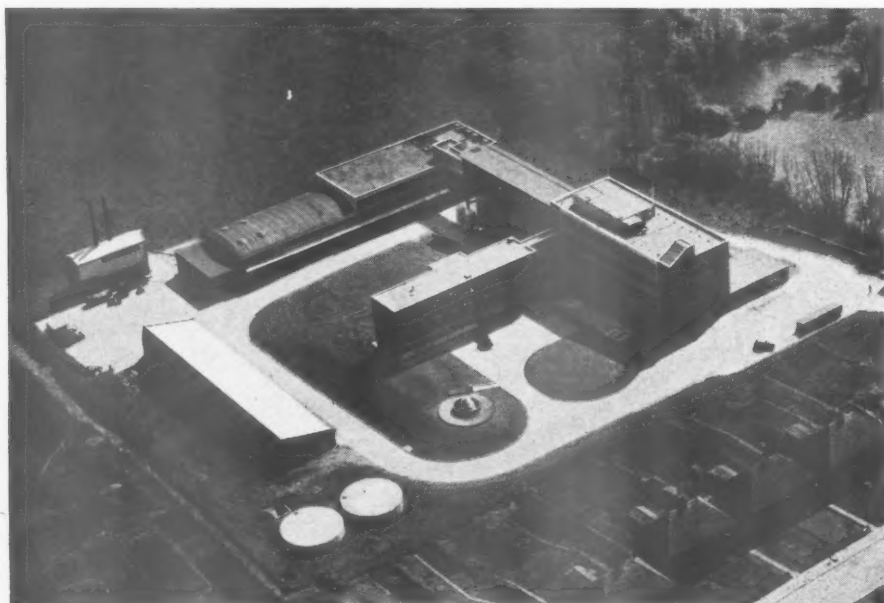
Matthew Hall & Co. Ltd.; plumbing, David F. Wiseman & Sons; electrical work, Lee Beesley & Co. Ltd.; boilers and ancillary plant, Danks of Netherton Ltd.; Oldbury Chain Grate stokers, Edwin Danks & Co. (Oldbury) Ltd.; hollow pots, The London Brick Co. Ltd.; accotile flooring, R. W. Brooke & Co. Ltd.; ironmongery, Parker, Winder & Achurch Ltd.; external paint, Mander Bros. Ltd.; internal paint, Docker Bros.; balustrading, etc., Bigwood Bros. (Birmingham) Ltd.; miscellaneous ironwork, H. E. Breaker (Metalwork) Ltd.; facing bricks, The Aldridge Brick & Tile Co.; common bricks, The London Brick Co. Ltd.; asphalte, The Limmer & Trinidad Lake Asphalt Co.; tiling, R. G. Robertson (Tiles); gas fitting, The West Midlands Gas Board; granolithic, Marbolino Ltd.; special wall finishes in entrance hall, John Ellis & Sons (Emulux); dado treatment to main staircases, Prodorite Ltd. (Prodorglaze); wireless and television installation, E.M.I.

Houses, Flats, Shops and Primary School, Kings Heath Estate, Northampton. (Pages 251-256.) Architect: J. L. Womersley, A.R.I.B.A., A.M.T.P.L., formerly Borough Architect, County Borough of Northampton, assisted by Geoffrey Hopkinson, B.A.R.C.H., A.R.I.B.A., lately Deputy Borough Architect; H. J. Rymill, Ivan Morris, A.R.I.B.A., and P. C. R. Bryan, Consulting Engineers; Edward A. Pearce & Partners, Quantity Surveyors; Ernest Howard & Son, Clerks of Works; M. Wilby, M.I.C.W., A. Course, R. A. McDermott, F. W. Clayton, General Contractors; The Borough Engineer Contracts Department, Northampton, T. Wilson & Son Ltd; Clements Bros. (Northampton) Ltd., A. Glenn & Sons Ltd., H. Holloway & Sons Ltd., Chowns Ltd., A. & F. Gale Ltd., W. J. Richardson & Son. Sub-contractors: Reinforced concrete works, The Trussed Concrete Steel Co. Ltd., Trent Concrete Ltd., Concrete Ltd.; shop fitters, Harris & Sheldon

Ltd.; terrazzo works, Jaconello Ltd.; flat roof finishes, Frazzi Ltd., Scudamore & Luck Ltd., Permanite Ltd.; electrical installation, The East Midlands Electricity Board, The Electrical Installation Co., F. J. Perrin; flooring, R. W. Brooke & Co. Ltd., Jaconello Ltd., Stonart Asbestos Flooring Co. Ltd., Gabriel Wade & English Ltd., The Marley Tile Co. Ltd., Semtex Ltd., Stevens & Adams Ltd., Dennis Ruabon Ltd.; manufactured wrought ironwork, Gardiner Sons & Co. Ltd., A. H. Allen & Co. (Engineers) Ltd., Matthews Bros., Cox Bros., Tubewrights Ltd., The Northampton Machinery Co. Ltd.; radio, wireless relay and television points, Northampton Wireless Relay Ltd., Audix Ltd.; sanitary fittings, J. W. Martin & Partners, Rawlins Hawtin & Co. Ltd., Travis & Arnold Ltd., A. R. & W. Cleaver Ltd., Econa Modern Products Ltd., William E. Farrer Ltd.; gas installation, services, etc., The East Midlands Gas Board; public and street lighting, The East Midlands Electricity Board, Troughton & Young Ltd., Stanton Ironworks Co. Ltd.; fireplaces, A. Bell & Co. Ltd., Raponi (Flooring) Ltd.; bricks, The Istock Brick & Tile Co. Ltd., Proctor & Lavender Ltd., New Star Brick & Tile Co., The National Coal Board, Ansley Hall Colliery, The London Brick Co., The Cherry Orchard Brick Co. Ltd.; window ventilators, Greenwood & Airvac Ventilating Co. Ltd.; refrigeration, Howards Refrigeration Ltd.; metal windows and door frames, Henry Hope & Sons Ltd., The Crittall Manufacturing Co. Ltd., John Thompson (Beacon Windows) Ltd., Williams & Williams Ltd.; steel lineposts, Stewarts and Lloyds Ltd., Tubewrights Ltd.; plumbing units, etc., B. Finch & Co. Ltd., Econa Modern Products Ltd., Bonfield & Hooke Ltd.; roof tiles, Colthurst, Symons & Co. Ltd., S. & E. Collier, Wilkins & Bedford, Wormells Ltd., Broughton Astley Tillerries Ltd.; pavement lights, etc., Lenscrete Ltd.; door furniture, Lockerbie & Wilkinson

(Birmingham) Ltd., Dryad Metal Works Ltd.; paints, British paints Ltd., Charles Turner & Son Ltd., Walpamur Co. Ltd., Vitretek (England) Ltd.; glazed cement wall finishes, Roba Cement Enamel Finishes Ltd.; cast iron goods, The Lion Foundry Co. Ltd., Burn Bros. (London) Ltd.; concrete gutters, Finlock Gutters Ltd.; fires and domestic hot water, Ideal Boilers & Radiators Ltd., Allied Iron Founders Ltd., The Coakbrookdale Co. Ltd.; soundproofing to flats, Fibreglass Ltd.; electrical ducts to flats, Ductube Ltd.; heating services, Ashwell & Nesbit Ltd., Seaton & Peet Ltd., Bonfield & Hook Ltd.; heating fittings, Gulf Radiator Co. Ltd., Copperad Ltd., Lumby's Ltd.; lighting fittings, Holophane Ltd., Ascog Ltd.; plastering, fibrous plaster, T. W. Tomalin Ltd.; ceilings, fibre board, Tentest Ltd.; storage tank, Braithwaite & Co. Ltd.; tar paving, Davis, Watson & Elliotts; curtains, The Northampton Co-operative Society Ltd.; wall tiles, Carter & Co. Ltd.; sculpture (Kings Heath Infants' School) Robert Adams; commemoration tablet, The Hopton-Wood Stone Firms Ltd. (sculptor—D. A. Seaman); woodwool, Thermocoust Ltd.; reconstructed stonework, Constone Ltd., The Croft Granite Brick & Concrete Co. Ltd., Trent Concrete Ltd.; joinery, Sharp Bros. & Knight Ltd., The Midland Joinery Works Ltd.; w.c. cubicles, Flexo Plywood Industries; cloakroom equipment, Cloakroom Equipment Ltd.; hat and coat pegs, Comyn Ching & Co. Ltd.; glass domes and glass bricks, Pilkington Bros. Ltd.; glass, Daylers; window control gear, Arens Controls Ltd.; stair nosings, Ferodo Ltd.; roller shutters, Brady Shutters Co., Ltd.; acoustic tiles, Celotex Ltd.; clocks, Gents & Co. Ltd., English Clock Systems Ltd.; fencing, Penfold Fencing & Engineering Ltd.; sliding door gear, P. C. Henderson Ltd.; roads and sewers, The Borough Engineer, Northampton; horticultural works, Borough Estates Department, Northampton.

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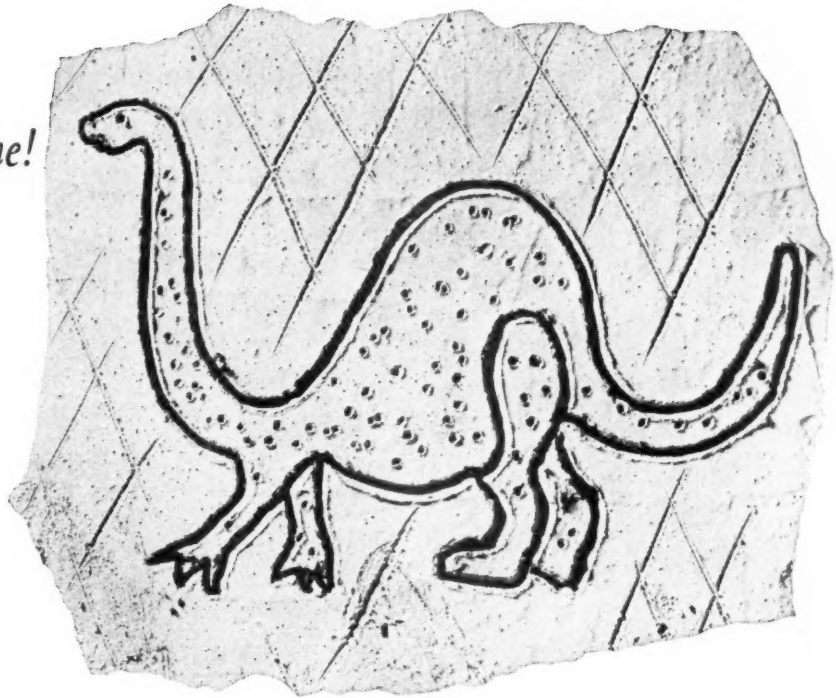
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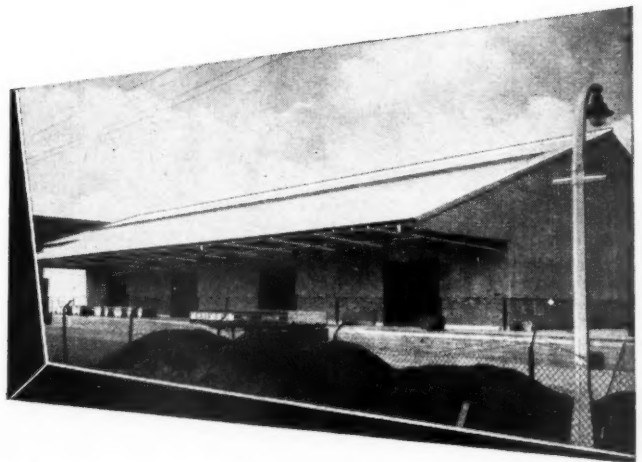
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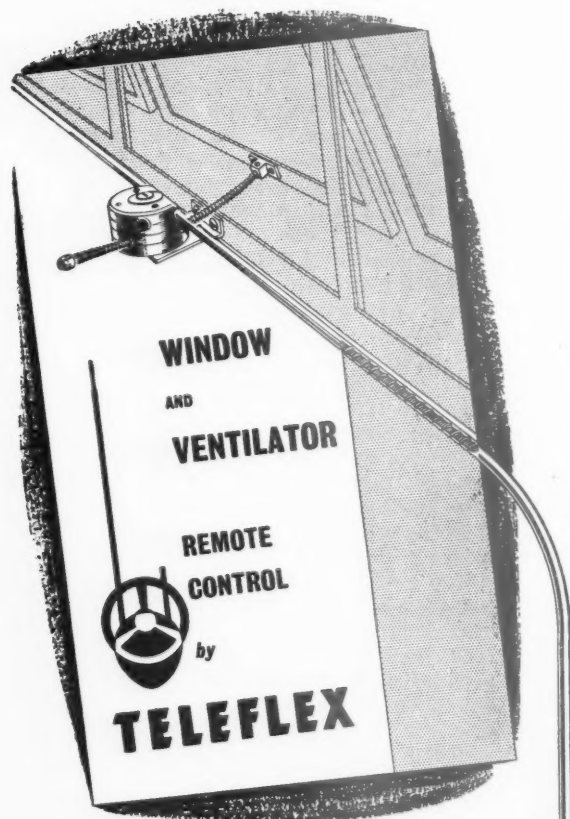
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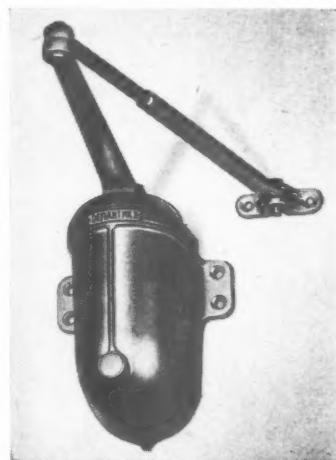
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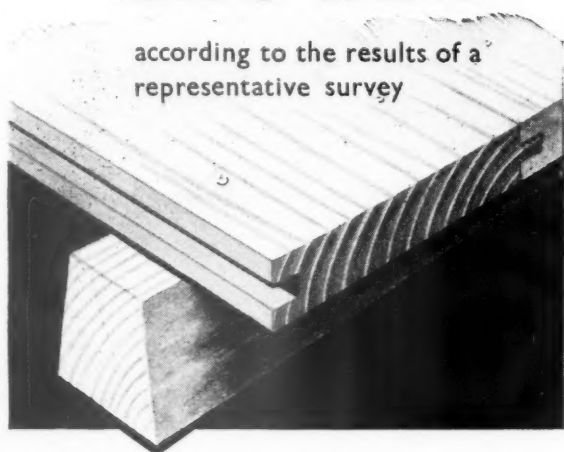
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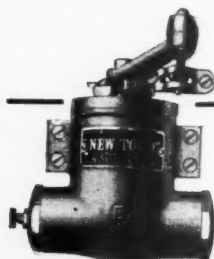
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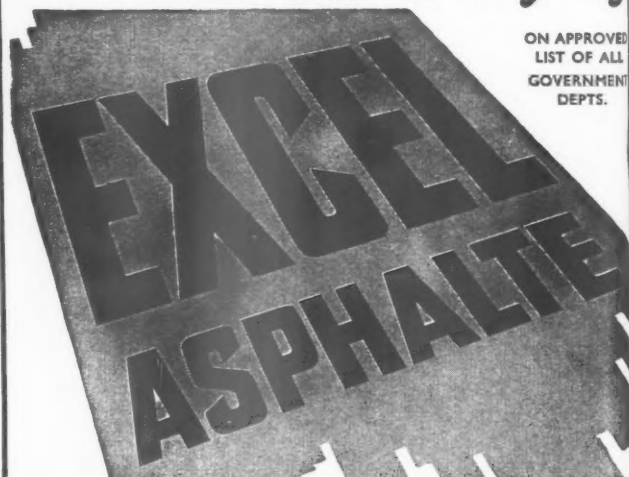
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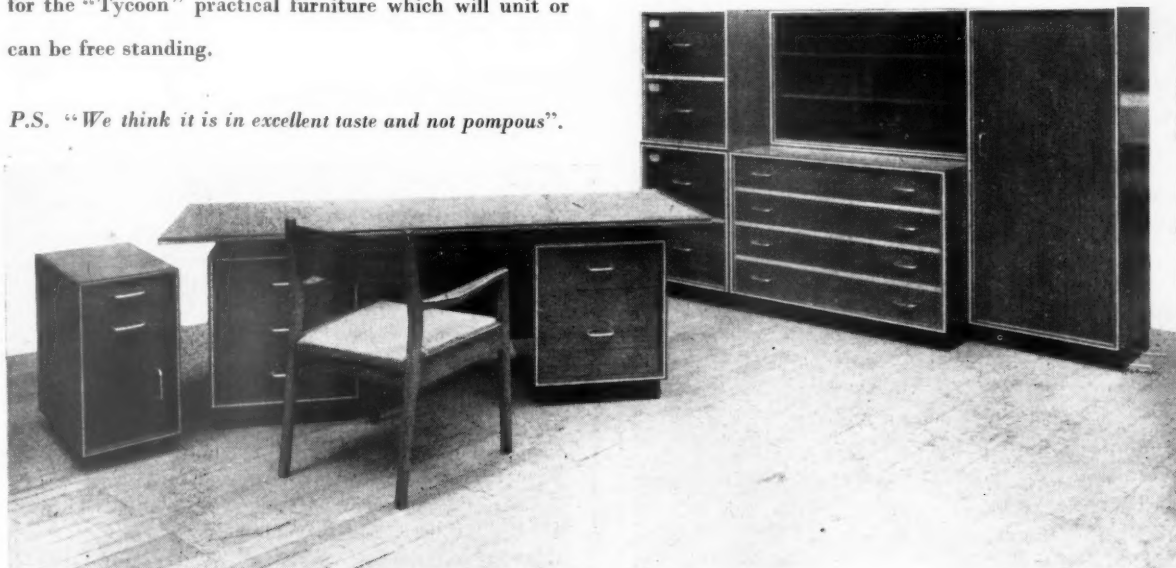
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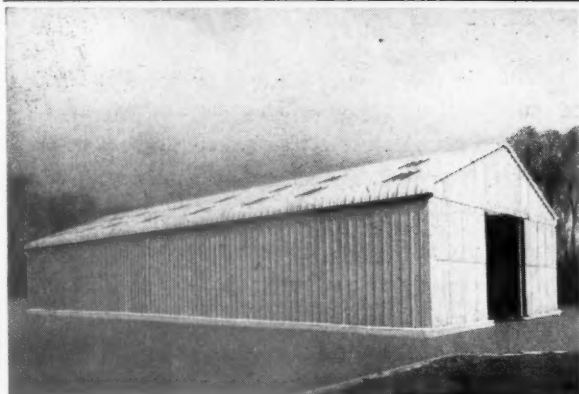
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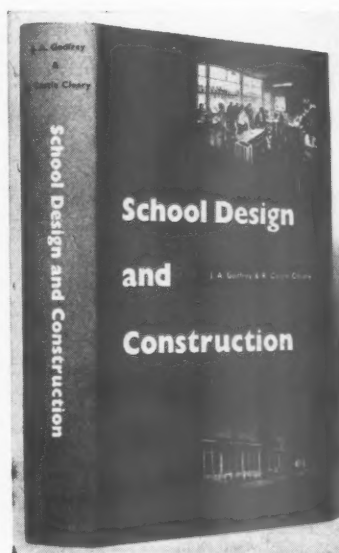
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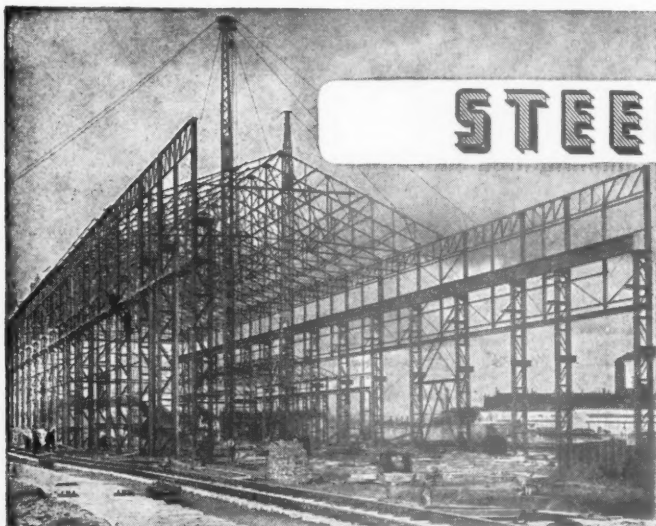
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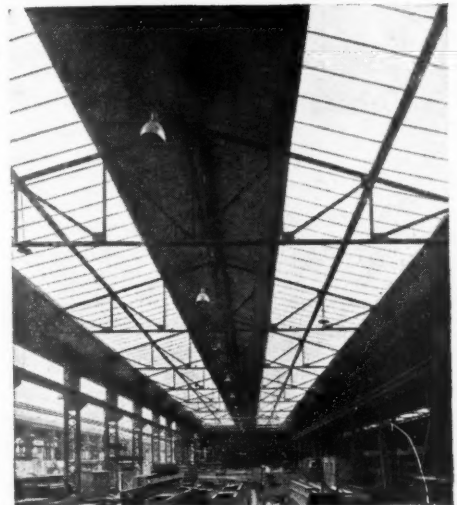
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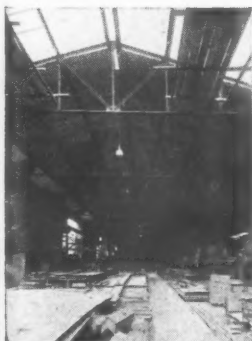
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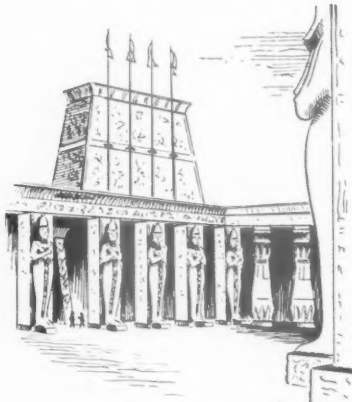
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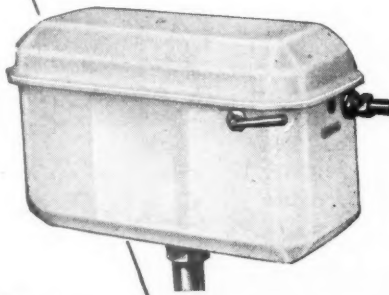
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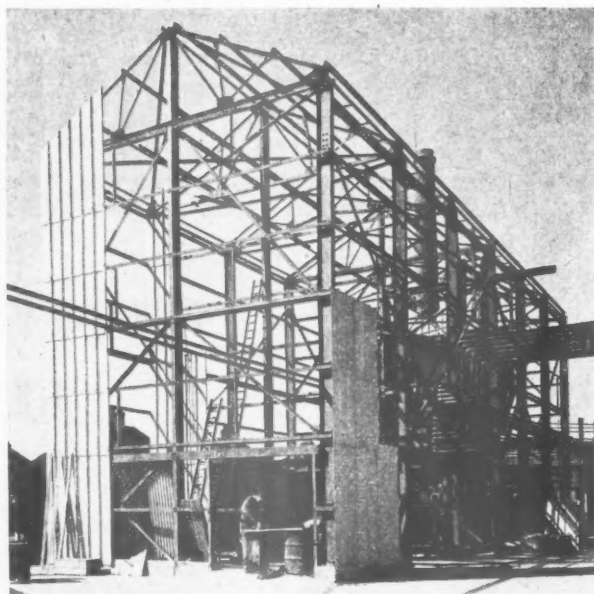
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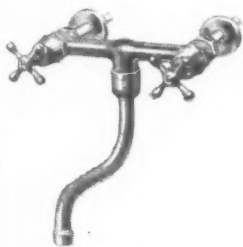
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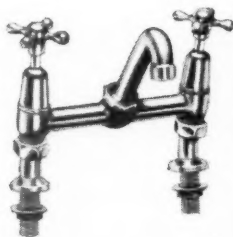
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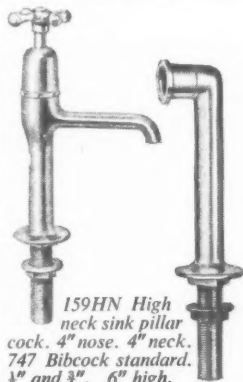
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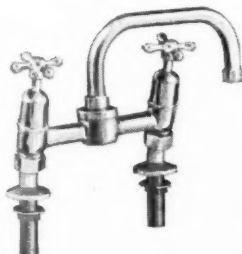
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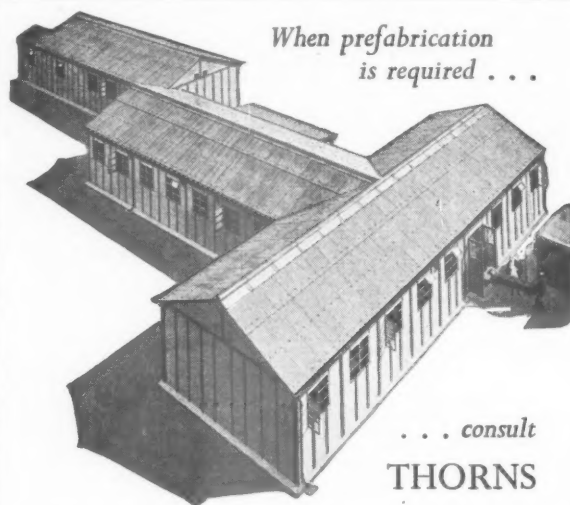
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BOROUGH OF OLDUBURY.

QUANTITY SURVEYOR.

Applications are invited for the appointment of Quantity Surveyor, Grade A.P.T. VIII, in the Architects' Section of the Borough Surveyor's Department.

The Corporation's building programme comprises mixed development of houses, maisonettes and flats, shopping centres, development of the Central Clearance Areas for multi-storey flats, and general building work for all Committees.

Candidates for this appointment should be Chartered Quantity Surveyors, possessing a thorough knowledge of building contract procedure, and have administrative ability; be experienced in the preparation of estimates, preparing specifications and bills of quantities, valuation for interim certificates and settling final accounts for all types of Local Authority building contracts.

The appointment will be superannuable, subject to the National Conditions of Service, and to the selected candidate passing a medical examination. Applications, giving particulars of age, qualifications and experience, with the names of two referees, should be delivered to the undersigned not later than Monday, 1st March, 1954.

Housing accommodation will be available to married applicants if this is required.

KENNETH PEARCE,

Town Clerk.

Municipal Buildings, Oldbury.

6th February, 1954.

1682

CARDIGANSHIRE COUNTY COUNCIL.

Applications are invited for the following appointments in the County Architect's Department, Aberystwyth:—

(a) **PRINCIPAL ASSISTANT ARCHITECT** (A.P.T. VIII—£760 × £25—£835). To be in charge of the Drawing Office, and to have general responsibility for the department in the absence of the County Architect and his Deputy. Applicants should be Members of the R.I.B.A. with good experience in the design and construction of modern buildings.

(b) **QUANTITY SURVEYOR** (A.P.T. VIII—£760 × £25—£835). Applicants should be Members of the R.I.C.S. 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.

(c) **MAINTENANCE ASSISTANT** (A.P.T. IV—£555 × £15 (2) × £20 (1)—£645). Applicants must have sound knowledge of building construction and all trades with experience in the preparation of specifications of maintenance and minor works.

(d) **CLERK-TYPIST** (Female) (General Division—commencing salary to depend on qualifications and experience). Previous office experience essential.

(e) **TELEPHONE OPERATOR** (Female) (Misc. Div. Scale—£300 × £15 (1) × £10 (3)—£345). Previous experience in operation of switchboards essential.

(f) **TWO CLERKS OF WORKS** (Temporary) (Inclusive salary of £10 per week). Applicants must have a thorough knowledge of the building trade, must be conversant with plans and specifications and Bills of Quantities, competent in the measuring and setting out of work and maintaining records and be able to prepare progress reports.

Candidates must disclose whether to their knowledge they are related to any member or Chief Officer of the Authority.

Forms of application and further details obtainable from the County Architect, County Hall, Aberystwyth.

CLOSING DATE—8th MARCH, 1954.

J. E. R. CARSON,

Clerk of the County Council.

County Office, Marine Terrace, Aberystwyth. 1724

CITY OF GLOUCESTER.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of an ASSISTANT ARCHITECT. Salary: A.P.T. Grade Va (£650 × £20—£710 per annum).

Preference will be given to Associate Members of the R.I.B.A., and the appointment is subject to the Local Government Superannuation Act, 1937.

Applications, stating age, whether married or single, training, qualifications, experience, previous appointments and present position, together with copies of recent testimonials, should reach the undersigned not later than Saturday, 6th March, 1954.

J. V. WALL, A.R.I.B.A.,

City Architect.

Suffolk House, Greystones, Gloucester. 1799

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CRANBROOK RURAL DISTRICT COUNCIL. ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment (in connection with new Housing Schemes) of **JUNIOR ARCHITECTURAL ASSISTANT** (vide para. 21 (xi) (b) of the National Scheme of Conditions of Service) at a salary in Grade A.P.T. II, commencing at £495 per annum.

Applicants should preferably be students of the R.I.B.A., or have passed an equivalent examination, and the appointment will be subject to the National Conditions. The appointment will be determinable by a month's notice on either side. Applications, stating full particulars of age, experience and qualifications, together with names and addresses of two referees, to be sent to the undersigned not later than Monday, 8th March, 1954.

Canvassing, directly or indirectly, will disqualify.

P. G. BANFIELD,

Clerk of the Council.

Council Offices, Hill House, Cranbrook.

18th February, 1954. 1797

COUNTY BOROUGH OF SOUTH SHIELDS.

CHIEF ASSISTANT (QUANTITY SURVEYOR).

Applications are invited for the above appointment in the Borough Engineer's Department at a salary in accordance with Grade A.P.T. IX (£815-£935). An additional £25 per annum has been recommended by the N.J.C. as from 1st April, 1954.

Candidates should be Chartered Quantity Surveyors possessing administrative ability and a sound knowledge of building contract procedure; be experienced in the preparation of estimates, specifications and bills of quantities, and accustomed to settling final accounts.

The appointment is subject to medical examination, the Local Government Superannuation Acts, and the N.J.C. Conditions of Service.

Housing accommodation may be made available to a successful married applicant, if required.

Applications, on forms to be obtained from the Borough Engineer, Town Hall, South Shields, should be returned to him not later than Monday, 15th March, 1954.

HAROLD AYREY,

Town Clerk.

1798

ARGYLL COUNTY COUNCIL require **JUNIOR ARCHITECTURAL ASSISTANT** for County Architect's Department, with a general architectural training and experience, particularly in connection with housing, and capable of surveying, levelling and preparing detailed drawings and specifications. Salary scale: £490-£595 per annum. Superannuable.

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A. D. JACKSON,

County Clerk.

1796

BOROUGH OF GILLINGHAM.

APPOINTMENT OF ARCHITECTURAL ASSISTANT, GRADE A.P.T. IV (£555 PER ANNUM).

BOROUGH ENGINEER'S DEPARTMENT.

Applicants should have good general experience of architectural design, preparation of working drawings, details and specifications, and supervision of construction.

The Council are prepared to allocate housing accommodation if required by the successful applicant.

Forms of application may be obtained from the Borough Engineer, J. K. Urwin, A.M.I.C.E., M.I.Mun.E., Municipal Buildings, Gillingham, Kent. Applications, appropriately endorsed, must be received by the undersigned, accompanied by copies of not more than three recent testimonials, by not later than first post on Wednesday, 10th March, 1954.

Canvassing, directly or indirectly, will disqualify.

FRANK HILL,

Town Clerk.

Municipal Buildings, Gillingham, Kent.

1806

NEWCASTLE REGIONAL HOSPITAL BOARD. REGIONAL ARCHITECT'S DEPARTMENT.

Appointment of

(a) **ONE ASSISTANT ARCHITECT**, and

(b) **TWO ARCHITECTURAL ASSISTANTS**.

Applications are invited for the following permanent (superannuable) appointments on the Headquarters Staff of the Regional Architect, Philip H. Knighton, M.B.E., A.R.I.B.A.:—

(a) **ONE ASSISTANT ARCHITECT**.

Applicants must be Associate Members of the Royal Institute of British Architects. The commencing salary, within the grade £600 × £25 (7) × £30 (3)—£665, will depend upon the extent of the successful applicant's practical experience at full professional standard, but the number of additional increments given on this basis will not be more than the number of years by which the applicant's age exceeds 25.

Candidates should have had sound practical experience of the planning and construction of large public buildings and, preferably, have had some experience also of hospital and health-service buildings. They should be capable of carrying projects through all stages and of taking charge of a small sub-section of the staff of a drawing office if required to do so.

(b) **TWO ARCHITECTURAL ASSISTANTS**.

Applicants must have passed the Intermediate Examination of the Royal Institute of British Architects. The commencing salary, within the grade £440 × £25 (1) × £20 (8) to £625 per annum, will depend upon the applicants' age and amount of practical experience since passing the Intermediate Examination, but will not exceed £525.

Applicants must have had a sound architectural training, and some practical experience in a practising architect's office is essential. Evening study facilities for the R.I.B.A. Final Examination are available at King's College of the University of Durham in Newcastle.

To Applicants who wish to gain experience of hospital planning and construction the posts offer an excellent opportunity for doing good-class work of an interesting and widely varied nature in an architectural department which is being expanded to deal with a considerable work-programme.

The terms of appointment and conditions of service will be as set out in the Whitley Council Circulars P.T.B.19 and 20, relating to professional and technical staffs of Regional Hospital Boards. The successful candidates will be required to pass a medical examination.

Applications, giving all relevant particulars, including training and experience, whether married, present appointment and salary, war service if any, date available, and the names of three referees, are to be received by the undersigned not later than 15th March, 1954.

R. DOBBIN,

Secretary.

"Dunira," Osborne Road,

Newcastle-upon-Tyne, 2.

18th February, 1954.

1807

ISLE OF ELY COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the under-mentioned appointments on the Staff of the County Architect:—

(a) **ASSISTANT ARCHITECT**. Grade A.P.T. V (£620-£650).

(b) **ASSISTANT QUANTITY SURVEYOR**. Grade A.P.T. III (£550-£595).

(c) **QUANTITY SURVEYOR'S CLERK**. Grade Misc. III (£395-£460).

(d) **JUNIOR ARCHITECTURAL ASSISTANT** (Temp.). Grade Misc. I/II/III (£320-£460).

All posts with the exception of (d) are permanent, and all are subject to the National Scheme of Conditions of Service, the Local Government Act, and to the passing of a medical examination.

Intending applicants should apply for forms, stating for which post they wish to apply, to the County Architect, County Hall, March, to whom they must be returned not later than Tuesday, 16th March, 1954.

R. F. G. THURLOW,

Clerk of the County Council.

1801

CITY OF NOTTINGHAM.

Appointment of (a) **ASSISTANT ARCHITECT** within A.P.T. Grades 6-7 (salary £670-£785), and

(b) **TWO ARCHITECTURAL ASSISTANTS** within A.P.T. Grades 1-4 (salary £465-£600), according to qualifications and experience.

National Joint Service Conditions.

Applications for (a) from Registered Architects, with experience of Housing, including conversions, and for (b) preferably from persons having passed the R.I.B.A. Intermediate Examination, to City Housing Architect, Guildhall, Nottingham, by 16th March, 1954, stating age, qualifications, experience, present appointment and salary, and naming two referees.

1800

MIDDLESBROUGH EDUCATION COMMITTEE.

ASSISTANT ARCHITECT, Grade V, required in the Education Offices (Education Architect—P.R. Middleton, Dipl.Arch., A.R.I.B.A.).

Forms and particulars obtainable from the Director of Education, Education Offices, Woodlands Road, Middlesbrough, to whom completed forms should be returned not later than Wednesday, 10th March, 1954.

1798

POPULAR BOROUGH COUNCIL invite applications

from Registered Architects for the established post of **ARCHITECTURAL ASSISTANT**, A.P.T. V. Forms obtainable from the Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.3. Closing date: Monday, 15th March, 1954.

1793

**HER MAJESTY'S COLONIAL SERVICE.
ARCHITECT. GOVERNMENT ARCHITECT'S
DEPARTMENT, MAURITIUS.**

To be in charge of a Section in the Architectural Department and responsible for the preparation of sketch designs, working drawings, specifications for and supervision of building works.

Appointment is on contract for three years, in the salary range £643 10s. to £1,291 10s. per annum, point of entry depending on experience and war service. Gratuity of £150 to £200 per annum on satisfactory completion of contract. Temporary variable cost-of-living allowance also payable. Leave at the rate of four days for each completed month of resident service. Free passages for officer, wife, and up to three children.

Candidates must be A.R.I.B.A., with preferably Degree or Diploma in Architecture, and experience in Town Planning. Previous experience covering Educational, Medical and Health, Public and Domestic buildings is required.

Apply in writing to the Director of Recruitment, Colonial Office, Great Smith Street, London, S.W.1, giving briefly age, qualifications and experience. Mention the reference No. CDE 112/52/02. Closing date for receipt of initial enquiries: 20th March, 1954. 1792

**COUNTY COUNCIL OF HUNTINGDON.
COUNTY ARCHITECT'S DEPARTMENT.**

APPOINTMENT OF CHIEF ARCHITECTURAL ASSISTANT, GRADE VIII, A.P.T.
Applications are invited for the appointment of Chief Architectural Assistant at a salary of accordance with Grade VIII, A.P.T. (at present £760-£835 per annum), of the National Joint Council's Scales.

Candidates should be Associate Members of the Royal Institute of British Architects or hold equivalent qualifications, and have had considerable experience in the design of Schools, Police and other County Buildings. The post could offer considerable scope to the right applicant, being the senior position in the Drawing Office.

The appointment will be subject to the terms of the Local Government Superannuation Acts, and the person appointed will be required to pass a medical examination.

Applications, giving the names of three referees and stating age, present position and salary, technical qualifications and examinations, together with details of experience, are required to be submitted to S. M. Holloway, A.R.I.B.A., County Architect, County Buildings, Huntingdon, in a sealed envelope endorsed "Appointment of Chief Architectural Assistant," by not later than Thursday, 11th March, 1954.

JOHN KELLY,

Clerk of the County Council.
County Buildings, Huntingdon. 1808
25th February, 1954.

**STAFFORDSHIRE COUNTY COUNCIL.
EDUCATION COMMITTEE.**

Applications are invited for the following appointment in the County Education Architect's Department:—

ASSISTANT ARCHITECT, A.P.T., Grade V to VI. Salary range: £595-£735 p.a., according to qualifications and experience.

Applicants must be Members of the R.I.B.A. and have had experience in an Architect's office. Preference will be given to applicants with experience in construction of schools and other educational establishments.

Applicants should state age, present and past employment, education, professional training, and enclose copies of two recent testimonials. All applications should be received not later than Tuesday, 2nd March, addressed to: A. C. H. Stillman, Esq., F.R.I.B.A., County Education Architect, Green Hall, Lichfield Road, Stafford. 1751

**WORCESTERSHIRE COUNTY COUNCIL.
ARCHITECT'S DEPARTMENT.**

Applications are invited for the appointment of **ARCHITECTURAL ASSISTANT, Grade A.P.T., IV** (£555-£600 p.a.). Application forms and Conditions of Appointment should be obtained from the County Architect, Castle Street, Worcester, before 7th March, 1954. (M194) 1763

PEAK PARK PLANNING BOARD.

Applications are invited for the appointment under N.J.C. service conditions of a **JUNIOR PLANNING ASSISTANT, Salary: A.P.T. Grade I** (£465-£510). Previous experience of development plan map preparation an advantage. Apply on forms obtainable from the undersigned; forms to be returned by 6th March, 1954. Canvassing disqualifies.

JOHN FOSTER,

Planning Officer.
Aldern House, Bakewell, Derbyshire. 1750

**LANCASHIRE COUNTY COUNCIL—
PLANNING DEPARTMENT.**

SENIOR PLANNING ASSISTANT, A.P.T. Grade VI (£670-£735) and **PLANNING ASSISTANT, A.P.T. Grades I-V** (£465-£645) required at Liverpool.

Applicants for Grade VI should be qualified architects, engineers or surveyors and be qualified planners with experience.

For Grades I-V, candidates should be studying for or possess a qualification in architecture, engineering or surveying; planning experience desirable. Commencing salary dependent upon qualifications and experience.

Applications, stating appointment applied for, giving age, qualifications, present appointment and salary, experience and two referees, to County Planning Officer, East Cliff County Offices, Preston, by 10th March, 1954. 1779

**BRITISH ELECTRICITY AUTHORITY.
EAST MIDLANDS DIVISION.**

Applications are invited for the following positions within the Division:—

ENGINEERING DRAUGHTSMEN (CIVIL), 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 (£567-£671 per annum) or Grade 6 (£433-£567 per annum) of Schedule D of the National Joint Board Agreement.

ENGINEERING DRAUGHTSMEN (MECHANICAL), 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 one or more of the following:—

(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.

The salary 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 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. cables; knowledge of protective gear systems would be an advantage.

The salary 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 to experience.

The above positions will be pensionable within the provisions of the British Electricity Authority and Area Boards 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 returned to the undersigned. Please quote Vacancy Number.

L. F. JEFFREY,

Divisional Controller.
1752

**CITY OF STOKE-ON-TRENT.
CITY ARCHITECT'S DEPARTMENT.**

Applications are invited from suitably qualified persons for the following appointments:—

(a) **ASSISTANT QUANTITY SURVEYOR.** Salary: A.P.T. Division, Grade VIII (£760-£835 p.a.).

(b) **ASSISTANT QUANTITY SURVEYOR.** Salary: A.P.T. Division, Grade VII (£710-£785 p.a.).

Note.—Suitable housing accommodation may be made available to successful candidates.

The selected applicants will be required to pass a medical examination, and the appointments will be subject to the provisions of the Local Government Superannuation Acts, 1937 and 1953.

Applications, stating date of birth, particulars of training, experience, etc., with copies of two recent testimonials should be received by J. R. Piggott, T.D., F.R.I.B.A., City Architect, Kingsway, Stoke-on-Trent, Staffs., endorsed with the title of the appointment, not later than Saturday, 6th March, 1954.

HARRY TAYLOR,

Town Clerk.
Town Hall, Stoke-on-Trent. 1762

CANNOCK URBAN DISTRICT COUNCIL

(Population—41,030).

QUANTITY SURVEYOR.

Applications are invited for the above-named post in the Architect's Department at a salary within Grades A.P.T. Va and VI, of the Scheme of Conditions of Service (£625-£735). A.R.I.C.S. or equivalent required.

HOUSING ACCOMMODATION AVAILABLE. Forms of application and further particulars obtainable from the undersigned.

Closing date: 8th March, 1954.

W. C. SPEEDY,

Clerk of the Council.
Council House, The Green, Cannock, Staffs. 1748
12th February, 1954.

PERTH AND KINROSS JOINT COUNTY COUNCIL

require two **SENIOR ASSISTANT ARCHITECTS.** Salary: £580-£680 (A.P.T., IV/V), for work on new School Building Programme. Placing on scales according to experience, etc. Houses available. Particulars and application forms from County Clerk County Offices, York Place, Perth. Applications to be lodged by 8th March, 1954. 1747

BUCKS. COUNTY COUNCIL.

Applications are invited from R.I.B.A. Probationers for appointment of **JUNIOR ARCHITECTURAL ASSISTANT** in General Division. Scale of salary (£295 p.a. for males aged 21, rising to £470 p.a.).

Application forms giving details obtainable from County Architect, County Offices, Aylesbury, and returnable by 12th March, 1954. 1767

**COUNTY BOROUGH OF TYNE-MOUTH.
BOROUGH SURVEYOR'S DEPARTMENT.
APPOINTMENT OF STAFF.**

Applications are invited for the following appointments:—

(1) **ASSISTANT ARCHITECT, Grade V** (£595-£645).

(2) **QUANTITY SURVEYING ASSISTANT, Grade III** (£525-£570).

(3) **SENIOR TOWN PLANNING ASSISTANT, Grade Va/Vi** (£625-£735).

(4) **ENGINEERING ASSISTANT, Grade V** (£595-£645).

The appointments are superannuable. In the case of appointments (1) and (3) and (4) the Corporation may be prepared to assist in the provision of housing accommodation in cases of difficulty.

Application forms and conditions of appointment may be obtained from D. M. O'Herrilby, Esq., B.Sc.(Eng.), M.I.C.E., Borough Surveyor, 16, Northumberland Square, North Shields, to whom they should be returned by the 10th March, 1954.

(Signed) FRED. G. EGNER.

Town Clerk.

14, Northumberland Square, North Shields.

GAH/EK

29th January, 1954. 1745

**COUNTY BOROUGH OF WEST HARTLEPOOL.
BOROUGH ARCHITECT'S DEPARTMENT.**

APPOINTMENT OF ASSISTANT ARCHITECT, GRADE A.P.T. IV.

Applications are invited for the position of Assistant Architect, Grade A.P.T., IV (£555-£600), in the Borough Architect's Department.

The appointment is subject to the Scheme of Conditions of Service of the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services, and to the Local Government Superannuation Acts, 1937 to 1953. The successful candidate will be required to pass a medical examination.

Applications, stating age, experience and qualifications, together with copies of not more than three testimonials, should be addressed to the Borough Architect, Municipal Buildings, West Hartlepool, and received by him not later than Friday, 5th March, 1954.

ERIC J. WAGGOTT,

Town Clerk.

Town Clerk's Office, Municipal Buildings,

West Hartlepool.

12th February, 1954. 1746

**COUNTY BOROUGH OF BLACKBURN.
ARCHITECTURAL ASSISTANTS AND ASSISTANT QUANTITY SURVEYORS.**

Applications are invited for the under-mentioned permanent appointments in the Borough Engineer's Department:—

One Architectural Assistant, Grade VIII (£785-£860).

One Architectural Assistant, Grade VII (£735-£810).

Two Architectural Assistants, Grade II (£520-£565) to Grade IV (£580-£625) (according to experience).

One Quantity Surveying Assistant, Grade VII (£735-£810).

One Quantity Surveying Assistant, Grade VI (£695-£760).

(Including salary award, operative 1st April next.)

Architect applicants must be Registered Architects, and have good experience in design and construction of schools and Municipal buildings. Preference given to Associates of the R.I.B.A.

Quantity Surveyor must be experienced in preparation of Bills of Quantities, specifications, estimates and statements of final accounts, preference being given to Professional Associates of Chartered Surveyors' Institute.

Applications, stating age, qualifications, experience, present and past appointments, with not more than three testimonials, to the Borough Engineer, Town Hall, Blackburn, by 18th March.

CHAS. S. ROBINSON,

Town Clerk.

1769

COUNTY BOROUGH OF HALIFAX.

ARCHITECTURAL ASSISTANT (GENERAL).

Applications are invited from suitably qualified persons for the appointment of Architectural Assistant (General) at a salary in accordance with Grade A.P.T., V (£595-£645). The Corporation is unable to offer housing accommodation. Candidates must disclose whether to their knowledge they are related to any member or senior officer of the Council. Applications, stating age, qualifications, present position, salary and experience, accompanied by copies of three recent testimonials, should be appropriately endorsed and delivered to me by 6th March, 1954.

RICHARD de Z. HALL,

Town Clerk.

Town Hall, Halifax. 1771

16th February, 1954.

METROPOLITAN BOROUGH OF SHOREDITCH.

SENIOR ASSISTANT ARCHITECT.

Applications are invited for the above appointment. Salary A.P.T. VII (£740-£815). Subject to medical exam., Council's Supn. Scheme & N.J.C. Conditions.

Applicants should be corporate members of R.I.B.A. with considerable experience in multi-story housing, including administration of contracts.

Applications stating age, training and details of experience and giving three referees to the Borough Architect, Town Hall, Old Street, E.C.1, by 9th March, 1954. 1775

HAMPSHIRE.

Applications are invited for the appointment of a TECHNICAL ASSISTANT on Grade III-IV of the National Scales (£525-£600) to work in the North-East Area Office of the County Planning Department at Basingstoke. Candidates should, as a minimum qualification, have passed the Intermediate Examination of the Town Planning Institute or of a related professional body and have had experience in the Planning Department of a Local Planning Authority and be competent land surveyors. The appointment is pensionable and will be subject to a satisfactory medical report.

Officers using their own cars when travelling on County Council duties will receive travelling allowances on the County Scale for the time being in force.

In approved cases the County Council are prepared to assist newly appointed staff to meet removal expenses.

No form of application is issued, but applications, stating age, education, qualifications and experience, together with a copy of one testimonial and the names and addresses of two referees, should reach the County Planning Officer, Litton Lodge, Clifton Road, Winchester, by the 10th March. 1777

CITY OF ST. ALBANS.

ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of an Architectural Assistant in the department of the City Engineer and Surveyor, at a salary in accordance with A.P.T., II, if unqualified, or A.P.T., III, if the successful applicant has passed the Intermediate Examination of the R.I.B.A.

Applicants must be suitably trained, good draughtsmen, and have had experience in the design and layout of housing contracts. Consideration will be given to the provision of housing accommodation.

The appointment, which is terminable by one month's notice, and is for a period of not less than two years, with a possibility of permanence, will be subject to the National Scheme of Conditions of Service, the Local Government Superannuation Acts, and medical examination.

Applications, stating age, qualifications, present and past positions and experience, together with names of two persons to whom reference can be made, should be sent to the undersigned, to arrive not later than Monday, 8th March, 1954.

W. B. MURGATROYD.

Town Clerk.

38, St. Peter's Street, St. Albans.

February, 1954.

1770

NEW TOWN OF CWMBRAN

(MONMOUTHSHIRE).

APPOINTMENT OF JUNIOR ASSISTANT ARCHITECTS.

Applications are invited for the above vacancies from persons who are graduate Architects or have passed the Intermediate Examination of the R.I.B.A., and have completed a satisfactory period of training.

The posts will be superannuable, and the commencing salary will be £465 p.a. on the range £465-£1 at £25-£2 at £30-£550.

Applications, stating age, experience, details of present and former employment (together with applicable salaries), and names and addresses of two referees, must reach the undersigned by not later than 10th March, 1954.

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

A.M.T.P.I.

Chief Architect.

Victoria Street, Cwmbran, Mon.

1768

CITY OF PLYMOUTH.

CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the established staff. The appointments are subject to the Conditions of Service of the National Joint Council for Local Authorities Administrative, Professional, Technical and Clerical Services; the Local Government Superannuation Act 1937; a satisfactory medical examination and one month's notice on either side for termination.

(a) 1 ASSISTANT QUANTITY SURVEYOR, Grade A.P.T. V (£595 to £645).

(b) 1 ASSISTANT QUANTITY SURVEYOR, Grade A.P.T. III (£525 to £570).

(c) 1 ASSISTANT QUANTITY SURVEYOR, Grade A.P.T. I (£465 to £510).

Candidates for appointment (a) should be members of the Royal Institution of Chartered Surveyors (Sub-Division III Quantities).

Candidates for appointment (b) should have had experience in the measurement of works on site and (c) must be capable of squaring and abstracting dimensions and will be expected to give general assistance in the preparation of Bills of Quantities and the settlement of accounts. Preference will be given to those who have passed the Intermediate Examination (Quantities Sub-Division) of the Royal Institution of Chartered Surveyors.

Applications on forms obtainable from the undersigned, accompanied by copies of not more than three recent testimonials and/or names of persons to whom reference may be made, should be received at my office not later than the 13th March, 1954.

The Corporation may make housing accommodation available to the successful married candidate for (a) if required.

H. J. W. STIRLING, A.R.I.B.A.,

City Architect.

Seymour Road, Plymouth.

1776

COUNTY BOROUGH OF SOUTHEAST-ON-SEA.

LANDSCAPE DRAUGHTSMAN.

Applications are invited for the above appointment. Salary: A.P.T. Div. Grade II (£495-£515 (3)-£540 per annum, shortly being revised to £520-£565 per annum).

Age limit 45 years.

The post is subject to the Local Government Superannuation Act, 1937. Medical examination.

Applicants must be fully qualified Draughtsmen, with experience in surveying, levelling and setting out, conversant with planning of gardens, playing fields, etc., and production of perspective drawings; have a sound knowledge of building construction, preparation of estimates, specifications and bills of quantities. A knowledge of horticulture and planting is desirable but not essential.

Applications, together with the names and designation of three referees, should reach the Parks Superintendent, Burdett Road, Southend-on-Sea, in a plain envelope endorsed "Appointment of Landscape Draughtsman," within 14 days of the appearance of this advertisement.

No application form will be provided.

ARCHIBALD GLEN,

Town Clerk.

1794

WEST SUFFOLK COUNTY COUNCIL.

ARCHITECTURAL ASSISTANT, N.J.C. service conditions. Salary: £525-£685 (A.P.T., Va). Post pensionable; medical examination. Applicants should have had at least two years' office experience and should be Registered Architects. Application forms, obtainable from the Clerk of the County Council, Shire Hall, Bury St. Edmunds, to be returned by 13th March, 1954. 1688

BOROUGH OF ROMFORD.

ENGINEER AND SURVEYOR'S

DEPARTMENT.

ASSISTANT ARCHITECT, A.P. & T. Grade VI (£695-£760 per annum).

Applications are invited for this appointment. Housing accommodation will be made available if necessary.

Particulars and conditions obtainable from the Town Clerk, Town Hall, Romford, by whom completed applications must be received not later than 12th March, 1954. 1778

Tenders for Contracts

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

HUYTON-WITH-ROBY URBAN DISTRICT

COUNCIL.

PROPOSED ERECTION OF 72 HOUSES IN

TWO CONTRACTS-ST. JOHN'S ROAD

(EAST) SITE.

Tenders are invited for the erection of 72 houses for this Authority. The scheme is divided into two contracts A and B, each of 36 houses of normal traditional brick construction. Relevant documents can be obtained from the Chief Architectural Assistant, Council Offices, Derby Road, Huyton, on deposit of £2 2s. which will be returned on the submission of a bona fide tender. Contract drawings can be inspected during normal working hours at the Architect's Department, Council Offices, Huyton.

Forms of tender, which are to be returned in the envelope provided, must reach the undersigned not later than first post, Friday, 19th March, 1954.

The Council do not bind themselves to accept the lowest or any tender.

H. E. H. LAWTON,

Clerk of the Council.

Council Offices, Huyton.

February, 1954.

1749

Architectural Appointments Vacant

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

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

THE Advertiser thanks the numerous applicants for appointment advertised under Box 1278. The vacancy is now filled. 1780

ARCHITECTURAL 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. 1536

ARCHITECTURAL ASSISTANTS (qualified) required for Edinburgh office. Good conditions. Particulars of age, qualifications and experience to Box 1043, Robertson & Scott, 42, Charlotte Square, Edinburgh, 2. 1754

ARCHITECTURAL ASSISTANTS required in the £500-£750 and £250-£300 salary ranges, to work in Romford. Apply, stating experience and salary required, to Evans, Thompson & Whitehead, Chartered Architects and Surveyors, 5, High Street, Romford, Essex. 1765

A SENIOR ARCHITECTURAL ASSISTANT required, full experience in preparation of Working Drawings, Details, and supervision of office and Industrial Buildings in the London Area. Good knowledge of construction and design essential. Apply in writing, giving full particulars of qualifications, age, experience and salary required to Box 9829. 1755

SENIOR ASSISTANT required by old established firm of architects in South Wales (N. Cardiff); applicants must be A.R.I.B.A. at least 32 years of age and have had a minimum of five years post graduate experience, including Local Government Housing Schemes, and be able to drive a car; A.M.T.P.I. would also be an advantage. The appointment would be as Senior Assistant Architect with a view to partnership at a later date. Applications should give fullest possible personal details, qualifications, experience and starting salary required. Box 1697.

FIRST-CLASS ASSISTANT required for detailing only. Must have had London experience, and be thoroughly up-to-date in design. Details, including salary required, to Alec F. French & Partners, Halifax House, Bristol, 1. 1803

ARCHITECTURAL ASSISTANTS required immediately for large general practice in London. Previous office experience an advantage. Salary by arrangement, according to age, qualifications and experience. Write, giving full particulars, to Box 1802.

ARCHITECTURAL ASSISTANT required for Architect's Department of large Maidstone Brewery. Applicants, who should be aged 30-40 must be good draughtsmen with a sound knowledge of construction. Previous experience in the Licensed Trade not essential. The appointment is pensionable and salary will be according to qualifications and experience. Reply with full details to Box 1698.

THE CO-OPERATIVE WHOLESALE SOCIETY LTD., invite applications for the appointment of ASSISTANT ARCHITECTS on the staff of the Manchester Architectural Department.

Candidates must have had several years' experience, preferably of commercial or industrial projects, possess a sound knowledge of construction and be able to prepare working drawings and details from preliminary sketches.

The appointments are permanent with prospects of promotion. Successful applicants will be required to undergo a medical examination for entry into a compulsory Superannuation Scheme.

Applications stating age, experience, qualifications and salary required, to be addressed to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society Ltd., 1, Balloon Street, Manchester. 1689

CLIFFORD TEE & GALE, F.R.I.B.A., require one Senior and one Junior Architectural Assistant for industrial work in their office at 43, Frederick Road, Birmingham, 15. Five-day week. 1729

YOUNG office-trained ASSISTANT required for Norfolk office. Can driver; competent surveyor; draughtsman and detailer. Knowledge of final accounts a distinct advantage. Apply, with details of experience and salary required, to Box 1788.

SOUTHDOWN MOTOR SERVICES, LTD., a substantial omnibus undertaking, with headquarters at Brighton, invites applications for the position of ARCHITECT.

The person appointed will be responsible for the maintenance of the company's garages, bus stations and offices, and (with or without other professional assistance) for the design and supervision of new building, including alterations. Salary will be in accordance with qualifications and experience.

Applications, with full details of training and experience, should be marked "Confidential," and addressed to the General Manager at 5, Steine Street, Brighton, 1. 1790

ARCHITECTURAL ASSISTANT required in London office, with varied practice, including Stores and Churches. Salary according to experience and qualifications. Box 1785.

ASSISTANT required in Surrey office. Applicants should be quick and accurate draughtsmen, capable of handling work from sketch plan to final stage, including site supervision. Reply, stating age, experience and salary required, to Box 1783.

ASSISTANT required, with at least Intermediate R.I.B.A., for general London practice. Office experience essential. Salary £400-£500. Apply CHA. 7328. 1772

ASSISTANT ARCHITECT, with practical knowledge of Building Maintenance, required in West End Architect's office. Please write, giving particulars of experience and salary required, to Box 1753.

INDUSTRIAL ARCHITECT.

APPLICATIONS are invited for a senior post shortly becoming vacant in a large industrial establishment in Ireland.

The work involves the handling of the Architectural and Civil Engineering aspects of large and small constructional projects, including modern buildings to house process vessels and plant, welfare accommodation, works roadways, yards, pipe ducts, small bridges, etc.

Candidates should hold the A.R.I.B.A. or equivalent qualification, possess a sound knowledge of structural steelwork and be able to carry out designs, prepare specifications and estimates, coordinate the progress of the work and keep control of the costs involved, all with the assistance of suitable staff.

The selected candidate must pass a medical examination to insurance standard before engagement.

Starting salary not less than £1,100 per annum. Please send full details:—Age, education, and experience in chronological order, to Box 1692.

ARCHITECT'S ASSISTANT. Intermediate standard, required for private office in South Somerset. Applications, stating age, experience, and salary required, to Box 1757.

SENIOR ASSISTANT required in busy Romford office with general practice. Good salary and progressive position. Full particulars to Box 1758.

SENIOR ASSISTANT required in Chelmsford for permanent post in small Architect's office. Details to Box 1759.

SENIOR ARCHITECTURAL ASSISTANT. First-class draughtsman, experienced in design and construction of large commercial and industrial buildings, required by Architects in Westminster. Box 1766.

ARCHITECTURAL ASSISTANTS, of Intermediate standard, required. Previous office experience essential. Apply in writing, stating age and experience. Salary: £300 to £400, according to experience. Box 1764.

SENIOR and JUNIOR ARCHITECTURAL ASSISTANTS required. Varied country practice. Reply, stating age, experience, and salary required. Box 1804.

Architectural Appointments Wanted

SENIOR ASSISTANT (aged 34) requires position in small office in the North Midlands or South-East. Has varied experience in industrial, commercial and domestic work, and is used to carrying through jobs, including the necessary administrative work, from design to completion. Box 848.

CHIEF ASSISTANT, A.R.I.B.A., with wide experience in office administration, staff supervision, and practical architecture in most fields including Housing, Hospitals and Factories, seeks responsible position anywhere in Britain. Present salary £810. Age 32. Car owner. Box 1718.

ARCHITECTURAL ASSISTANT (female). Inter. standard, 8 years' office experience, seeks position in small London office. Box 852.

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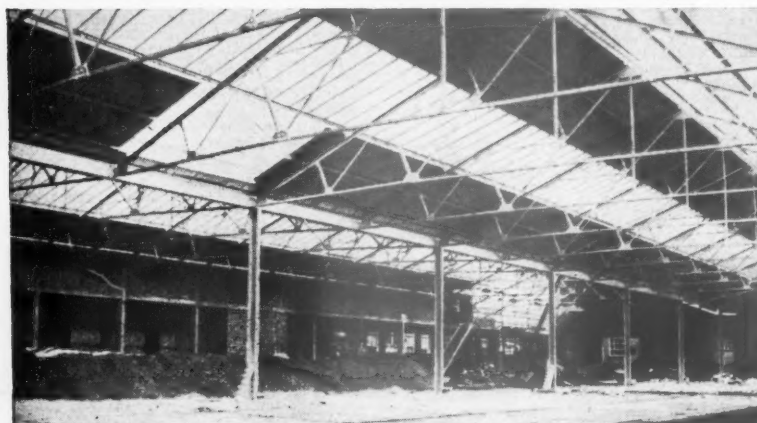
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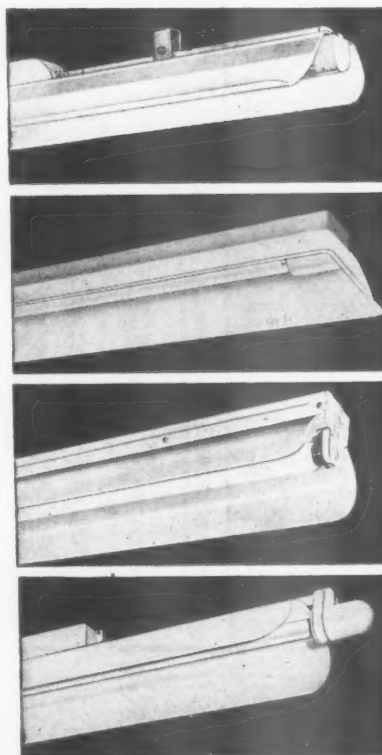


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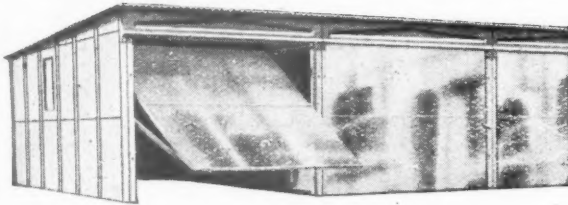
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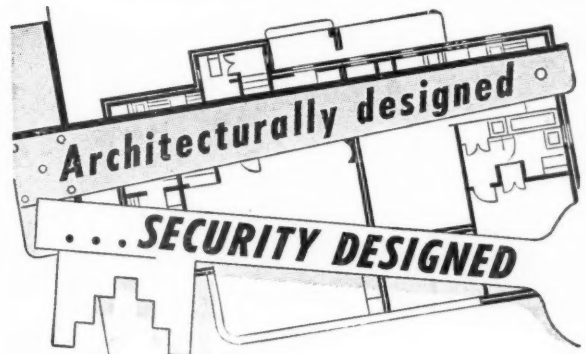
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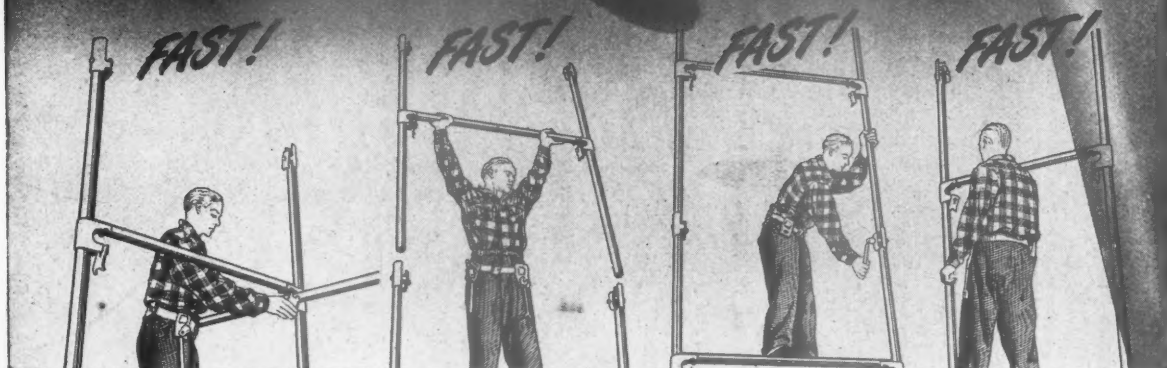


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