THE ARCHITECTS' JOURNAL

Information for the architect:

From October the AJ will be changed and enlarged to include the special features listed below. Architects and students are recommended to make sure that they get their personal copies of the AJ, if they do not already, in order to be able to create their own individual sfB-classified library (see AJ reply paid order form at the end of the Journal.)

Elemental check lists

Each week in addition to its usual features the AJ will publish a supplement giving a design check list for one of the functional elements in Table 1 of the sfB system of classification.

Technical references

Accompanying this elemental check list will be a list of technical references telling architects where to obtain the factual data needed in all stages of the design process.

Technical studies

These technical references will be accompanied by a special article, additional to the normal AJ technical article, which will deal with some aspect of the functional element in question.

Information sheets

Supporting these supplements will be a special series of Information Sheets. These have been designed as an enlargement of the present series to provide a complete and concise coverage of all materials and trade products.

Informative advertisements

The co-operation of advertisers and advertising agents is being sought in producing preclassified advertisements giving basic information on their products for inclusion in each sfs element file.

THE AJ LIBRARY

New products and new publications

The AJ's weekly feature, The Industry, by Brian Grant, is being redesigned so that each note is contained on A6-sized paper and carries an sfB classification number so filing enthusiasts can keep each item for future reference. Information Centre will also appear in a different form.

As usual

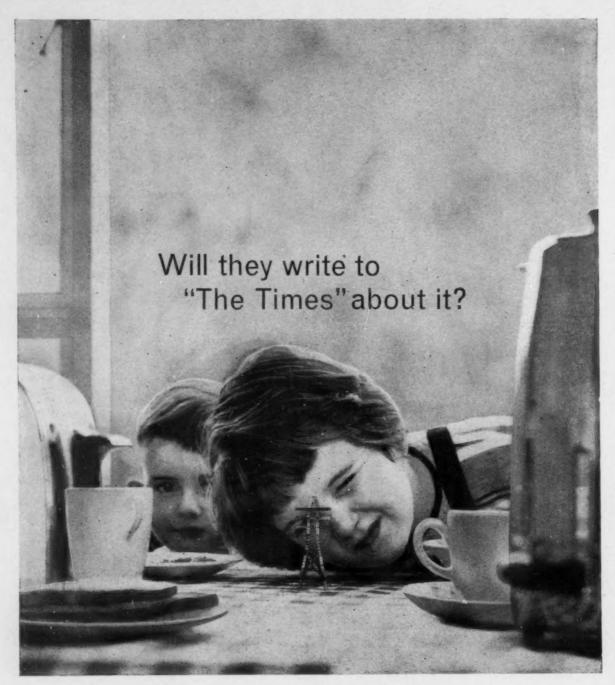
The AJ will continue to publish technical articles, cost analyses of buildings, Working Details and prices of measured work, all of which readers may wish to file in personal, as well as office, libraries.

SfB classification

All articles, features and reviews will be classified with the sfb number and the UDC number where appropriate in a coding box in the top right-hand corner.

Filing

The introduction of a special method of binding has enabled the AJ to be opened out flat and to make all pages, and not just Information Sheets and Working Details, to precisely the A4 size, the officially recommended size for technical publications. An inch margin and centring marks for punching at the standard 3½ spaces allow the AJ's pages to be filed in most types of folder or binder. All articles will be arranged so that they can be easily extracted as a whole, without including other editorial matter. The removal of pages or groups of pages from the glue backing is facilitated if the Journal is opened out and the join rubbed flat on both sides of the page or pages being extracted.



By the time these children are ten years older, Britain's power demands will have doubled. But the number of transmission towers will not have doubled. On the contrary — because the Central Electricity Generating Board is adopting 400,000 volt transmission, fewer new towers will be needed. The new power system will use some existing towers, suitably reinforced, and a limited number of new, slightly taller ones. By Act of Parliament, the C.E.G.B. must provide an efficient,

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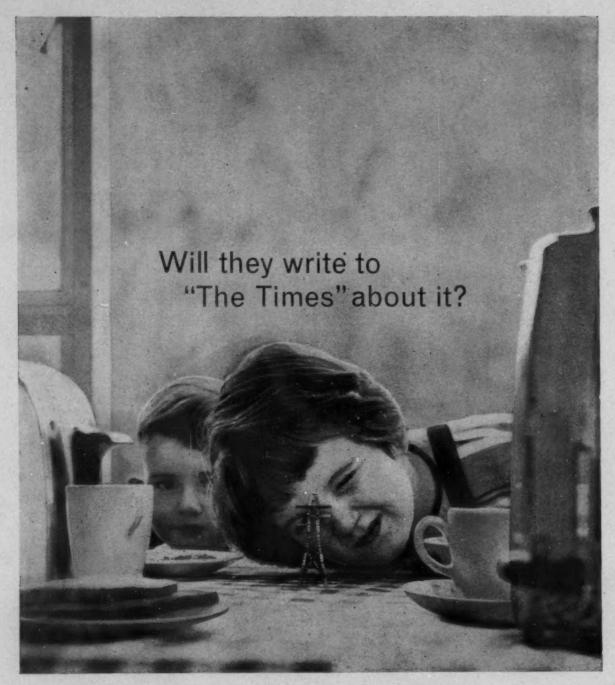


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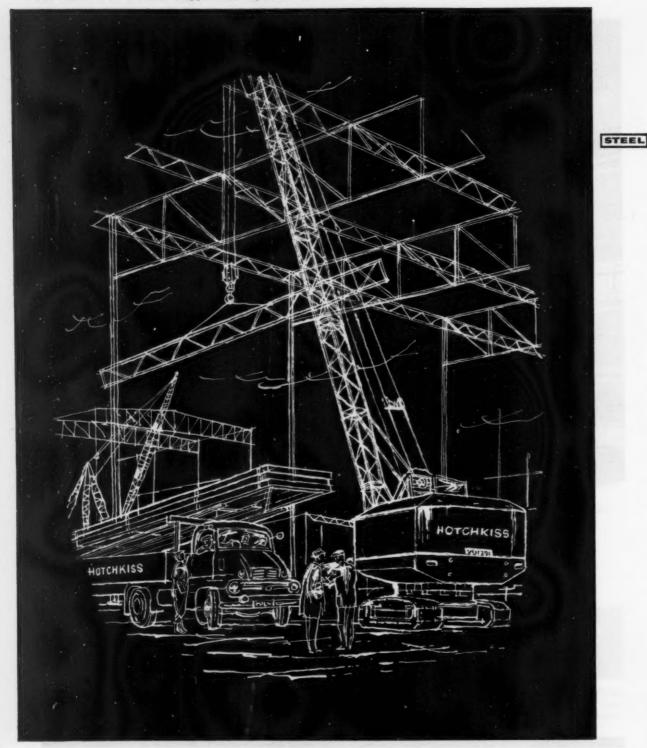
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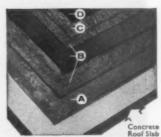
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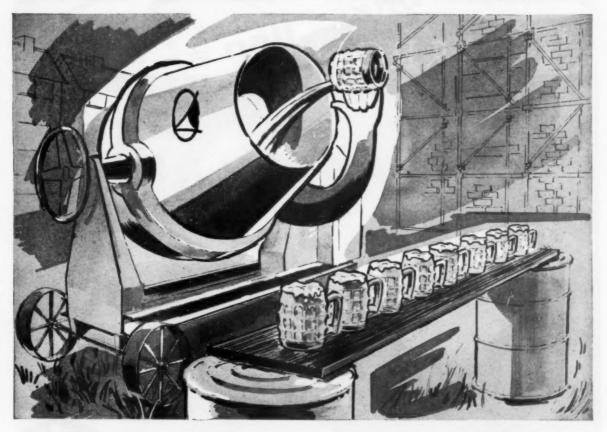


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By A. F. B. Nall, A.M.I.San.E., A.M.Inst.W.

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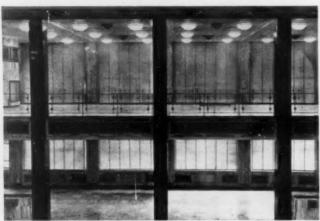
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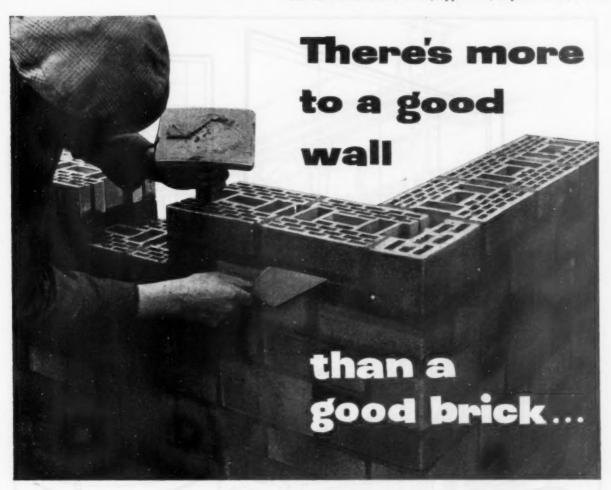
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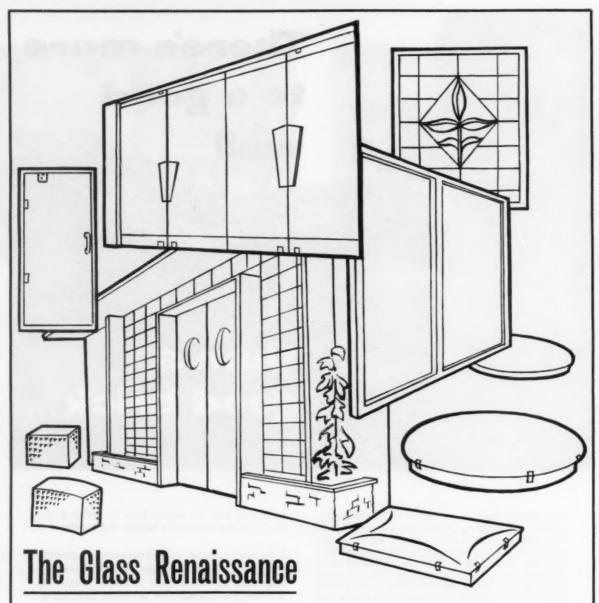
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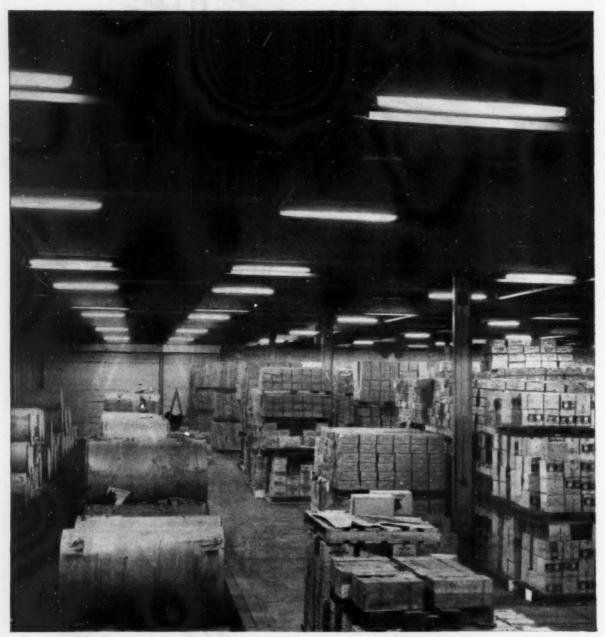
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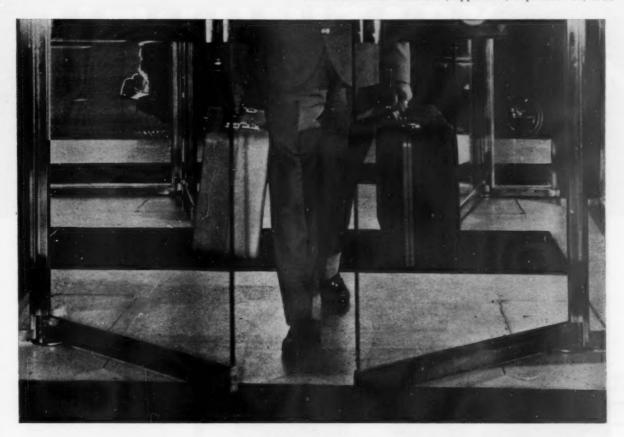




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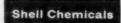
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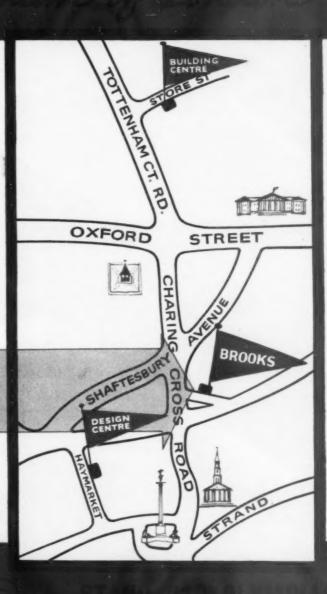
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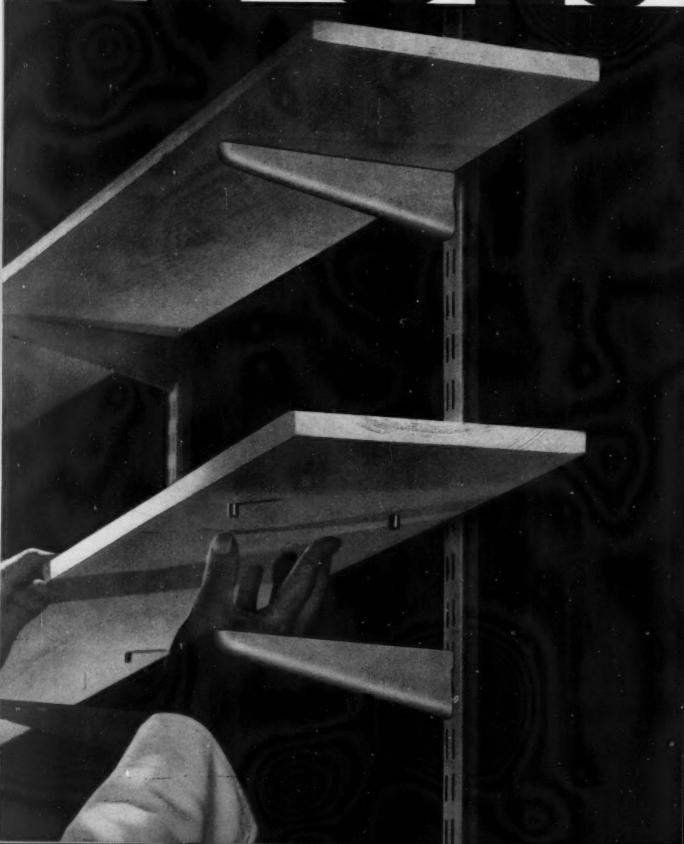
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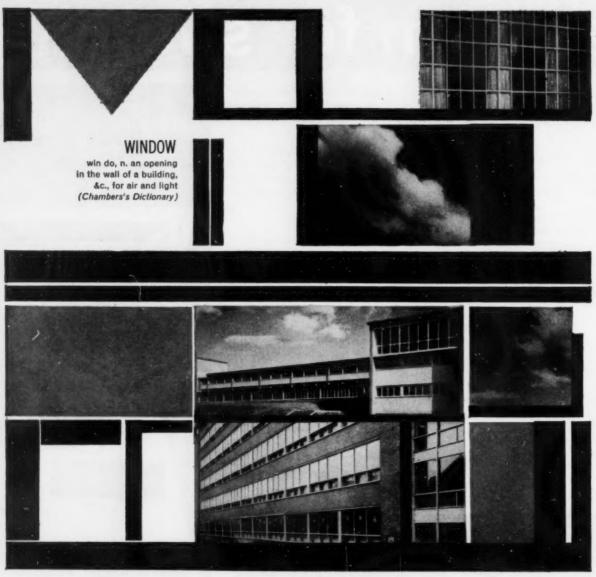
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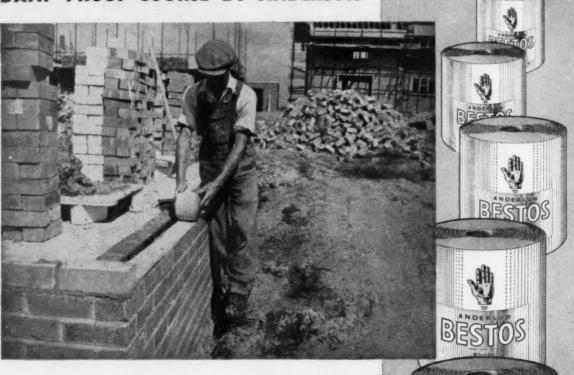
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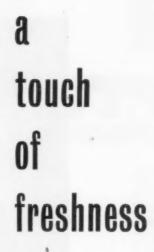
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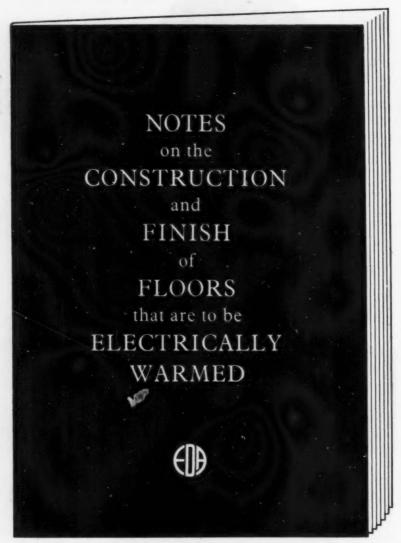
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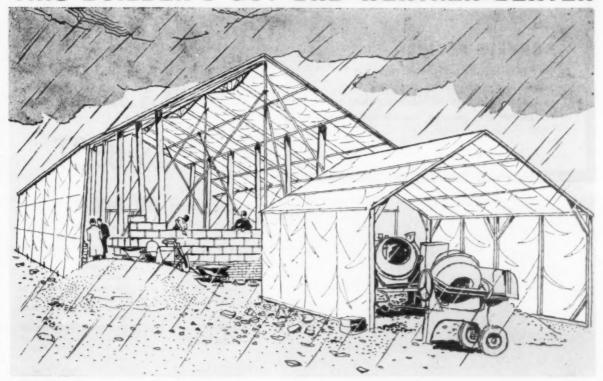


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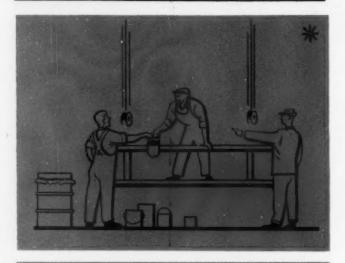
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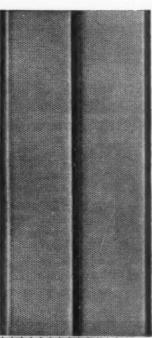
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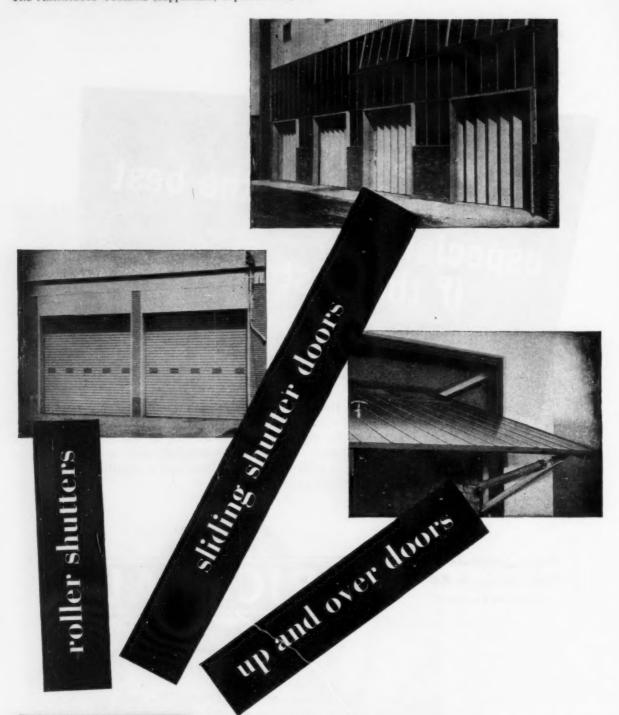
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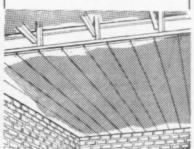
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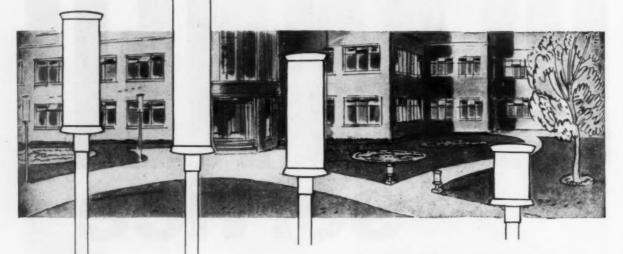
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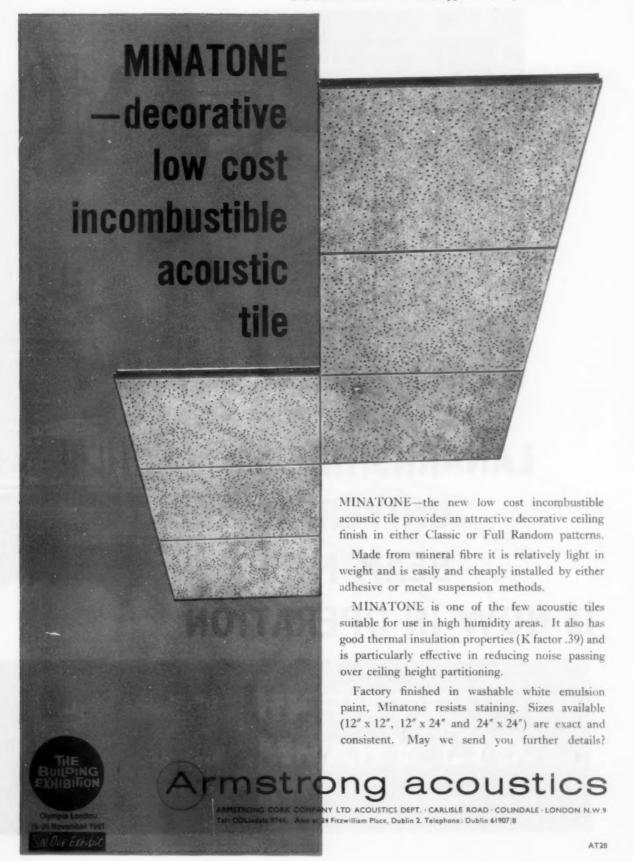
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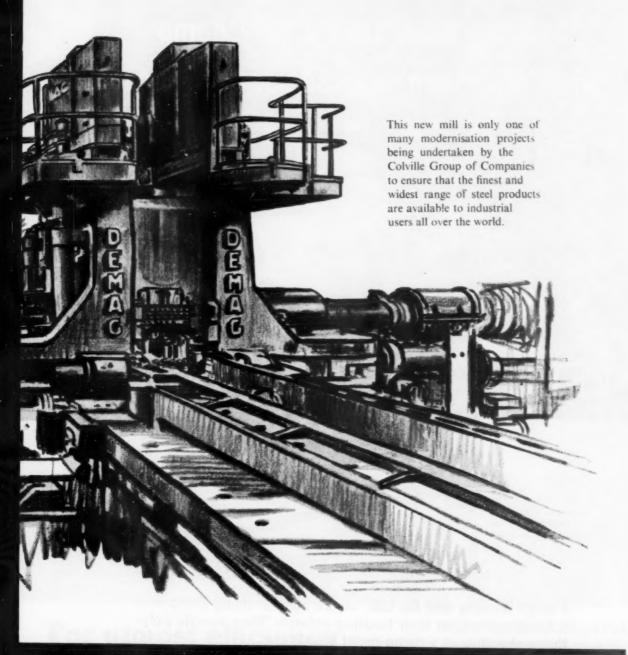
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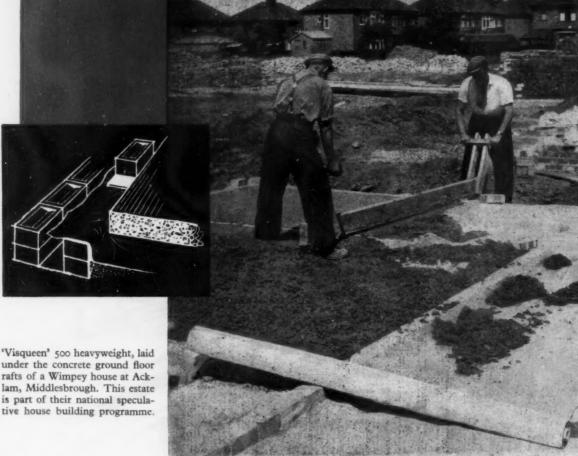




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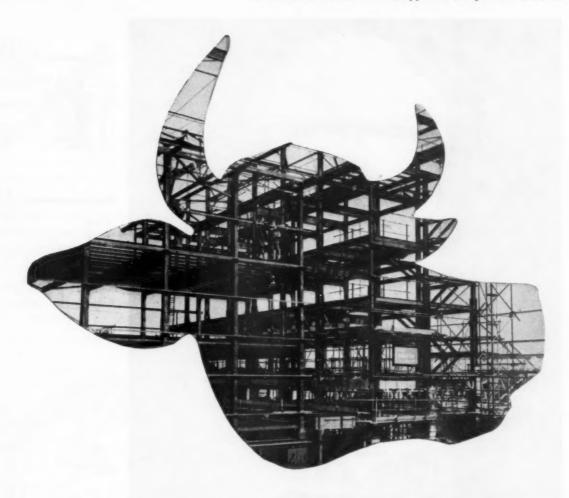
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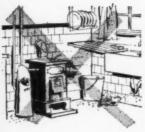
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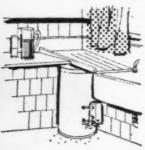
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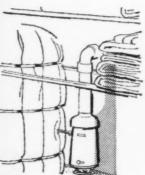
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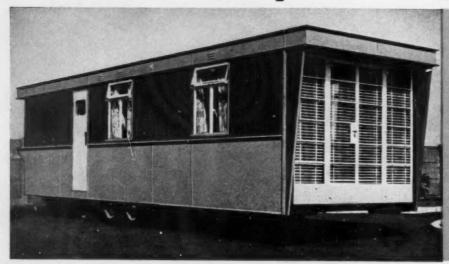
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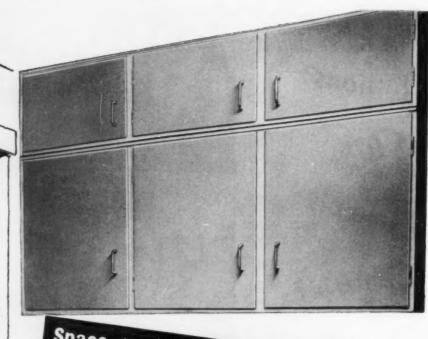


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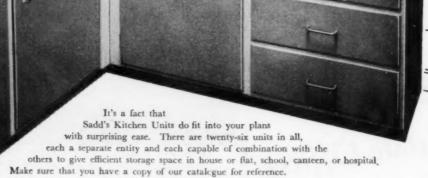
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News from Hull



Clean hands and food handling-

Handspray basins make it easier for Food Workers to maintain hygienic habits

Everybody agrees that cleanliness heat is sprayed is important when handling over his hands food—the workers concerned, their which he can management and public authorities. soap and rinse in But when it comes to the point it a matter of secis often far harder to put hygienic onds. He does precautions into operation than it is to talk about them.

Take one example. Hand washing. The importance of this when the people concerned are food handlers is obvious. It was with this problem in mind that the Corporation of the City of London introduced 'Standard' Handspray basins in their public convenience in Charterhouse Street which is used by meat porters from Smithfield Meat Market.

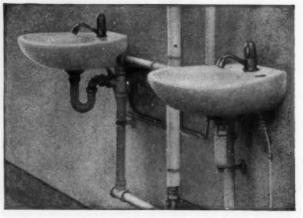
The advantages of the 'Standard' Handspraybasinaretwo-fold. Firstly it makes it far easier for a user to wash his hands. There is no need to plug the basin and then mix hot and cold water to the right temperature for washing. The user just turns on the mixer tap and water of the right

not have to empty the basin and swill it out when he has finished.

The 'Standard' Handspray basin saves time and troubleandmakes hand washing a

more attractive and less tedious task that requires little conscious effort. The novelty of the basin willencourage workers to try it out-when they will find how much simpler it is they will continue to use it.

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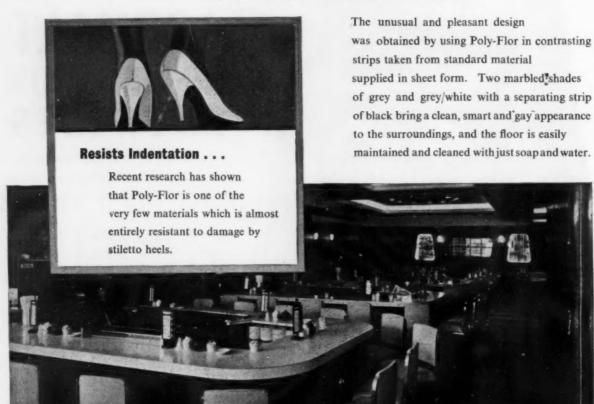
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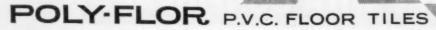
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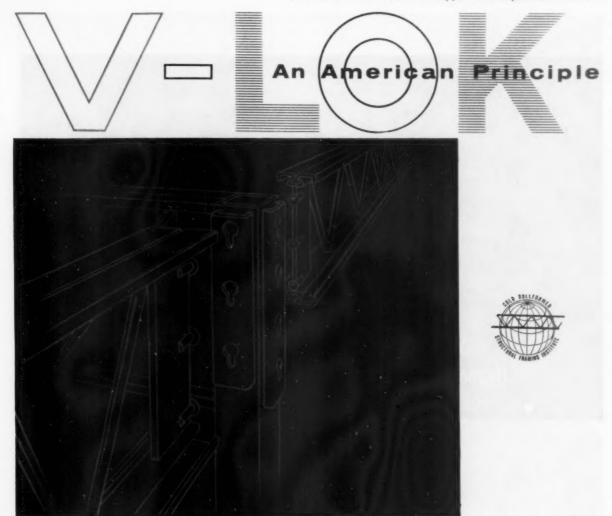
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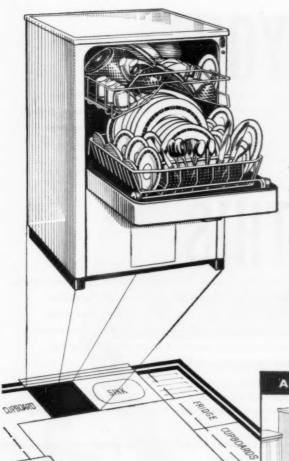
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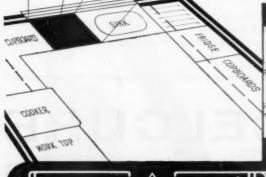
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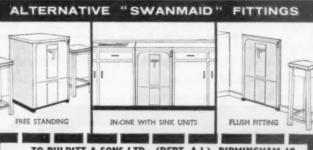
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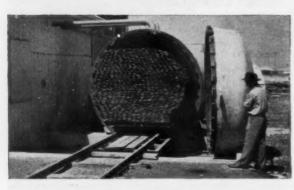
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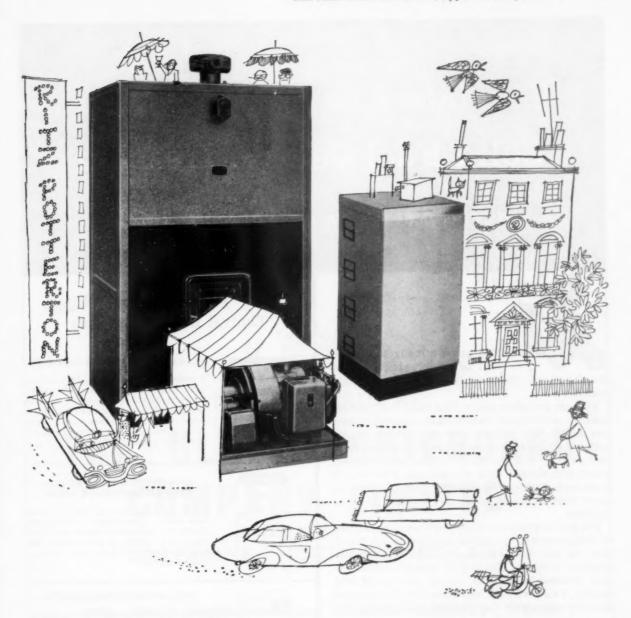
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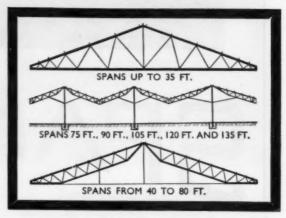
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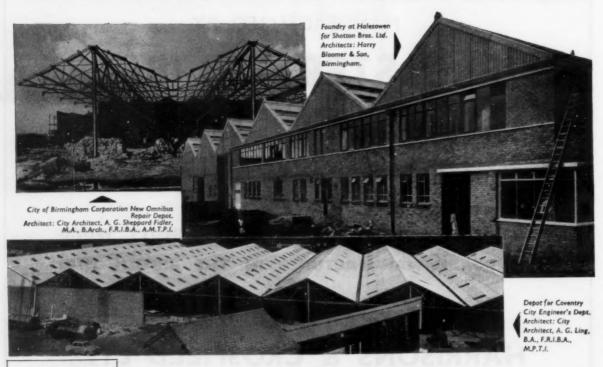
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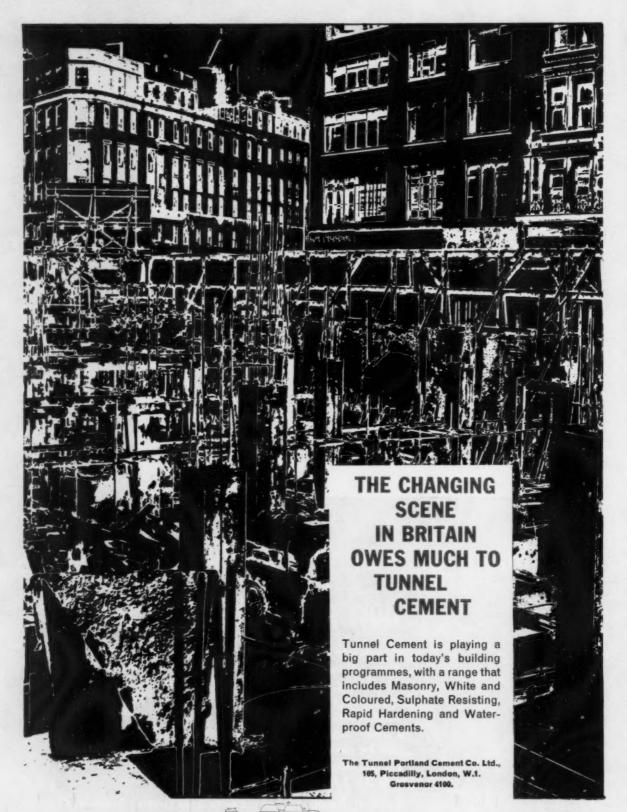
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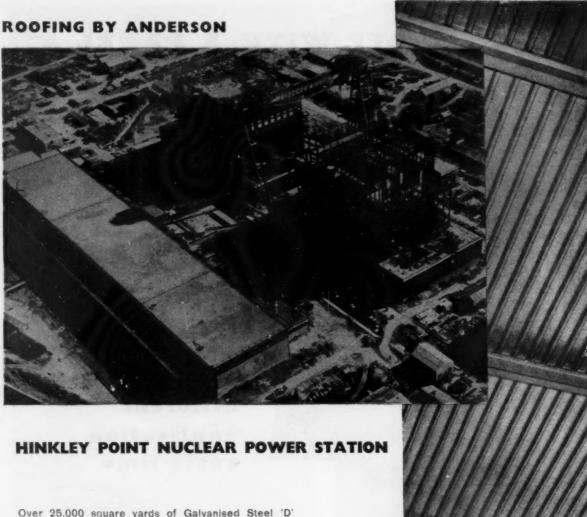
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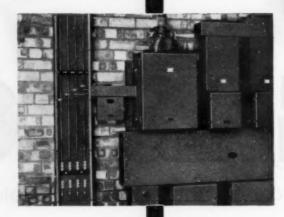
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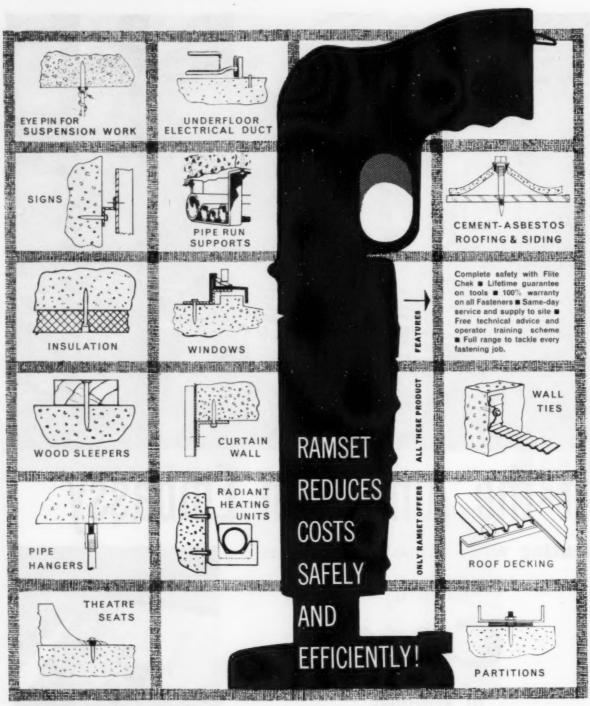
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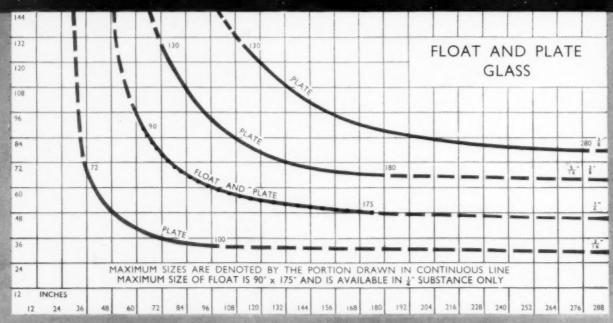
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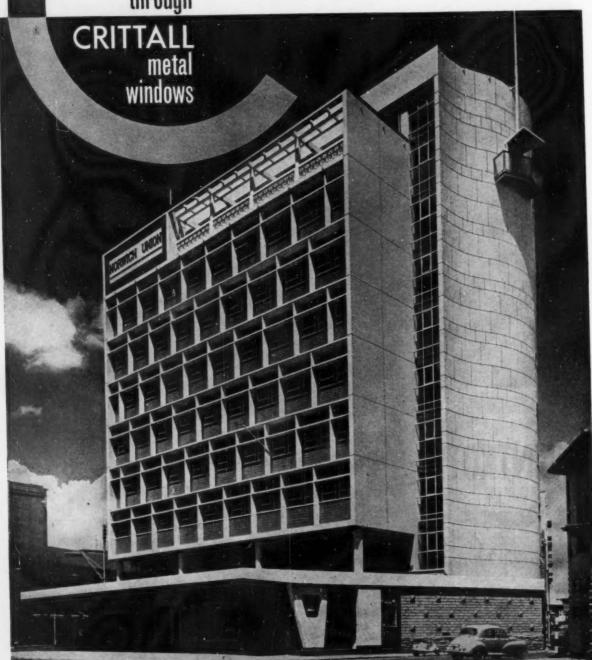
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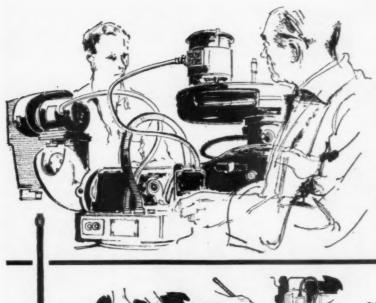
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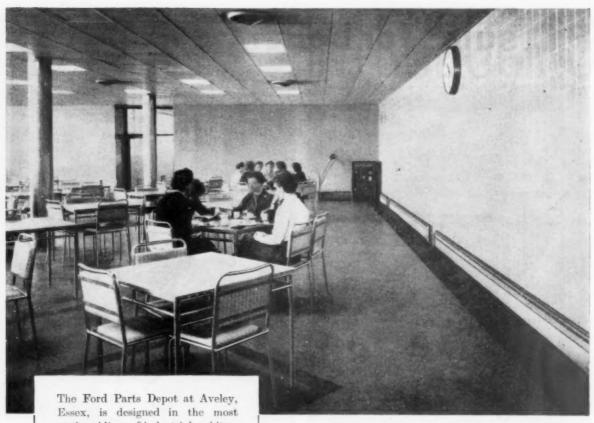
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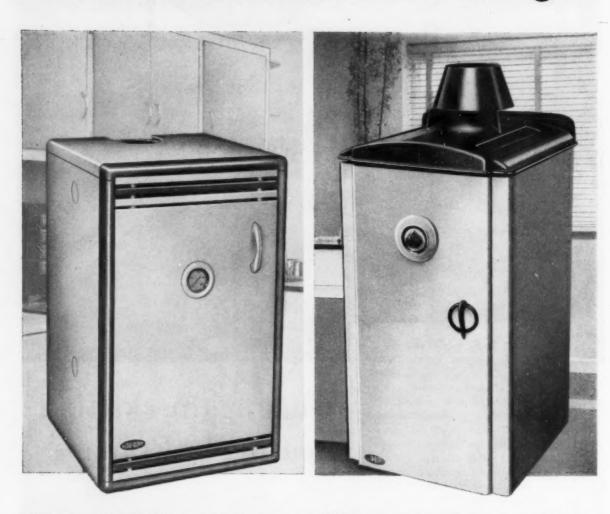
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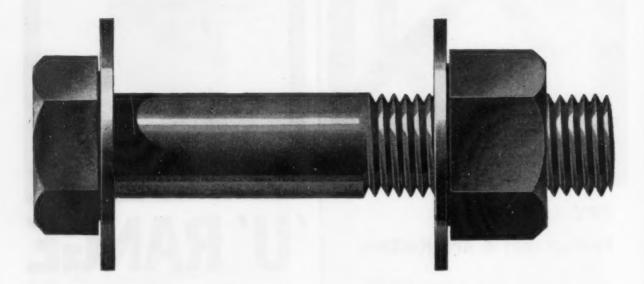
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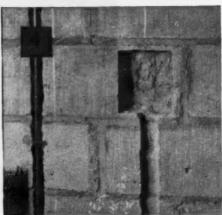
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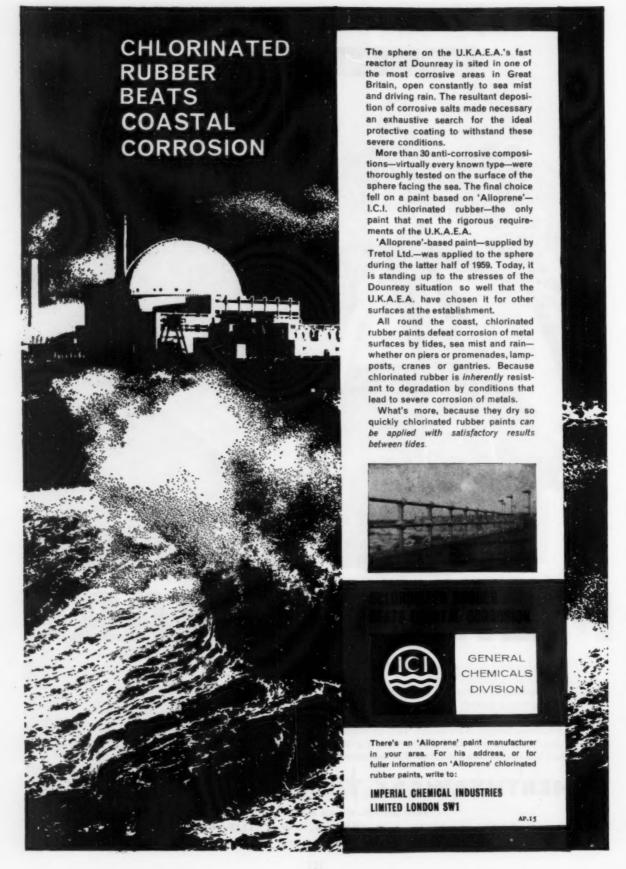
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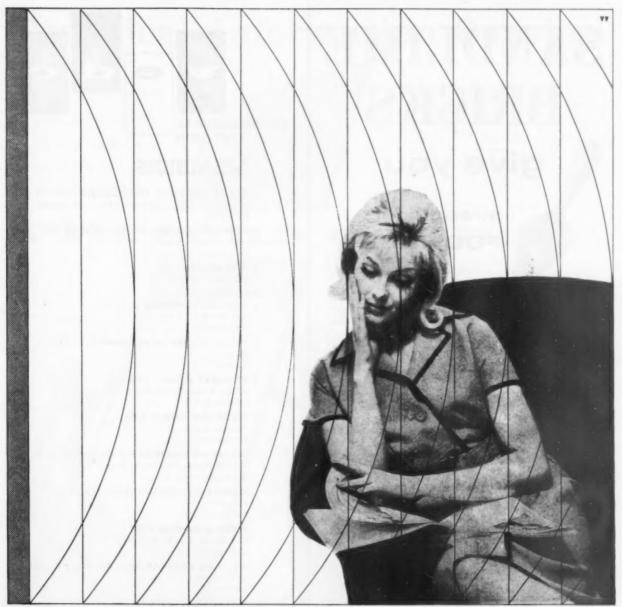
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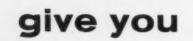


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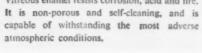
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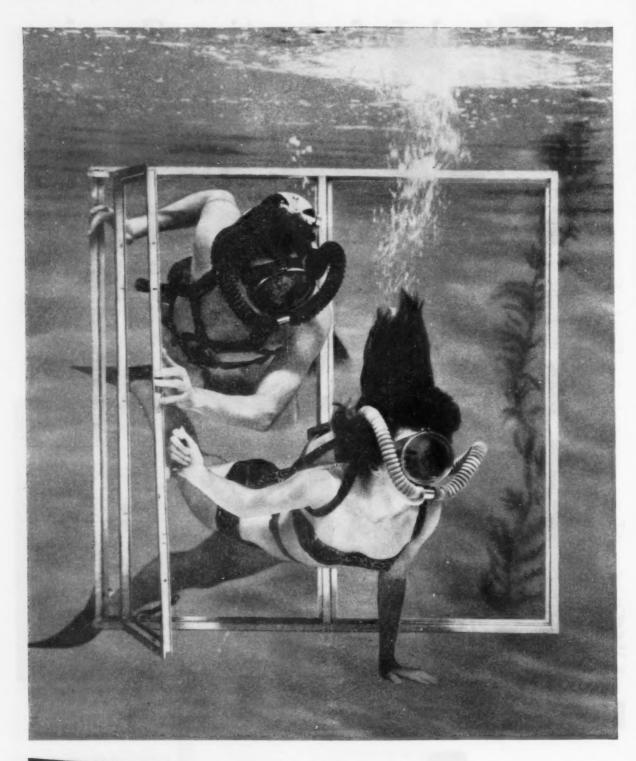






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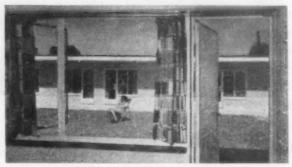
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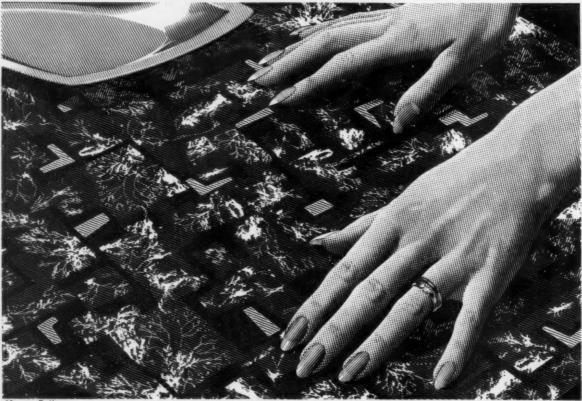
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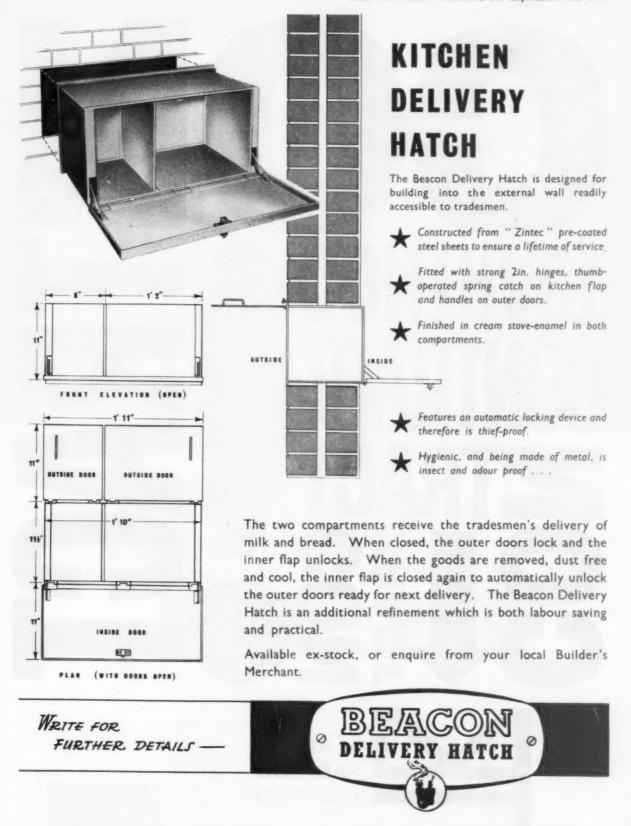
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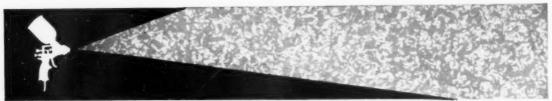
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Brochure No. 181A shows clearly the service and availability of 'Tanalith' and 'Pyrolith' required for preservation and flameproofing of timber. The cost and specification is all here, set out just as Architects like it. 'Tanalith' and 'Pyrolith' are being specified with confidence and with growing frequency.

Brochure No. 181A was highly commended by the judges in The Royal Institute of British Architects and The Building Centre's Manufacturers Trade and Technical Literature Competition 1961.

* If you have not received your copy, please let us know.

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PORTERFLECK

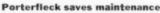
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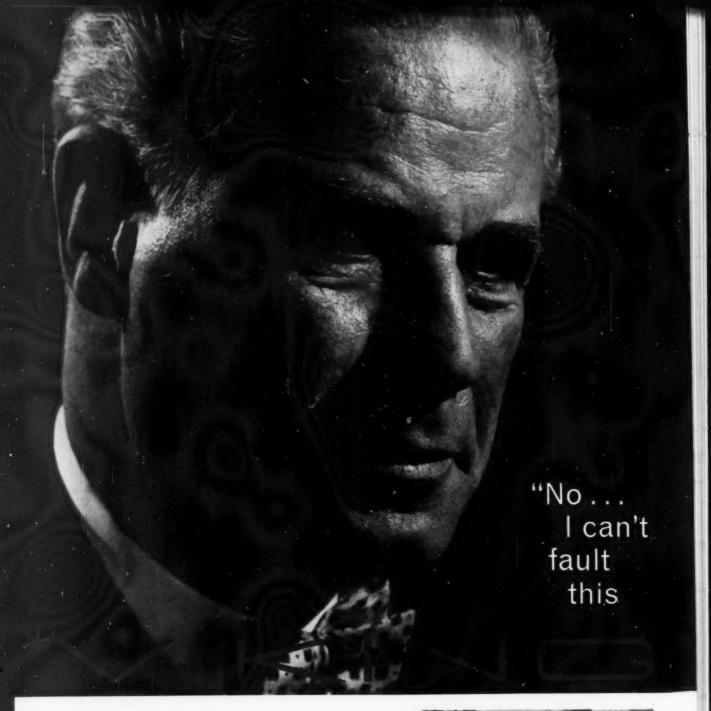


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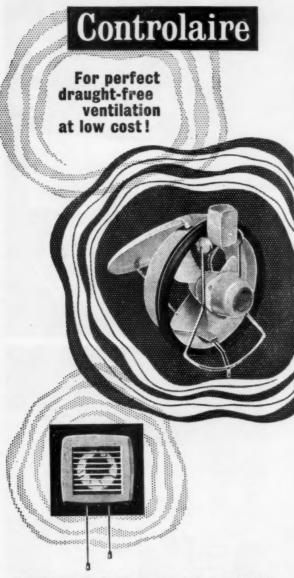






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NOT QUITE ARCHITECTURE

Not even one more time

By the time you read this it will be all over. An epoch will have ended at 11.55 p.m. on Saturday, September 16, as the strains of Samantha fade out the last Pick of the Pops. Not that the pops will have stopped annual prophecies of the death of rock'n'roll (" It'll never last") have failed to kill the product so far, and it looks as if it will be with us some time yet, and so will the rest of the activities we have got into the habit of calling "Pop."

All the same, the fact that the Great Aunt in Portland Place (no, not that one; the other one, down by the church) the fact that Aunty BBC feels moved to wring the neck of the pioneer pop programme, after something like six unbroken years, is a sign of something or other. The Light Programme, of course, has always put out the pop product, but in picking that name for that programme, the BRC was, as far as one can tell, the first limb of the Establishment to recognise that Pop had happened, existed. This was strictly the disc thing, the 45 EP thing to be precise, but what is odd, looking back, is that this was before the Elvis thing. It can't have been much before, but the fact is that the pop record boom did begin a bit ahead of the Presley epidemic. Still and all, if you want a milestone to mark the beginning, you couldn't do much better than Heartbreak Hotel, which really ushered in a but frantic period; a period that included Written on the Wind, the film that still separates the men from the boyseither you dug it the most, or you just weren't anywhere with it, but even if you were a complete square you would have to admit that it had some of the most steaming visuals ever etched in Hollywood. Who





Russian shop in Holborn

This shop, for the sale of Russian luxury goods, from vodka and caviar (at a bar at the back) to nests of wooden dolls and owls that flap their wings, has been designed by John Boissevain and fits into the structural shell of a new office building in High Holborn. The aim has been to create the right background for the bright toys and other articles, by the use of naturally-finished timbers indigenous to Russia, pine, sycamore and cedar. Combined with a simple and restrained colour scheme of white, black and yellow, this has created a soft recessive background to a colourful display. The back of the shop is devoted to a snack bar where Russian drinks and cold buffet meals are served, and since records are on sale a listening booth has been included. Goods are received at basement level and sent by a remotely-controlled hoist to the stock room at mezzanine level.

will ever forget the red of Dorothy Malone's hair against the different red of her sweater and the different red again of her Dual-Ghia—after that, black and white films on the square small screen began to hurt my eves.

The period, too, of the early Everlys (Little Susie) Peggy Lee's Mister Wonderful, the first fin-tailed Plymouths, and the good Tommy Steele, before Lionel Bart (the Quisling of English pop) turned him into a toothless Music-Hall Revivalist. But it was also the period when, for the first time since Spike Hughes and Fred Elizalde were up at Cambridge, a knowledge of pop became part of the essential mental equipment of an English intellectual.

It still is, you bet (did you see Gazette, the broadsheet the hard-edge boys got out to back up New London Situation?) but it doesn't mean the same thing to the boys who dig the message now as it did to the boys who first discovered that there was a message to be dug-Lawrence Alloway, who first proposed that bad films might be good movies; the Smithsons, who observed the existence of Cadillacs; Ed Paolozzi, our Marco Polo into Ad-land; John McHale, who brought back the first copies of Playboy from the States; Toni del Renzio, who generalised an article on Chanel in Paris Match into a workable theory of fashion as it is; me, who got the word expendable into the argument; and Frank Cordell, who actually knew (and knows) how Top Ten type discs are made in the studio. And there is David Sylvester, who (like the Russians) thought of everything, but everything, first-he claims, even while admitting that he didn't like, Written on the Wind*... We too were expendable, new models have come out with Ivy League styling, the Establishment has really caught up-Presidents of the AA have heard about beatniks, and barely two months back an architectural knight confided that he thought Pop Art was "the real problem now." Like, everybody's hip.

Then, what's with Pick of the Pops coming off? It doesn't mean that pop is finished (a sawed-off version of Pick will occupy unnatural breaks in the Chris Barber show) but it may mean that a particular period of pop is finished, a period of fabulous creativity-in six years the style-shop at General Motors has shown more formal creativity than Picasso in a life-time or all the masters of modern architecture put together. Signs of resting are to be observed -the compulsive quality went out of car styling before the last motor show-and interest is, therefore, bound to sag outside the pure consumer sections of the community. But chiefly, the 45 EP has taken a beating, the period's most characteristic product is out of favour. Juke boxes and disc jockey studios are full of them, to be sure, but not teenage rumpus rooms. And, you know what killed them? Shake the nearest teenager and see what falls out. See? Right -get with the transistor thing, but quick! REYNER BANHAM

of Lalita.

The Editors

MORO OR MOSS?

If Nottingham City Council decides to abandon the building of the civic theatre, and despite widespread misreporting in the press, this is not yet certain—it will justify the continental view of us as rough islanders only on the fringe of civilisation. So far, as Astragal explains (p. 400), the Council has not met to approve or cancel its leader's proposal to stop the building and hand over the site to Moss Empires, for which he had the backing of the General Purposes Committee. We hope that the pasting the proposal has had both in the Guardian and the Daily Telegraph will cause the Council when it does meet to think again. The Guardian has frankly described the proposal as "an act of party spite," and the Daily Telegraph as "a sorry result of local political strife, a blow to one of the best repertory companies we have and for the architect, Peter Moro, a waste of 21 years' work", and remarked that "it will not help to dispel the popular view of Conservatives as a party indifferent to culture."

The present idea is apparently to hand over the £75,000 site (free, extraordinary as this may seem) to Moss Empires on condition that they build a theatre there, using the same contractors and architect, but whether using his scheme seems most improbable. For its essence was the provision of a middle-sized theatre to hold about 750 people, embedded in a compact and ingenious building which would provide for a whole range of cultural and social activities, an art gallery, TV studios, a restaurant and club rooms, and actors' flatlets (as at the Belgrade Theatre, Coventry). Could a theatre on these lines possibly suit the grand scale musical and spectacular shows favoured by Moss Empires? Could Peter Moro be expected to transform his scheme to suit these new masters? Even if he were, could the present building, which has almost reached stage floor level, be so transformed?

However, before Moss Empires takes charge of Nottingham's cultural life, it should be known that in Scotland this Company has just announced its intention to close its Edinburgh theatre, because "Edinburgh has not a theatre-minded public" (though correspondence has been raging in the Scotsman for weeks about whether to build a national theatre or an opera house there), and has applied for permission to redevelop both its Edinburgh site and the site of the Glasgow Empire—the latter despite a record-breaking run of a comedian called Andy Stewart. These applications for redevelopment, it was claimed at a press conference last week, were merely to establish the value of the properties, as a duty to the shareholders. Managing director Leslie Macdonnell said frankly that he would recommend closing the Edinburgh theatre, but that the Glasgow Empire was in no immediate danger—the proof being

that Andy Stewart has already been booked to return next

vear.

Finally, it should be recalled that the project for this theatre was made possible by a gift left in trust "for the improvement of Nottingham", which was expected largely to cover the cost of building, leaving the ratepayers to cover any running losses which might be incurred before the project became self-supporting. Do Nottingham councillors consider that they are free to spend £150,000 of this money on the foundations of a theatre they refuse to build? Or are the ratepayers to meet this loss and wait to receive their gift until someone thinks of a better way of improving Nottingham than by finishing Peter Moro's theatre?



PASS ROUND THE AIR-WICK

You may already have seen, in this week's editorial, that Nottingham's civic theatre is not as dead a duck as all the newspapers suggested. The Conservatives' threat of destruction certainly hangs over it, as it has done since they took over from Labour earlier in the year, vowing as they did so that Peter Moro's excellent theatre would not be built. But their recent ploy to get rid of the building may not come off. Indeed, so far no one has told Peter Moro that his job is over; nor have the builders been instructed to lay down their tools. But the rumour, like the building, is not without foundation. This is what has happened so far.

It seems that the Conservative group remembered that Moss Empires Ltd. had applied successfully for planning permission for mixed development on the site of their two Nottingham theatres, the "Empire" (no longer in use) and the "Theatre Royal," saying that they would like one day to find another site for a theatre. (They had done the same thing in Birmingham several years ago, and so far no replacement had been found for the theatre). The leader of the group then approached Moss unofficially, suggesting that they might like the site as a gift-on condition that they developed it as a theatre, using the architect and contractors already employed on the civic theatre. Moss seemed interested and the idea was brought before the General Purposes Committee, which gave the Conservative leader permission to continue negotiations on these lines officially. Since then Moss have seemed a little cool about the plan: their managing director, Leslie Macdonnell, has said that such things cannot be decided in days or even weeks, adding that Moss would not want to do anything to embarrass themselves or Nottingham Corporation.

It is possible that someone has pointed out to Moss that their greatest embarrassment might be the placing of an 1,800-seat theatre on to foundations for something less than half the size. An architect who knows the site

tells me that no one would be able to get such a large theatre on to it, even if the original foundations were removed.

Another whisper going round Nottingham says that the corporation is very much interested in the £400,000 site of Moss's existing theatres.

REVISED DOOR-STOP

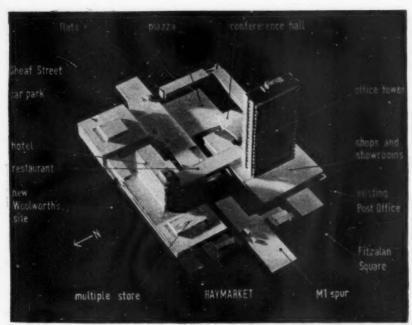
The new edition of Banister Fletcher has been lying heavily on my desk and conscience ever since it came out. I don't know what to make of it, though I must say I found Peter Collins's halfpage article on it in the Guardian a fascinating account of how it got to be the way it is. And what a monstrously dull work it remains, in spite of the platoon of talents, captained by Professor Cordingley, who tackled the unrewarding task of revising it and bringing it up to date.

What I find really objectionable about the new edition is the appalling superficiality of the added chapters. There is not a single explanatory diagram or plan in the chapter on European Nineteenth and Twentieth Century architecture, and only one (Coventry Cathedral) in the equivalent chapter on Britain. Does Professor Cordingley think that the emphasis on plans and the evolution of new plan types in modern architecture is unimportant? Or is it just easier and cheaper to reproduce well-known photographs than to get plans re-drawn?

A cynical friend pointed out that it is probably only the History requirement in the ARIBA course that keeps Banister Fletcher alive. Since the RIBA is now the proprietor of half the proceeds from the sale of the book, they appear to be in a position to manufacture a demand for a product from which they will profit. . . . Passed to ARCUK for investigation of possible unprofessional conduct.

IS SPUR NECESSARY?

A recent editorial in the Estates Gazette, on "How to Build Cities," commented favourably on the MOHLG'S recent report on new towns (with its recommendation of greater density and greater urbanity in future) and went on



A model of a £5 million redevelopment scheme for a shopping and commercial centre near the middle of Sheffield, which has just been submitted to the Corporation for approval by the developers, Estates Property Investment Company. The site is a seven-acre area in the Sheaf Valley adjoining the centre of the city, but about 35 ft. below it, with a steep escarpment and difficult access which have hitherto kept it in isolation. The architects, Gilbert Marsh and Derek Woolf, propose to turn this to advantage in their multi-level scheme dominated by a 25-storey tower block

to suggest "an exercise, a subject perhaps, for a competition to be run by THE ARCHITECTS' JOURNAL: find the advantages of urban life, the extent to which layout and design create these, and the way the old city magic really comes about."

This started the AJ office brooding on the advantages of city life: public transport-and traffic jams; choice of jobs-and the rat race; fish and chips and espresso coffee. Not very exciting. Someone rather frivolous suggested that only in the city would you have the enjoyment of seeing a cinema poster, like the current one in London, advertising a film personality as "The nude with a difference." Finally, one member of the party said he found he needed a city of about eight million people to find a couple of suitable friends in, and everyone else reminded him he would never see his best friend unless he lived round the corner.

No prizes are offered, but what do you think are the advantages of urban life?

NEW MARKET FOR HAYMARKET

The other day fans of "The Archers" will bave heard Carol refer to the

Design Centre. Was this, perhaps, a nice bit of timing by a CoID publicity officer. It couldn't have come at a better moment because last week farmers in West Suffolk were confronted with twee

notices telling them "The Design Centre Comes to Ipswich." Apparently this four-week exhibition is one of a series the Centre is putting on at stores throughout the country. A useful idea, and a pretty startling one for window shoppers—judging by the Centre's window displays I saw at Footman's, in Ipswich, before the exhibition opened. I hope to look in and report on this design service for rustics next week.

QUITE KNOTT FOR ARCHITECTS

Those of you who are interested in the Higher Commercialism should see Finmar's current show of furniture by Borge Mogensen. Not only have they paired him with a fine artist Svend Hansen, but they have hired an artgallery (the RBA in Suffolk Street) to do it in. For once this usually judicious organisation has overplayed its handnot by adopting the status/snob approach, but by showing too much. Hansen is revealed as a very minor and very limited artist, while Mogensen emerges as a designer with a very narrow range of ideas. The realisation of these ideas is often exquisite, and the craftsmanship exemplary, but room after pale wood-coloured room, filled with pale wood-coloured wooden furniture eventually becomes the air-conditioned Scandinavian hell of Kathleen Knott's A Clean, Well-lighted Place, and the visitor's one ambition is escape.

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LETTERS

Wilfred Burns
Newcastle upon Tyne City Planning Officer

W. H. Tibbs

John Whitehead, ARIBA

Roger Coombs

Newcastle roundabout

SIR: I am sending you an illustration of the redevelopment scheme for the Pilgrim Street junction in Newcastle, so that your readers can see in model form the effects which Ian Nairn put superbly well into words in your issue for September 6.

This model might also help the NAA in their study of the area—help which would have been most readily forthcoming if they had chosen to return to my office to discuss the proposal before committing themselves to print.

WILFRED BURNS

Newcastle upon Tyne.

Heat loss calculations

SIR: As an electrical engineer interested in all heating systems, I have no "axe to grind" on the relative merits of one system to another.

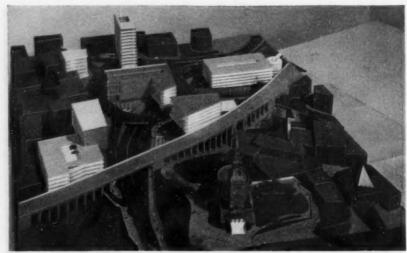
I hesitate to disagree with some remarks made by Mr. Dale (AJ 30.8.61) concerning floor warming but I feel he made rather sweeping statements in his letter. It is unfortunate that he is evidently not aware of the advantages of floor warming as well as the disadvantages because the choice of a heating system should surely depend on the pros and cons.

There is no reason why Mr. Dale should not ignore other heat gains when designing a floor warming system, and I for one agree that he should. These heat gains should only be considered when estimating the operating cost.

He is misleading when he quotes recommended limits of temperature swing and suggests they are firm design conditions. Again, he may design for the temperature swing within the thermostat differential that he is accustomed to for other heating systems.

By his statement "the 'off peak' designers' systems have to be assisted by fires etc.." Mr. Dale appears to be unaware that there are many floor warming installations which are not supplemented.

The air change rate allowed for with floor warming will not, I agree, be correct for other systems of heating. The allowance for air changes made in floor warming design increases the rate of heat input and results in a higher floor screed temperature. There is thus an increase in the stored heat in the floor to allow for cooling by air changes during occupied hours.



Model of the Pilgrim Street road improvement scheme just approved by Newcastle Town Planning Committee, showing the Royal Arcade (left of centre) in relation to traffic roundabout and underpass.

The screed thickness and rate of heat input must be calculated when air changes are considered to prevent excessive temperature swing. Heat carried away by air changes during unoccupied periods is reduced because of the lower floor surface temperature during those periods. Air changes are, therefore, allowed for by the rate and hours of heat input, unlike other heating systems, where the heat provided for air changes during the pre-heating does not warm the structure before passing out of the building. Floor warming is not suitable where the area of radiation is inadequate to provide the heat requirements. Mr. Dale refers to a particular instance where the floor area was apparently inadequate but other advantages of the system may have justified the architect considering floor warming.

It would be on the balance of advantages and disadvantages whether the system was acceptable. There is no heating system without some disadvantages and the importance of these must be considered in relation to the needs of the architect and client.

Unbiased advice on the advantages and disadvantages of all suitable heating systems should be given by the heating engineer. Leave the selling of a particular system to a salesman.

W. H. TIBBS

Size of drawings

SIR: With regard to the correspondence on office management, I find that a drawing size 30 in. wide and about 10 in. high is often convenient since it folds to $7\frac{1}{2}$ in. × 10 in. and so clips easily to a letter which is usually a bit wider and often a bit deeper. It seems to me that instead of doing our drawings on sheets of standard size we could reverse the process and simply cut the sheet according to how much room the drawing took up. Think of the vast amount of paper we should save by this small organisational innovation.

With regard to SfB, I am patenting a filing

system known as "Pile-File." What happens is that as catalogues and so on come in you put them on top of a pile. It is quite easy to find any particular item because you find in practice that there is no difficulty in remembering the approximate chronological order of receipt. When the pile approaches a condition of instability you throw away the bottom half just retaining anything still of interest—which is about 1 per cent and goes back to the top of the pile.

JOHN WHITEHEAD

Bury St. Edmunds

Building in stone

SIR: Your correspondent Mr. Hugh Krall suggests that stone would be used in more modern buildings if it were not for the conservatism of the industry, and he asks for more imagination, research and publicity. For many years the industry depended upon architects as a source of inspiration rather than a product, but we have now come to accept that architects today are mainly interested in building components and specialised services.

The issue of the AJ of June 29 contained eight Information Sheets (a record number in one issue) all devoted to stone. Three of these related to new developments—the use of stone as permanent shuttering, storey-high units faced with thin slabs of natural stone, and machine patterning on stone.

Despite the fact that the lay Press likes to talk about "concrete and glass" buildings, stone is used very much more than Mr. Krall indicates, but what we are most perplexed about is how to encourage young and imaginative architects to use stone in new ways. We can provide the techniques, as many architects who have visited Portland in recent years will testify, but design inspiration must surely come from the architect.

ROGER COOMBS

Bath

In 1933 the Editors first conceived the idea of Information Sheets. The first series of Sheets, as older readers will remember, were based on the "office bible" of Sir John Burnet, Tait and Lorne. In those days constructional technique was still relatively simple and unchanging and these early Sheets took the form of a presentation of such methods of construction as the firm found satisfactory. In these Sheets proprietary products and standard products figured side by side as the subject of each Sheet required.

Second series

This first series lasted until 1943. After the war it was decided to direct Information Sheets on a new tack. On the one hand the steady increase in the industrialisation of building techniques had begun to disrupt the stable constructional norms of traditional building. In place of the few tried methods of meeting each constructional occasion there was now a multiplicity of methods, most of them untried. On the other hand the spate of new manufactured materials and products had begun to create a new information problem for the architect, particularly since those who manufactured and marketed them seldom gave the architect the information he wanted.

Faced with this situation, the Editors judged that, however useful the original Information Sheets had been, it was no longer feasible for a publishing house to give detailed advice on construction. Instead, they proposed to direct the Library towards product information. Their most useful job, they decided, would be to assist the manufacturer to tell the architect all the architect wanted to know. The new Sheets, which began publication on October 2, 1947, were, therefore, for the most part "sponsored": that is, the manufacturer paid for them as he paid for an ordinary advertisement and the part of the Editors was limited to extracting the required information, to excluding sales talk and to presenting each product in a standard businesslike way.

Third series

In its own way the second series has been as great a success as the first. It has, in fact, achieved its object. The Information Sheet with its full use of dimensioned diagrams and its terse and orderly text has been generally accepted by the industry. Firms are now producing very good technical information sheets on their own and there is, therefore, less reason for the AJ to do the job for them.

At the same time it has become evident that the regime of sponsored Sheets has serious drawbacks. Most of these arise because sponsoring took from the Editors any real opportunity for directing the progress of the Library. Sponsored Sheets are time-consuming to produce and, as many go out of date and have to be replaced relatively quickly, the build-up of the Library has been slow and uneven. Therefore the architect looking for any one product could never be sure of finding it; still less could he be sure of finding all the alternatives for any given job in order to make a comparison between them.

But the decisive factor calling for a change is the general realisation by architects that they can no longer use the haphazard methods for controlling the technical aspects As the date approaches for a major change in the handling of information in the Journal, the Editors describe the part which Information Sheets will play in the new dispensation

Rebirth of the Architects' Journal Library of Planned Information of their job which have served them for so long. After some twenty years of heroic makeshift, they are on the brink of adopting a rational method. One aspect of this is, of course, the sfB classification and the A sizes for technical literature. However, the Editors consider that the revolution cannot stop at these excellent innovations: it must extend to the architect's method as a whole, to his methodology as the eggheads would say. They have, therefore, used sfB as the occasion for proposing to architects a new and rational approach to design. This proposal of theirs is to be fulfilled in the supplements which were described in last week's issue. As, however, the sfB project is concerned with architects' information, it was evident that the Library of Information Sheets, if it was to survive at all, must share in it. In fact, as we shall see, the Library more than shares, for it could be said that the ultimate effect of the project is to raise the Library to a new level of usefulness.

As a preliminary to the change in Information Sheets, the sponsored Sheet is to be dropped. By this means the Editors regain the freedom they used to possess in the Burnet, Tait and Lorne days.

The Library during the sponsored period was mostly an agglomeration of individual Sheets each setting out to tell the architect all that he wanted to know about one product. Apart from those Sheets which were in series, there was no attempt to relate the content of one Sheet to that of another and although there were Editorial Sheets in the series, these could only be published at such rare intervals that they were unable to fill the gap between product knowledge. All the same, despite their shortcomings in the mass, each individual Sheet in the old series remains a useful reference so long as the product it represents is unchanged. The new series is being designed to do two things. First, during the year of the supplements, it is to fill the gaps in product knowledge left by the old series. It will do this by supplying in each elemental file a conspectus of all the main varieties of product which relate to the element. Second, after the last elemental file has been published. the Library will be used to keep the elemental files up to date, giving further information about products and about materials and techniques as the occasion requires. The new Sheets will keep their old format and appearance. They will keep also the principles of orderliness, succinctness and the preference for diagrams in place of text when this is possible; but they may eventually drop their classification in favour of sfB and in those Sheets dealing with products the old rule of "one product, one Sheet" will be dropped for a policy of giving only so much space as each product requires. For the architect there is a further difference in that, whereas the old Sheets were a final reference to be made only when the architect had decided which product he was going to use, the new Sheets will be a first reference to be made when the architect is making his choice.

HOPE'S Reversible Windows





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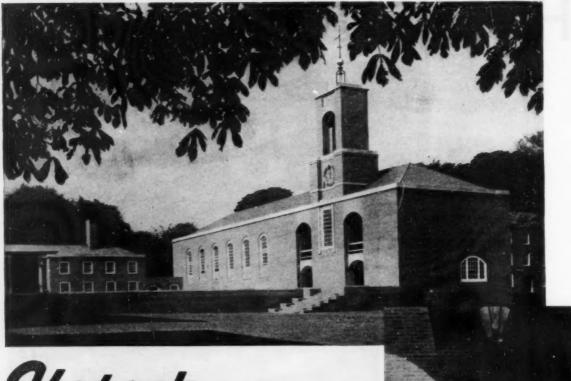
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NEWS

RIBA

New commissions are falling

The estimated total value of new commissions for private architects has fallen for the second quarter in succession: the figure for April to June 1961 was £253 million compared with £282 million in the first quarter and £271 million in the second quarter of 1960, a fall of 10 per cent over the first quarter of this year and 7 per cent on one year ago.

Analysing the figures last week, the RIBA found that "large firms have lost more ground than the small and medium firms ... the estimated value of new commissions for large firms (with 11 or more architectural staff) is 15 to 20 per cent less."

The second quarter of the year normally shows a fall in relation to the first quarter, and the current position is not a major decline, the report points out. "Nevertheless, this is the first time since the middle of 1958 that two successive quarters have shown a fall in the total value of new commissions; it strongly suggests that the boom in new commissions ended with 1960 and that a period of decline has now set in.

"The policies announced by the Chancellor on July 25 will of course have a further depressing influence on decision to build and although most offices are still very busy, architects must hope that it will be possible to encourage investment again before the present stock of projects is worked off."

Private housing shows the lowest quarterly total since mid-1958, and speculative house building has been sharply cut back.

TPI

Reading Summer School

Planning, it is salutary to be reminded, covers a wide field. "To provide the conditions for the maximum possible enrichment, development and expression of the human personality" was Sir John Wolfenden's definition of its object in his opening address to the Town and Country Planning Summer School, which closed at Reading on Saturday.

Accordingly, the school's papers and study groups have ranged from the Chinese puzzle of compensation and betterment to the basic provisions that have, in five short years, brought assured prosperity to African villages chronically teetering on the brink of extinction by famine.

Dr. B. B. Waddy explained how, in northwest Ghana, the survival of villages had precariously depended on the food and energy left in their six-week planting season, so that one untimely epidemic, resulting in a bad harvest, started a vicious downward spiral to starvation.

Comparative plenty has now been secured,

he went on, by the development of mobile medical services to control the mass impact of diseases; by the provision of a good water supply; and by the building of firstclass trunk roads to minimise the cost of bringing blankets and building materials from the railhead, with feeder roads passable by lorry during the crucial cash-crop harvest.

The consolidation of this break-through by the establishment of village surgeries, pharmacies, schools and councils could now create the foundation for a contented agricultural community.

Essentially the same lesson emerged from a paper by Mr. Dunstan Skilbeck, principal of Wye College: that the planning of our own countryside must be based on a better understanding of what is needed to secure a viable agrarian economy.

Mr. Skilbeck deprecated the founding of agricultural policy on the "way of life" concept, which was applicable among British farmers only to Welsh valley smallholders and Highland crofters-and equally applicable to colliers, freestone quarrymen and blacksmiths. He also questioned the social value of our traditional farming pattern as a prop for the nation's stability. health, defence or balance of payments; and he dreaded the "preservation of rural England."

The whole face of the countryside must change, he declared. The erstwhile divorce between town and country no longer existed: it must give place to a common interest in what was at once the countryman's factory and the townsman's garden.

"A fully mechanised, chemicalised and industrialised agriculture," efficiently producing what consumers wanted from our land, might be ugly by outworn standards, but there could be a beauty and a spiritual contribution in its essential well-being.

The planner's part in this transformation lay not, he thought, in the exercise of statutory controls over farm buildings-not, at least, until planners had more insight into the nature of the problem-but in the coordination of a co-operative effort by all the professions and interests concerned, and particularly by the makers of prefabricated buildings.

He wrily welcomed the "gentle lead" given by the Council of Industrial Design in setting up a farm buildings panel-consisting of one member connected with farming and six architects. "How one wishes," he said, "that it could have been a little more representative of what farming is about. Architects are not awfully clever on this sort of problem: why should they be, poor dears?

The great need, as he saw it, was for a Farm Buildings Research Institute, on the lines of the one already set up in Sweden, to study the aesthetics of design and the use of materials as well as technical matters. In reply to questions from the school's discussion groups, Mr. Skilback acknowledged that urban growth was a first charge on our limited land resources, and described the urbanisation of 35,000 acres of farm land a year as "a flea-bite, entirely unimportant," which could go on for decades without detriment in view of the rate (nearly twenty times as fast) at which agricultural productivity was rising.

This attitude in a life-long farmer contrasted piquantly with the opinion of Mr. Eric Lyons, consultant architect to the Span organisaion, that in this small island we could not all be allowed to have privacy outdoors or to grow our own vegetables. But Mr. Lyons was at one with Mr. Skilbeck in deploring the influence of the preservationist "Betjemanic depressives" and in resenting statutory controls that "hit everything in sight in a flabby way, slowly stifling the sensitive plants while allowing the tough, hardy weeds to spring up again.' The discussion-group leaders made plain their constituents' view that Mr. Lyons's prescription of high-density group design, with no private gardens worth having, had little more relevance to "our problem today" than he would concede to the suburban villa, the cottage image and the garden-city layout. Its scope, they maintained, was limited to one small stratum of the population, and they wanted to know on what research into modern ways of living he based his wishful thought that an ever-increasing number of people were not interested in cultivating the back gardens that so inconveniently complicate the problems of group design.

In reply, Mr. Lyons disarmingly admitted the urgent need for such research, admired the "enormous contribution" made by the garden-city concept, disavowed any claim to have solved the problem for anybody but the "neglected middle-middle class of underpaid professionals," and agreed that the same kind of approach would give quite different results in other contexts. It was the approach that mattered-the willingness to experiment, to spend more money on housing, to be wrong, and to believe in the attractions of gregarious living. Still more disarmingly, he confessed that he often said things to annoy, because he knew they teased.

For those of his persuasion there was some comfort, perhaps, in the revelation by Mr. W. C. Dutton, Junior, that we are urbanising farm land at barely one-tenth the American rate per head of population, and in the warning by Mr. J. R. James, chief planner at the Ministry of Housing and Local Government, that local planning authorities will shortly be called upon to apply minimum densities of 50 persons per acre to local-authority house-building, and 30 for private enterprise, in areas of acute land shortage round green belts. (This represents a doubling and trebling respectively of the densities at which house-building is now going on in many such areas.)

But there was nothing but gall in the contention of Mr. Desmond Heap, comptroller to the City of London Corporation, that development control was "without doubt the most outstandingly successful part of the 1947 Act." and that "if anything is wrong with today's new buildings, if it is true that the City of London has become a City of Dreaming Slabs, and has thereby committed a gaff, all this is entirely the responsibility of architects."

It might be the function of planning authorities to turn down the worst of such

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excesses, he went on, but not to embark on the job of "redesigning the architectural treatment" of new buildings: that would only lead to "some monotonous local-government style." "Variety is all," he declared "—provided, of course, there is a seemly coalescence, one building with another. The art of studied carelessness has much to commend it. In the last resort this whole matter of architectural design is a question of taste and manners."

DEREK SENIOR

SCOTS' NEW TOWN

Plan for Midlothian

A part of Midlothian is to be completely transformed in the next 20 years, according to a plan put forward by the Secretary of State for Scotland, Mr. John Maclay, at a Press conference last week, after a day's discussions with the local authorities concerned, Midlothian and West Lothian, and Glasgow, for which a new town there will provide overspill space.

The central proposal is for a new town based on the present village of Livingston, 15 miles west of Edinburgh, accompanied by plans to stimulate industrial development over 80 square miles of the surrounding countryside. Ultimately Mr. Maclay foresaw a planned industrial conurbation similar to the English Midlands, as a result of this regional scheme.

The county councils concerned have been asked to submit observation about the proposal before October 15, including their views whether Mid Calder village should be incorporated in the designated area.

Mr. Maclay hopes to publish a draft order designating the new town boundaries before the end of the year, and site preparations could begin in about a year's time.

DIABT

New Patterns for Old Boroughs: Exhibition of architectural models, etc., showing postwar developments in south-east London, at South London Art Gallery, Peckham Road.

UNTIL SEPTEMBER 30

4,000 Years of Mexican Architecture: Manchester Building Centre. UNTIL SEPTEMBER 30

The Art of Glass, Ansons, 35 Dover Street, London, W.1. 9 a.m. to 5 p.m.

UNTIL SEPTEMBER 30

New Sculptures for Londoners: Exhibition of photographs and models of works of art acquired by the LCC since 1955 under its "patronage of the arts scheme," Royal Festival Hall, evenings, 5.30 to 10 p.m. Admission free.

SEPTEMBER 20 TO OCTOBER 5

Sculpture and modelling in Victorian Architecture: Two lectures by Charles Handley-Read, Victoria and Albert Museum, at 6.15. Admission free.

SEPTEMBER 27 AND OCTOBER 4

ST. PAUL'S

Six firms for Choir School

The Minister of Housing and Local Government has announced that six firms of architects have accepted his invitation to submit designs for the new Choir School to be built on a site adjoining the eastern end of St. Paul's Cathedral, in accordance with the decision to hold a limited competition previously reported in AJ, 23.8.61. They are:

Architects' Co-Partnership. Raymond C. Erith. Howell, Killick and Partridge. Robert Matthew and Johnson-Marshall. Lord Mottistone (Seeley & Paget). Stillman and Eastwick-Field.

The assessors of the competition will be Sir William Holford (president, Royal Institute of British Architects), Professor Richard Llewelyn Davies (professor of architecture, London University), and Dame Evelyn Sharp (Permanent Secretary, Ministry of Housing and Local Government). They will have the assistance of the archdeacon of London, representing the dean and chapter.

Designs are to be submitted by February and will be exhibited in due course.

Preaching to the near converted

Paul Ritter

I have just returned from Stockholm, Orebro, Göteborg and Copenhagen. Thanks to Sven Thiberg and Dr. Lennart Holm of the Building Research Institute, I was there to lecture on traffic segregation. My exhibition on the subject opened in the Building Centre at Stockholm, to be shown there again two months later in the grandest new pedestrian precinct in Europe. The city won the IUA Abercrombie award on the day of my lecture. I learnt prodigiously from administrators and architects.

This precinct, Segelgatan, came into existence because the tube tunnel found sand (where normally all is hard rock) and the planners "hitch-hiked" along with it on the cheap. A pity there is no continuously sheltered way round the centre. What was to have been a circular, low-lying piazza to the south, open to the sky, is to be covered with an enormous lens-punctured roof, influenced, it is rumoured, by the opera ring in Vienna.

At Farsta, and other places, criticism of the over- and mis-use of point blocks is fierce:

they hanker for horizontal lines. Interest and admiration are for Park Hill, Sheffield, not Roehampton, and the tendency is towards terrace and other housing.

The centre of Farsta was alive at lunch time. On Sunday a woman sold bright balloons from a great bunch aloft (Godsend for colour slides) and toys from a basket on a weekday and it was at fever pitch on a Friday night at 7.30, with 2,300 parking spaces filled, and more cars arriving. Inspection of the long, service loop underground to the shops revealed more cars collecting their orders. Victorian, florid cast iron seats, now in production and popular in Sweden, were the only relief to arid, unimaginative floorscape, and unsympathetic architecture.

Gay fountains at Blackeberg, fine scale of Hoegdalen, pretty paving at Ragsved showed what could have been done. Farsta was a popular haunt before the town was built: incredibly white birches, pines, trees by the thousand, wild flowers without number grace the path system.



Stockholm's suburbs-when the green areas white version provides ski-ing from the door.

Stockholm and its suburbs are carved out of continuous forest. Pathscape is continuous for miles in Farsta, Blackeberg and Vallingby, through Hasselby Grad and Hasselby Strand by the fabulous lake, not to be appreciated in a car. No fence or gate bars you from Swedish land. School playing fields are tiny and tarmac football pitches with wire fencing merge into the scenery and are used all day long. In winter the green area's white version provides for ski-ing straight from the door and the flat areas are used for skating. Mr. Holmgren, from the city, said they planned their paths first: the engineers are told their roads cannot go across

them, so it is they who have to decide to have an overpass, neatly reversing our usual situation. In Stockholm they aim at fairly wide underpasses. There are a few large pipe tunnels at Hogdalen, but they were deemed unsavoury, inviting use as lavatories. I still liked them.

Segregation of traffic, several people told me, was merely a fashion. Certainly many architects do not understand it. Consequently, short-cuts, dangerously crossing every cul-de-sac, invite risks in many of the "meander-plan" schemes. Careful study is only now becoming common.

Stockholm at present requires provision for

1.6 cars per dwelling-a threat to any environment. Its own latest proposals for a residential area provide storage on three floors, using the steep contours. One car per dwelling results in huge parking areas round the superblocks of flats such as Markbacken in Orebro. But on this flat site careful orientation of living rooms and the planting of hundreds of trees will help. At Ballmora, Stockholm, Bo Sahlin has exploited a valley at the entrance to a large scheme to hide the enormous quantity of parked cars, leaving the splendid landscape near the dwellings intact. It is well worth sacrificing something in nearness for this, apart from questions of safety, noise and stench.

In Orebro, two celebrated schemes are an instructive contrast: Baronbackarna (1953-55) by White and Ekholm encloses a large area free from traffic, while in Rosta (1947-52) by Backstrom & Reinius access road separates every dwelling from its green space (Riley greens!). Residents have asked for the road to be repositioned, after noting the sanity of the other scheme.

At Stockholm H. Wohlin has studied the roaming of pre-school children at play (they start school at 7 in Sweden).

Research into accidents is going on, under that pioneer Professor Lindström in Göteborg.

A detailed survey compares the nature and rate of accidents in a Radburn type area with another. This has shown that even minor roads cannot be regarded as completely safe, yet such arguments still persist. (I was asked by the traffic engineer in charge to join a discussion on the degree of segregation for the next stage of central development in Stockholm, after he had heard that I would back 100 per cent segregation.) In many ways Göteborg shows the way,

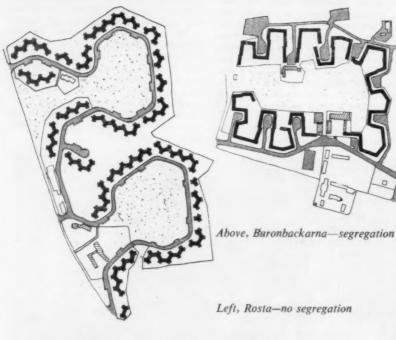
In many ways Göteborg shows the way, Their police chief went to Stockholm to report on their first pedestrian street, closed to traffic from 11 a.m. daily; its quiet is a roaring success and other streets want to follow suit.

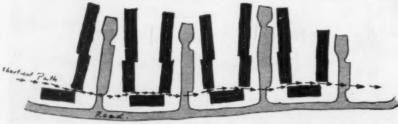
Starting one morning from the splendid new students' hotel (mixed sexes) where I stayed at Göteborg, I wandered along an informal green track and was surprised and moved to emerge after three-quarters of a mile, through a narrow crack between two high walls, down some steps, into the highest part of the most formal grand piazza in Scandinavia, with the main avenue leading into it from the opposite side below. An object lesson.

Traffic segregation now has its brilliant advocates in Copenhagen: in Prof. Bevesdorf, Kmed Svenson, and Skaarup and Jesperson who are using it for a small new town. In their exciting scheme for relieving the historic main road through the little town of Horsholm from motor traffic, the road on the axis (planned in 1737!) is now to be built. The capital seems keen on pedestrian streets at its centre, and there are many fine possibilities. Their fulfilment will be eased by the exemplary research of the Institute for Shopping-Centre Planning, supported, please note, by the Co-operative movement jointly with all private business associations. My exhibition is to be used to that end in Copenhagen in October.









Dangerous short cuts in faulty meander plan

THE INDUSTRY

This week Brian Grant describes machinery for removing tree stumps, a booklet on foamed slag blocks, lattice beams for floors, heating systems, plastic finger plates, wall mounted beds, lavatory basins, and a gas fired boiler

Grubbing up tree stumps

The usual method of grubbing up oid tree stumps with a bulldozer or wire rope makes a fearful mess, and there is now a useful alternative method used by a Mr. Weller, a plant hire operator working from the Portsmouth area. He has two or three American machines, one of which is shown attacking a 4 ft. elm stump. A 40 h.p. petrol engine drives a 2 ft. diameter wheel with cutting teeth round the periphery, and this rips the stump and lateral roots into small chips and shreds down to a depth of about 12 in. below ground level. A series of hydraulic controls move the cutter wheel back and forth across the stump and also move the whole machine forward to take a further cut. As the stump disintegrates the chips are thrown backwards under the machine and can either be carried away and burnt or used to fill up the hole. The machine can tackle a stump up to 33 in. above ground level, and takes about an hour and a half to deal with a 4 ft. diameter stump, the biggest job so far tackled being a beech, whose diameter, with laterals, was about 15 ft. and which took about 10 hours to remove. The main advantage of the machine is that it leaves the site undamaged and can operate in a confined space, leaving even pavements and kerbstones untouched. (Weller's Plant Hire, Lovedean, nr. Portsmouth.)



Attacking a 4-ft. elm stump with an American machine

Foamed slag blocks

A booklet from the Foamed Slag Producers Federation reviews the advantages of foamed slag aggregates and concrete blocks, giving the appropriate information about thermal insulation and sound absorption, as well as fire resistance. Figures are given for block sizes and weights, and there are recommendations on mortar mixes, plastering and external rendering and the types of block to be used for partitions and walls. There are also the appropriate Bs references. A short but useful publication concerned almost entirely with facts. (The Foamed Slag Producers Federation Ltd., 260 Gray's Inn Road, London, wc1.)

Lattice beams for floors

Head, Wrightson are now producing prefabricated lattice steel floor beams known as Filigree. They are welded units with three standard depths of about 4½, 6½ and 8½ in., and are made by automatic welding in continuous lengths, though transport methods limit the length to about 40 ft. The welded girders are supplied to flooring contractors. who cast a vibrated concrete plank on the lower chord to form permanent shuttering for the final pour. The beams need propping at 7 or 8 ft. centres while hollow tiles are placed between them, and the floor is then poured, embedding the diagonals and top chord of the beam, and leaving a level surface for the floor finish. As an alternative, a quick release steel mould can be used between beams, giving a rib and arch appearance to the underside of the floor. (Head, Wrightson & Co. Ltd., 20, Buckingham Gate, London, Sw1.)

Heating systems

Pottertons have an exhibition of central heating equipment at De La Rue House in Regent Street, which is open until the end of September. They have also produced a popular booklet intended to explain to the general public the elementary facts of central heating systems and different types of fuel. It is, as anyone would expect, intended to persuade people that a Potterton boiler is the right answer, but the figures of annual running costs and installation seem to me to be pretty honest, and I



Drum series. A range of 25 pendant, wall and ceiling units, from 5" to 15" in diameter, available in 6 colours. Its salient feature is the translucent opal precision moulded louvre. Designed by Paul Boissevain.



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suspect that the choice, for domestic purposes at any rate, depends on what people think they would like rather than logic, and on the value which people set on the time given to raking out ash or carting solid fuel.

At the exhibition there is a large display of gas and oil fired boilers and I also noticed a newish range of warm air circulators, with outputs from 35,000 to 75,000 B.t.u. per hour. The largest model is illustrated here, and has a low level air return, with a warmed air discharge from the top of the unit, though there is an alternative model with the inlet at the top and the warm outlet at the bottom. (Thomas Potterton Ltd., 20, Buckhold Road, London, sw18.)



Small finger plates in p.v.c., measuring 10 by 2½ in., are now being made by Mangers in white, cream and transparent. They are fixed by two screws and cost 1s. 6d. each. (J. Manger & Son, Amasal House, Cannock Road, Stafford.)

Beds in the wall

I suppose most people in this country regard fold away wall beds as American inventions in which corpses are stored until such time as they are discovered by one of the late Raymond Chandler's private eyes. All the same there is quite a lot to be said in favour of a neat folding arrangement, not only in minimum flats or bedrooms for almost grown children, but also to provide extra accommodation in family hotel rooms. The illustration below, left, shows the Gant bed, which is made in 3 ft. and 4 ft. widths, and needs a recess only 18 in. deep, with a height of 6 ft. 9 in. The frame is counterbalanced on tension springs, and is easy to stow, the bedclothes being held in position by clips and strapping. Prices are about £23 and £26 for the two widths, to which must be added the cost of a mattress. (Gant Metal Products Ltd., Edinburgh Way, Harlow, Essex.)



Gosletts have recently introduced the Cygnet V hospital basin, which measures 24 in by 20 in. and can be mounted on porcelain enamel brackets about 3 in. clear of the wall, as in the illustration, or on floor legs. The design has no crevices to harbour dirt, and the basin with brackets retails at about £11. There is another version for domestic use with taps on the flat part of the shelf, and this is also made in a pedestal model, in a range of colours. Retail prices for this type start at £15 15s. (Alfred Goslett & Co., Ltd., 127, Charing Cross Road, London, wc2.)

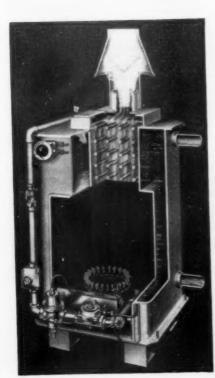
Gas fired boiler

The Valor people, who introduced an oil fired boiler last year, have followed it with a gas fired model which sells at £63. It has an output of 40,000 B.t.u. and is intended for domestic installations where there is not room to store oil or solid fuel. There is an adjustable thermostat with which the temperature can be set anywhere between 90 deg. and 210 deg. F, a dial thermometer and the usual flame failure device. (The Valor Co. Ltd., Erdington, Birmingham.)

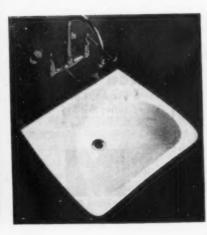
Plastics in the building industry

In the AJ of August 24 it was suggested it would be a good idea for the makers of plastic products to come to some agreement about minimum quality standards. It is interesting to see, therefore, that the Plastics Institute has set up a building sub-committee to consider the general development of products for the building industry. The majority of members are primary producers of resins, rather than manufacturers of end products. which is probably a good thing, as there is likely to be less special pleading, but there is also an architect, a representative of BRS, and two contractors. One can only welcome such a committee and hope it will have teeth enough to discourage goods not likely to be reliable.









First column:

Upper, Gant bed-in-a-wall Lower, Valor gas fired boiler

Second column:

Upper, Potterton space heating unit Lower, Goslett's Cygnet V hospital basin

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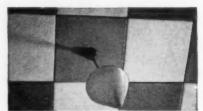


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4.91 planning: urban and rural URBAN REDEVELOPMENT

Urban Redevelopment and Social Change, by C. Vereker, J. B. Mays and Others. Liverpool University Press. Price 25s.

This volume, one of the Social Research Series issued by the Department of Social Science at the University of Liverpool, is a study of part of one of the inner residential districts of that city. In common with many other districts of this type, much of the area is now decayed and is ripe for redevelopment. Some redevelopment, associated with the University's own expansion programme, is already under way. Other schemes for further comprehensive change seem probable in the future.

It has long been contended, by social scientists and others, that comprehensive clearance and rehousing schemes of the kind usually undertaken by local authorities, can produce as many problems as they solve, since they disrupt the established social pattern of the area which has developed over a long period of time. Planners and architects who are familiar with overspill and redevelopment schemes will be familiar too with the arguments that have been advanced on the other side.

This book, however, makes an effort to carry the argument at least a stage further forward. For, in addition to presenting a very careful analysis of the social and physical content of the area, the authors attempt to revalue current planning and redevelopment policies in the light of their findings. The fact that they acknowledge and accept the need for comprehensive physical and social changes and that they are concerned with what forms these changes should take, constitutes a step forward which will commend their study to all who are concerned with redevelopment in practice.

The study itself, the outcome of a series of investigations in which a number of university departments took part, covers a wide field. Successive chapters deal with the historical development of the area, its social background, the condition of the property within it and the family and social life it supports today. It is the last two chapters, however, which contain the material which is of most interest to the planner for these deal with residential change and with the

conclusions reached.

Two main types of residential change are discussed—those arising spontaneously from within the area through the mobility of the resident population, and those imposed from outside through rehousing and transfer of families. The information provided on the amount of residential change that takes place spontaneously is particularly interesting. This suggests that the volume of movement into and out of an inner residential area that now takes place is considerable, and that very great differences in stability can occur within a relatively small area. The most critical section deals with the

views held by the sample interviewed on whether they would be willing to move away from the district in order to secure better accommodation. Taking the district as a whole, while 36 per cent of those families interviewed did not wish to move from their present accommodation and 25 per cent would prefer to have other accommodation within the district, 39 per cent were willing to move away. It is shown that these proportions can vary a great deal; a large number of permutations are worked out in which the views given are related to location, type of accommodation, the rent paid, household composition and age. This last seems particularly significant. For example, more than half the households with a head under 50 years of age were willing to move elsewhere, while one-half of those with a head of over 50 were anxious to stay. It is also very significant that the large majority of those who were willing to move wished to go to the outer suburbs.

Some of the conclusions are particularly relevant to future local planning policy. It is suggested, for example, that in so far as this district is concerned, the gap between the numbers who wish to remain and the numbers scheduled to remain by the provisions of the current development plan is not very wide. The authors maintain that, while wholesale clearance would disrupt the fabric of social life catastrophically, it should be perfectly possible to work out a plan of gradual clearance and concurrent rebuilding, coupled with a thinning out of the numbers to be rehoused, that would enable social coherence to be preserved. They show that since the social framework and content of the district are subject to constant change and wide internal variation, the adaptability of the inhabitants is probably sufficient to cope with extensive physical changes. But they maintain that the programme of change must be systematic, gradual and related to local social conditions, not sudden and conceived in purely physical terms.

These are reasonable claims. It seems clear that the principal task is to work out the level and extent of planned change which a local society can accept without damage and the speed at which this can be carried out. Planners, economists and sociologists need to work together to establish ways of doing this. Such studies are badly needed, for in the next few decades large sections of our great cities will have to be redeveloped if they are not to rot. This study indicates the kind of work that needs to be done if we are to rebuild wisely. As such, it deserves the careful attention of working planners and architects who are concerned with redevelopment projects.

> **Ba7** 69-003-13

8.64 surveying and specification

VARIATIONS AND FINAL ACCOUNTS

Building Contract Variations and Final Accounts by G. Chrystal-Smith, AIAS, AIQS. Published by George Newnes Limited, London. Price 35s.

The variation or final account is an important aspect of professional practice. Yet it gets scanty treatment in most textbooks. The author has been aware of this and has attempted to make good the deficiency. The book consists of 11 chapters and 312 pages, and deals with variation orders, variation accounts, ascertainment of prices for variations, material rise and fall claims, adjustment of provisional and prime cost sums, provisional work, dayworks, interim certificates, final accounts and contracts without quantities. It also contains a selection of examination papers from the examinations of the Institute of Quantity Surveyors and the Incorporated Association of Architects and Surveyors. The majority of the chapters commence with a short introductory text which, with advantage, could have been amplified to include a description of the function of each process and the reasons for adopting the processes which the author recommends. The text is then followed by a large number of examples mainly without comment.

This book should appeal to the junior quantity surveyor who requires "something to follow" when preparing a part of a final account. Others will probably find that the subject has been treated more adequately, although in less detail, in other text-books at a lower cost.

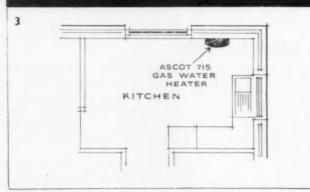
Contract administration

This week we are taking the unusual step of publishing, in pages 418 to 430, nine of the sequences of operations (numbers 53 to 61) in Ronald Green's handbook on Contract Administration. The reason for this is to conclude the series before the commencement, on October 4, of the Information for the Architect Supplements. Next week the series will be concluded with 62 Recommendations and a revised table of contents (the series has not followed exactly the table published with the first issue).

The series will then be complete and the architect, if he has collected the series during the past six months, will have a complete guide to running a job. Those who have not been doing this will be able to buy the guide in book form next year.







Barbour Index File No. 151

ASCOT AND THE PRIVATE BUILDER: 6

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architectural education

The Architects' Journal for September 20, 1961

412

the two trends contested

The article under the title 'The Two Trends' by J. H. Chadwick (AJ supplement, August 16th) posed as the two trends in architectural education that of 'discipline' and, opposed to it, the trend of 'freedom.' As the author puts it:

"There are those who believe in freedom, others who see salvation only through discipline. The one approach is alive....The other, heartlessly sterile, stresses coldheaded intellectual detachment."

"The generally prevailing formal and academic approach, basically disciplinarian in character, is unrelated to any natural educational growth."

No evidence is presented to justify the validity of these assumptions of two such opposed camps in architectural education but it is worth while to consider them at their face value in more detail.

They can, I believe, be challenged on two main grounds.

- They presuppose that formal training and order in architectural education are intrinsically bad and, if replaced by 'freedom,' all will be well.
- They presuppose that 'the two trends' in architectural education revolve around differences of method rather than differences in the content of what is to be studied.

Having postulated his two trends, Chadwick then paints a horrifying picture of the effects of one of them. "Discipline...," he says, "... in the sense of strict instruction and rigorous training, is incompatible with responsibility and initiative." Therefore the student who is subjected to this tyranny of discipline goes out into the big world only to become "... an emotional failure..." because he surrenders easily to clients and committees, he is "... overcome by apathy ...", he "... has difficulty letting ideas out of his head" and has "... an overwhelming

fear of authority." In fact, as Chadwick sees it, he is just a crazy, mixed-up architect-highly suitable material for the psychiatric couch in the next introverted American film! All this is because "... The student is rarely left to grow in a natural kind of way." If this were really the picture, one would expect that the solution would be some sort of A. S. Neal-type school of architecture where there were no rules and no course of study to be followed beyond that prompted by the student's natural instincts. In fact Chadwick proposes as his solution a basic course (he calls it a 'basic research period'). This should run for the first two or three years in which emphasis should be on technical information, discussion groups, criticism, drawing techniques and the like. He adds, "Only after all this initial familiarisation with all the various aspects of architectural problems should design be thought of." The main changes he proposes in later years are that design subjects should be fully worked out from all angles rather than a superficial dabble at different building types and that working drawings should be for real, live building rather than abstract problems.

So his solution, it seems to be, is not 'freedom' but a specific course of study which, as it stands, is highly commendable. Although the author may not realise it, he has in fact given a very fair summary of the actual course at present in operation at one prominent school of architecture. All the lessons of experience of such a course in action are that order, a syllabus, timetables and well-controlled programmes become more necessary not less. The result is certainly not rigidity. Content and method are regarded as flexible and change from year to year in the light of experiment and experience.

Paul Ritter, in his comments which follow this article, supports the concept of 'the two trends' and seizes on Chadwick's illogicality in urging 'freedom' but advocates another type of course as a basic solution to 'discipline.' Ritter is concerned to retain the purity of the concept of 'freedom' and argues "... the basic point of free and alive education is that the dictatorial syllabus is replaced..." He therefore advocates a more logical conclusion by advocating "... the best system is that which allows him [the student] who fits Chadwick's schema to work according to it, but leaves the others to work out their own innumerable salvations" (my italics).

Surely, this is still not fully logical in that if one works on the basis of natural educational growth there can be no 'schema' and for every student there should be a different course? Architectural education for students would become a new facet of the 'do-it-yourself' movement in an atmosphere of unadulterated, but infectious, enthusiasm.

It is curious that there should be a close parallel between the 'freedom' and discipline' trends posed here and the similar distinction which has been one of the main controversial issues in the education of very young children in the primary school stage. After the war there was a strong swing in primary education to what became known as 'free activities'; the child was to be allowed to express its own personality, to muck about with Plasticine and paint and so on. This would evolve the enquiring mind, etc., etc. Many teachers would argue there is still some merit in this kind of training but that its uncritical adoption leads to a neglect of basic training to read, write and cope with numbers. It appears there is now a swing away from the 'complete freedom' approach to primary education.

It is not hard to detect a similar approach to architectural education in Chadwick's article and, even more so, in Ritter's comments. But whatever

the merits or demerits of 'freedom' in primary school education, does the same apply to higher education for architecture for young adults? This session, new students will come into architectural schools with a minimum of two A levels. More than at any time previously in the patchy history of architectural education in this country, students are going to arrive after periods of intensive study of a formal and academic nature. Whatever we think their previous school training should have been, this is going to be a factor which is real and must be taken into account. Are we really prepared to accept the view that the best kind of teaching in this situation is to 'liberate' the students to mill about in an architectural free-for-all?

Finally, if we reduce the main issue in architectural education to two trends in methodology we obscure far deeper issues which have been with us a good while and which still remain. Surely the deeper 'two trends' can still be said to be broadly speaking between 'Beaux-Arts' and 'Bauhaus' with all that this implies in the content of architectural education? Of course these two approaches have their repercussions on the methods by which architecture is taught, but these are derivative issues.

The two different approaches were vividly illustrated in the student designs submitted for a movable theatre and exhibited at the IUA Congress. Students from a wide range of countries, including some from Britain, submitted

designs which showed that the problem had been tackled in two quite different ways. On the one hand, the analytical approach to the problem, respect for the programme and workable answers in terms of mobile theatres that could really be used as such; on the other hand, superficial esquisses, designs demonstrating a certain virtuosity but which ignored the facts of social life and the technology of a mass production, industrial society.

To me, these are still the real 'two trends' in architectural education. Through the training of the architect they are still being reflected in the real world of live building.

ANTHONY GOSS

USCON

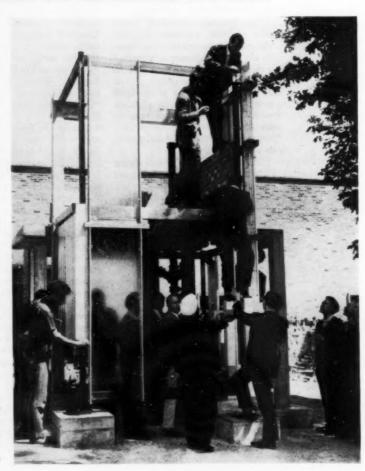
upper school conglomerate demonstration frame

In the AJ issue of October 15, 1959, John Carter described experiments at the Birmingham School of Architecture to help students acquire a real insight into building technique. This account describes a further expansion of this idea into the field of steel and concrete framed structures.

In the curriculum at Birmingham the word "conglomerate" has stood, during the past three years, for an assembly of building components, built by second year students to a plan they have devised, and bearing a slight resemblance to a simple domestic building during erection. Now, the word means this and something more, for an "upper school conglomerate" for fourth-year students has joined it as the latest in a series of experiments in technical education at the Birmingham school.

This takes the form of a skeleton frame, partly single and partly double storey, to which are attached selected types of cladding, embracing the main techniques and materials now in use. Instead of studying these matters by attending ordinary building construction lectures, students are brought into closer touch with the varied problems of frames and cladding.

The conventional way of treating this subject is by lectures, the use of samples, and visits to buildings during erection. The Birmingham method secures the advantages of these combined aids, while ensuring that the



"building" which is visited (and actually worked on) is frozen at just the stage where it will show most clearly the details of construction.

The scheme has only been possible through the eager and generous collaboration of builders and specialist manufacturers and the help given from the outset by the staff of the Brooklyn Technical College, where a site was placed at the disposal of the School of Architecture for the building of the "demonstration frame."

This site fronts onto a suburban road, and, prepared for the raised eyebrows of local residents, temporary town planning permission was secured for three years.

The frame was based on a design in which staff collaborated with a picked team of students. The aim was to produce a frame in which columns, beams, external and internal corners gave the greatest scope for awkward and interesting intersections in the cladding. Quantities were taken off and lengths of steel scheduled by the students. The frame was also used as the basis for the fifth year specification examination, to which it was well suited.

Members of the frame are square and rectangular tubular steel sections, spaced to a 3 ft. 4 in. unit module vertically and horizontally, with half of the steel cased in concrete, to simulate a conventional in situ frame. Next year part of the steel may be cased in lightweight fire-resisting materials which will resist the weather as well.

The frame was erected by a Birmingham building firm: the students visited the site during erection and followed the closely-planned progress schedule and the provisions made for future fixings. The students' programme began fully when the frame was ready to receive cladding, which includes:

Multi-storey type curtain walling in aluminium, designed for extreme

conditions of temperature change and humidity.

Single-storey type curtain walling of pressed steel type.

Patent glazing, used as a vertical cladding.

Insulated stainless steel and plasticfaced industrial cladding.

Precast concrete panels, adapted to both concrete and steel frames, with marble and mosaic facings. (One of the assemblies draws on ideas developed for the LCC Roehampton estate.) Slate slabs cramped into in situ concrete and brick walls to illustrate fixing of stone, slate, marble and granite slabs.

Infill panels of double glazing, and asbestos (also used as a site black-board!)

Plumbing assembly for internal stack pipes and branch connections. Timber framed panel infill between cross walls (to be more fully studied next year).

Once the erection of the frame was complete, it became the school's responsibility to co-ordinate deliveries of material and to adapt the timetable and improvise when delays occurred.

After a series of lectures on the economics of frames, builders' plant, etc, the fourth-year students visited the site in parties of a dozen at a time, spending nearly a week there. In this time they joined tutorial sessions on cladding techniques, took on practical work suitable for them, such as the fixing of slate slabs and concrete panels, and studied the erection of more specialised components carried out by the makers. Finally, they took full-size details of sections, junctions and fixings, dismantling and reassembling the various elements as necessary in order to make a really complete study.

It was not always easy to balance the site work so that each successive team of students got the same breadth of experience from their visit, but the results justify optimism. Purely manual work was cut to a minimum in the limited time allowed, since the students had already gained experience of building terraced houses and were aware of the labour which site work still involves.

After their conglomerate work, the fourth year began a two-week study programme on the design of a simple framed building (a four-storey office building for letting) in which they calculated the members of the concrete frame and prepared full size details of the exterior cladding, using their conglomerate knowledge. This programme was seen as an integral part of the experiment.

There is scope for increasing in future years the range of products demonstrated by the conglomerate frame. Once erected, the components remain on the frame under conditions of accelerated exposure. The effects of this will be studied as part of the building science training and will be reported to those who have given material or services for the scheme.

R. STANLEY MORGAN

Acknowledgements

Erection of frame, W. J. Whittall & Sons Ltd. Supply of steelwork, Stewarts and Lloyds Ltd. Welding of steel-frame, Tubewrights Ltd. Curtain walling and patent glazing, Henry Hope & Sons Ltd. Glass panels and Vitroslab, Plyglass Ltd. Glazing, Pearce and Cutler Ltd. Asbestos cement panel, G. R. Speaker & Co. Ltd. Slate panels, Broughton Moor Green Slate Quarries Ltd. Non-ferrous accessories for slate, W. H. Frayley & Sons Ltd. Mosaic and marble-faced precast concrete panels, Proctor and Lavender Ltd. Insulated cladding, Robertson Thain Ltd. Plumbing assembly, W. & J. Webb Ltd. Loan of power tools, W. H. Price Ltd.

foundation course: northern polytechnic

The existing system of architectural training presupposes a gradual development of the capabilities of a student, beginning at a given level of general knowledge and progressing through various stages until, within a measurable period of time, he becomes capable of producing buildings possessing a recognisable quality. This quality is a technological and cultural one, the recognition of which cannot be brought

to the notice of the new student too early, and may well be used as the basis of the primary stage of development. It is this initial stage which is undoubtedly the most clearly defined and, needless to say, vital period from all viewpoints. The preliminary formulation of a sound approach to architecture at this early time will largely decide the pattern of development throughout the course.

Before beginning his training, a student generally has either a distorted view of architecture, or one that is completely at variance with reality. Nevertheless, all in common have enthusiasm of some kind for the thing called "architecture." The most important thing, therefore, that staff can offer is their own brand of enthusiasm, not so much for "passing it on," but for the game itself. Enthusiasm is obviously not enough;

young students are soon aware that architecture means more than an ability to draw, and practical issues become extremely important; staff, therefore, must be able to give direct, simple answers to specific practical problems, and it is vital at this stage that they should be in practice and in a position to quote, where appropriate, their own experience.

It must be remembered that during this period a student is always making new discoveries, and the member of staff who can readily adjust his reactions to share equally in the process, will more readily gain the confidence of the student.

The liaison between studio tutor and student will be assisted if groups are formed with a maximum number of 12, although a group of 8 is probably ideal, with opportunity for longer periods spent with the individual and providing a suitable number for a discussion or impromptu criticism group. It also enables the member of staff to effect a much more personal relationship with individuals and at the same time assume, by implication, the role of group leader " rather than " teacher," in that sense avoiding being considered strictly on the "other side of the line." Architecture today is becoming far more impersonal and is often the result of group work or the close relationship between architects and specialists. Students beginning a career in architecture have a tendency to force themselves to be original at all costs and to

be rather afraid of conforming to an overall design policy in any form. It is felt, therefore, that group working should be encouraged at the outset both in preliminary research and in the realisation of the problem.

Coupled with the tutor-student and student-group relationship, discussions involving the whole year or individual groups should be held, together with "open criticism" where students and staff combine to criticise work, each student explaining and defending, if necessary, his own approach to the problem; in this way, confidence is gained and the individual gradually learns to express verbally his thoughts and ideas, concisely to a critical audience.

The introductory period at the Northern Polytechnic is geared to an equality of application between "principles and practice" so that each new experience commences with a very adequate study of all factors affecting the problem and its final solution. Each problem is carefully selected to cover one aspect of the educational process, and calculated to extend the capabilities of the student at each stage of development.

In addition to the studio work and, in the main, related directly to it, subjects studied include the principles and practice of building construction, basic structural systems and materials; building science combining theory with experimental studies in daylighting, heat and sound insulation, and the physical properties of building



Partly finished ATV commentator's box Students' 1960-61 project

materials; the theory of structures and simple calculation of stresses. The framework of the local government administration within which the architect in this country practises is explained in a course of lectures, and the historical background filled in.

In effect, an effort has been made to establish an approach to the training of the student which will give an early awareness of the industrialised environment within which he will eventually work, which will best be demonstrated perhaps by the following first year programme:

Teaching aim

Techniques

Three dimensional exercise related to human scale

Form Colour Structure Scale Pattern Texture

TACTILE EXPERIENCE

Methodical Recording

First term

The first period is spent experimenting in the technique of drawing with exercises in lettering, an overall line pattern and an abstract pattern design gives an early opportunity to introduce the cultural element.

To consolidate the principles of the preliminary exercises a problem is set involving human scale. Example:

A children's play shelter
Sizes of components given:
3 walls, roof, base.
Colours specified.

Students to arrange components to create suitable play environment.

Design to include paving treatment, abstract pattern on one wall, and sculptural wall to function as part of the play process.

Design is produced in model form with at least one figure to show scale relationship.

This is followed by an exercise in measuring designed to give the student a tactile experience of modern building. Two or three modern buildings are selected and students measure in groups a particular feature such as entrance doors or a staircase, each student makes a black and white drawing from survey

Time and method

Instrument drawing (45 hrs.)

Discussion at introduction

Individual unaided design, no set period allowed A fixed time for submission

General appraisal on submission

(30 hrs.)

Instrument drawing to scale. Set out pictorially

Teaching aim

Quality of material Opportunities and restrictions of sheet material

GROUP EXERCISE in environment in broad terms

INDIVIDUAL CONTRIBUTIONS WITHIN THE GROUPS Study of an individual building type in simple terms Function and character considered in relation to structure

First Project Simple design studied thoroughly relative to functional material, structural suitability, etc.

INITIAL RESEARCH

RESEARCH DEVELOPMENT

TECHNIQUE

COLLABORATIVE PROJECT Study of simple shelter in basic terms. Real and practical

notes using drawing technique to clarify the parts of the building being

The next experience involves the study of a specific material, i.e. stiff paper, but the student is asked to think in terms of a structural component having its own particular properties. A design is evolved by experimenting with the material in model form and investigating an organic design process often by using one structural unit repetitively. The model is then transcribed as a working or assembly drawing and finally a rendered drawing is prepared and the model photographed with lighting effects.

At the end of the first term a group exercise is carried out and in the 1960-61 session a site was allocated at Highbury Fields for a small exhibition of architecture. Groups of students surveyed the area and the year divided into nine groups for the first part of the exercise which consisted of modelling the site as existing and then in block form laying out the exhibition based on the programme areas.

Prior to this talks were given on the elementary principles of layout and landscaping. Each student then considered one exhibition building, with 1-in. scale drawings, perspective and model. The groups were allocated specific materials with which to design, thereby ensuring a degree of continuity within each group.

Second term

The first exercise involves the study of a small fitment and in the 1960-61 session it was decided to base this on the design of a flexible studio fitment to house drawing boards, tee squares, books, drawings and models. Two designs were selected and made up in the workshops and finally one was selected to be used as a standard studio fitment for the school.

Preliminary research was carried out into drawing office equipment and study sheets produced.

Groups of students measured up each studio and studied circulation patterns. Anthropometrical studies were carried out and existing fitments analysed.

14-in. scale drawings were produced in pencil to show design, followed up by separate study into finishes in the form of a perspective and accompanying samples of materials together with a diagrammatic study of flexibility of fitment. The two designs selected were detailed by the students in question who in turn liaised with the craftsmen constructing the prototype.

An established feature of the first year course is a collaborative project involving the design and construction of a small shelter type of structure; the previous examples include a shelter and a Scorer's Box for the Northern PolyTime and method

Study of development of plane surfaces by individual student (45 hrs.)

Geometrical basis of three dimensional form examined in class group

Effect of light and shade on forms examined and conventional shadow projection used as class studies (30 hrs.)

Group discussion and decisions

Block model prepared by group in 6 hrs.

Class appraisal of each scheme following submission

(15 hrs.)

Coloured perspective sketches and simple structural models used as a basis for formal criticism

Given set of requirements expanded by class discussion, resulting in a pattern of research, study and development

Holiday work

(45 hrs.)

Assessment by staff and report on assessment to class

Week-end unaided

Given statements of requirements developed into client's brief, and enlarged by class discussions

Teaching aim

RESEARCH AND DEVELOPMENT

APPROACH TO **DESIGN PROCESS**

OPPORTUNITY FOR LIAISON

THREE DIMENSIONAL REALITY PRACTICAL PROCESSING AND MANUFACTURE

GROUP WORK STRUCTURAL ANALYSIS AND INVESTIGATION

FINAL STATEMENT

technic Sportsfield. The 1960-61 project was a television commentator's box with ATV acting as clients, the box finally to be taken over by ATV. The problem involved the design of a demountable box housing two commentators and a monitor set with adequate provision for all-round vision, thermal insulation, sound insulation, ventilation, heating, etc. After being briefed by the clients, represented by the Director of Outside Broadcasts, students carried out anthropometrical studies and investigated the problems of demountable structures, materials and the various factors affecting the problem.

A preliminary statement was prepared in the form of a drawing of the box in a typical setting and this was followed by a structural study including full size details.

The clients then considered a number of designs and a final selection was made based on their specific observations.

A group of students prepared the final working details, and meetings during this process were held with the craft operatives in the School of Building. Meetings were also held with the remainder of the year to discuss any alterations and the choice of materials. The final prototype was made up in the joinery workshops of the School of Building with the School of Rubber Technology co-operating by fabricating the fibre-glass roof-and p.v.c. ventilation grille to the monitor set. It is by this method that technology and design combine to become a living reality to the student and help to form an appreciation of the many problems involved between the basic idea and the final three-dimensional expression.

The second term also includes an investigation into utilitarian structure with the year being divided into groups to design and construct a structure to support a given load. Four types of simple structure are finally tested to destruction by a combination of wind and dead loading, the results being tabulated for comparison.

This ends what might be termed the "foundation course," and the rest of the year is spent in studying a small building in great detail including heating, lighting, daylighting, finishes, services, and interior decoration, including very detailed design-working drawings combined, and a model showing interior layout and furniture. During the last term visits are made to the workshops of the School of Building for 3-hour periods each week, and it is felt that this, together with the thorough and very comprehensive study of one small building at this stage, is the best means of consolidating and putting into practice the principles learned over the first and second terms.

> J. SIMMS EDWARD J. W. CURTIS

Time and method

(75 hrs.)

Extra mural

site supervision

53

On a routine visit to the site make certain that you know what stage the job should have reached, check against the progress chart in advance and relate your inspection to the stage claimed on the chart and against the clerk or works' reports. Know the order in which trades are following and how the work should be progressing. Decide in advance why you are making the visit and list what you are going to look at and why. It is too easy to go to a site because you think it is time you made a visit and miss all the things you ought to have seen while enquiring about the foreman's cold.

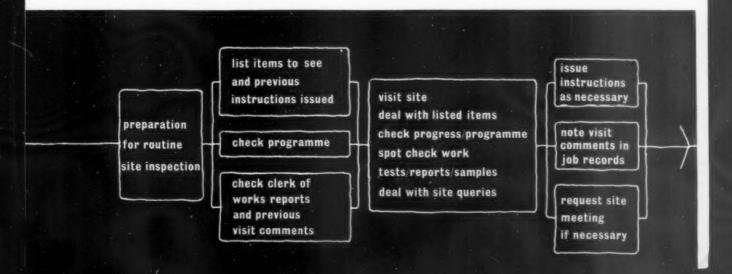
Deal with items you have listed first.

Deal with any queries raised on site next. If you are asked anything which you do not know, admit it, find out and answer it from the office.

Spot check items minutely in terms of material, workmanship and adherence to drawings; but take a tape and check the position of individual items remembering to keep an eye on the wood and not be too preoccupied with the trees. Take samples from the site for comparison with samples in the office which were obtained when selecting materials; check that tests on materials are being made in accordance with directions in the bills of quantities and that you have been notified of all results; go through

the clerk of works' current report and check new plant on site—batch boxes, gauges, materials, storage, general state of the site and existing properties.

Do not hang about when you have dealt with all you wished to do. Do not instruct a workman direct. Instruct the general foreman or clerk of works as they are the only people with authority to act upon such instruction under the terms of the contract. Confirm with the contractor in accordance with the terms of contract all points which arise from the visit to the site. Send a copy to the quantity surveyor.



Contract administration

UDC No. 65-10

site supervision

check list

demolition

property

salvage

clearance underground

sealing services

trees

part lopping

underground roots

general

identification

access removal

protection

programme

take over site

setting out

agree levels and setting out for

building(s)/1 in. in 100 ft. 0 in.

maximum error unless extreme accuracy required/½ in. in 100 ft. 0 in.

is visible to the eye

agree confines of site working area

spoil deposit

notices

huts, plant and materials

check submission to local authority

position (relative to later buildings

where unknown to contractor)

roads and circulation

protection/security

documents

drawings

programme

bills of quantities copies of contract terms

weekly return forms

names and addresses:

local authorities

quantity surveyor and consultants

sub-contractors

excavation

conformity with

drawings

bills of quantities

programme

site work

timbering/safety and stability

adjoining property

water clearance/sumps at base of

heavy reinforcement

mechanical/manual removal

flat bed/stone removal and adequate

joint pockets for drains

consistent bearing in foundation

bases/prod or test load/check consistency of stratification against

trial hole records

site supervision

check list

toundations

conformity with

site work

drainage

conformity with

site work

superstructure carcass

conformity in all cases with

back-filling and ramming spoil deposit hard core/material size—too big causes large voids, too small may cause crumbling/thickness—should be put down in layers and picked over/consolidation/levels—no high spots leading to a thin slab over

drawings bills of quantities specification and tests for piling engineer's reports programme

timbering or stability
tanking/sumps
blinding/full cover to base of
reinforcement
materials and mix/can be fairly dry for
mass foundation work
additives
reinforcement/rigidity/no grease or
earth on or between bars
joints/stepping/aim at maximum
evenness of settlement
defective work or material
samples/tests/engineer's reports

drawings bills of quantities programme statutory requirements

materials/off loading/storage sizes/bed surround and mix/gradient and levels jointing/mains connections/inspection chambers/render and mix/back-fill clear of stones/full concrete cover where a suspicion of tree roots ancillary equipment/gullies/traps/ covers/gratings defective material and workmanship/ fractures in pipes, spigots or sockets/ protective coating intact samples and tests

drawings bills of quantities consultant or specialist details and specification tolerances/relationships with future operations manufacturers' recommendations statutory or other consent requirements

UDC No. 65-01

site supervision

check list

concrete

steelwork

brickwork or block partitions

masonry

roofing

materials/mix/storage/use of cement in delivered order to prevent bags going stale reinforcement/rigidity-no sagging and check presence of support blocks/no grease, bitumen, rust films or scales formwork/clean and oil to prevent sticking/alignment-plumb bob rather than builders' level for verticals even cover/strutting and stability/tight joints method of placing/construction joints/ lifts/ducts/sleeves/vibration-should be no water on surface/lift cleaningchiselled, loose cleaned off, water saturated and good mortar bed before placing next lift/concrete should be slightly sticky and last portion requires spading from container-should not "flop" from container/no "initial set" or crusty concrete to be placed additives/damp-proofing/protection finishes/dusting/key for plaster/ throatings or weatherings defective material or workmanship surface after stripping shuttering honey-combing/ no steel or tie wire

material/scaling/preservative omissions/incorrect positioning bolt holes which should be filled alignment of all members/buckling/ bracing deformity

showing

off loading and stacking bond/alignment/rise/setting out internal partitions damp-proof courses cavity ties down outwards and clear of mortar/clearance/closure/chases/ ducts/sleeves mortar/materials/mix/pointing defective material or workmanship samples

off loading and storage mortar/materials/mix/pointing fixings/bondings protection defective material or workmanship

materials/storage/off loading insulation continuity/batten pitch and

Contract administration

site supervision

check list

fixing/elimination of board edge unevenness where sheet roofing over flashings/pointing or bedding/lapping or jointing/upstands/seams, etc./
chases for and tucking/topping/
surfaces to be dry before felt or asphalt work carried out pitch/fixings/firring/falls gutters jointing and falls/overflow levels or weirs throatings/weatherings/drips defective material or workmanship samples

timber (plus workshop inspection)

materials/storage/protection evidence of preservative on prepared and site cut materials/fireproofing/ moisture content jointing/connections/general fixings/ alignment/bearings/rigidity battens/backboards/plates/fixing pellets/grounds/ventilation arrangements defective material or workmanship samples and tests

metalwork (plus workshop inspection)

materials/storage preservative or other treatment general fixing/lugs/bolts/cramps/ dowels/bedding and pointing isolation from corrosive materials defective material or workmanship

plastering/rendering and screeds

materials/mix/storage/protection preparation/key/lathings battening/board fixings/scrim application/waterproofing surfaces and final finish/angles/ making good screed falls/service run protection defective material or workmanship

plumbing-external and internal

materials and fittings/storage/ protection weights/gauge/sizes fixings/jointing or connections/ underlays/laggings or insulation/ accessibility ancillary equipment/valves/meters/ overflows accessibility defective material or workmanship samples, tests, authority approval of installations and fittings

sts No. Ba

UDC No. 65-01

site supervision

check list

service installations (inspect with consultant where employed)

electrical

materials/connections/ attendance/fixings/ protection

gas

ducts/falls/covers/ accessibility

hot water telephone

equipment/action/ condition of finish/

mechanical services condition of finish/ relationship with other works/identification

tests/sample materials defective material or workmanship

finishes

generally check

floorings/sub-floor condition/ fixing or bedding adhesion/protecticn/ junction strips/expansion joints/

finishes

fittings (plus workshop inspection)/ alignment/scribing/fixing/finish/

lippings

glazing/type/weight/thickness/ quality/samples/mirror fixings/

fixing or bedding

painting/surface condition/preparation

coats/colour/finish/samples

polishing/surface condition/preparation

finish/samples

ironmongery/fixings/action/housings/

finish/alignment/master systems

external works

conformity with

drawings bills of quantities programme

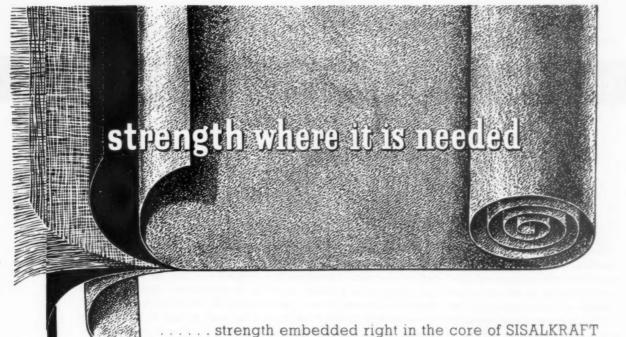
site works

roads/pavings/materials/base and thickness/consolidation/construction joints/falls/finish

lighting/cable trench excavation/

base mix

ground preparation and levels/ seeding/planting/turfing/protection walls or fences/damp proof courses and copings/foundation or base/mix and materials



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Contract administration

certificate procedure

The contractor submits his claims for payment throughout the work in accordance with the terms and conditions laid down in the contract. He submits a claim, based upon subcontract claims and money expended on labour and materials to date, to the quantity surveyor or where no quantity surveyor is employed to the architect. The claim is checked by an inspection of works on site, materials delivered to the site but not fixed, nominated subcontractors' and nominated suppliers' invoices, daywork sheets where applicable, and any other substantiating evidence, and a statement prepared accounting in itemised form for the and noting which sums are included to liabilities would normally end. be passed to sub-contractors for works to date, and the appropriate genera retention.

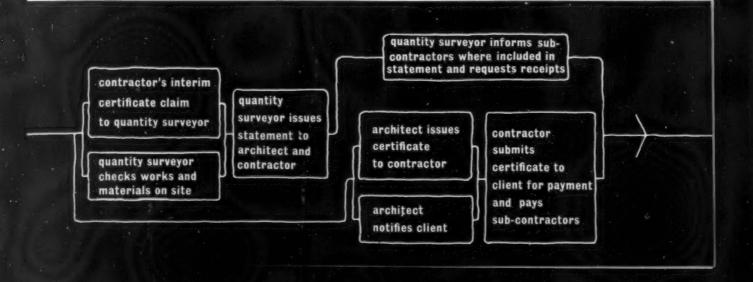
It is exceedingly important that the statement prepared is a factual and accurate document, as it may well be in the case where a contractor or subcontractor enters into a state of liquidation, that these documents will be the basis of decision on how much a client can claim to have bought if the receivers take possession of material and plant on site which is not fixed.

Where a sub-contractor has completed work in the early stages of a very long contract it would be unjust to hold a retention figure on his work until the end. Arrangements should be made with amount of this retention at the point in principal sums due to the contractor, the contract where the sub-contractor's

> Copies of the statement are sent to the architect and the contractor by the quantity surveyor, and the certificate

for payment is released by the architect on the basis of this statement to the contractor within the time stated in the articles of agreement. At the same time the sub-contractors whose work has been included in the certificate should be informed of the amount released against their accounts and asked to submit receipts when the sum is received from the contractor. The client should also be informed when the certificate is released together with a reminder of the period in which he should honour the certificate in accordance with the articles of agreement. the quantity surveyor to release the full On release of the first certificate, it is as well to describe the procedure to the client for his information.

> The contractor submits the certificate to the client for payment direct. It should not be paid through the architect's



maintenance information

55

When sub-contracts have been completed and before your client moves into the building, sub-contractors should be asked to supply instructions for the correct maintenance of their materials or of the work carried out. These should cover items such as flooring materials, finishes to all internal surfaces, aluminium windows or anything requiring regular maintenance.

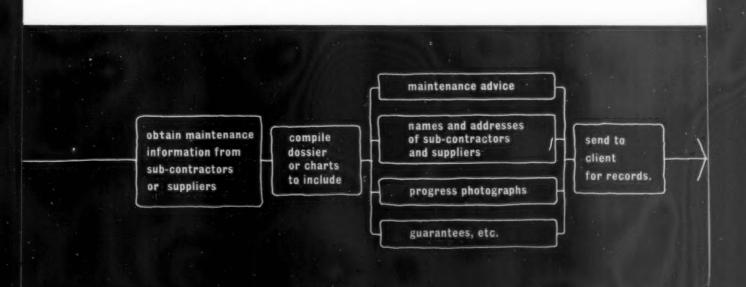
Although in the main it would be the architect's responsibility to deal with sub-contractors in the correction of any failure in material during the liability period, it may be more convenient to

the client, after the contract has been settled and the sub-contract obligation discharged, to be able to contact these firms direct for advice and anything arising related to the work. It is important, therefore, that, together with the instructions, your client is given the name of the firm, the address, the telephone number and, if possible, the name of the person who dealt with the contract in order that he can deal with that person who knows the history of the work on site and how it was carried out. For instance, your client does not want to have to contact you for a new

set of keys.

To this information add the complete set of progress photographs which have been taken throughout the course of the work showing the construction of the building in stages.

As well as testing all the equipment and services in the building before handing over to your client, arrange for him or his maintenance staff to be shown the positions of all mains, intake points, distribution boxes, isolation valves, etc., and how to operate mechanical services, emergency or fire fighting equipment.



practical completion inspection

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Bear in mind when making your inspection for practical completion that this is not the opportunity for catching up on points you should have noticed during normal site supervision inspections, but that it should be specifically concerned with the correct operation of all equipment, completion of all finishes, and defective or omitted items. To obtain a consistent result the inspection should be made with a check list containing broad headings of floors, walls, ceiling, doors, windows, electrical equipment, services equipment, sanitary ware, joinery, or other items, depending upon the character of the building. Detailed consideration will need to be given to such things as:

general cleanliness of all surfaces adhesion of plaster, tiles or other applied surfaces completed decorative finish according to schedule screws and fixings secure signwriting or notices completed mechanical and other services tested ironmongery operation, check keys handed over correct light fittings and bulbs electric switch plates on and secure fire fighting equipment complete radiator brackets secure sanitary fittings complete, clean and working gully gratings, etc., in position doors, windows operating full arc

joinery junctions, scribings, etc., finished

earlier defects and making good generally finished

The contractor should arrange for the final tests to be carried out on mechanical and other services either before or during this inspection. Ensure that you attend all tests. Your client should be invited to attend or send a representative so that he will be fully acquainted with the operation of the services and equipment. Consultants, technical representatives or any others responsible for the work also should be present. Finally check escape routes and any other terms of consents.

arrange with contractor for final inspection and tests as necessary

invite client or his representative to attend tests site tests with consultants' technical representatives, etc., as necessary architect and contractors general inspection of building for practical completion occupation

Contract administration

practical completion

57

Practical completion is the stage at which a building can be said to be in a state ready for occupation by the client without inconvenience. This is probably the most difficult clause in the contract to interpret fairly to both client and contractor. It is excessively inconvenient and frustrating for a client who has moved into a new building to find sections of an otherwise complete building in need of making good, or with a couple of light fittings missing. On the other hand, it is impossible to say the building is not capable of being occupied. It is an extremely misleading phrase and should be rewritten in the contract, as each can claim the opposite. It is often equally inconvenient for the contractor to try to complete the work

while the building is occupied and people are wanting him out of the way, with the result that it is almost impossible to get a contractor back once the client is in.

It is essential, therefore, that the architect insists on absolute completion before the builder leaves the site and before the client moves in. This means that the building is practically complete pending settlement of the defects at the end of the defects liability period stated in the articles of agreement.

Certification of practical completion is certification of completion as far as liquidated damages are concerned and this certificate should release and include the agreed proportion of the retention figure as stated in the articles of agreement.

When the contractor has overrun the agreed contract time including any extension of time that has been granted, he should be informed that, as from that particular date, the liquidated damages clause will come into operation and that the certificate will be endorsed "Subject to whatever may be the rights of the employer under clause 17 of the contract" or other similar qualification.

The architect is not entitled to deduct liquidated damages from a certificate under conditions of contract, but must in no way prejudice the rights of his client to this claim, and for this reason he should endorse the certificate.

arrange with quantity confirm agreed surveyor to release 50% arrange defects date of practical retention on statement liability inspection completion to contractor and prepare final account date with contractor or inform contractor ask client to list endorse penultimate of delay incurring defects arising in certificate as necessary liquidated damages clause defects period

defects liability

58

On practical completion of the contract the date for the defects liability inspection should be decided and the contractor informed. Inform your client of this date and in your letter ask him to note anything defective which arises before that date and which may not have been apparent during the defects inspection. Your client should also be informed (and it should be borne in mind during your own inspection) that defects do not include damage caused by him or his staff since occupation and it is advisable to quote the clause in the contract which deals with this particular item, in order that he does not expect the contractor to make the building brand new again. Before the period elapses send him a letter asking for his list of items which he may have discovered to be defective during the occupation or use of the building and incorporate it in your schedule of defects.

The inspection of the property should then be related to a check list based on that used for practical completion inspection in order that the inspection can be made methodically with the contractor present and that you can be sure that everything has been included. Copies of the completed schedule of defects should be prepared for the contractor, the quantity surveyor and the client. After consultation with your client, arrange with the contractor the dates on which he will start and finish the work and instruct him accordingly. On completion of the work, a second inspection should be made which goes through the schedule item by item. The quantity surveyor should be instructed that the contractor's liabilities are complete and that the final statement of account should be prepared which releases the remainder of the retention.

inspect building finally inspect under defects and confirm contractor prepare schedule liability clause completion and agree to deal to contractor dates with with work contractor/client obtain client's on site copies to list of client and "relevant" defects quantity surveyor

final certificates

final account for the work will be an account extensions of time, claims, itemised statement in the form arranged contingencies, etc. at the beginning of the contract. It It will be presented through the this in settlement of the contract. should take into account the variations architect to the client as a statement to the work as ordered from time to agreed with the contractor on the the account. It should set the original total works. The architect's duty, on provisional sums or prime cost assess- condition that he has satisfied himself

ments made when compiling the bills of that it is a fair interpretation of respecwhich have been expended on the down in the articles of agreement contractor.

The quantity surveyor's statement of appropriate item. It will take into (which is the extent of his authority in the agreement of the final account) is to recommend the client to pay

The architect, therefore, issues his final certificate (marked Final) to the time throughout the contract in order client's behalf by his quantity surveyor contractor when passing the final that the client can relate all his previous as his agent and will represent the true account to his client. It is not a docurecord copies to the relevant section of financial statement of account for the ment on which discussion takes place with a view to negotiating outstanding difficulties.

Signed copies of the account should quantities, against the actual sums tive liabilities under the terms laid be sent to both the client and

issue copy and final certificate contractor to contractor quantity surveyor client's presents release signed and settlement certificate agreed copies of completes final account to client contract issue copy and to architect for payment notification of certificate to client

Contract administration

rs No. Ba

final fees

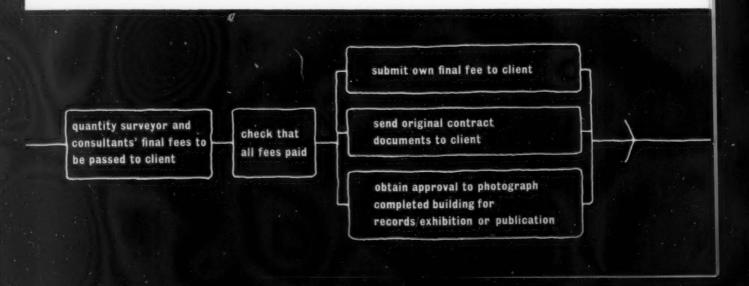
From time to time you will have which the contract has passed since Tell the contractor that you have done received interim statements for fees from the quantity surveyor and original agreed terms of the appointment. These you will have passed on fees. should describe the stages through sealed. After this they will be destroyed

submitting your previous interim account and should include all outconsultants in accordance with the standing expenses. It should be noted as the final statement of account for the building, write a letter diplomatic-

to your client for payment direct. Forward the original contract docu-Ensure now that these people have ments to your client for his records submitted their final fees and that and inform him that you intend to keep these have all been settled before sub- all other documents relevant to the mitting your own account for final fees contract for six years where a contract to the client. Your own final account is signed and twelve years where it is

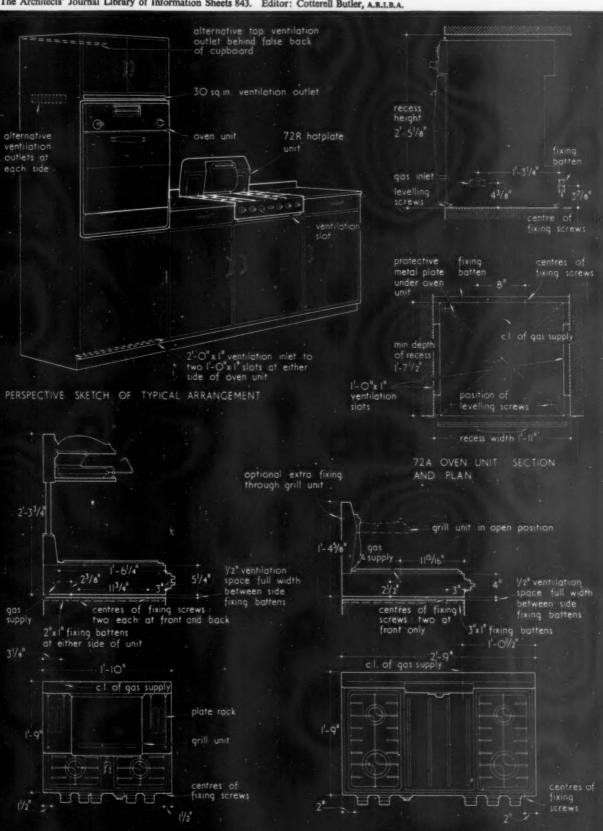
so. As the client has become so used to telephoning you about one thing or another from the time he moves into ally but firmly informing him that this represents the termination of your services for the contract.

Request permission to use photographs or drawings of the work for exhibition, publication, or when asked by new clients for examples of previous work.



COOKING GAS

The Architects' Journal Library of Information Sheets 843. Editor: Cotterell Butler, A.R.I.B.A.



72R HOTPLATE UNIT SIDE ELEVATION AND PLAN

31.C1 · NEW WORLD 72· BUILT-IN GAS COOKER

This Sheet describes the New World 72 gas cooker which consists of separate oven and hotplate units for building into any desired cabinet arrangement. Two types of hotplate are available, as illustrated in the drawings on the lower face of the Sheet. The drawings on the upper face show a typical cabinet arrangement and give details of the oven unit.

Material and Construction

The units are constructed of cast iron and pressed sheet steel, vitreous-enamelled. The hotplate units have front and side panels of pressed stainless steel.

Oven Unit

The inside dimensions of the oven are 1 ft. 6 in. wide by 1 ft. 2 in. deep by 1 ft. 4 in. high. It is fitted with Regulo control, has a top front flue outlet and a single burner which is automatically lighted from a single permanently-burning pilot flame, fully protected against being accidentally extinguished. The oven door is latch-less and bottom-hinged. Two chromium-plated steel shelves are provided and there are six shelf positions.

Hot Plate Units

No. 72AG: This hotplate unit is 1 ft. 10 in. wide by 1 ft. 9 in. deep by 2 ft. 3\frac{3}{4} in. high overall the grill. It has four Radoflex boiling burners, with detachable caps, and an eye-level grill. Safety taps are fitted which must be pushed in before they can be turned on. Ignition is automatic and all burners will light when the appropriate tap is turned on, provided the pilot flames are alight.

No. 72R: The unit is 2 ft. 9 in. wide by 1 ft. 9 in. deep by 1 ft. 4\frac{1}{6} in. high overall the splash plate. It has four Radoflex boiling burners. The grill folds away in the centre of the splash plate to give a large area between the boiling burners for resting pans etc. The unit has automatic ignition and safety taps similar to the 72AG unit.

Gas Rating

Oven unit: 11,500 B.T.u./hr. approx.

Hotplate units: Front burners: 12,500 B.t.u./hr. approx. each.

Back burners: 7,500 Grill burner: 12,000 B.t.u./hr.

Fixing

Oven unit: The oven unit should be fitted in a recess 1 ft. 11 in. wide by 1 ft. 7½ in. deep minimum by 2 ft. 51 in. high. This allows for a ventilation space 1 ft. 0 in. long by 1 in. wide at each side of the oven, with equivalent air inlets through the cupboard below.

The recommended height of the base of the unit from the floor is 2 ft. 6 in. A metal plate should be provided for protection below the oven.

A firm seating for the levelling screws must be provided at the four corners of the oven base. A batten must be provided, as shown in the section on the upper face of the Sheet, to take the two back fixing screws. The front of the unit is fixed by a screw at each corner hidden by the stainless steel trim. A ventilation outlet 30 sq. in. in cross-sectional area should be provided in the cabinet above the front of the unit, but where this is not convenient, outlets can be made at the side or behind the cupboard above, terminating at the top back. The gas connection is ½ in. B.S.P. female and a gas governor is fitted. There is room below the oven for the supply to be led in from any direction.

Hotplate units: The width and depth of the recessed top to take the hotplate unit should be to the exact dimensions required to fit the unit. The unit is mounted on two battens along the sides of the base and an air space ½ in. high should be allowed between the base of the hotplate unit and the solid top of the supporting cabinet for the full width between the battens. The battens should be 2 in. by 1 in. with fixing points at 1 ft. 7 in. centres for the 72AG unit, and 3 in. by 1 in, with fixing points at 2 ft. 5 in. centres for the 72R unit. The drawings on the lower face of the Sheet show the positions of the fixing screws in each case.

The gas connections are ½-in. B.S.P. female.
The 72AG has the gas inlet at the back left and final connection must be made in the cupboard below. The 72R has the gas inlet at the back centre, led in from below or behind, and the final connection is made within the hotplate unit.

The units are vitreous-enamelled in cream or white.

Further Information

The manufacturer will supply on request fixing details and other data.

Compiled from information supplied by:

Radiation New World Ltd.

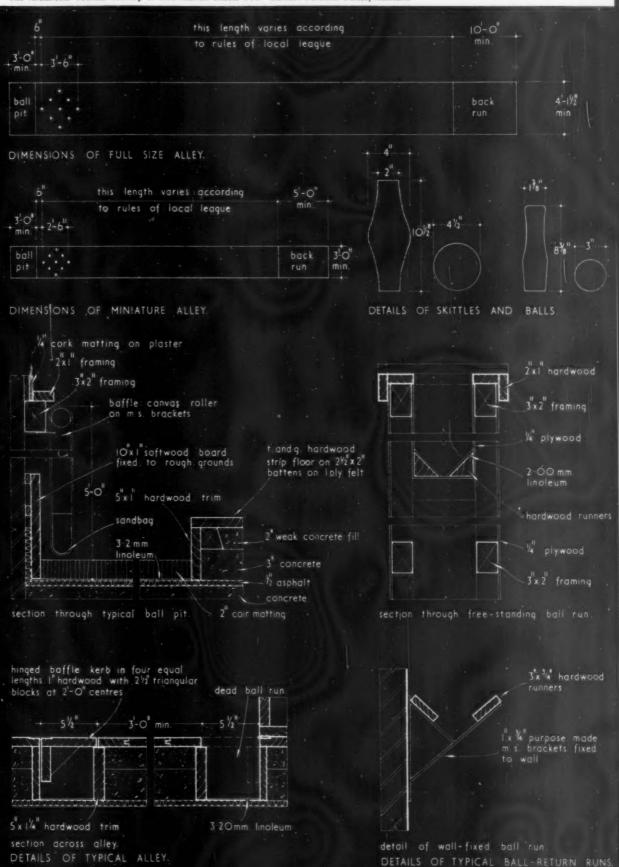
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PLANNING RECREATION SKITTLE ALLEYS

The Architects' Journal Library of Information Sheets 844. Editor: Cotterell Butler, A.R.I.B.A.



4.L12 PLANNING AND DESIGN OF SKITTLE ALLEYS

This Sheet deals with the siting, planning, installation and equipment of skittle alleys. Two types of alley for the nine-pin game are described, full-size and miniature. There are no national rules governing the game and the architect designing a skittle alley should therefore consult any local league that may exist to ascertain whether a minimum size is laid down for the alley, centres of pins, etc., for match play.

Siting

Alleys are generally installed in public houses or licensed clubs. It should always be borne in mind that the game is noisy and can interfere with the quiet enjoyment of other parts of the premises. The alley should not, however, be completely isolated from the building and if the premises have been planned with a central service core, it is an advantage to have a bar counter giving direct service. Where the alley has to adjoin a lounge or similar room, the problem of sound insulation should be considered both with regard to the ceilings and to the wall between the lounge and the skittle alley; the latter should have a sound insulation value at least equivalent to 11-in. cavity brickwork. For ceilings, ½-in. fibreboard has been found to give a far greater degree of insulation than, for example, plasterboard with a skim finish.

The game should, wherever possible, be confined to a separate room but it may sometimes be necessary to provide a floor that can be used for other purposes when skittles is not being played.

Design

The alley consists of the bowling lane itself and pin stand, a back-run for the bowler and a sunken ball-pit behind the pins. Channels for "dead" balls should be provided on both sides of the alley. A strong flexible baffle should be provided at the back of the ball pit to act as a ball stop, and an inclined run should be fitted at the side of the alley for returning the balls by gravity. This may be in the form of an open channel fixed along the wall or it may be boxed in to form the barrier between the spectators and the alley, and the top used as a bar for standing drinks while watching play; the apertures at each end must be adequate for easily inserting and removing balls. The barrier can be carried solid to the floor to give protection from flying pins and balls.

Size

Full-size alley: As previously stated, the length of alleys varies but ideally a room 55 ft. 0 in. long should be provided, 50 ft. 0 in. being the minimum: the alley, including back-run and ball pit, should occupy the full length. The actual bowling length, i.e. from bowling line to first pin, varies between 30 ft. 0 in. and 36 ft. 0 in. and requirements should be checked with the local league.

The back-run, i.e. from the beginning of the alley to the bowling line, should be from 10 ft. 0 in. to 11 ft. 0 in. The length of the ball pit depends on the overall space available for the alley, but 5 ft. 0 in. is desirable and it should not be less than 3 ft. 0 in.: when it is under this size, balls tend to bounce off the baffle and back on to the alley.

the baffle and back on to the alley.

The width of the alley is governed to some extent by the pin centres but is never less than 4 ft. 1½ in.

The centres of the pins vary in different districts but 3 ft. 6 in. to the centres of the outside pins, as shown in the drawing on the face of the Sheet, is average.

The size of balls to be used should be ascertained in order to

design the "dead" ball runs which must allow the balls to run freely without any possibility of their jumping back into play.

Miniature alley: The normal length of a miniature alley is 30 ft. 0 in. and the recommended width 3 ft. 0 in., with 2 ft. 9 in. as the minimum.

Materials and Installation

Floor: The surface of the alley must be dead level and true throughout its length and must be laid with care: it is, therefore, advisable wherever possible to have it laid by specialist flooring contractors.

contractors. The material generally used is maple strip, as it wears evenly and not into holes or splinters, and its light colour contrasts well with the balls. With maple it is essential to have central or some other continuous heating system, as variations in temperature considerably affect the playing condition of the floor. Where intermittent heating only is provided maple should be avoided and yang or gurjun used. Where the floor is to be used also for purposes other than skittles it should be protected from furniture by carpets or other suitable coverings. For miniature alleys, 6-mm. linoleum is normally used, on a built-up screed or asphalt underlay. The linoleum should be bonded to the screed or underlay to prevent stretching. The linoleum surface renders miniature skittles a far less noisy game than the full-size version. Full-size alleys can be finished with linoleum but this is only rarely done, as it must be laid in one continuous strip without joints.

The spots marking the centres of the pins should be permanent: the normal method is to inlay 1-in. square brass or plastic plates fixed with countersunk screws.

Back-run: Where the back-run has a back wall this should be finished with a durable, washable surface to a minimum height of 3 ft. 6 in. from floor level. Any side walls to the back-run should be similarly finished.

Ball pit: The ball pit is sunk about 6 in. below the surface of the alley, i.e. to the same level as the dead ball runs, and should be provided with coir matting. The baffle at the back of the ball pit must be extremely strong, but flexible: it can be of vertical lengths of hemp rope stapled to a timber framing or in the form of a canvas roller which can be purchased from a manufacturer of blinds. The advantage of the latter is that it can be turned to minimise wear on one part and whitened to preserve its appearance. Hemp rope becomes dirty and is not so readily replaced when the rope wears.

Any side wall to the ball pit should be protected, e.g. by metal

Any side wall to the ball pit should be protected, e.g. by metal sheeting or t. and g. boarding, and a hinged door to the height of the ball-return run can be provided to protect spectators while giving access to the ball pit.

Returned ball run: Typical constructions for the returned ball runs are shown on the face of the Sheet. With the enclosed type of run the runners should be insulated, as the noise of several balls being returned together is considerable. For this insulation, 2 mm. linoleum is recommended, as this is sufficiently hard to allow the balls to run freely.

Compiled by David Burgess, A.R.I.B.A.

FURNITURE AND FITTINGS: 121

working detail

KITCHEN CABINET: HOUSE IN LONDON, N.2

C. J. Collins, architect

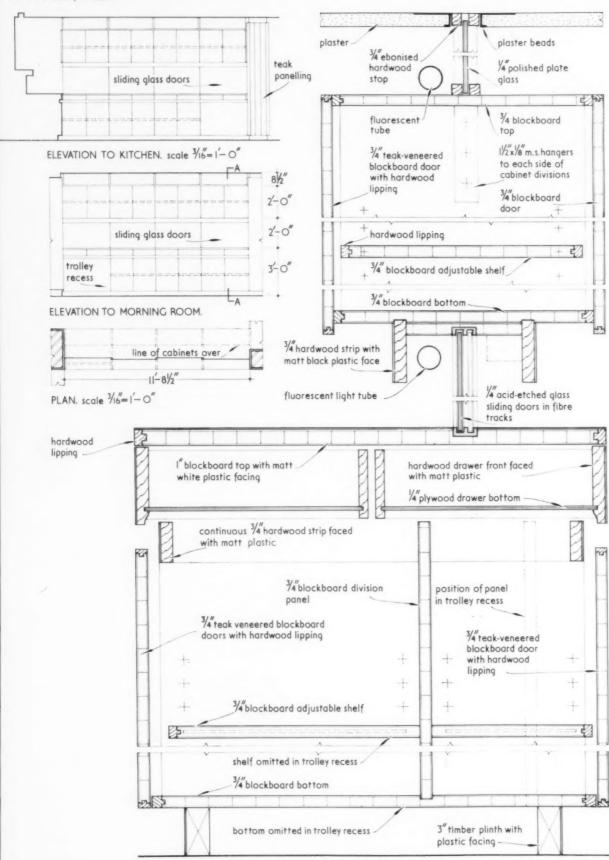


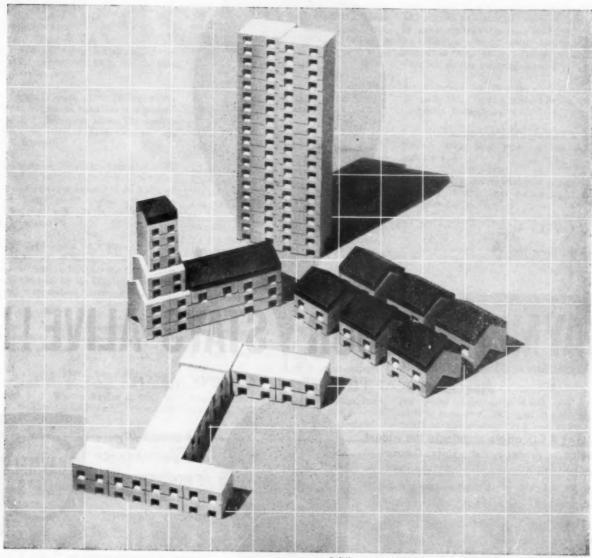
This cabinet, which forms the dividing wall between kitchen and morning room, is an example of high-class joinery work using teak-veneered blockboard and hardwood.

working detail

KITCHEN CABINET: HOUSE IN LONDON, N.2

C. J. Collins, architect





Buildings constructed with "Stacks Builder", by permission of Bell Toys Ltd.

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Announcements

PROFESSIONAL

John Boissevain, AADip, has moved into his new office at Holland Park, 43, Portland Road, London, w11.

John Coppock, ARIBA, of 41, Donegall Pass, Belfast 6, N. Ireland, has taken into partner-ship Cecil F. Kennedy, ARIBA. The practice is under the style of John Coppock and Cecil F. Kennedy.

W. G. Palmer & Associates, chartered architects and surveyors, have transferred their offices to Grosvenor House, 18-20, Cumberland Place, Southampton (telephone 23521/2), and will be pleased to receive trade literature.

Healing & Overbury of Cheltenham have been appointed to design a new private patients wing to be built for the Cheltenham General Hospital by the Cheltenham Group Hospital Management Committee.

Alina, Diparch, and Noel Moffett, Barch, ARIBA, FRSA, AMTPI, have moved their office to 6a, Bedford Square, London, well (telephone Museum 6686).

Leslie L. Taylor, LRIBA, has taken Robert Taylor, ARIBA, into partnership. The practice continues as J. Walton Taylor & Son, St. James' Buildings, Gallowgate, Newcastle upon Tyne 1.

Since the death of P. Neville Taylor, ARIBA, the practice of Taylor & Yandell has been changed to T. Jeffrey Yandell, ARIBA, MSIA, 18, Whiteladies Road, Clifton, Bristol 8 (telephone Bristol 30515).

The Manchester Society of Architects have established an office in The Manchester Building Centre, 115, Portland Street, Manchester 1 (telephone Central 9802).

TRADE

K. A. Griffin, 122, Melling Road, Aintree, Liverpool 9, has been appointed the Northern representative of The Nuralite Co. Ltd., Gravesend, Kent.

Norman Gold, photographer, has opened his new studio at The Studio, Hornton Place, Hornton Street, London, w8 (telephone Western 8480).

J. C. Longman has been appointed technical sales manager of Ekco Heating & Electrical Ltd.

The London agents of Kay & Co. (Engineers) Ltd., of Bolton, de Guyon, Thornely & Cheal, have moved their office to 146, St. Stephen's House, Victoria Embankment, London, sw1 (telephone Whitehall 8811).

Rotary Defrost-O-Matic, 12, Whitehall, London, sw1, will shortly be holding a series of trade shows throughout the country.

From April I, 1962, Allied Ironfounders will become an operating company and the 23 subsidiary manufacturing companies will be wound up, with the exception of overseas companies and UK companies in which there are outside minority interests.

Art Pavements & Decorations Ltd. have moved to 157, Clapham Road, London, sw9 (telephone Reliance 1471).

J. E. Wooldridge has been appointed South-Western area sales supervisor of Atlas Lighting Ltd.

P. W. Howard, deputy chairman and former managing director, has retired from BTR Industries Ltd.



REFERENCE BACK

The Sheets published on 6.9.61 were incorrectly numbered 21.C2 and 21.C3. They should be amended to 21.C6 and 21.C7.

structural steelwork

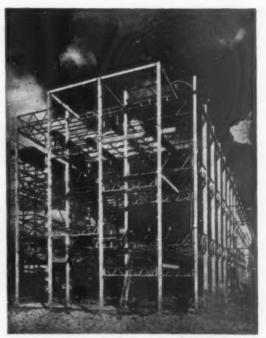
● DESIGN ● FABRICATION ● ERECTION

For this B.E.A. Building, speed was the essence of the contract. Sommerfelds designed the Steelwork and from unloading the first lorry on site to completion of a 250-ton steelwork erection, took three weeks.



New Air Terminus buildings in Kensington for B.E.A. Photo graph taken 16 days after commencement of steel deliveries Main Contractors: Messrs. Richard Costain Limited.

The Architects for the Bowater Paper Corporation Limited's new Office Blocks at both Northfleet and Mersey required Lattice Steelwork on a 3ft. 4in. module. This allowed complete flexibility of internal arrangements and all service lines are easily run between floor and ceiling.



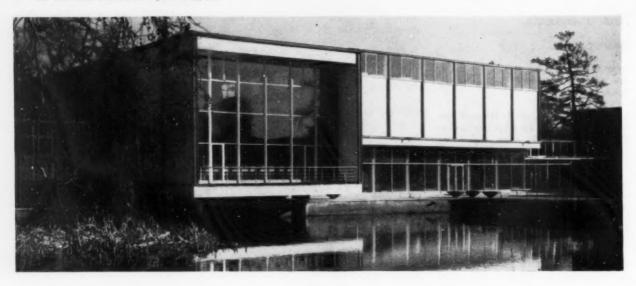
Part of a new Office Block for The Bowater Paper Corporation Limited.

Architects: Messas, Farmer and Dark

Sommerfelds

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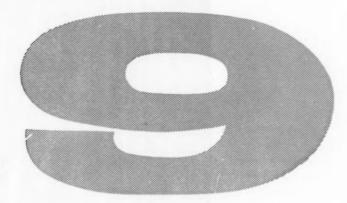
Technical school at Canterbury

This extension to the technical school for girls at Barton Court, Canterbury, is planned as a self-contained unit, linked to the main building by a covered way. At the same time care has been taken to preserve an existing lake and a number of mature trees, using them to obvious advantage in siting the extension, which consists of assembly-dining hall, gymnasium, practical rooms and classrooms. The assembly hall and gymnasium are on piles, the remainder of the building being on normal concrete foundations. The steel frame is on a 10 ft. 0 in. grid with reinforced concrete

upper floors and wood wool slabs for the roof, which is finished in bituminous felt and chippings. External cladding includes shiplap boarding as well as brickwork. Compactly planned, because of the nature of the site, the contract price was £73,530, or just over 83s. per sq. ft. It was designed by John L. Berbiers, city architect and planning officer; C. W. Gummer, deputy; D. Chamberlaine, chief assistant architect; assisted by D. Vane and K. West; quantity surveyors, Widnell and Trollope.



THE LOGICAL USE OF COLOUR IN BUILDING



The eye-photopic and scotopic vision

Although everyone realises that there are two kinds of vision — colour vision during the daytime (photopic vision) and night vision (dark adapted or scotopic vision) — the interplay of these two kinds of vision, and their influence upon both choice and perception of colour schemes, are not so familiar.

Above a certain level of luminance in daylight the cones of the retina are the principal receivers of the flux of energy and colour vision results. It also permits of the recognition of fine detail. The cones have a more complicated response than the rods. Instead of simply detecting light and dark and giving us a series of greys, cone vision also gives chromatic colour, the basic hues (blue, green, yellow and red), their differences and summations. The rods are more sensitive to the blue end of the spectrum than the cones, but both are about equally sensitive to the red end of the spectrum. A red object by day (photopic vision) appears black by night (scotopic vision), whilst a blue object by day (photopic vision) appears light grey at night (scotopic vision) - a complete reversal of their luminosity factor. On the other hand scotopic vision is dependent upon the rods in the retina. These are many times more sensitive than the cones but do not allow the recognition of fine detail like the cones. The sensitivity is highest in the region which would produce the achromatic sensation of green in (cone) photopic vision. The sensitivity of the two kinds of vision are therefore different, and also, since there are only a few rods near the fovea (the area of highest colour sensitivity), the highest scotopic sensitivity is away from the line of sight. Such old adages as "All cats are grey at night" (scotopic vision), and "To see a weak light do not look at it" (maximum rod concentration not in line of sight) are basically correct.

The eye quickly recovers from scotopic vision to the reception of colours, certainly within seconds, and the greater part of the recovery in a fraction of a second. The converse of this condition is a lengthy process. Workers in the field usually state that half an hour suffices but it is much more probable that the sensitivity of scotopic vision is dependent upon the period of exposure to light above the scotopic vision level, and that the season of the year and length of day have a specific effect.

During twilight both cone vision and rod vision are active and because the relative participation of rod vision and cone vision varies, colour judgments are unreliable in the extreme. Nevertheless light intensities equivalent to twilight are often found in certain areas of modern buildings. Under these conditions the eye is more likely to recover colour vision than slowly attain scotopic vision. This immediately limits the hues of any decorative scheme to blue, blue-green or green, and demands high value colours of medium chroma. In these circumstances it is far better to increase the light intensity if this is possible. If this cannot be done—and it rarely can be done—maximum luminance and minimum contrasts of adjacent areas should be aimed at.

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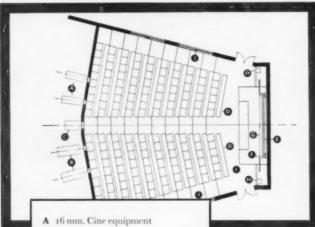
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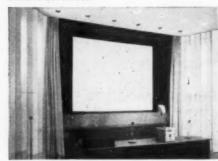


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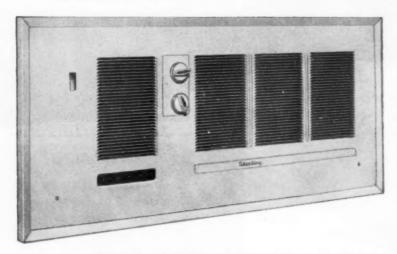
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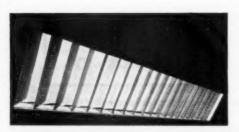
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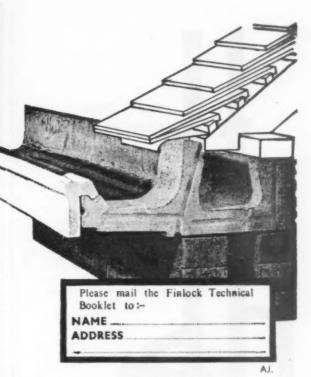
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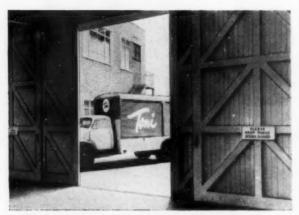
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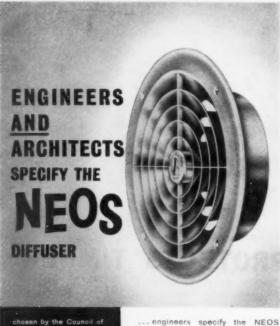
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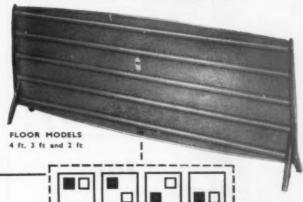
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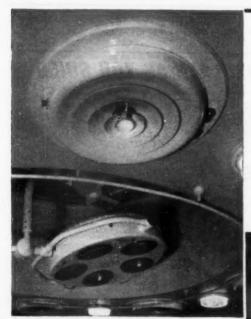
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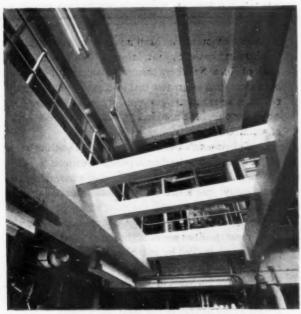
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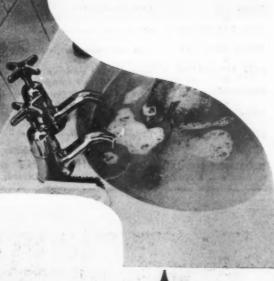
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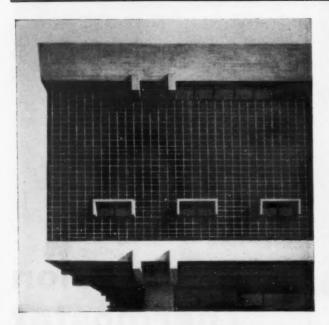
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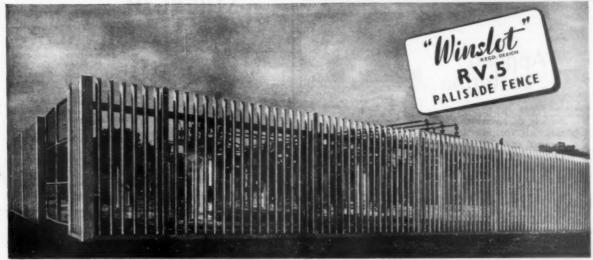
Western opinion has an ideal image of modern Japanese architecture: spare, elegant, informal. While the work of Junzo Sakakura seemed to support this, there is an increasing awareness that in Kenzo Tange Japan possesses an architect who probably ranks with the world's top ten, but practises an entirely different kind of architecture.

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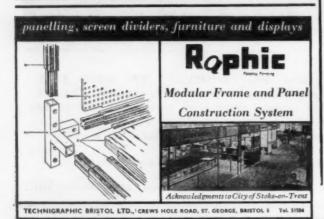
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The City Council has agreed (a) to pay 50%.

Applicants in poses in Arr. In an antications.

The City Council has agreed (a) to pay 50% of the total cost of removal expenses of successful candidates up to a maximum grant of 650 in those cases where the Committee feels it is warranted, subject to the successful candidates remaining in the post for a minimum period of two years from the date of taking up the appointment, otherwise refund of the grant will be required; (b) to offer the successful candidates, in cases where the Committee deems it is warranted, the tenancy of a dwelling to be let at an economic rent, and (c) to draw candidates, in cases where the Committee deems it is warranted, the tenancy of a dwelling to be let at an economic rent, and (c) to draw candidates, atention to the facilities under the Council's scheme for advance on mortgage, whereby in approved cases a loan for the purchase of a house moto 100%, of valuation may be granted by the Council.

Those wishing to take part in one of Britain's most stimulating programmes should apply immediately for further details and forms of anolication to George Kenvon, A.R.J.B.A., A.M.T.P.I. (City Architect, IR Cloth Market, Newcastle upon Type, 1, indicating the grade for which they wish to be considered.

JOHN ATKINSON.

Town Hall Newcastle upon Tyne, 1.

Town September, 1961.

ARCHITECTS

Sydney Greenwood, A.R.I.B.A., Chief Architect

JOHN LAING AND SON LIMITED

requires

ARCHITECTS, ARCHITECTURAL ASSISTANTS and DRAUGHTSMEN

The office has been established for over 15 years, has broad experience, and offers tremendous opportunities.

There is full scope for close collaboration with all other branches of the industry; these include Civil Engineering, Plant Engineering, Cost Analysis, Project Planning and Construction. The Research and Development Centre provides a unique background to design work, and staff are appointed to the Centre as the occasion arises.

There is a regional office in Manchester, and there are opportunities with the Laing Housing Company at Edgware, for work on new housing projects.

Work in hand includes the following:-

Redevelopment of Central Areas, Industrial, Commercial, Multi-Storey Dwellings, Schools, and Proprietary Systems. Staff are required in all grades up to Project Architect. Full advantage will be taken of skill in vigorous design and presentation, effective detailing and Draughtsmanship, and Technical knowledge and Project Management.

Applicants who have a positive attitude to the need for close collaboration between the branches of the industry, will be especially valued.

These posts offer excellent prospects and progressive benefits, including a pension scheme.

Applications giving brief details to

Group Personnel Manager,
JOHN LAING AND SON LIMITED,
London, N.W.7



National Provincial

considerable long term building programme and ARCHITECTS are required in the following categories:

PRINCIPAL ASSISTANT ARCHITECT, qualified with at least 10 years' experience.

ASSISTANT ARCHITECTS, qualified with some previous experience.

ARCHITECTURAL ASSISTANTS, recently qualified or Intermediate.

ARCHITECTURAL DRAUGHTSMEN, heavy architectural drawing experience.

There are also openings for:

QUALIFIED MECHANICAL ENGINEERS. MECHANICAL ENGINEERING DRAUGHTSMEN.

Please write, stating age, experience, qualifications and salary required to:

B. C. SHERREN, F.R.I.B.A., CHIEF ARCHITECT, NATIONAL PROVINCIAL BANK LIMITED, BOX No. 34, 15 BISHOPSGATE, LONDON, E.C.2.

Additional facilities:

Non-contributory pension and other benefits.

Canteen facilities. London Allowance.

Three weeks' holiday to most grades.

SAINSBURY'S

Food Distributors & Manufacturers desire to make the following new appointments in their

Building and Engineering Division

Blackfriars, London, S.E.1. These vacancies are caused by the continued expansion of the Division particularly in connection with work on large new self service stores. Commencing salary will depend upon age and experience. All posts are permanent and pensionable.

ARCHITECTS

The selected applicants will be in charge of a section and responsible to the Manager of the Architects Department. Commencing salary £1,500 to £1,850.

ASSISTANTS

in The Architects and Shop Planning Departments

Applicants should be of intermediate R.I.B.A. standard or equivalent with some practical experience. Applicants for the Shop Planning Department should have some experience of shop fitting work. Commencing salary £900 to £1,350.

CLERK OF WORKS

for visiting contracts within 150 miles of London. Lodging away from home will be necessary for part of the week. Salary £1,150.

Applications giving full details of age, qualifications and experience should be addressed to—

The Personnel Manager (B & ED),

J SAINSBURY LTD

Stamford House Stamford Street Blackfriars SE1

WIMPEY

The Architects' Department's current programme covers all types of commercial, industrial and domestic building projects.

Appointments are available for a wide range of experience, particularly for ARCHITECTS and ASSISTANTS who appreciate the contribution good design can make towards efficient construction and are interested in applying cost knowledge to detailing.

Appointments on a permanent basis are immediately available at Head Office with good progressive salaries for the right men. Five-day week, with three weeks' annual holiday.

Applicants should write to :

E. V. Collins, A.R.I.B.A.,

Chief Architect, GEORGE WIMPEY & CO., LTD., 27 Hammersmith Grove, London, W.6.

CITY OF CHESTER
DEPARTMENT OF CITY ENGINEER
ARCHITECT'S SECTION
Applications are invited for the following
Assistants at the salaries stated and experience
appropriate to the grades indicated.
(a) ONE SENIOR ASSISTANT ARCHITECT
PLANNER, Grade V. £1,310-£1,480 per
annum, with planning experience for special
Central Area Redevelopment and Quinquennial
Review, offering unique opportunities in a
Review, offering unique opportunities in a
(b) TWO SENIOR ASSISTANT ARCHITECTS,
Grade IV, £1,140-£1,310 per annum, for
schools, housing and general work.
Applicants are expected to be A.R.I.B.A. Housing accommodation will be available if required
for the successful applicants. Applications with
three recent testimonials or references should
reach the City Engineer, 49, Northgate Street.
Chester, by 10th October, 1951. 9394

reach the City Engineer, 49, Nortingate Street.
Chester, by 10th October, 1961.

BOROUGH OF WEST HARTLEPOOL
BOROUGH ARCHITECT'S DEPARTMENT
Applications are invited for the following appointment: SECTION ARCHITECT, Grade
A.P.T. V-£1,310-£1,480, commencing salary within the Grade, according to experience.
The Council is prepared to consider the provision of housing accommodation in suitable cases.
Candidates for the appointment should be Associated Members of the Royal Institute of British Architects and should have had considerable experience of Local Authority work.
The Department has a programme including a College of Further Education, Secondary and Primary Schools, Housing and Welfare Schemes.
The National Scheme of Conditions of Service and the Local Government Superannuation Acts apply, medical examination is required and the appointment is subject to one month's notice.
Applications, stating age and experience, together with the names of two referees should be addressed to the Borough Architect, Municipal Buildings, West Hartlepool, to reach him not later than Monday, 2nd October, 1961.

ERIC J. WAGGOTT.
Town Clerk.
Borough Architect's Department.

Borough Architect's Department. 7th September, 1961.

BOROUGH OF RAWTENSTALL
APPOINTMENT OF CHIEF ARCHITECT
Applications are invited for the above permanent
pointment at a salary within A.P.T. V (21.3101,480 per annum). Applicants should be members
t the R.I.R.

appointment at a salary within A.P.T. V (£1,310 £1,480 per annum). Applicants should be membe of the R.I.B.A.

The appointment will be subject to the prisions of the Local Government Superannuati Acts, the National Scheme of Conditions of Servi and the termination by one month's notice i either side. Housing accommodation will available.

Applications is a side of the conditions of the conditions in the condition of the conditions in the condition of the condition of the condition in the condition of the condit

available.

Applications including names and addresses two referees should reach the undersigned mater than Monday, the 25th September, 1951. Evassing will disqualify. Any relationship to me bers or senior officers of the Council must disclosed.

COLIN CAMPBELL. Town Clerk.

Town Hall. Rawtenstall. Rossendale, Lancs

Applications are invited for vacancies in the Architectural Section of the Borough Engineer & Surveyor's Department as under:

(1) ASSISTANT ARCHITECTS—Within the salary range £1,005—£1,355 p.a.

(1) ASSISTANT ARCHITECTS—within the salary range £1,005—£1,355 p.a.
(2) ARCHITECTURAL ASSISTANTS—Within the salary range £660—£1,185 p.a.
(3) JUNIOR ARCHITECTURAL ASSISTANTS—within the salary range £275—£655 p.a.
The starting salary for vacancies in (1) and (2) will be fixed having regard to qualifications and experience and consideration will be given to the provision of housing accommodation where appropriate and to the payment of removal expenses.

expenses.

Applicants for (3) should hold the G.C.E. in the appropriate educational subjects to undertake professional studies, and full training facilities are available. The commencing salary will be according to age.

Full particulars and conditions of the appointments may be obtained from the Town Clerk. Town Hall. Romford, to whom applications for the appointments are to be sent by Saturday, 30th September, 1961.

LEEDS REGIONAL HOSPITAL BOARD PROPOSED NEW GENERAL HOSPITAL AT HUDDERSFIELD CLERK OF WORKS (BUILDING AND STRUCTURAL)
Applications are invited for the appointme of CLERK OF WORKS (Building and Structura in connection with the construction of a ne General Hospital at Huddersfield (500 bed approximate total cost £3,500,000). Salary £1,3 per annum.

per annum.

The successful candidate will be required to work contractors hours—at present approximately

work contractors hours—at present approximately 50 hours per week.

The project is being carried out in consecutive phases under the direction of the Regional Architect, P. B. Nash, A.R.I.B.A., and Messrs. George Trew and Dunn, Private Architects. The main building contract has now been running for over a year and building on the site will continue for another three years.

The Clerk of Works will have an Assistant Clerk of Works (Building) and a Clerk of Works (Mechanical and Electrical) to assist him in his duties.

duties.

Applicants must possess a thorough knowledge' of all aspects of the building trade and must have had extensive experience as Clerks of Works on multi-storey reinforced concrete framed buildings. Membership of the Institute of Clerks of Works or the possession of the Clerk of Works Diploma of the Association of Building Technicians an advantage.

of the Association of Bulleton Avantage.

Applications, stating age qualifications, pre-vious experience, together with the names of two Architects to whom reference may be made, to the Secretary, Park Parade, Harrogate, by 7th October, 1951.

BOROUGH OF PRESTWICH
BOROUGH ENGINEER'S DEPARTMENT
APPOINTMENT OF ARCHITECTURAL
ASSISTANT
ARCHITECTURAL ASSISTANT at a salary i
accordance with Grade A.P.T. III/IV (£960£1,310).

ARCHITE
accordance with Grade A.F...

The commencing salary will be fixed at a point within the scale commensurate with qualifications and experience. Provision of housing accommodation will be considered.

Applications stating age, qualifications, experience, etc., together with the names and addresses of two referees should be received by the undersigned not later than Monday, 2nd October, 1961.

C. A. CROSS,

Town Clerk.

9317

September, 1961.

September, 1961.

METROPOLITAN BOROUGH OF CAMBERWELL ARCHITECTS

Vacancies for Architects in the Borough Architect's Department within a salary range of 2855 and £1,525 (Grades A.P.T. II to V of the National Scales), Grade and commencing salary according to qualifications and experience. The work of the department includes design and construction of public buildings, housing estates, including multi-storey construction. Application form from Town Clerk, Town Hall, 8.E.5, TC7928

GLENROTHES DEVELOPMENT CORPORATION

SENIOR ARCHITECT required for a variety of work including the design of Industrial. Shopping and Commercial Buildings, This post offers excellent opportunities for an architect with wide experience, imagination and enthusiasm.

Salary up to £1,670 per annum according to experience.

coerience.

House to rent available.

Applications to Secretary and Legal Advislegathes Development Corporation, Glenroth

COUNTY BOROUGH OF CROYDON
Applications are invited for the following
appointments:—
ARCHITECTURAL ASSISTANTS to assist in
the Council's extensive and varied building programme. Grades A.P.T. HI/IV—21,005 to 21,355

gramme. Grades A.F.T. 1111V 21,900 to 21,900, p. 3.
Good general training necessary. Intermediate qualification not essential. The commencing salary in grade will be fixed according to qualifications and experience of the successful applicant. Pensionable posts. Five-day week. Assistance with housing accommodation will be considered. The Section (H. Thornley, A.R.I.B.A., Principal Architect) is organised on a group basis. Application forms may be obtained from the Borough Engineer, Town Hall, Croydon.

GHANA HOUSING CORPORATION
(Established by Ordinance)
Applications are invited from suitably qualified Architects for the post of ARCHITECT in the above Corporation.
Duties: Preparation of layouts for developing areas; design of houses suitable for the tropics: administration and supervision of contracts (knowledge of contemporary architecture an advantage). Some travelling.
Qualifications: Not less than 25 years of age with either a professional qualification or a degree in Architecture of a recognised University.
Terms and Conditions of Service: Appointment on contract of three tours each of 18-24 months.
Salary according to experience and in range 11,090—22080 p.a. Generous gratuities and leave; free medical treatment; passages for appointee and family (not exceeding three children each under 18 years); accommodation at low rental; low income tax, rate forms, apply to THE DIRECTOR OF RECRUITMENT, 248, TOTTEN-HAM COURT ROAD, LONDON, W.1.

2568
CONSORTIUM OF LOCAL AUTHORITIES SPECIAL PROGRAMME. Member Authorities of the Consortium (C.L.A.S.P.) are setting up a Development Team consisting of three Architects and a Quantity Surveyor based at County Hall, West Bridgford, Nottingham. The team will co-ordinate and lead C.L.A.S.P. Acchinical development work, which will be related to the large annual building programmes of the C.L.A.S.P. Member Authorities. It will consist of long and short term development and will include work with such organisations as the Building Research Station, the Universities and manufacturing industries. The posts will be on the establishment of individual Member Authorities and will consist of:—ONE ARCHITECTS. J.N.C. C. (21.560—21.825); ONE QUANTITY SURVEYOR. J.N.C. C. (21.565 (21.565)) and polications, which should give details of candidates' qualifications, experience and the names of two referees, should be made as soon as possible to A. R. Davis, Clerk of the Construm, County Hall, West Bridgford, Notting-ham.

as possible to A. R. Davis, Clerk of the Consortium, County Hall, West Bridgiord, Nottingham 9341

HERTFORDSHIRE COUNTY ARCHITECT'S DEPARTMENT
Applications are invited for appointments within the following grades:—
ARCHITECTS:

(a) A.P.T. IVIV (£1,140—£1,480 per annum).
Candidates should be A.R.I.B.A. Commencing salary dependent on ability and experience.

(b) A.P.T. III/IV (£960—£1,310 per annum).
Posts are suitable for young architects who have recently completed their course of study for the Final Examination of the R.I.B.A. Previous office experience will be the minto account in deciding initial salary. The office is organised on the Group system and all architects are given projects for which they are responsible for design, working drawings and supervision. There is opportunity for all architects to take part in the continuing programme of technical development work in dimensionally co-ordinated structural systems embracing steel, concrete and londbearing methods and in which cost analysis and control methods are employed. The Department has its own Quantity Surveying and Engineering Groups who work closely with the architects.

The building programmes are very large and include Schools. Colleges of Further Education, Police and Fire Stations, Court Houses, Libraries, Health Centres and Clinics. Welfare Homes.

Application forms from Geoffrey Fardeli, M.B.E. A.R.I.B.A. County Architect, County Hall, Hertford, Here, to whom they should be returned by 2nd October, 1961.

SURREY COUNTY COUNCIL

SURREY COUNTY COUNCIL
Applications invited for appointment of ASSISTANT ARCHITECTS on GRADE IV (21,140—21.310 p.a. plus 245 p.a. London Allowance).
Must be A.R.I.B.A. and have had experience in preparation of drawings and specifications, and be capable of assuming responsibility for medium to large scale contracts.
Full details, present salary and three copy testimonials, preferably one from present employer, to County Architect, County Hall, Kingston, as soon as possible.





AJ SfB

A statement to advertisers We are appealing to advertisers to join with us in giving architects more concise, classified technical information.

A successful journal is a joint venture of editorial and advertising interests. The editors do their utmost to give architects the news, comment and technical information necessary for them to keep abreast with new developments and to practise efficiently. Our advertisers form a complementary service by supplying information on new materials, products and services, and by keeping this information up to date.

We believe that a neglected field of advertising lies in the preparation of informative advertisements. This is the field where the most response to an advertisement can be expected from a responsible, professional reader. In our policy of providing information for the architect we want to give every encouragement to advertisers to produce concise, logically ordered material, in tabular, drawn or diagrammatic form, fully dimensioned and annotated where necessary.

This is a method which has been successfully demonstrated by the AJ's Information Sheets. Advertisements that present information in an acceptable, authoritative way will be preserved by readers. Informative advertising is not intended to take the place of full catalogue information or the visit of technical representatives, but rather to assist the architect to make basic decisions and selections during the initial stages of his design when speed is vital. In particular, The Architects' Journal seeks the co-operation of all the advertisers in its forthcoming series of supplements, which, commencing on October 4, will provide within a year the nucleus of a personal library (based on the SfB filing system) for every architect. Easily detachable, the supplements will dea! with a different building element each week, and contain a check list, design information, references and information sheets. We hope manufacturers will see the value of making their own contribution to this library by providing as much informative advertising as possible for each subject dealt with. Such advertising being an integral part of the supplement can be easily filed by readers as information complementary to the editorial. If any advertiser or his advertising agent seeks advice or further information on this we will be pleased to give it.

LANCASHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
vacancy exists in a newly formed group in
County Architect's Department for a
lifted and eatmosnastic ASSISTANT ARCHICT with a dominant interest in organisation

and management processes.

The appointment will be within the salary scale A.P.T. V (£1,310—£1,480) and application forms may be obtained from the County Architect, P.O. Box 26, County Hall, Preston, to be returned not later than the 6th October, 1961.

COVENTRY CITY

SENIOR GROUP HOUSING ARCHITECT
41,550 to £1,825-8CALE "C"
Applications invited for deputy to Principal
Housing Architect.
Design ability, eathusiasm and drive required
to implement urban renewal and neighbourhood
projects on imaginative basis. New ideas
Commencing.

Commencing salary according to experience.
Application forms returnable by 6th October, 1961,
to Council House.

ARTHUR LING, City Architect

ARCHITECT (one position up to £1,500) and ASSISTANTS up to £1,250 for design and construction of buildings for new and existing parks and open spaces. Opportunity for interesting work in association with landscape architects. Starting points according to qualifications and experience. Apply Chief Officer (A1/A/2554/9), L.C.C., Parks Dept., County Hall, S.E.1 ('phone WATERIOS 5000, ext. 8076).

ext. 8076). 9361

UNIVERSITY OF ST. ANDREWS

CLERK OF WORKS required for University
building contracts in Dundee. Staff appointment;
salary £850; pension scheme. Applications should
state age, trade, training, qualifications, experience and posts held, with dates; and should
be lodged with the Secretary of the University,
c/o Queen's College, Dundee, by 7th October, 1961.
9353

c/o Queen's College, Dundee, by 7th October, 1961.

STAFFORDSHIRE COUNTY COUNCIL
COUNTY PLANNING AND DEVELOPMENT
DEPARTMENT
Applications are invited for the appointment in the County Planning and Development Department of a SENIOR PLANNING ASSISTANT on A.P.T. Grade V (£1,310-£1,480 per annum). The commencing salary will depend on qualifications and experience.

The successful applicant should have a final professional qualification in planning, architecture or landscape design and should be experienced in planning administration. Particular responsibilities of the post include Development Control in relation to Design and Amenity, Caravans and Advertisements, advising on amenity questions arising out of the Development Plan especially in relation to Village Plans. The Council are prepared to grant lodging allowance of 35s, per week for a period of six months and second class railway travel home every two months during the initial six months to married applicants maintaining a home outside the geographical county. Consideration will also be given to the granting of financial assistance in appropriate cases towards removal expenses.

tance in appropriate cases towards removal expenses.

Applications giving details of age, education, qualifications, present and previous appointments, experience and the names of two persons to whom reference may be made should be sent to D. W. Riley. Country Planning and Development Officer. 41a Eastgate Street, Stafford, not later than 6th October, 1961.

Relationship to any member or senior officer of the Country Council must be disclosed. Canvassing will disqualify.

T. H. EVANS,

Clerk of the Country Council

9364

NORFOLK COUNTY COUNCIL

SENIOR PLANNING OFFICER (Amenity and Special Subjects) J.N.C. Scale B—£1.410 to £1.670
Applications are invited from persons holding suitable qualifications in planning, architecture and/or landscape architecture for appointment to the above new post as head of the Amenity and Special Subjects section of the Department.

The section is faced with an extremely interesting programme of work, and a person nossessing an appropriate degree of enthusiasm and organising ability is required.

An "essential user" car allowance and part removal expenses are payable, and the National Conditions of Service will apply.

Further particulars will be supplied on request. Closing date for anolications 16th October.

B. I. MAXWELL.

County Planning Officer.

Norwich Off. Sosso

County Planning Officer.

Norwich. O2T. S9359

COUNTY ROROUGH OF EAST HAM
SENIOR ASSISTANT PLANNING OFFICER
Grade A P.T. II—2815 to 2960
(plus London Weighting)
Vacancy in Borough Engineer's Department.
Salary above minimum payable according to qualifications and experience.

A subsistence allowance may also be paid over reasonable period to the person appointed if unable to obtain suitable housing accommodation necessitating the maintenance of two homes.

Further details and application form (returnable with) 10 days) from the Town Clerk, Town Hall.

East Ham, E.6.

COUNTY BOROUGH OF ROTHERHAM ARCHITECTS

ARCHIFECTS
Applications are invited for the appointment of ARCHITECTURAL ASSISTANTS—A.P.T. 111/IV (£960—£1,310).

I ARCHITECTURAL ASSISTANTS—A.P.T. II/IV (290-21,310).
The department has a varied and expanding togramme of architectural work including chools and large central redevelopment areas. Candidates are required to have passed Parls I not II of the R.I.B.A. final examination. The commencing salary in the grades will be coording to capabilities and experience. Housing accommodation will be available if precessary.

Applications to be endorsed "ARCHITECTS" stating age, qualifications and details of experience, together with names of two referees, should be received by me not later than Tuesday, 3rd October, 1961.

Canvassing will disqualify.

JOHN S. WALL,

Town Clerk.

Municipal Offices,
Rotherham.
September, 1961.

CITY AND COUNTY OF NORWICH
CITY ARCHITECT'S DEPARTMENT
Opening for a SENIOR ASSISTANT ARCHITECT, preferably with local government experience, mainly for urban renewal housing. Salary
to be fixed up to £1,480. Casual car allowance.
Applications on form obtainable from David
Percival. City Architect. City Hall, Norwich,
NOR. 01A, should be returned by 2nd October,
1961.

CUMBERLAND COUNTY COUNCIL
There are vacancies on the staff of the County
Architect's Department for ASSISTANT ARCHITECTS on A.P.T. Grades 3, 4 and 5. Applicants
must be suitably qualified.
Further particulars and forms of application
may be obtained from the County Architect, 15,
Portland Square, Carlisle.

G. N. C. SWIFT.

arlisle.

G. N. C. SWIFT,

Clerk of the County Council.

9339

ADMIRALTY—NAVY WORKS DEPARTMENT
ARCHITECTURAL AND CIVIL
ENGINEERING ASSISTANTS
Vacancies exist in Navy Works Department
Drawing Offices for ARCHITECTURAL and
CIVIL ENGINEERING ASSISTANTS as shown.
Posts are non-pensionable. Opnortunities for transfer to Established Staff will occur.

Engineering Assistants;—
Vacancies exist at Pinner (Middlesex), Liverpool, Rosyth, Greenock and Glen Douglas (Dumbartonshire) and occur at Establishments elsewhere in the United Kingdom from time to time. Applicants must be competent Draughtsmen and experienced designers in one or more of the following types of civil engineering works;—Structural steelwork, reinforced concrete; dock and harbour works; airfield construction; oil fuel schemes; roads, rail services and water supplies. O.N.C. or equivalent qualification is essential.

Architectural Assistants:—
Vacancies exist at Head Office Architects Branch, Pinner (Middlesex), and also at Portsmouth, Devonport, Greenock and Chatham. Applicants must be competent Draughtsmen and will be required for work on the preparation of designs for a wide range of new works, including housing projects, all forms of accommodation buildings, specialised technical buildings and industrial typhuldings in H.M. Dockyards, Preference given to candidates studying for professional qualifications.

to cannuates state of the cartons of the cartons of the cartons of the cartons of the carton dependent on location) starting from £653 p.a. (at age 21) to £905 p.a. (28 and over): maximum of scale £993 p.a. Opportunities occur for promotion to Leading grade salary maximum £1,160 p.a. National Rate.

Five-day week. Annual leave 18 days rising to 22 after 10 years.

motion to Leading grave somey has been parallely and the parallely week. Annual leave 18 days rising to 22 after 10 years.

Consideration will be given to successful candidates being granted assistance to obtain professional or technical qualifications.

Candidates, who must be British subjects are invited to apply, in writing (giving details of experience). to:—Director General. Navy Works (48/96/7/1/30)). Admiralty, Chamberlain Way. Pinner, Middlesex.

Interview will be arranged locally. S9550

COUNTY BOROUGH OF GREAT YARMOUTH EDUCATION COMMITTEE
SCHOOLS ARCHITECT'S DEPARTMENT Applications are invited from Associate Members of the R.I.B.A. for the appointment of a SENIOR ASSISTANT ARCHITECT at a salary within A.P.T. IV (£1,40 to £1,310) to work on an interesting and progressive programme.
Previous experience with Local Government not essential.

essential.

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

Full details of present and past appointments. age, qualifications and experience, together with the names of two referees, should reach the Schools Architect, 22, Euston Road, Great Yar-mouth, by 26th September, 1961. Chief Education Officer.

22. Euston Road. Great Yarmouth, Norfolk.

CITY PLANNING AND ARCHITECTURAL DEPARTMENT
Applications are invited for the following appointments within the grades shown:—
(a) PLANNING ASSISTANT (Development Control—A.P.T. III./IV—2960—21,310 per annum).
(b) PLANNING ASSISTANT—A.P.T. II—(£815—2960) per annum).
The vacancies exist in the Development Control Section of the Department.
(c) 2 ARCHITECTURAL ASSISTANTS—A.P.T. II—(£815—2960).
(d) 1 JUNIOR ARCHITECTURAL ASSISTANTS—A.P.T. II—(£815—2960).
The programme of building works is extensive and interesting and these appointments afford an opportunity for good experience.
The commencing salary for each appointment will be fixed at a point within the scales commensurate with qualifications and experience.
Applicants for post (a) should have passed the final examination of the Town Planning Institute; and should be experienced in the preparation of reports on planning applications and applications under the Advertisements Regulations in the City Areas. Experience in the preparation of Tree Preservation Orders will be an advantage.
Applicants for post (b) should have passed the intermediate examination of the Town Planning Institute, and have had previous experience in the Planning Department of a Local Authority.
A five-day week is in operation and qualifications to the together with the average and qualifications with the average and qualifications.

required.

Applications stating age, experience and qualifications, together with the names and addresses of three referees should be sent to the City Planning Officer and Architect, 7, North Parade Buildings, Bath, by Saturday, 7th October, 1961.

JARED E. DIKON.

Town Clerk.

Guildhall. Bath

Bath. 9399

CARSHALTON URBAN DISTRICT COUNCIL

ENGINEER AND SURVEYOR'S DEPARTMENT

ASSISTANT ARCHITECT (A.P.T. IV)

Salary within range £1,165—£1,355 according to
experience. Candidates must have passed Final

B.I.B.A. or equivalent.

Experience offered on design and supervision
of housing, public buildings, etc., in large Urban
District within the fereater London area. (Population approximately 60,000).

Car allowance payable. Five-day week. Good
working conditions. Staff canteen.

Applications forms obtainable from the undersigned to be returned by 25th September.

Canvassing will disqualify.

C. H. DURRANT,

Clerk of the Council.

District Council Offices.

Clerk of the Council.

Sy201

BOROUGH OF ASHTON-UNDER-LYNE
APPOINTMENT OF:

(a) QUANTITY SURVEYOR GRADE A.P.T. IV

(£1,140-£1,310 per annum).

(b) ARCHITECTURAL ASSISTANT GRADE
A.P.T. III (£960-£1,140 per annum).

Applications are invited for the above appointments in the office of the Borough Engineer and Surveyor.

ments in the ones of Surveyor.

The provision of housing accommodation for the successful candidates will be considered if

Further particulars and application forms obtainable from the Borough Engineer and Surveyor, Municipal Offices, Ashton-under-Lyne.

Completed applications should be submitted to me by the 13th October, 1961.

G. A. MALONE,

Town Clerk.

own Hall,
Ashton-under-Lyne,
Mth Sentember, 1961.

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198/61.R.

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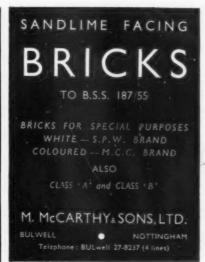
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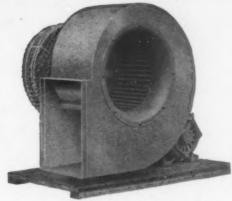


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