FINE ARTS DEPT.



standard

contents

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

NEWS and COMMENT

Diary News Astragal's Notes and Topics Letters Societies and Institutions

SECTION **TECHNICAL** Information Sheets Information Centre Current Technique Questions and Answers Prices The Industry PHYSICAL PLANNING SUPPLEMENT BUILDINGS CURRENT STATISTICS HOUSING Architectural Appointments Wanted Vacant and [VOL. 119 No. 30861 THE ARCHITECTURAL PRESS 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.I. 'Phone : Whitehall 0611 Price IS. Od.

RS

RSI

RIB

SE

TPI

Registered as a Newspaper.

The Architects' JOURNAL for April 22, 1954 ARCHITE ★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ig to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address. Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1. IGE Sloane 8266 IHVE Institution of Heating and Ventilating Engineers. 49 Cadogan Square, Sloane 1601/3158 Incorporated Institute of British Decorators. Drayton House, Gordon Street, Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783 Incorporated Institute of BHIBH Sectors Institute of Landscape Architects. 12, Gower Street, W.C.1. Museum 1783 Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2. Temple Bar 4071 Museum 7197/5176 IIBD ILA I of Arb Institute of Aronautors. 2019 Institute of Aronautors. 2019 Institute of Aronautors. 2019 Institute of Builders. 48, Bedford Square, W.C.1. Museum 7197/5176 Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3. Avenue 6851 Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172 Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1. Sloane 7128 Inland Waterways Association. 14, Great James' Street, W.C.2. Chancery 7718 Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1. Whitehall 7264/4175 Weitehall 7264/4175 IOB IR IRA ISE IWA LIDC LMBA London Master Builders' Association. 47, Bedford Square, W.C.1. Museum 3891 Modern Architectural Research Group (English Branch of CIAM). Secretary:Trevor Museum 3891 MARS

 MARS
 Modern Architectural Research Group (English Branch of CIAM). Secretary: Trevor Dannatt, 6, Fitzroy Square, W.1. Euston 7171.

 MOA
 Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1. Whitehall 3400

 MOE
 Ministry of Education. Curzon Street House, Curzon Street, W.1. Mayfair 9400

 MOH
 Ministry of Health. 23, Savile Row, W.1. Regent 8411

 MOHLG
 Ministry of Labour and National Service, 8, St. James' Square, S.W.1. Whitehall 4300

 MOS
 Ministry of Supply. Shell Mex House, Victoria Embankment, W.C. Gerrard 6933

 MOW
 Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 7611

 NAMMC
 Natural Asphalte Mine-Owners and Manufacturers Council.

 94-98. Petty France, S.W.1. Abbey 1010

 94-98, Petty France, S.W.1. Abbey 1010 National Association of Shopfitters. 9, Victoria Street, S.W.1. Abbey 1010 National Buildings Record. 37, Onslow Gardens, S.W.7. Kensington 8161 National Council of Building Material Producers, 10, Princes Street, S.W.1.Abbey5111 National Federation of Building Trades Employers. 82, New Cavendish Street, W.1. Langham 4041/4054 NAS NBR NCBMP NFBTE

NFBTO NFHS

National Council of Building Trades Employets. National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4. National Federation of Housing Societies. 13, Suffolk St., S.W.1. National House Builders Registration Council. 82, New Cavendish Street, W.1. Langham 4341 Molesey 1380 Deidee Street, E.C.4. City 1476 NHBRC National Physical Laboratory. Head Office, Teddington Mo National Sawmilling Association. 14, New Bridge Street, E.C.4. National Smoke Abatement Society. Chandos House, Buckingham Gate, NPL NSA NSAS S.W.1. Abbey 1359 NT

National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1. Whitehall 0211 Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 0215 Reinforced Concrete Association. 94, Petty France, S.W.1. Abbey 4504 Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. PEP RCA RIAS

Royal Institute of British Architects. 66, Portland Place, W.1. Langham 5721 Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1. Whitehall 5322/9242 Edinburgh 20396 RIBA RICS RFAC Whitehall 3935 Regent 3335 RSA Trafalgar 2366

Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1. Royal Society. Burlington House, Piccadilly, W.1. Royal Society of Arts. 6, John Adam Street, W.C.2. Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1. Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19. W Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1. Sloane 5134 Wimbledon 5101

SBPM Victoria 2186 SCR Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8. Western 1571 Society of Engineers. 17, Victoria Street, Westminster, S.W.1. Abbey 7244 School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3. SFMA

Mansion House 3921 Structural Insulation Association. 32, Queen Anne Street, W.1. Society of Industrial Artists. 7, Woburn Square, W.C.1. Scottish National Housing. Town Planning Council. Langham 7616 Langham 1984 SIA SIA SNHTPC

Hon. Sec., Robert Pollock, Town Clerk, Rutherglen. Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1. Holborn 2646 SPAB Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2. **TCPA**

Temple Bar 5006 City 4771

 Timber Development Association.
 21, College Hill, E.C.4.
 City 4771

 Town Planning Institute.
 18, Ashley Place, S.W.1.
 Victoria 8815

 Timber Trades Federation.
 75, Cannon Street, E.C.4.
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 War Damage Commission.
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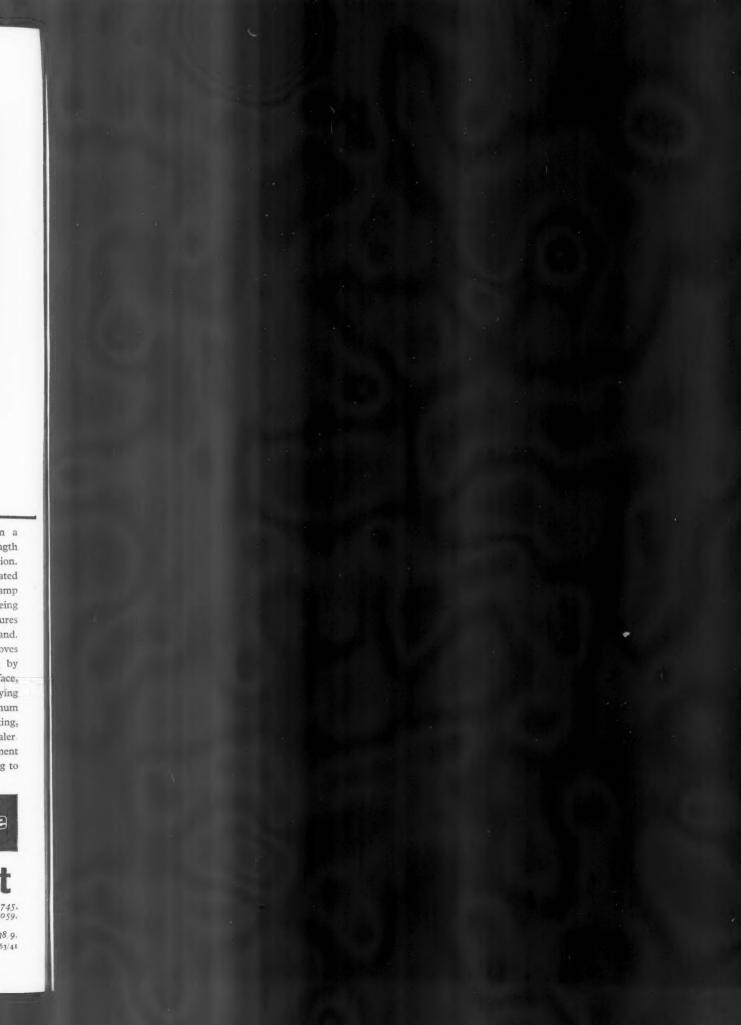


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Van Dyke Engineering Co., Ltd O.C. Products (two lactories Ventilation equipment has been used. Others have been the Silicosis, Advance and Standard Factory Programmes and the Ex-Wartime Factories involving approximately 100 Factories under Sir Percy Thomas & Son F/A.R.I.B.A. The Wales and Monmouthshire Industrial Estates where for some twenty factories COLT Ventilation equipment was specified by Jonah Arnold & Smith. The Remploy Factory Programme under the Ministry of Works where nearly one hundred factories were ventilated by COLT. COLT Ventilation equipment has also been specified for many further contracts on Industrial Estates at Slough, Stevenage, Crawley, Trafford Park; for the Northern Ireland Advance Factory Programme, Scottish Industrial Estates, The Ministry of Supply Factories and Irish Estates Ltd.

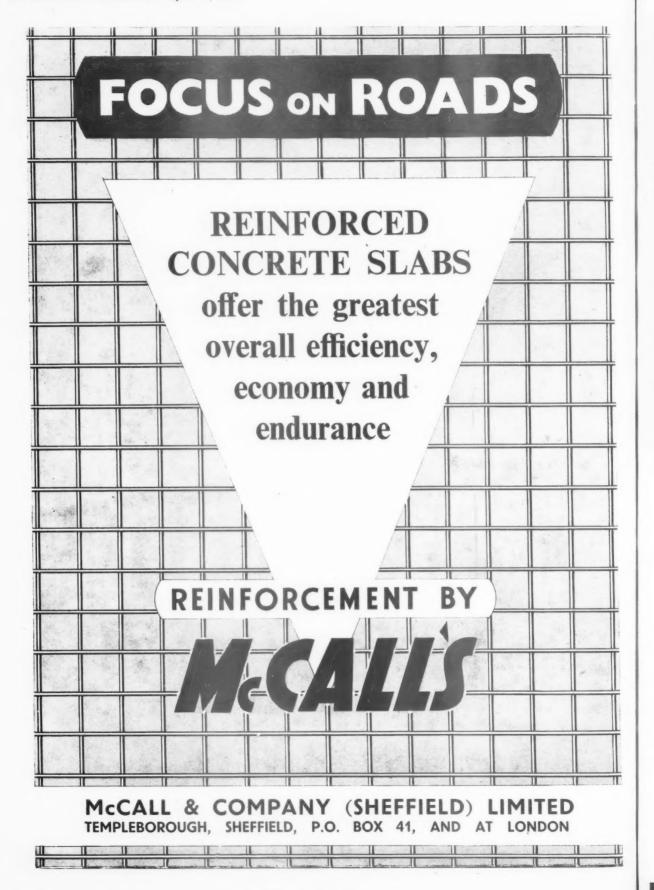
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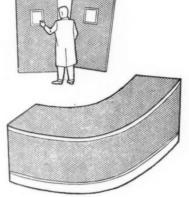
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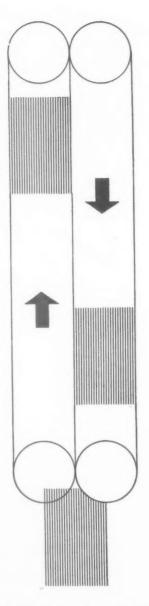
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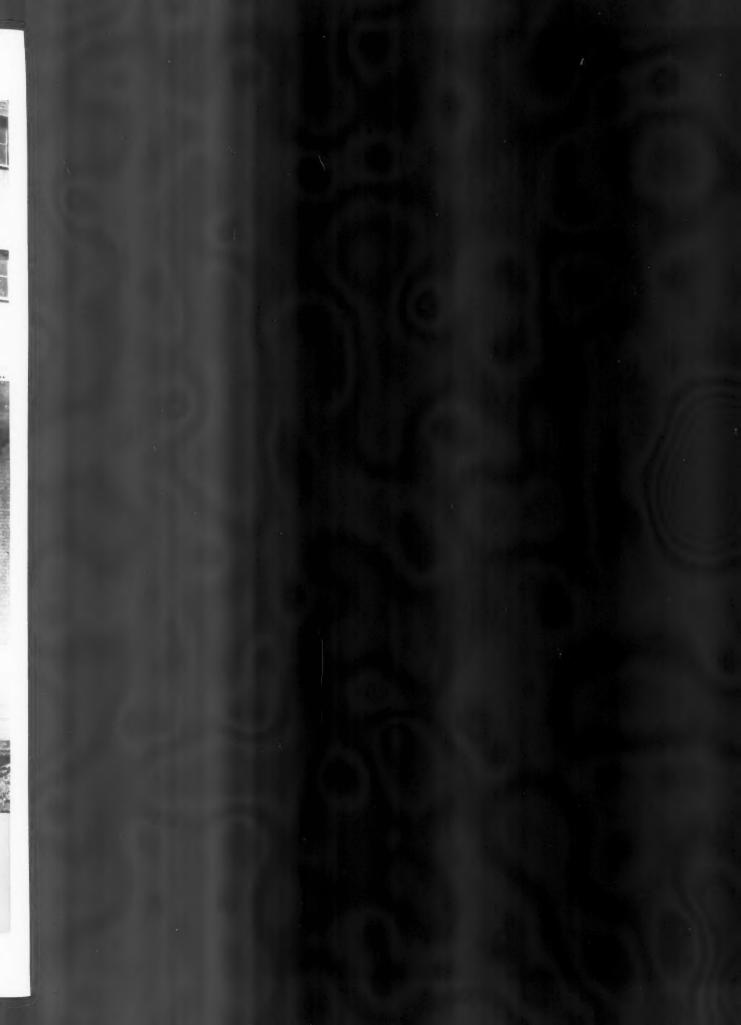
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THE ARCHITECTS' JOURNAL for April 22, 1954









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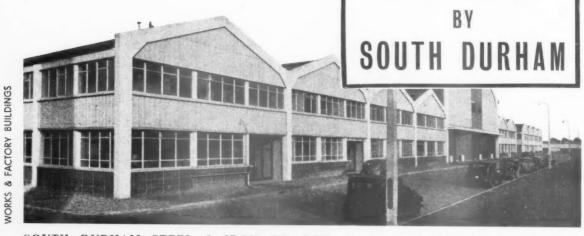
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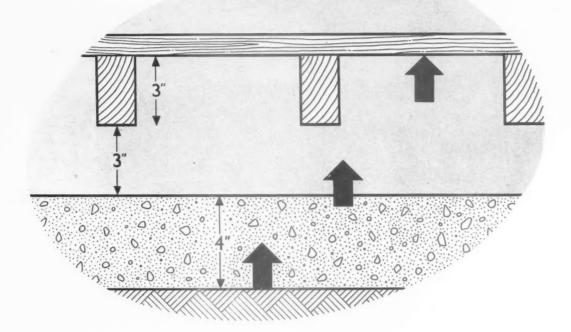
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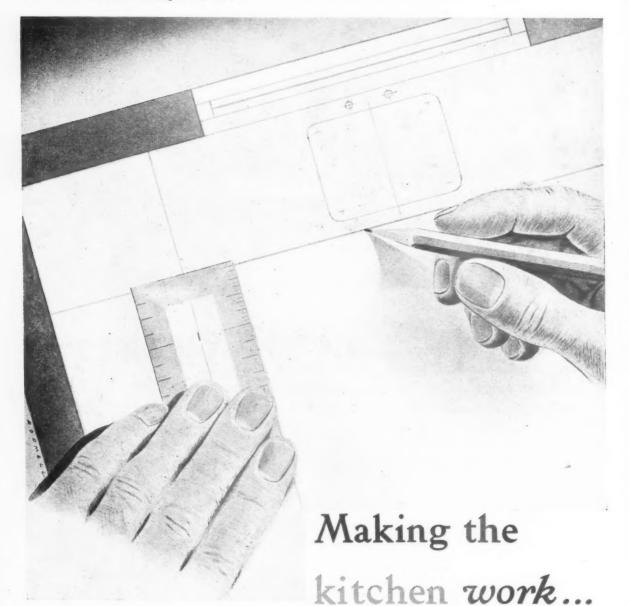
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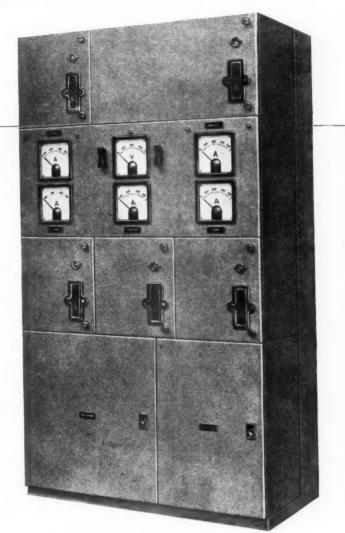
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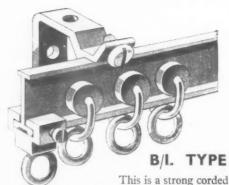
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⁶ Rufflette ⁷ Brand Runways, either corded or non-corded, are being increasingly used as landlord's fixtures in many new building schemes. Full details will be supplied on request.



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ARTERS) ARTERS) AMITTEE





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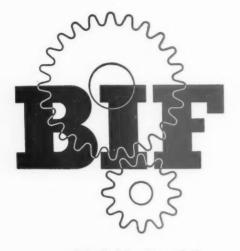
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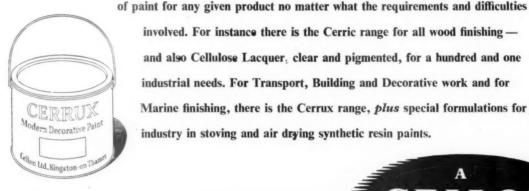
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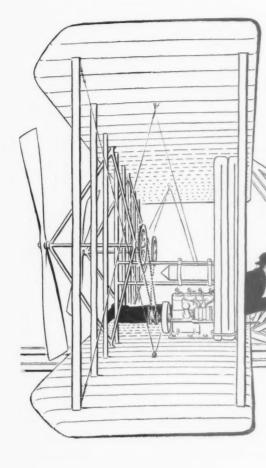
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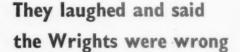
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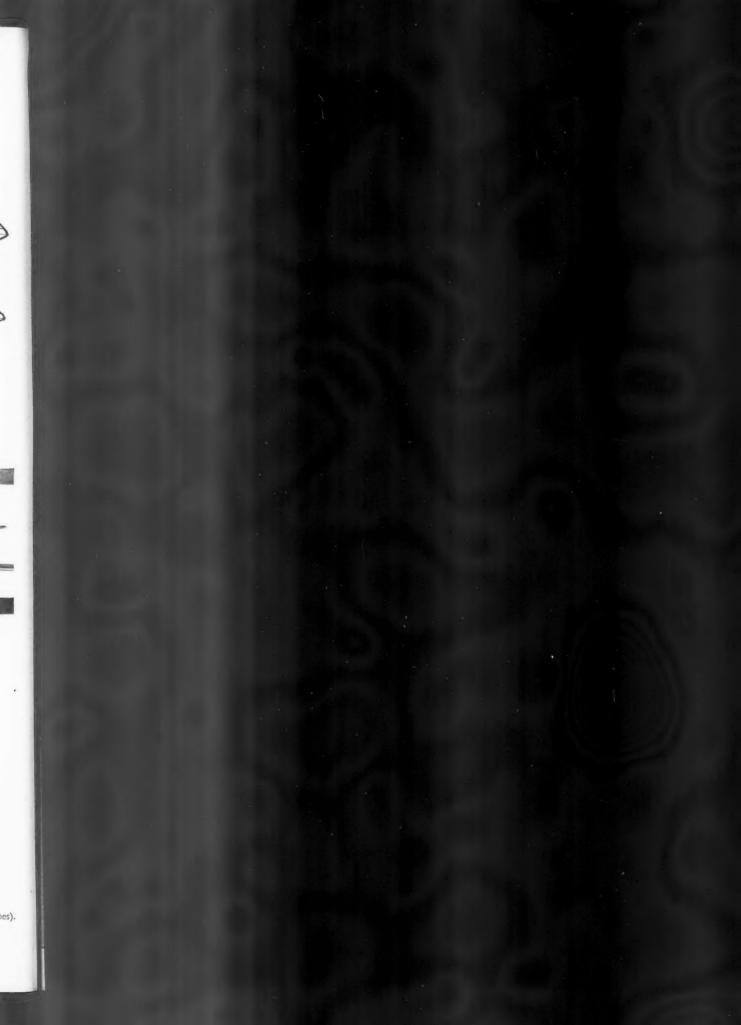


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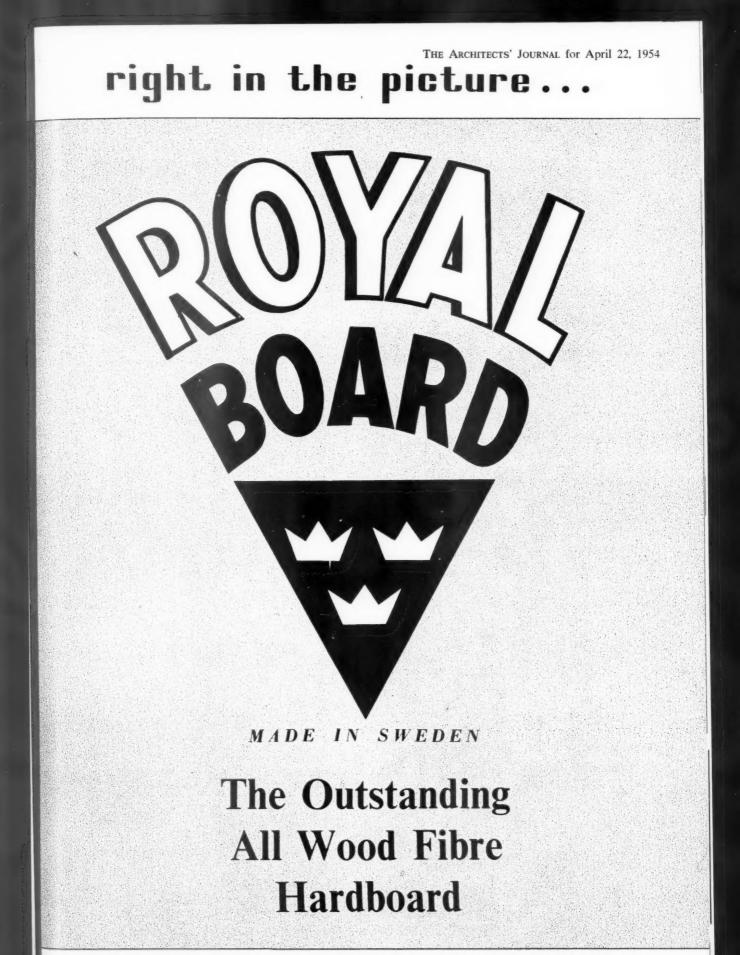
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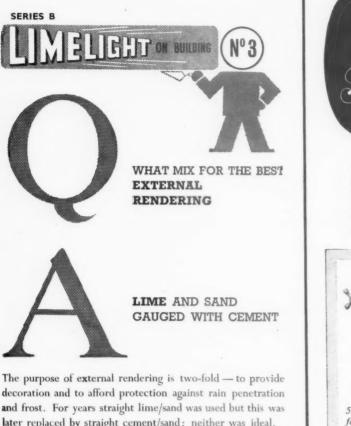
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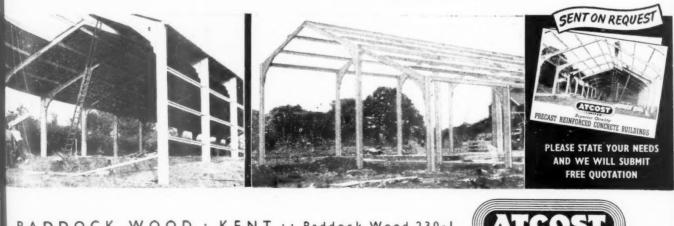
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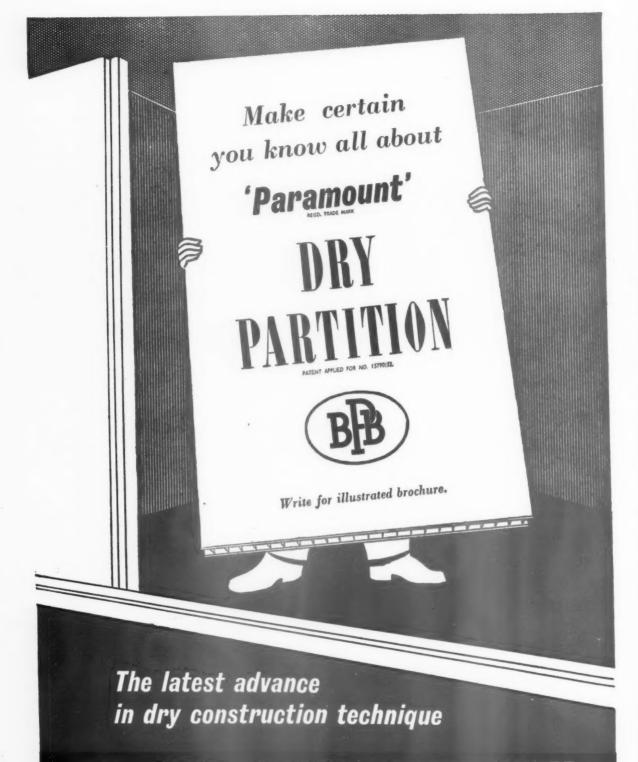
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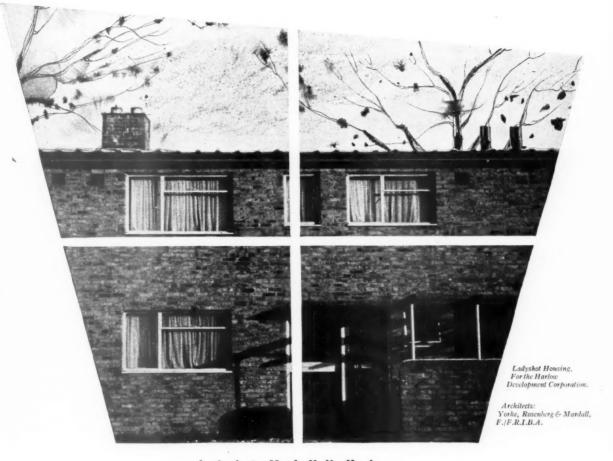
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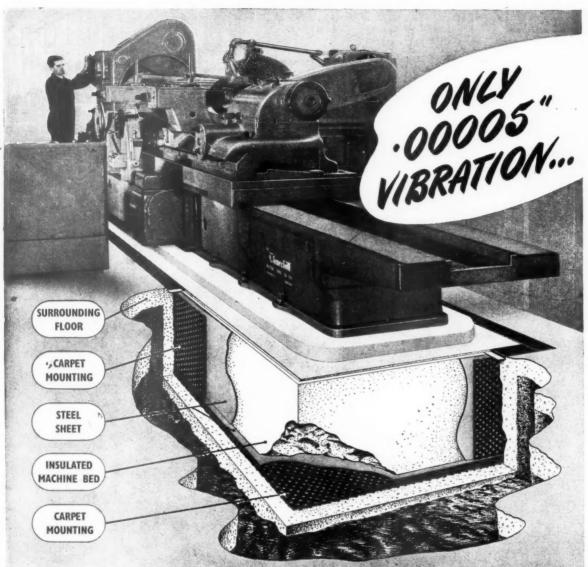
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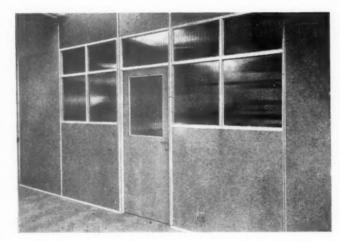
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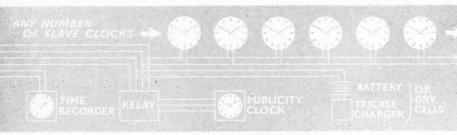
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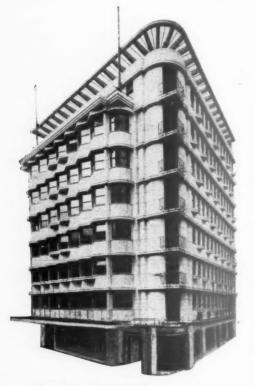
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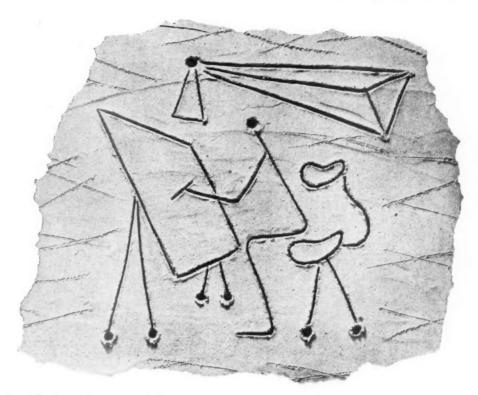
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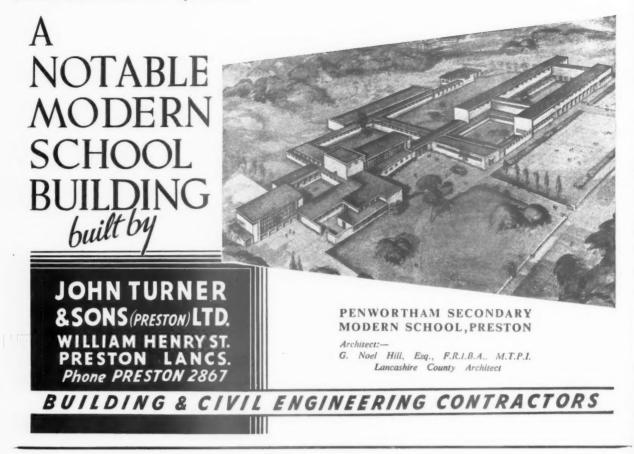
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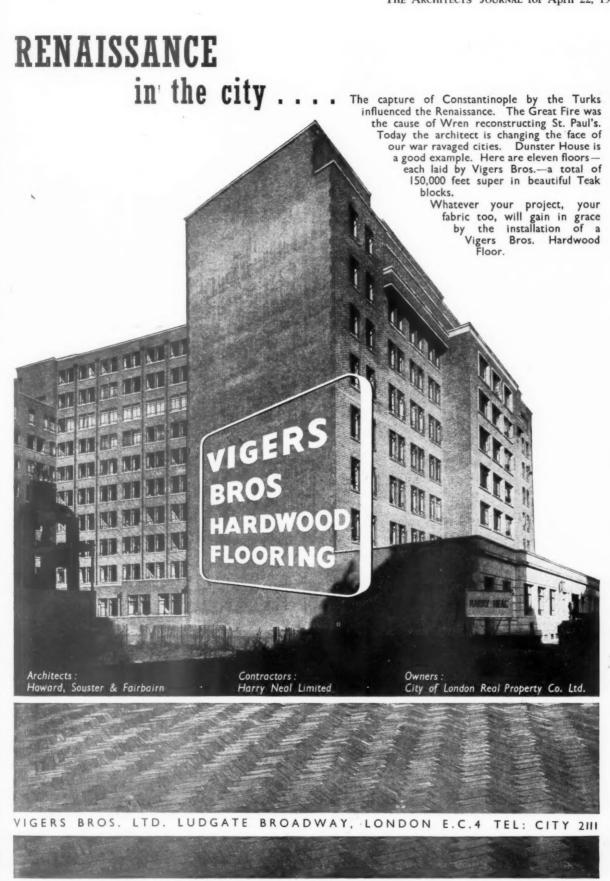
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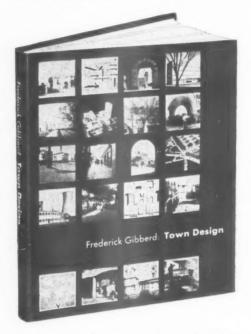
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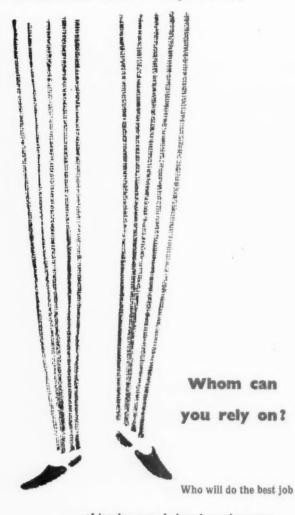
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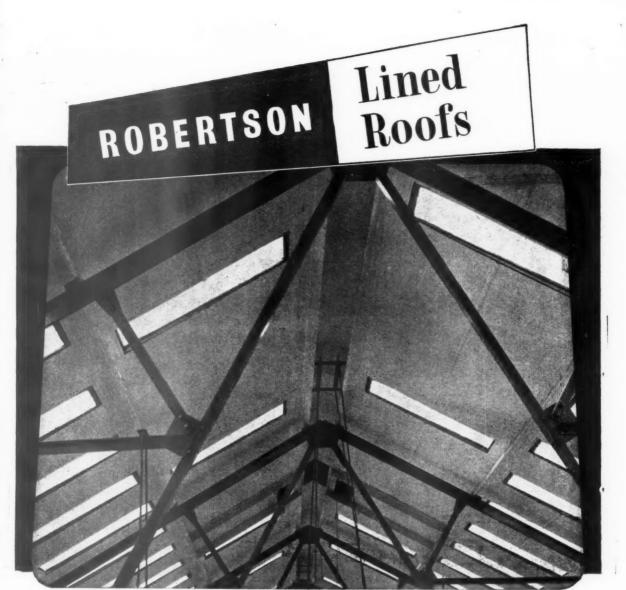


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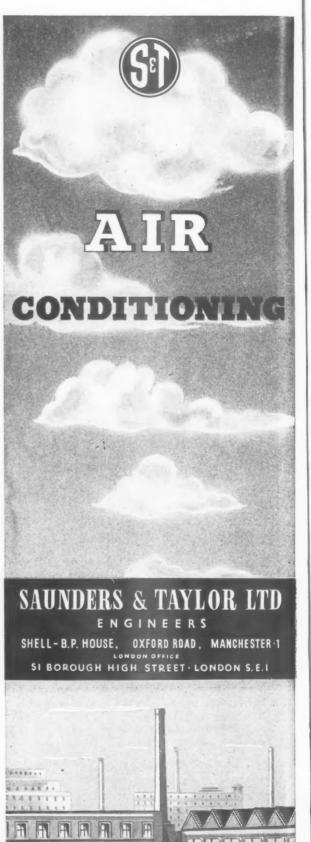
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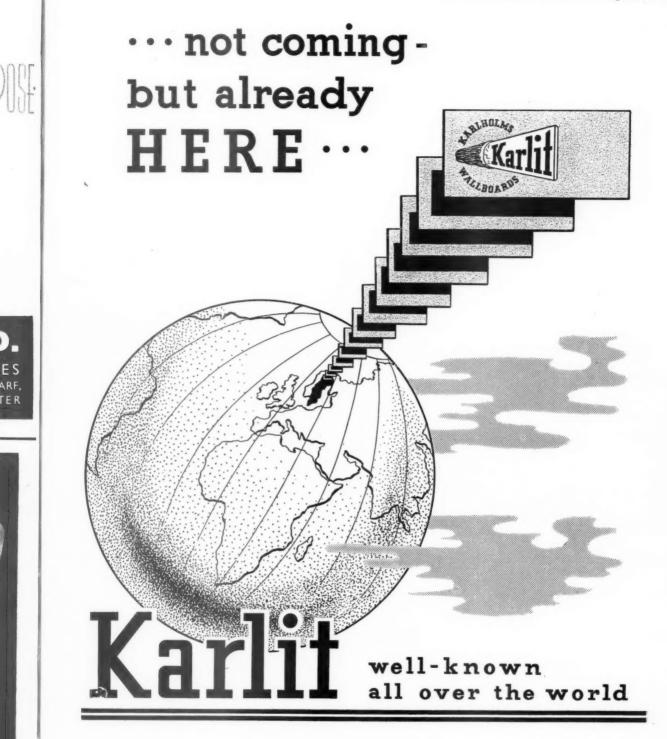
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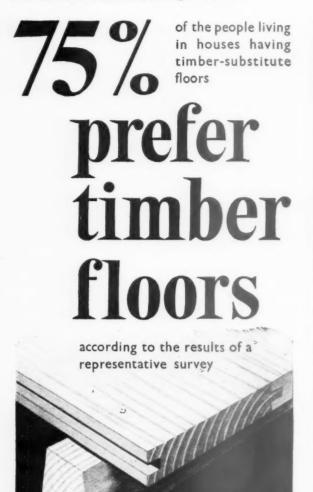
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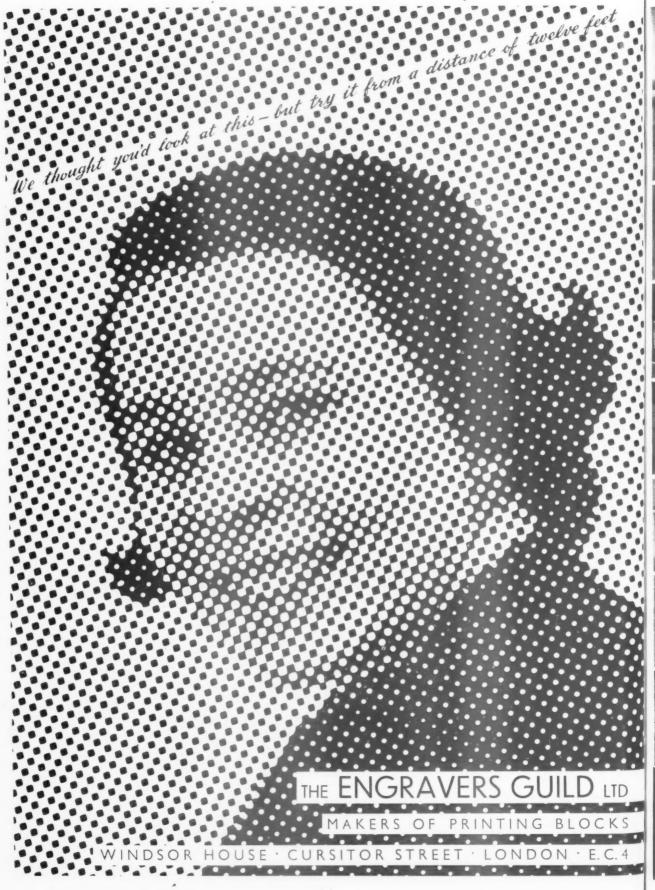
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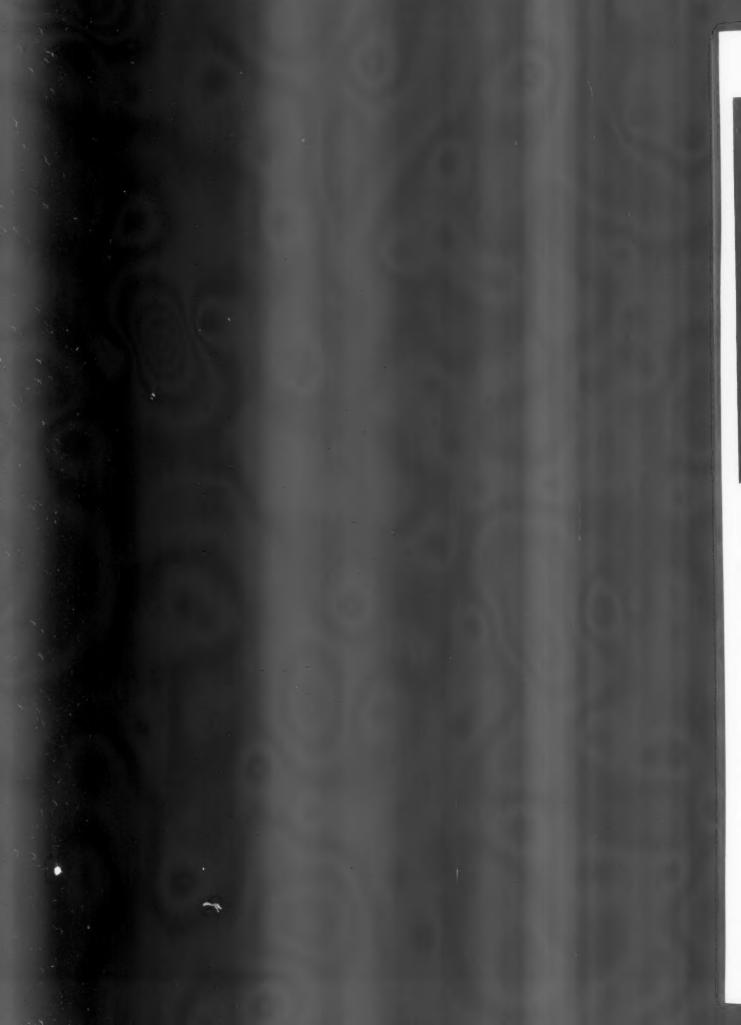
FOOTNOTE: And here, in case you would like to read a complete book review is Vogue's, the whole of it. Short but very, very sweet :

"London Night and Day", the Architectural Press's guide for tourists and locals, among the wittiest, prettiest and most knowledgeable of its kind, informal yet immensely suave, like Sherlock Holmes in his dressing gown."

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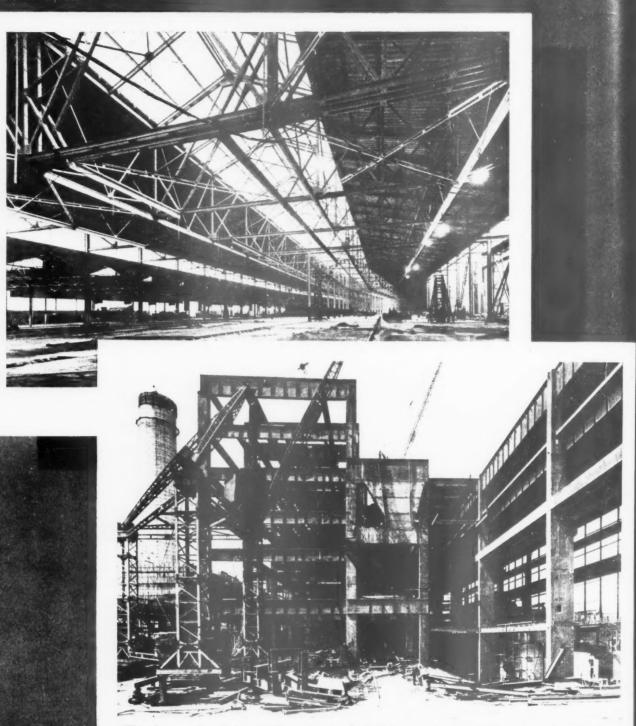
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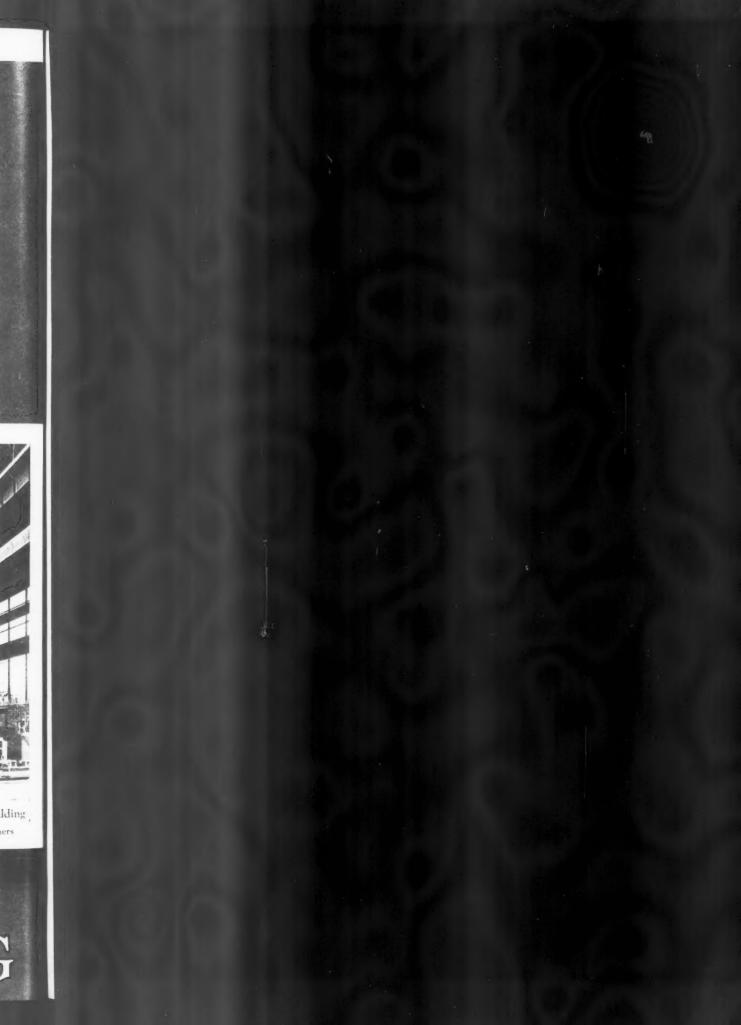
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BEWDLEY

You couldn't honestly say that there was nothing in the papers these days, but nevertheless, despite Indo-China and Macarthy, Dulles, Geneva, Mau-Mau and the Quebec Agreement, "politics are so dull" as Sir David Eccles remarked at the Building Centre lunch, "it's not surprising that people are becoming more interested in buildings."

Further evidence of this comes from Bewdley, Worcestershire-scene of the second town meeting organized to discuss the Architectural Review's townscape proposals. There was, it seems, standing room only and an overflow meeting in a side room. A local resident (with memories presumably of the heyday of Baldwin) said there hadn't been such a local turn-out for many vears. It is most encouraging to hear that despite the counter-attractions of Andy Pandy and Lady Barnett there are still enough people in some places who are interested enough in what those places look like, or will look like, to turn out in the evening and talk about it.

MAJOR PROPHET

Are architects any longer interested in art-apart, of course, from their own particular branch? One sometimes wonders. £6 is a high price to pay for a book, but for those who take seriously the enigmas thrown up by the story of creative man, it is not too much. André Malraux's Voices of Silence* is important. It is a piece of rhetoric and opinion, sincere and passionate and often convincing. In its 650 pages there may be inaccuracies-the curators and historians have jumped on them while ignoring the thesis. Here, in fact, is a piece of opinion to set against the spate of guide-books and histories of which we have really had enough. Scholarship is so much easier than thought. Malraux is not Ruskin, nor even Pater. His book may stand on the shelf beside the "Architecture of Humanism" to which-in an odd way-it is a counterblast.

MINOR PROPHET

John Gloag's "Sacred Edifice "-first published in 1937-has now been reissued by the publishers on the ground that the author showed extraordinary omniscience in forseeing the controversies that have surrounded-and still surround-the rebuilding of Coventry

* Secker and Warburg

cathedral. In fact, Mr. Gloag's story is a pleasant trifle about the cathedral at "Brell" which, having been much battered by storm and Zeppelins, is befriended by a sentimental US millionaire-who plays the part of the Bomb Damage Commission. The tale gives the author plenty of scope to discuss the pros and cons of reconstruction.

ASTRAGAL, however, became absorbed in the character of the Dean's son-inlaw, editor of the "AW" (short for Architects' Weekly)-a youth who felt passionately about the modern movement, was slightly immoral and had dramatic good-looks, with grey eyes set far apart. So now you know!

FALSIES FOR ARCHITECTS

From time to time nearly every one must have a moment of doubt when he wonders if there isn't something missing from the contemporary interior, when he wonders if all these deep textures, primary colours, natural materials, selected antiques, aren't all a bit too real. Our ancestors never sentenced themselves to constant exposure to the truth, they had their fakes and their illusionistic gimmicks, but where are ours?

Actually, ASTRAGAL is in a position to reveal that the New Falsity is already with us. He recently discovered in one of the shiniest of the shiny magazines from across the water the advertisements which herald the new movement. One was for louvered wall-paper, printed to imitate wooden shutters closed or slightly ajar (query: does a room papered with this appear to be more draughty than one that isn't?). The other was for plastic plants (with

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In " T thir nea dile He new bec or allo velo who one Tov mo the exclusive Natur-tex finish), and these at once illustrate the virtues of the New Falsification. They are pliable, washable, fireproof; look real and feel real. Furthermore, they are the original, the genuine, plastic, plants, and so widely are these paragons of the New Syntheticism appreciated that even with two factories in operation the manufacturers are only now able to accept orders for early delivery. "Send for free illustrated brochure and botanical wall-chart," says the advert. ASTRAGAL will do that very thing, and report back.

FEWER GOLDFISH?

For the last year or two ASTRAGAL has been troubled about window sizes and spacing. At first, along with greying hair and fibrositis, he was inclined to attribute this to the passing of the years, but then he noticed that quite a number of contemporaries, including the *avant* garde, are seemingly having the same doubts.

We seem to be coming to the conclusion that the window wall ought to be kept for special occasions and places where you can assemble enough heat, curtains and venetian blinds to offset its serious drawbacks. In all other living and working spaces there's a great deal to be said for a window/floor area ratio which does not exceed twenty per cent.

This is going to be awful for the young men and women now crowding out of the schools, their vision filled with glittering space-frames. But just look at the recently published work of those three leading firms. You see what I mean?

URBAN SPRAWL

In his recent Observer articles on "Town Making"-a very different thing from town planning-R. Furneaux Jordan stated the present dilemma of planning and democracy. He believes that our towns, old and new, have lost clarity and definition because their sponsors-city fathers or suburban commuters-have been allowed too much liberty in their development. To Sir Thomas Bennett, who wrote to the Observer in reply to one of Mr. Jordan's articles, the New Town sprawl is justified just because most people want houses with gardens -which means only twelve to fifteen



The last remaining Georgian shop-front in Banbury. ASTRAGAL refers to its proposed demolition in his note, "One Step Forward, Two Steps Back."

houses to the acre. Mr. Jordan suggests that such standards can only be achieved for a minority.

ASTRAGAL is appalled by the implication in Sir Thomas's letter that the sprawl way is the right way because it is the popular way. Must we throw aside professional judgment in favour of the public opinion poll? The gutter press and little plaster doggies in windows are highly popular, but they are not, therefore, wise or beautiful. We cannot re-pulp or throw away our new towns. They are our legacy to the future, and we may be doing far worse by the future than our wicked Victorian ancestors did by us with their industrial Midland towns.

We must discover the real causes of urban sprawl and find real cures for it if our cities, let alone our new towns, are to survive.

ONE STEP FORWARD, TWO STEPS BACK

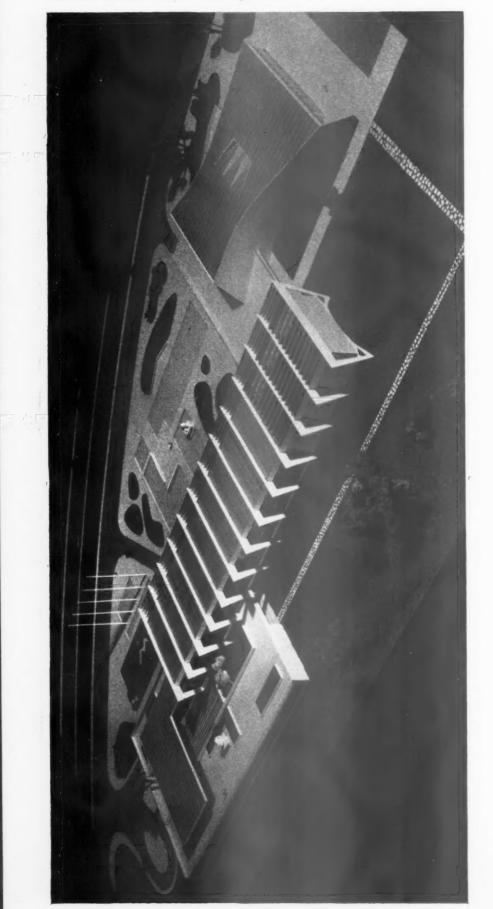
My picture shows the last remaining Georgian shop-front in Banbury, Oxon.

It is not to remain much longer. You are not expected to regard this as a national loss, though it is a good deal better than anything Banbury has produced in shop-fronts since it was new. The sad thing is that the new owners, the Northampton and District Building Society, propose to push out two Georgian bow windows and put back one big Bankers' Georgian bow window.

Apparently an inquiry was held by the MOHLG, but nobody turned up to say why the shop front should not be demolished.

COMPETITION FEVER

Following arguments over the Dover, Dublin and Sighthill competitions, someone has pointed out that only the Falmouth competition has escaped controversy. This is too much for ASTRAGAL. There is argument, of course, over Falmouth, but so far unreported. Here's one point of contention: the winning design (unlike the others, who were differently sited) had several w.c.s below the level of the



4 Live Museum

The new Museum of Modern Art in Rio de Janeiro will be the first to be designed specifically around the concept of the *Musée Vivante*, that is, a museum intended not merely as a place for the storage and display of capital investment in art-work, but also as a place for creative activities in the fine and applied arts. For that reason its programme of accommodation is not the classic and well-worn repertoire of gallerystorage-administration, but includes work-rooms and teaching space as well. The accommodation for these practical activities is seen at the far end of the long galleryblock in Affonse Reidy's prictiminary-project model above, a low, spreading structure around green courts and light-wells with a long run of windows commanding a view

of the bay of Rio. At the other end of the block is the auditorium, placed on the side nearer the Avenida Perimetral for easier public access. The complete programme is, in fact, nearer to the English conception of an arts-centre than a museum, but how different in appearance, and conception, from those pious hopes which were circulated in model form by the Arts Council immediately after the war. The differences may only be due to the generous budget and the Brazilian tradition of overdoing things in the grand manner—or they might be due to the feeling that the project was excitting enough to be worth neutrating to an architect of genus. (The project will be fully illustrated in the May issue of the *Architectural Review*.) mai

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The Editors

THE RIBA AND TOWN PLANNING

LANNING control—to which we referred a few weeks ago--is arousing considerable ill-feeling amongst some architects. But it is only one facet of the most complex subject of town and country planning which is, as a whole, being constantly publicised today as a deterrent to development and a drag on initiative. However, as all good architects have seen for themselves, planning, properly carried out, has a most valuable and positive role to play in the growth of the nation. It is obvious, however, that their are some wrinkles in planning practice which have to be ironed out. In as far as these faults affect architects, it is reasonable to suppose that the RIBA has formed a policy for eradicating them. But before questioning the RIBA's policy, if any, we would remind readers of recent planning history.

The war and its aftermath raised Town Planning from Cinderella of the Arts to a being the position of dazzling, although somewhat dangerous, importance in the affairs of the country, and architects have good reason to feel proud of their contribution to this renaissance. It began, perhaps, with Coventry's magnificent gesture of imagining a new city centre (on pioneering principles that have now become commonplace) while the ashes of the old one were It continued with the justly world-famous County still warm. of London and Greater London Plans, which for the first time brought all the major new ideas which had been generated over the preceding years within the covers of a couple of Then followed the intense activity of the new volumes. Ministry of Town and Country Planning-the legislation, the Central Areas Handbook, the New Towns programme and the slow realization that that elusive science of Regional Planning was not just Town Planning blown up large, but something new which required, among other things, a new sort of team work by many experts.

And the realization came too, that Town Planning itself was a much more complicated subject today than when it had faded out at the end of the great period of Georgian town planning. Recently the complications and the frustrations have become more and more apparent, as the enthusiasm of the blue-print days have given way to the hard grind of the realization stage, which was bound to be slow but has been made slower by the necessary finance being diverted to other purposes and by the over-complicated legislation.

But in spite of all the difficulties there was a field in which

main sewer, although the winners' report is supposed to have stated: "drainage by gravity." Were Lyons, Israel and Ellis, the winners, aware of this apparent discrepancy? Was the assessor, Howard Lobb, aware of it? Does it matter, now that the automatic pump has been invented?

A NEW DICTIONARY

There is no kind of book ASTRAGAL likes as much as one which contains the maximum of fact and the minimum of opinion, and on wet evenings you are more likely to find him curled up with a good dictionary than anything else (well; practically anything else). A new and welcome edition to the stock of wet-weather reading is A. L. Osborne's Dictionary of English Domestic Architecture,* and with it ASTRAGAL has been able to make good use of the last few April showers. It begins with Abacus, like most architectural dictionaries, but it ends with Wing, thus resisting the vulgar temptation to get into the Z's at any price, which gets the better of so many lexicographers. "ASTRAGAL" it defines very fully as "a small half round moulding encircling a column below the capital: a moulded wooden glazing bar (q.v.)," which is much better for one's amour propre than to be dismissed simply as "a sunk bead" as in one dictionary which shall be nameless.

It is, in fact, a very good dictionary indeed, and it is going to get a lot of people out of all sorts of tangles concerning the right description of our architectural heritage. It is up to date -it has heard of Baroque and Mannerism, and defines them in a manner which is helpful-it is accurate in its use of art-historical terms, and even if its definitions are occasionally a little obtuse, as in the case of Palladian, it more than makes up for this in its illustrations and their forcefully didactic captions. Architectural lifemen will be able to stock up with useful words like Bartisan, Pentice, Ancone and Kneeler, while the rest of us simpler souls will be able to look up the difference between Modern Architecture and Twentieth Century Architecture (and the point is very well taken), or to date, with the aid of two pages of excellent drawings, a fireplace to the nearest ten or twenty years.

ASTRAGAL

* Country Life 21s.

block in Affonse Reidy's preliminary-project model above, a low, spreading structure around green courts and light-wells with a long run of windows commanding a view

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architect-trained experts were showing themselves to be preeminent, not so much as solo-designers but as leaders, as co-ordinators, and as the only experts in the field who could weld all the conflicting demands of a hundred individual building projects into a well ordered harmony. We might well ask at this stage what the RIBA has been contributing to the individual efforts of its members who have been exploring and developing this immensely important phenomenon. As far as we can see the answer is-very little. Acts are passed, important statements on floor space, on density control are made, major criticisms of New Towns appear and the RIBA does nothing. We are not, for a moment, asking the Institute to try to take the place of its sister body, the Town Planning Institute, but we are asking for a vigorous and active policy from Portland Place. Before the war architects had far too small a share in such town planning activity as there was, to the great detriment of our cities: it is the duty of the Institute to make sure that this does not happen again.

There are a number of current planning issues of great concern and interest on which the views of the Institute should be made known. A new Town and Country Planning Bill is now before Parliament: no critical statement has yet appeared from the Institute on the previous Act (the famous 1947 Act), vet both documents closely concern the work of many members. There was no statement published on the New Towns Act, or on some of the very controversial planning standards adopted by the New Town Corporations, or of the niggardly financial grants they were allowed. The problems of mixed development have been widely discussed, the condition of the blitzed city centres is anything but satisfactory, floor space and residential density and other planning standards, which intimately concern architects as building or as town designers, are all in need of review.

The list is long; and perhaps the first step would be for the RIBA to organize a Planning Conference, in order to collect and analyse the experience of its members on this vital sphere of their work. But some action is long overdue.

Lancs.

LETTERS

Douglas W. Richardson, A.R.I.B.A. Geoffrey L. Price, A.R.I.B.A. Maurice C. Jarrett, A.R.I.B.A. and Ivor Davies, Student R.I.B.A.

Trade Union for Architects?

SIR,---Remuneration of architects in salaried employment has not risen with the currency That of industrial operatives depreciation. male, has risen by 174 per cent. on 1938 rates and the average in all categories is 201 per cent. (Ministry of Labour Gazette), An increase of 25-30 per cent. on present salaries is what is required and moreover carned as set out in considerable detail in

my article published in THE ARCHITECTS' JOURNAL, of July 16. It is also contended that the scale proposed in that article is considerably more just than the APT Grades ever can be

ever can be. "London Architect," who should have the courage to sign his letter (AJ, March 25), accuses me of being naïve. Surely a Trade Union's first duty is the welfare of its members, and for that reason it should have a real interest in the pros-perity of the industry on which their lives depend. Strike action is a form of black-mail and in the case of a powerful industrial union can adversely affect others not in-volved and, in some cases, the entire coun-try. Such action in the end benefits no one. try. Such action in the end benefits no one. There appears to me to be a considerable difference between a trade union as such and one which has come under the control of politicians having no interest in industry and still less in England and has become an organized racket.

A professional union should have a higher standard of integrity than this, to say the least.

DOUGLAS W. RICHARDSON.

Training Assistants

SIR,—In your issue of March 25 A. Douglas Jones says that "the schools believe that each of its students is a potential principal." There may be something to be said for such a belief, but what will be the position if it ever does happen that every student becomes a principal?—a Gondolerian epoch? It is surely obvious that all just cannot be principals and there must always be a large body of assistants. In which case is it not part of the schools' responsibility to produce adequate numbers of men properly trained for such work?

May I also ask why Mr. Jones considers that the statement regarding the small per-centage passing the RIBA Final is such an indictment of the "external" system of training. Surely it can also suggest that the RIBA Final requires a very high standard of attainment and possibly that the schools' standard is somewhat lower.

GEOFFREY L. PRICE.

Festival Hall Organ

Newcastle.

SIR,—We were interested to see from your photograph in the issue of the AJ for March 18 the change in the interior of the Royal Festival Hall brought about by the comple-tion of the orrea. We have waited impait result ratio or about by the comple-tion of the organ. We have waited impati-ently for this and are delighted with the general way in which the organ has been treated, and its nature expressed.

You say however that usually an organ is concealed behind a grille or dummy pipes. In our experience great instruments generally have frontages in which the organ



builders have gone to some trouble to arrange for the majority of the pipes to speak, at the same time using the pipes to make a satisfactory shape or form having regard to the building as a whole. Dummies are in fact a last resort.

Our faith in the AJ is shaken when you state without comment that only the formally-grouped pipes are dummies, implying that this represents an achievement in design. If in fact real pipes in this position are impossible for acoustic or technical reasons, we suggest that perhaps a simple panel or screen in place of the dummy pipes would have at least as much justification aesthetically as the blank apron wall at high level on the river front of the Hall.

We feel sure that some discipline of the real pipes could have been arranged to pro-duce a satisfactory result both visually and acoustically, and the attitude of the LCC architects to this problem makes us think that where the Festival Hall itself is suc-cessful, that success must be purely fortui-If dummies have been introduced " to tous. pull together the informal arrangement of real pipes," they will be applying orders to their facades next, "to pull together" other "informal arrangemente" 'informal arrangements.

The unreal proportions of the toy pipes will be an annoyance to all organists, and we can already hear our Scandinavian friends laughing like a rank of pedal posaune.

Coventry.

MAURICE C. JARRETT. IVOR DAVIES.

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ETT.



RIBA Town Planning Award

The RIBA is to make an award for Distinction in Town Planning-the only award in town and country planning bestowed by the Institute. It will be made—by confer-ment only—to fellows, associates and licen-tiates of the RIBA for outstanding work in the design and layout not of individual buildings but of groups of buildings. The award will be given for actual planning work and, while not primarily intended for housing layout designers, they will not be excluded.

Recommendations will be made to the RIBA council by a standing committee set up for the purpose.

up for the purpose. Personal applications by candidates will not be considered. The name of a candi-date must be submitted by three or more sponsors (**RIBA** members) who will be re-quired to submit details of the candidate's professional qualifications and experience and evidence of the candidate's actual plan-ning work. Nominations may be made ning work. Nominations may be made twice annually (March 1 and November 1) to the Secretary, RIBA, 66, Portland Place, W.1.

Members who receive the award will be entitled to use the designation RIBA Award This, for Distinction in Town Planning. This, or the initials Dist. T.P., should be placed after the letters denoting class of RIBA membership.

New Appointments

The following appointments were announced at a recent RIBA Council meeting:—New Council for Codes of Practice for Buildings: RIBA Representatives: P. V. Burnett and Charles Woodward. Council for the Preser-vation of Rural England: RIBA Representa-tive: C. W. C. Needham in place of Henry Braddock. (Note: The other RIBA representa-tive is Sir Patrick Abercrombie.) University of Wales Faculty of Architecture: RIBA biladoch. Viole. The Unit office function of the problem of the pr Association: Annual Meeting, Nottingham, June 4, 1954: RIBA Representative: F. Hamer Crossley, President, Nottingham, Derby and Lincoln Society of Architects. Forest Products Research Laboratories: Committee on Grading of Home-Grown Softwoods: RIBA Representative: G. Newell. The jury convened by the Wessex Federal Society of Architects to make an award of the RIBA Architecture Bronze Medal for the three years ending December 31, 1953, have made the award in favour of the Church of St. Francis of Assisi, Ashton Gate, Bristol, designed by Robert J. Potter and R. W. Hare.

COID

Design Conference

Speakers at the Scottish Design Congress, to be held in Edinburgh on May 26-27, will include Richard Llewelyn Davies, A. G. Sheppard-Fidler, W. T. C. Walker, and A. G. Ling. Full details may be obtained from the COID Scottish Committee, 95, Bothwell Street, Glasgow, C.2.

CAMBRIDGE

Working Party on Plumbing

Last week a meeting was convened by the Cambridge University and Town Waterworks Company to discuss the possibility of ensur-

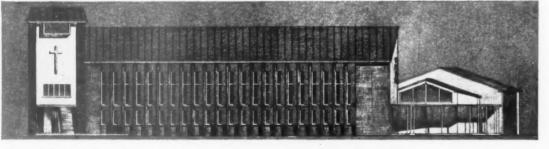
Company to discuss the possibility of ensur-ing that in all new buildings water pipes and fittings should be so located and protected as to prevent damage by frost. A resolution was passed to establish a Working Party charged with the task of pre-paring a simple Code of Practice relating to the design, location, installation and protec-tion of water pipes and fittings. It was ex-plained that the intention is that the provi-sions of the Code, when approved and adopted, shall be observed by all local archi-tects. builders and plumbers, and enforced. tects, builders and plumbers, and enforced, so far as may be necessary and practicable, by the Water Company.

COMPETITION

design illustrated on page 433.

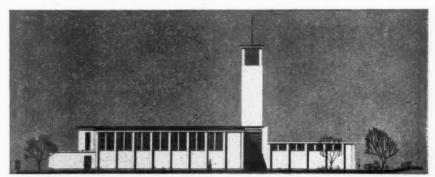
Wrongly Credited Designs We regret that mistakes were made in our We regret that mistakes were made in our publication of the results of the Sighthill church competition. In our April 1 issue, on page 388, we attributed the design of Andrew Jackson's design was given correctly in the issue of April 8 but on page 435 we attributed the work of Alec Murray to W. R. Ashcroft and Alexander D. Bell. Messrs. Ashcroft and Bell were co-designers, with David M. Jones, of the design illustrated on page 433.

Sighthill church competition designs: see note above.



Above: West elevation of church designed by Alec Murray. See page 435 of the JOURNAL for April 8 for other drawings.

Right: North elevation of church designed by W. R. Ashcroft, Alexander D. Bell and David M. Jones. See page 433 of the JOURNAL for April 8 for other drawings.



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MOHLG

Statement on Frozen Pipes

The MOHLG has issued a statement about frozen pipes to local authorities, pointing out that the minister is satisfied that the recommendations in the existing Housing Manuals and their Technical Appendices, if properly applied, provide adequate protection against the conditions normally to be expected in this country. The statement calls attention to the Technical Appendices to the Housing Manuals, 1944 and 1949, and to the Model Water Byelaws.

DENMARK

Award to Sir Hugh Casson

Sir Hugh Casson has been elected a member of the Royal Danish Academy. He received that honour from the King of Denmark two weeks ago.

PLANNING BILL

A Wrong Implication

In the leader on the Town Planning Bill which appeared on page 359 of our issue on March 25, the following statement was made:—

"But there remains a fundamental schism; the landowner will get a market price for his land from the private developer and only a restricted price, based on 1947 values, from the public authority developer, and changes in the value of money may widen the resulting gulf to a point at which there will be cries of injustice and discrimination." And in Ernest Watkins's article on the same subject on page 407 of our issue for April 1, this statement was made: "Under Part III, where land is compulsorily acquired by a local authority after the Bill comes into force, the owner will continue to receive no more than compensation based on its existing use and valued under the provisions of the 1947 Act (that is, on 1947 levels of value)."

levels of value)." The implication which is conveyed in both of these passages that local authorities will continue indefinitely to pay on the basis of 1947 values is only partially true. It is stated in the Government White Paper that the Government intends "to base the compensation (for compulsory acquisition) on the current existing use value plus the 1947 development value." The phrase "1947 development value." The phrase "1947 development value "relates to the compensation already agreed under the 1947 Act for loss of development value, for which payments were to have been made from the £300,000,000 fund, but which are now to be paid only if and when actual loss is sustained.

Therefore, the proportion of the compulsory purchase sum which refers to the development value is determined by 1947 values, but the proportion which refers to the current existing use value will be determined by current values.

DIARY

Architect, Sculptor and Client—with special reference to Epstein's Madonna and Child. Louis Osman. At the AA, 34, Bedford Square, W.C.1. 8 p.m. APRIL 28

The Cathedral of Santiago De Compostela, Spain. J. M. Ruiz-Morales. At the Victoria & Albert Museum, South Kensington, S.W.7. 6.15 p.m. APRIL 28

Industrial Design. A residential course organized in conjunction with the COID. For particulars apply to the Director, Pendley Manor, Tring, Herts. MAY 28 TO 30

BUILDINGS IN THE NEWS



Flats at Holford Square, Finsbury, London

To be known as Bevin Court, this block of flats designed by Skinner, Bailey and Lubetkin will be opened by Dame Florence Bevin, the widow of Ernest Bevin, on April 24. The photograph below shows the main staircase of the flats.



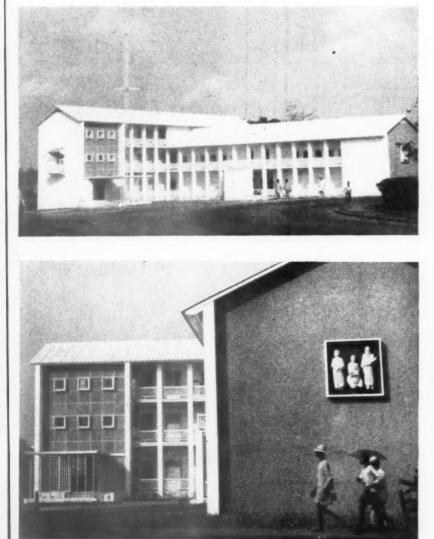
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Clinic at Corby New Town

On April 23 Lord Nuffield will inaugurate the Nuffield Diagnostic Centre in the new town of Corby, an experimental consultative clinic designed by Richard Llewelyn Davies of the Nuffield Provincial Hospitals Trust. Right is the public waiting-space. The building will be fully illustrated in a later issue of the JOURNAL.



and April



Broadcasting House at Lagos, Nigeria

Occupying the site of a former burial ground at Ikoyi, this new building for the Nigerian Broadcasting Service was designed through the Public Works Department (Chief Architect, T. Scott) by W. Murray Jack. It consists of three distinct units: a three-storey office block, a two-storey studio block (this wing is constructed of two shells, the inner of which is entirely free of the main structure) and a workshop block. The walls are rendered in white colour-wash with silver-grey and light cream recessions. Window surrounds are picked out in light blue and canary yellow. The sculptured figures on the wall of the studio block represent music from the three main regions of Nigeria, and are by the Nigerian sculptor, Ben Enwonwu.

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CHURCH HALL

IN STEVENAGE NEW TOWN, HERTS.

designed by C. HOLLIDAY, formerly chief architect, Stevenage Development Corporation,

L. G.VINCENT, deputy chief architect,

D. STIRLING CRAIG and J. H. R. STEVENSON, architects-in-charge

consultants, reinforced concrete, TWISTEEL REINFORCEMENT LTD.

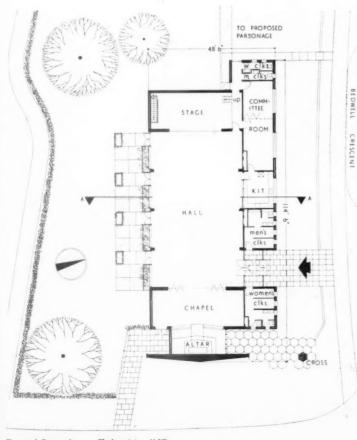
St. Andrew's Church and hall in the Bedwell Neighbourhood at Stevenage provides a dual-purpose building which can be used as a hall with seating for 250 and a stage and also as a church with a chancel and altar at the east end. The chancel has a separate external entrance and sliding-folding doors divide it from the main body of the hall. When these doors are closed the small chapel thus formed can be used on weekdays when the hall is in use for other activities. Sliding-folding doors are also used in the committee room to the north of the stage to divide the room when it is required as a stage dressing room. The steeply-pitched roof is designed to give height and contrast among the new residential development.



Grou



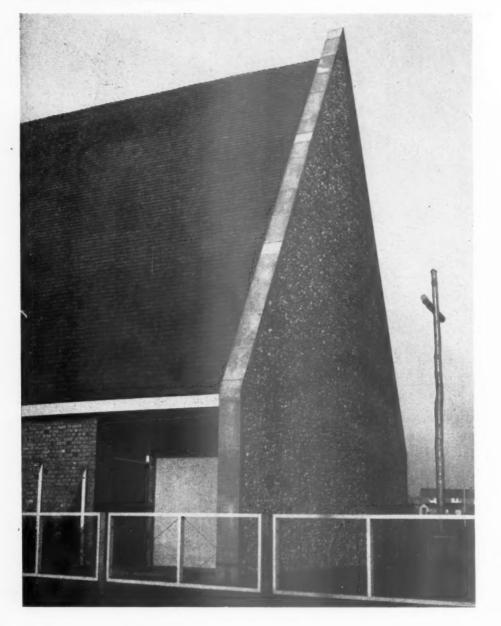
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Top, from the north-west. The low block in the foreground contains the committee room, kitchen and cloakrooms. Above, the main entrance doors seen from inside the hall with door to gentleman's cloakroom beyond.

Ground floor plan [Scale : $\frac{1}{32}$ " = 1' 0"]



Left, the east wall of the chapel, which is flint faced. On the right is the rough fir cross, constructed from a tree which had to be removed on a nearby development. Below, a general view of the hall looking towards the chapel.

roof rafter

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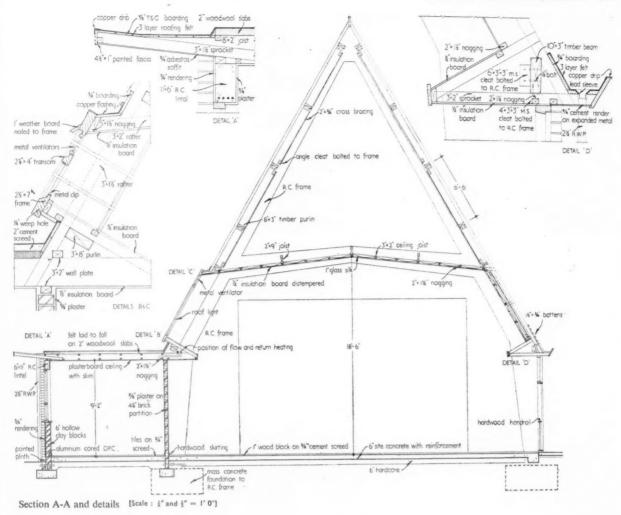
CHURCH HALL

at STEVENAGE NEW TOWN, HERTS. designed by C. HOLLIDAY formerly chief architect

PLAN.—Along the north wall the kitchen, cloakrooms and main entrance are placed. The south wall of the hall is entirely glazed and has three pairs of doors opening on to a terrace. Under the stage is a basement which contains a chair store and heating plant.

CONSTRUCTION.—There is a reinforced concrete frame to the main hall and brick load-bearing walls to the low north block. The floor is of



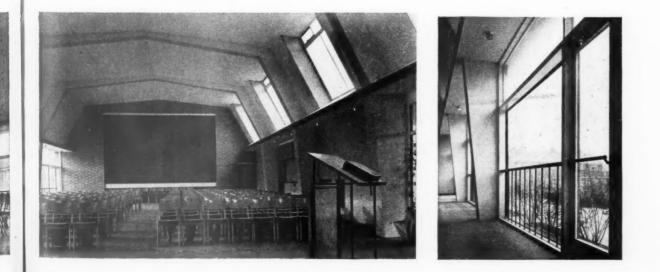


6-in. site concrete, reinforced, and there are mass concrete foundations under the r.c. frames. The roof is carried on 8-in. by 3-in. timber purlins, rafters and 2-in. by 3-in. cross bracing.

FINISHES .- The east gable wall is faced with

flints and the west walls with facing bricks. The roof is covered with cedar shingles. The walls are plastered internally. Above eaves level the roof is lined with perforated hardwood and with acoustic board at ceiling level, distempered. The floor finish in chancel and main hall is hardwood blocks. The

Below left, the stage at the west end of the hall seen from the chancel. Below, part of the glazed south wall, with doors leading on to the terrace.

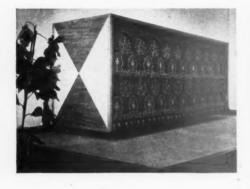




Left, entrance to gentlemen's cloabroom from the entrance hall. Below left, the altar. Below, the chapel, showing the tall north window beside the altar. The altar steps have hardwood risers and are finished with black terrazzo

CHURCH HALL

at STEVENAGE NEW TOWN, HERTS. designed by C. HOLLIDAY, formerly chief architect



chancel steps are of black terrazzo, with hardwood risers. In the chancel is part of the carpet used in Westminster Abbey for the Coronation in 1953. There are thermoplastic floor tiles in the committee room, kitchen and cloakrooms. A feature of the east end is the tall north window adjacent to the altar. A bell is placed high up on the west gable, supported on a simple cantilevered steel bracket.

SERVICES.—Artificial lighting in troughs along both flank walls of the hall at eaves level. The chancel is lit also by concealed lights. Heating is by a warm air system served by a gas-fired boiler in the basement.

The general contractors were William Sindall. For sub-contractors see page 504.



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HOUSE

in MOTT STREET, HIGH BEECH, ESSEX designed by JOHN BARTON consultants (lattice trusses) BOTTWOOD ENGINEERING CO. quantity surveyors, MERCER and MILLER



This house on the edge of Epping Forest, near Loughton, has been planned for a doctor, his wife and three children and mother-in-law. The latter is provided with a bed-sitting room on the ground floor, next to a study for the doctor's use. The provision of these two rooms brought the total floor area to 1,800 sq. ft. The site commands a view of many miles westwards across the Lea Valley into Hertfordshire.

Living room through large west window.

From the north-west.





Left, the main entrance and covered way leading to the garage, seen from the south. The covered way has a glazed roof.

HOUSE in high beech, essex designed by John Barton

SITE.—The house is placed on a ridge with the ground sloping sharply down towards the west and north, in the direction of the Lea Valley. The house is placed with the main living areas facing west in the direction of the best views. A compact rectangular shape was thought by the architect to be best for the rather exposed position. The garage, on an east-west axis, is connected to the. house by a covered way with glazed roof.

PLAN .- The client wished to have his own private room and a bed-sitting room for his mother-in-law on the ground floor, and the first floor bedrooms to be fairly small to allow the greatest possible space for living accommodation. This resulted in the ground floor area being about twice that of the first floor. The slope of the ground suggested the use of two levels, the dining room, kitchen and front door being on the lower level. A flat roof, if used, would have had to be stepped, and the architect decided that a sloping roof was "the neatest and simplest method of enclosing necessary volume." The entrance hall is planned as a lobby with rugged materials; a stone floor, brick and concrete block walls. The utility room is intended for laundry, washing vegetables, etc. The larder has been kept down to door height to allow the morning sunshine to enter through a clerestory window over. The terrace outside the west windows of the dining room is intended for out-of-door meals.







WORKING DETAIL

BAY WINDOW: HOUSE AT WELWYN GARDEN CITY

WINDOWS: 24

J. A. Godfrey, architect

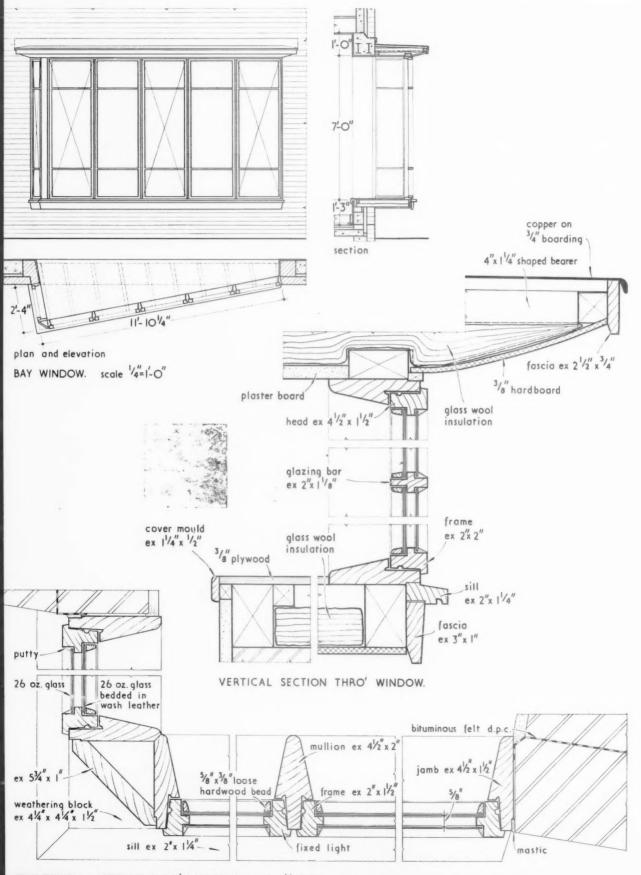


The inner glazing is secured by wood beads (screwed to the frame and bedded in wash leather) to allow access for cleaning. The portion of wood framing exposed in the cavity between the inner and outer sheets of glass has been thoroughly painted to reduce the risk of moisture from the timber forming condensation in the cavity. The main framing is painted Siberian pine and the mullions are tapered in section to reduce the contrast in brightness with the outside light. The skirting is a heating unit.

WORKING DETAIL

BAY WINDOW: HOUSE AT WELWYN GARDEN CITY

J. A. Godfrey, architect



HORIZONTAL SECTION THRO' WINDOW. scale 1/4 full size

WINDOWS: 24

Architects' Journal 22.4.54

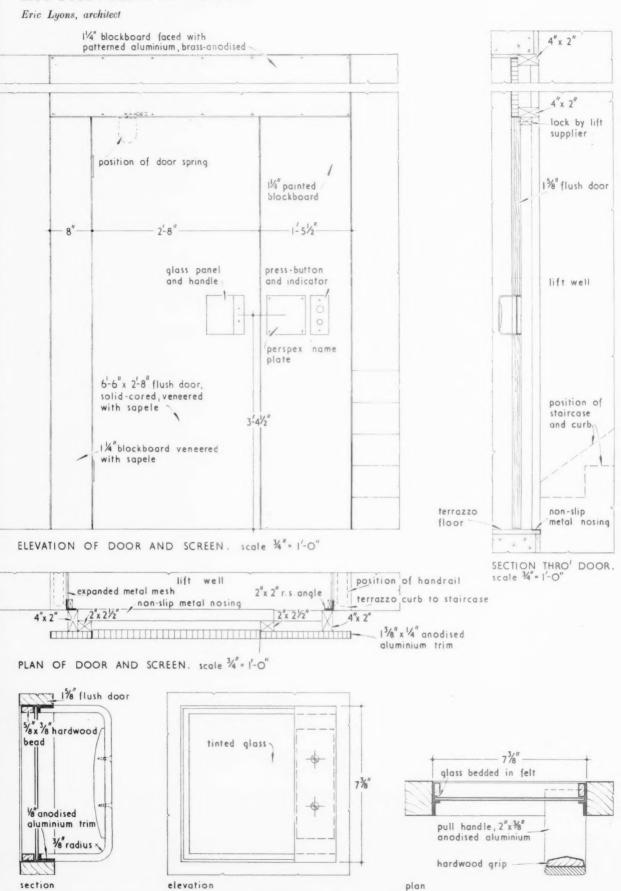
WORKING DETAIL

LIFT DOOR : FLATS AT RICHMOND

Eric Lyons, architect



The door and surround are of blockbourd, the door and the left-hand jamb being veneered with sapele, the righthand jamb puinted and the fascia faced with patterned aluminium, brass-anodised,



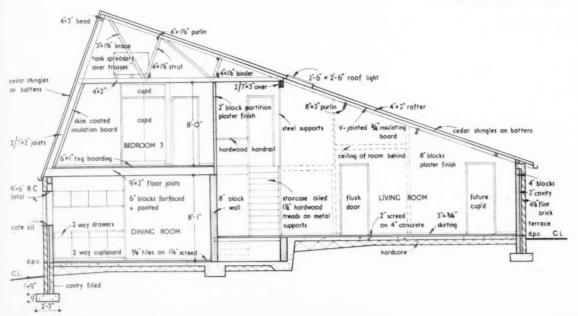
DETAILS OF GLASS PANEL AND HANDLE. scale 4 full size

WORKING DETAIL

LIFT DOOR : FLATS AT RICHMOND







Longitudinal section [Scale : $\frac{1}{8}^{"} = 1' 0"$]



Above, from the kitchen, looking towards the living area. It is hoped to illustrate the staircase as a Working Detail in a later issue of the JOURNAL. Below, living room, looking towards the staircase. Right, from the south-west, the rooms on this side of the house face a superb view westwards.











Above left, looking westwards through the main living room window across the Lea valley into Hertfordshire. Above, the storage unit dividing the dining area and kitchen. It is hoped to illustrate this unit as a Working Detail in a later issue of the JOURNAL. Left, looking down into the living area from the top of the staircase.

purlins exposed. Panel walls are faced externally with cedar boarding with cover strips on bituminous felt and lined internally with fibreboard, skim coated. The facing bricks are white flints and the external paintwork is black and white, which is traditional in Essex. Internally, floors are finished with York stone paving in entrance hall and utility room, black and white chequer pattern tiles in dining area and kitchen, thermoplastic tiles in doctor's room, bathroom and lavatory, carpeting in other rooms. The concrete block walls in entrance and kitchen are left unplastered. Elsewhere walls are plastered and painted, and wallpapers are used in the bedrooms. The kitchen fittings are of oiled teak and gaboon ply with white trim and marble serving tops. This treatment was considered the most suitable since the kitchen forms part of the living area. The log fireplace in the living room is constructed half inside and half outside the room in an attempt to overcome the duality of having two focal points in the room-the superb view and the fireplace. The flue, which rises behind a vertical mullion of the large window, is constructed of refractory sections, a cavity filled with concrete lightly reinforced with steel and a sheath of asbestos cement.

Above, front

on the right,

west for dining

the for

french

south s

the millioking

SERVICES.—Air ducts in the floors heat the whole house and are supplied from an oil-fired heater in the centre of the house. The house was occupied seven months after work commenced. The price, including central heating, light fittings, cupboards and storage, was 48s. per ft. cube and 3s. 9d. per ft. sq.

General contractors, J. Whiffen & Sons Ltd. Subcontractors, page 504.

HOUSE

in HIGH BEECH, ESSEX designed by JOHN BARTON CONSTRUCTION.—External load bearing cavity walls and steel piers, which carry timber lattice roof trusses and panel walls over windows facing the main, east-west, views. Cavity walls have a brick outer skin and lightweight concrete block inner skin. There are certain panel walls which are constructed from timber studding.

FINISHES.—The roof is finished with shingles on battens and the living room ceiling is lined with fibreboard, V-jointed and leaving the rafters and nally nous skim I the ch is





Above, the east facade, front door and garage on the right. Above right, the north and west facades, with the dining room window in the foreground. Right, the main living area looking towards the french windows on the south side.



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BUNGALOWS

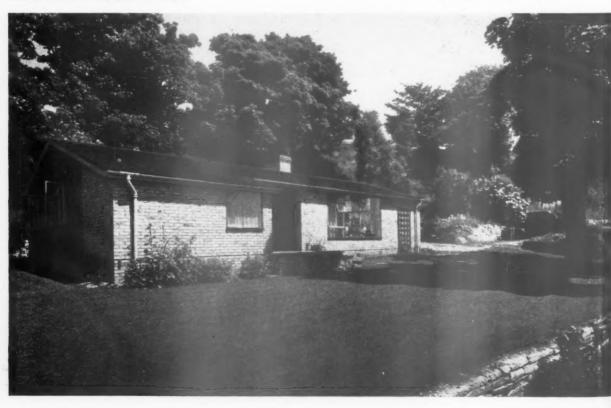
 on DOVER HILL, FOLKESTONE, KENT designed by c. w. H. WRIGHT and MICHAEL CRUX and
 in ROUNDWOOD DRIVE, WELWYN GARDEN CITY, HERTS designed by MICHAEL MEACHER



Living room with dining space on the right.

This bungalow, on a site which occupies the sharp and steep internal angle of Killick's Corner on the Folkestone-Dover road, was built for a client who had retired from the Civil Service due to ill health and is developing the site as a nursery garden. The owner required a two-bedroom house which took advantage of the fine views over the Channel and the town to the south. Several war-time ammunition magazines on the site were available for use as fuel stores and a garage.

The house at Folkestone from the south-west.



SITE from also force ventim

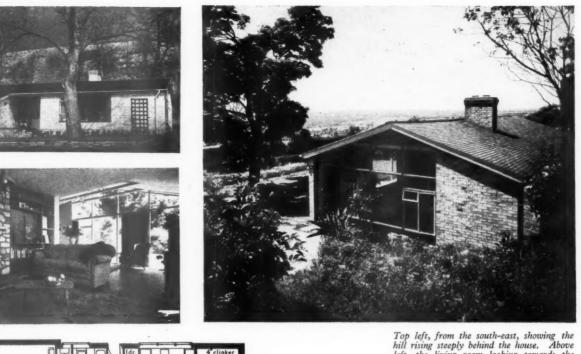
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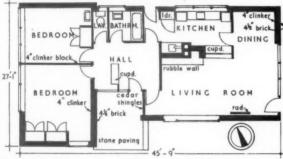
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hill rising steeply behind the house. Above left, the living room looking towards the glazed east wall. Above, from the northeast, looking towards the fine view of the country behind Folkestone.

BUNGALOW

 ON DOVER HILL, FOLKESTONE, KENT designed by C. W. H. WRIGHT and MICHAEL CRUX

Plan [Scale: #" = 1' 0"]

SITE.—The house is placed so that it is sheltered from the north and east by a wooded bank which also creates an upward airstream, breaking the force of the prevailing south-west winds and preventing downdraughts in the flues.

PLAN.—The need for some privacy from the main road and the client's wish for extensive views were deciding factors in the planning. The living room faces south and east for these reasons and the bedrooms on the west side will eventually be screened more effectively from the road on the west and north by planting. The noise of traffic has largely abated by late evening.

CONSTRUCTION and FINISHES.—External walls are of load-bearing cavity construction with an outer skin of buff-coloured stock bricks and an inner skin of 4-in. clinker blocks. The roof is covered with cedar shingles and the ceilings throughout are of painted fibreboard. Floors are covered with thermoplastic tiles and terraces with broken York stone. The fireplace wall in the living room is in limestone from the Cathedral precincts at Canterbury. Externally, barge boards and fascia are painted white and the soffits turquoise: Kitchen fittings are EJMA standard, and there is a hardwood, built-in unit between kitchen and living room with sliding plate-glass doors.

SERVICES.—Heating in the living room is by a solid fuel convector fire. Air passes in a duct direct to the fire from outside and warmed air enters the room at ceiling level. There is one radiator in the living room, served by a solid fuel boiler in the kitchen, which also provides domestic hot water. Heating elsewhere is by electric fires. Although there are large areas of glass, only the minimum number are opening lights; insulation proved adequate during the first winter that the house was occupied, which was exceptionally cold.

The house was built by direct labour at an approximate cost of $\pounds 1,600$. For sub-contractors, page 504.



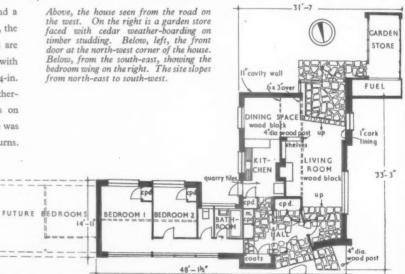
GENERAL.—This house has a living-wing and a bedroom-wing. Owing to the slope of the site, the house is built on four levels. External walls are either of load-bearing 11-in. cavity construction, with an outer skin of $4\frac{1}{2}$ -in. brick and inner skin of $4\frac{1}{2}$ -in. blocks, or 9-in. brick clad externally with cedar weatherboarding. Roofs are of 2-in. wood-wool slabs on timber joists at 2-ft. centres. The contract price was $\pounds 2,200$. The general contractors were E. & A. Burns. Sub-contractors on page 504.

BUNGALOW

HERTS

2. at WELWYN GARDEN CITY,

designed by MICHAEL MEACHER



Plan [Scale : 1/1 " = 1' 0"]



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TECHNICAL SECTION

Measurement and valuation, which we again return to in the Technical Section, lie at the heart not only of the problem of building costs but also of the problem of architectural form. For in the long run an inappropriate costing system can be as inhibiting to the development of architecture as the absence of sensibility in the designer. It is, perhaps, unfortunate that whenever the architect comes to face these problems, he always looks critically towards his neighbour in the design team—the quantity surveyor. Yet it is clear that the situation in this field is one which has been inherited by all the partners together and is their common responsibility. It is at once no one's fault and everyone's fault. If, therefore, we tend to give the impression that the situation can be righted by a one-sided reform on the part of the RICS nothing could be further from our meaning. The way a man looks on measurement and valuation is largely conditioned by the history of the profession to which he belongs. For this reason, we give further space this week to contributors who discuss what may fairly be called the traditional method of costing. Nevertheless we believe that the changes in building technique which we are now experiencing call for other costing methods, and we hope to give attention to these in a future issue.

This week's special feature

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The number preceding the week's special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant Information Centre items. Further and earlier information can be found by referring to the index published free each year.

8 QUANTITY SURVEYING cost control

Since publication of the reply by "chartered quantity surveyor" (March 18, 1954) to Professor Bowen's article (December 31, 1953) we have received contributions on the subject from three quantity surveyors: Arthur J. Willis, well known as teacher and author; James Donovan of the Cwmbran Development Corporation and "Another Quantity Surveyor," in private practice. These we print below in versions slightly compressed for space. All three examine present practice with a critical if conservative eye, and Mr. Donovan provides interesting glimpses of another industry and of American practice.

From ARTHUR J. WILLIS

The leading article in the issue of March 18 seems to ask for a consideration of points overlooked or glossed over by "CQS" in his article in the Technical Section of the same issue. Let us forget environments, integration and the like and consider the simple facts. What is the object of the building industry? To provide buildings for the employing public who want them, to suit their needs and at a price they will 4981

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pay. The buildings required must be designed with planning, construction and æsthetic effect all in mind. The employer will want to know in advance what the cost of the building as designed will be, and to find the builder to erect it for the fixed price.

THE NEED FOR MEASUREMENT OF BUILDING WORK

The builder, seeing the drawings and specifications, cannot say "Yes, £7,350." He will have to find labour, buy materials, provide plant, arrange for supervision and finance, and do a good deal of administrative work covering such things as National Insurance, holidays with pay, payment of wages and merchants' accounts, keeping of costs, etc. A certain amount of this work can be valued as a percentage on his turnover by reference to the actual results of previous years. Such an estimate is sufficiently accurate to enable him to make a suitable allowance for each future job. However, the main problem before the builder is "how much labour shall I want and what will materials cost "? The problem before the architect and his client is " how can we tell him this "

All the information the builder can be given is in the form of drawings and specification, with, perhaps, a model available to look at. These should show fully and exactly everything required. He must somehow convert the drawings and specification into man-hours and invoices, to give him the cost of labour and materials. The only practical way of making such conversion which has yet been found is to split up the building into smaller units, the man-hours and materials for which can be accurately estimated, and by pricing these smaller units build up a total figure for the whole building. This analysis has been for many years the work of the quantity surveyor. It is concerned with questions of fact, and it is therefore wasteful for six or eight builders to prepare the information for themselves. Moreover, the preparation of the particulars by one man ensures that all tender on the same facts. The pricing of the units into which the building is so dissected is largely dependent on judgment; it is therefore left to the builders tendering to do this for themselves.

STANDARD METHOD OF MEASUREMENT

Such is the basis of the present system of competitive tendering. True, it may be 100 years old and even older, and it is rightly pointed out that times have changed. But the system has developed considerably. It is the development of new materials which has most affected the principles of measurement, and systems have been evolved for their measurement.

Whilst the entrusting of the preparation of quantities to one man ensured that builders should tender on the same facts, it was found that the methods of

individuals differed. Surveyors and builders got together and, as a result of mutual agreement, a Standard Method of Measurement of Building Works was published in 1922, which has been several times revised since to keep up with progress in the industry.

THE BUILDING INDUSTRY AND SOCIETY

Before leaving the subject of preparation of quantities, something must be said on the points raised in the leading article referred to above. The getting of buildings at the cost and in the quantity society has a right to expect is, to a certain extent, outside the control of the industry itself. The quantity is limited by the size of the industry, which in its turn cannot expand effectively unless there is reasonable prospect of the expansion remaining permanent. Just as the workman is fearful that an increase in the number of his fellows may mean unemployment, so the master builder cannot indulge in increased capital expenditure, unless there is a prospect of long-term use of the resultant assets. What cost society has a right to expect is a little difficult to say: presumably such a cost as gives a reasonable remuneration to those members of society who have contributed their labour to the erection of the building.

"Cumbersome, slow and costly." Complex perhaps, but not cumbersome; slow—at times certainly, and there is scope for improvement here; costly only because of slowness where it occurs.

It is suggested that the Girdwood Committee's report does not support the idea that competitive tendering on quantities provides the best inducement for building efficiency. In the first place, the Report is concerned with repetitive housing, which, one might say, is building in its simplest form, understood by a large number of builders who would not be able to tackle contract work of a different kind. They know what it costs them to build a house and are prepared to chance the general detail and negotiate a price. But, as the Report points out, this method is most successful where (i.e., fails unless) full details are available of the non-repetitive work (in other words. builders cannot guess this, but must take out quantities) and makes it necessary to avoid variations-two conditions which are found very difficult in practice! It is evident from this comment that the system would not be suitable for the general run of building work.

"Unsound cost control" (because the system of measuring does not reveal labour organization and the use of machinery). The labour factor in any item of work varies with each builder. It is not practicable to bill brickwork as "x" man-hours of bricklayer, "y" bricks and "z" yards cube of mortar (or, instead of mortar, more man-hours

and quantities of cement and sand). Each builder knows his own men and will use his own judgment as to how many bricks they will lay in an hour. Materials are rather more constant, but the amount of waste varies and is a matter for individual judgment. The use of machinery is again a matter of the builder's judgment, not of fact. It is for the builder to decide whether it will be worth his while to bring a mechanical excavator to a job, and, if so, whether it will be more economical to use it only for basement digging and reducing levels, or whether it should be used for trenches. The various types of excavation are kept separate in bills of quantities, and the builder can estimate accordingly. In the case of joinery, in the same way, the estimator can judge from the quantity whether it is worth setting up a machine for a particular item.

P.C. SUMS AND PROFESSIONAL FEES

The ever-increasing proportion of prime cost items is alarming to the quantity surveyor as much as to the architect; particularly when he sees work so classified which the builder could either do himself or be left to obtain his own quotations for. Prime cost items are not by any means all "lump sum" quotations, and some that are, need not be. When quotations are being obtained for such things as specialist floor or wall finishings or asphalt work, the quantity surveyor may well prepare bills for specialists to price. In some cases, such as sanitary fittings and ironmongery, consultation between architect and merchant is necessary, and, if the surveyor does not prepare a bill, the schedules of these items have to be checked by him (and it is not unusual to find corrections necessary). The conditions of all specialist quotations need careful examination by the quantity surveyor to ensure that he measures all ancillary work and tells the builder to provide the services which the specialist requires.

Then comes the question of fees. The percentage scales of both architects and surveyors are only a compromise. There is usually a substantial difference in the work involved, both for architect and quantity surveyor, between a £50,000 factory and school or hospital of the same value. Yet the scale fee is the The merit of the percentage fee same. is that it can be determined by rule, so that a client knows what his liability will be, and it is based on an "average" job be, and it is based on an "average" job —if there is such a thing. It has been found impracticable to graduate the scales according to the type of building. In these days of specialization the architect is sometimes relieved of some of his work by a consultant, and the RIBA scale makes provision for a part reduction in such a case. With quantity surveyors the scale is specified to be "an over-all scale, based upon the inclusion of all provisional amounts that do not





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Sevenoaks 2251 GERrard 7890 THE ARCHITECTS' JOURNAL for April 22, 1954



Long ago when Britain was an island of many kingdoms, and the great forests were full of wild fallow deer, the colour of their young was known as "fawn". Today the forests have shrunk to parks or green belts and the deer in England are domesticated, but the ancient colour name is still with us, its shade now precisely defined by the British Colour Council. This same Council has also standardised the tones of nutria, which is the colour of the finer, shorter hairs of the rabbit, the musk-rat, the hare and the South American coypu. Now these two delicate colourings of both foreign and domestic animals have been chosen to provide a tone pattern for the Vinyl tile illustrated. Architects will find that the dual range of Semtex Vinyl and Semastic Decorative Tiles (whose colours were selected in collaboration with the British Colour Council) offers them the widest possible scope for colourful decorative schemes to satisfy both aesthetic and practical considerations.

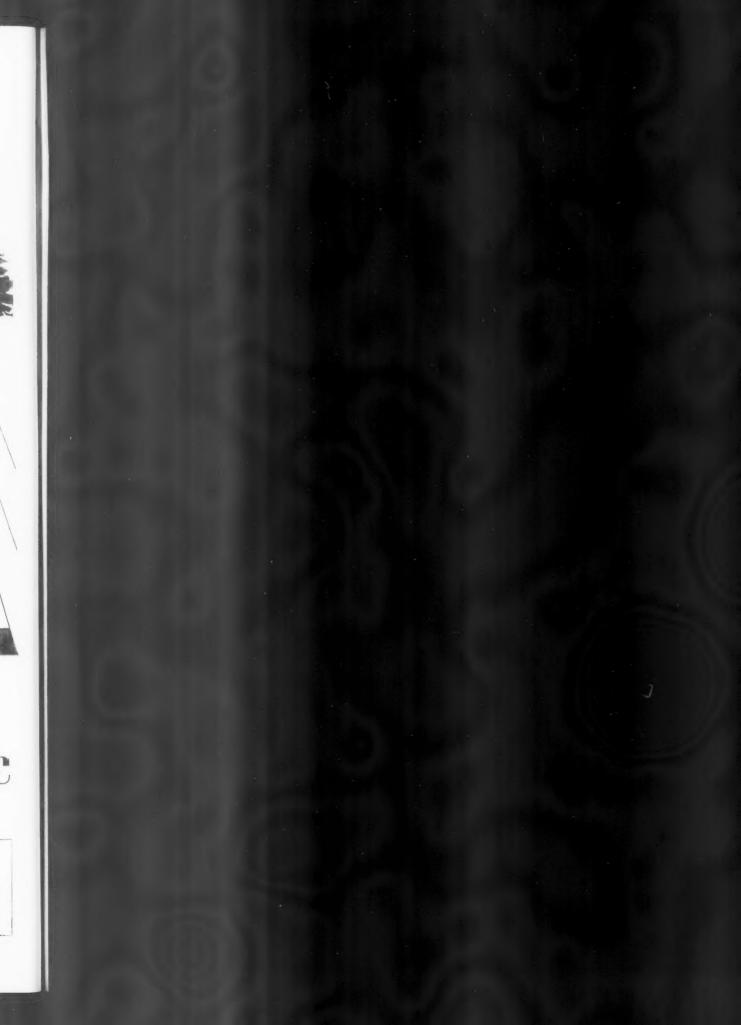
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However, in the last 30 years or so there has been a strong tendency to make the structural frame and the floor construction a provisional sum, based on a price obtained from a specialist contractor who provides the design (whether such procedure is to the advantage of the client is doubtful). Neither architect nor quantity surveyor makes any reduction of fee, although the provisional sum is substantial. I have prepared quantities for schools at about £60,000 each, in one case measuring every part of this structural work from consultant's drawings, in another including a provisional sum of over £10,000. In both cases the fee percentage was the same under our contract. Here both architect and quantity surveyor might well make a rebate on the fee, though the quantity surveyor is ready and willing to measure, but cannot do so without detailed drawings.

FALLIBLE HUMAN NATURE

So much for the system as it exists and the comments in the leading article, but what is the alternative, given that the client must have a fixed price in advance? It is impossible to put on the architect or quantity surveyor the responsibility for saying how many manhours are required, or what the price of materials will be. That is where the builder's skill and special knowledge come in. Perhaps throw all the drawings and specification at the builder, and let him employ the quantity surveyor? The overhead costs would be enormously increased if each builder prepared his own quantities, unless tenders were limited to one or two firms. One might say, of course, "X is an honest man; I will ask him for a price." Human nature being what it is, one cannot expect such a man to minimize his profit, and the man chosen may not be the one best able to tackle the job at the time. Whilst a price from one firm is sometimes a suitable solution, as a regular system it would probably lead to abuse. No, the practice of today, the result of many years of experience and development, is eminently adaptable and is being adapted to changes in materials or construction. It needs the co-operation of all parties, the architect and consultant to supply their information completely thought out, the quantity surveyor to put service above fees and the builder to be constantly checking his organization to extract the maximum of efficiency. The Robertson report, published since writing, agrees.

From JAMES DONOVAN

PRODUCTIVITY AND THE CRITICAL ATTITUDE

Since reading Professor Bowen's reports I have read again the Productivity Team's report, and also looked back into almost 30 years' experience to estimate just what has been the effect of the architect's inability to provide the quantity surveyor with infor-mation "down to the last screw." The effect upon the quantity surveyor at times has been heartbreaking! But the note dearest to Professor Bowen, quite rightly, is Productivity, so I have only concerned myself with the ultimate effect upon the contract. The real problem of productivity is one we shall always have with us-the harmonious integration of men, materials and machinery by production planning, and to be ever dissatisfied with present standards of production. At present, although improving, the position is very bad. The building trade has for years boasted of its so-called "industrial peace" but, I ask, is a chronic go-slow strike industrial peace? The real remedy lies in the proper appreciation and application of industrial administration, industrial psychology, new business and constructional methods, a fair day's work and a fair day's pay, cost control information for management that is timely and acted upon immediately. The Productivity Team's report and the Working Party's report indicate this, but I venture to suggest that the total good effect of these reports is no better than if 90 per cent. of the copies made went into the waste paper basket.

TIMELY INFORMATION FOR THE Q.S.

Speaking as a quantity surveyor, in regard to information from architects. I have, of course, experienced many " rush ' jobs with too little information, but one is apt to overlook the many jobs, over the years, on which one gets ample time and information. Quantity surveyors must resign themselves to the fact that virtually every job is a "rush" job for a man at the end of any team. When the opportunity is available, most quantity surveyors would try to meet this by keeping an eye open for what is going on the architect's board and discussing all kinds of problems mutually at that early stage. It is also then that timely notice can be given to the architect of the kind of information and details that will enable the quantity surveyor to provide the maximum amount of useful informative work for the contract in the shortest time. What, for perhaps quite a good reason, cannot be provided then by the architect is, frankly, imagined in the majority of cases by the quantity surveyor-and why not? After all, are we not a team? And quite a lot of what is imagined stands, if imagined with

TECHNICAL SECTION

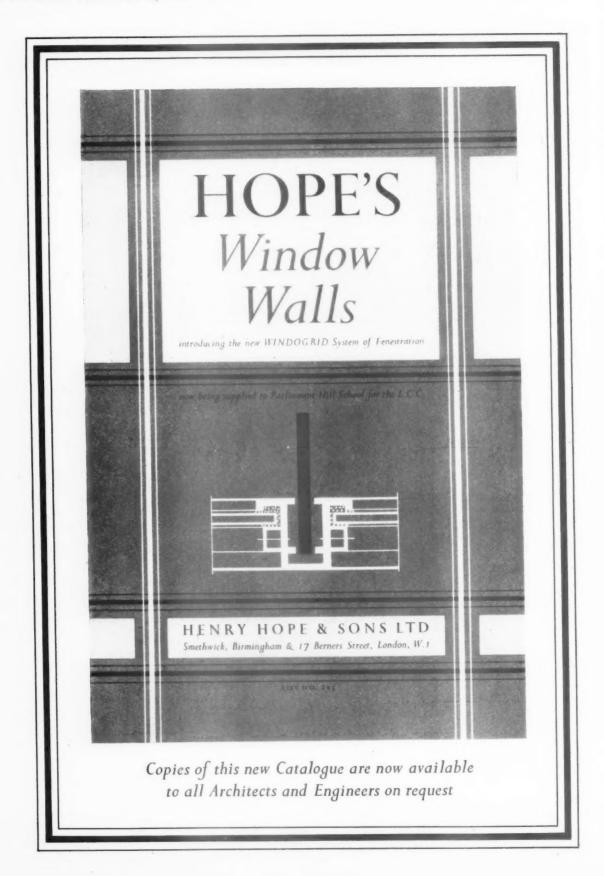
understanding of and sympathy with the architect's aims and ideals. But what of that which does not stand? It becomes the subject of a variation order. Now from time to time—and it has been hinted at in these reports of Professor Bowen's—there arises in the ARCHITECTS' JOURNAL a clamour for using some American penalty system for compelling the architect (or is it client?) to make up his mind down to the last screw.

MEASUREMENT IN OTHER INDUSTRIES

Now what of the quantity surveyor and American practice, or the practice of "other countries," which Professor Bowen mentions in the JOURNAL of March 18? Firstly, I think, it is necessary to understand properly the British procedure and the British quantity surveyor before one can make comparisons with other countries. Professor Bowen complains that the analogy of button manufacturing by "Chartered Quantity Surveyor" takes the quantity surveyor out of his own field, but is not that all to the good? Admittedly, the reference to button making was not intended to be taken too seriously, but one might well ask "what do they know of the quantity surveyor who only the building trade know"? The fact is that the quantity surveyor is the forerunner of his parallel in many advanced factories today where industrial administration is as high as in any American factory. I refer to the Planning and Progress System, which is usually administered by an individual, who, rather like my own ideal of the complete quantity surveyor, has a first class grounding in the technicalities, but who is, mentally, essentially a commercial man.

To quote from "Factory Administra-tion in Practice," by Hiscox and Price : the mechanic was once pre-eminent and everything was subservient to him. He handled not only those things which he understood, but also those things with which, by lack of training, he was but imperfectly acquainted. Can it be wondered that inefficiency was paramount? The factory was filled with officials-energetic but ineffective. They did as they were told and they were controlled by the engineer or mechanic, and even at the risk of offending many good friends, who are really competent men, it must be placed on record that, generally speaking, the mechanic or engineer has very little aptitude for business. It is to give the engineer every opportunity to concentrate upon producing a work of art and a saleable commodity (that is an economic one) that the businessman in the form of the Progress Manager comes into the workshop and coordinates commercial sagacity with technical ingenuity." (My italics.) The Progress Manager is usually responsible for the drawing up of

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fu in wi m pi or m bills of quantities and the estimating of the factory products. To hear critics decry bills of quantities in the building trade makes one wonder, when they draw comparisons with other industries, whether they think a modern turbine is built without the need of a bill of quantities. If they admit the need of the bill then they say it is too detailed. Let me quote some of the detail in a "bill" for a spindle for a 4-in. and 5-in. Tailstock of a Lathe out of 1¹/₈-in. dia. black round mild steel:

- Item 1. Cut to length; ... 2. Centre ends;
 - ...
 - ., 3. Rough turn;
 - " 4. Finish turn and screw § in. thread:
 - , 5. Screw $\frac{1}{2}$ in. whit.:
 - 6. Cut keyway;

and so on.

The material is similarly taken care of and the whole detail is compared with actual cost if the order is procured, and the estimator held to account. There is no reason why the same check could not be used on the estimator and production officials in the case of the building trade bills, but we have the advantage that only one bill is got out for all contractors to tender on-quite an advantage in fact. I should add that the office of the factory that gets this bill out is also responsible for organizing the work through the various machines and shops to assembly and delivery, but that is not our concern at this juncture.

COMMERCIAL SAGACITY AND THE Q.S.

As all this has come about since the advent of the professional building quantity surveyor, I think that the Professor's allegation of being out of date is rather false. Our factory friends, realizing the advantages of specialization, adopted a system -quite recently in fact-which some of us, knowing only the building trade, are only too ready to condemn. In fact, I would suggest that if the quotation just given above was read with the architect in mind and not mechanic and engineer, and quantity surveyor substituted for progress manager, you would get a very true picture of the best relationship of architect and quantity surveyor. The quantity surveyor brings to bear commercial sagacity upon the architect's technical and artistic ingenuity. The full significance of this is not yet fully realized, even by quantity surveyors themselves as a class, but that is coming fast. As to the allegation that the architect's carefully thought out production methods in his design are imperfectly portrayed in the bill of quantities, I must say, with all sincerity and sympathy, that most of these ideas have been shot to pieces by hard-headed businesslike organizers of contracts. There are so many subtle problems in production

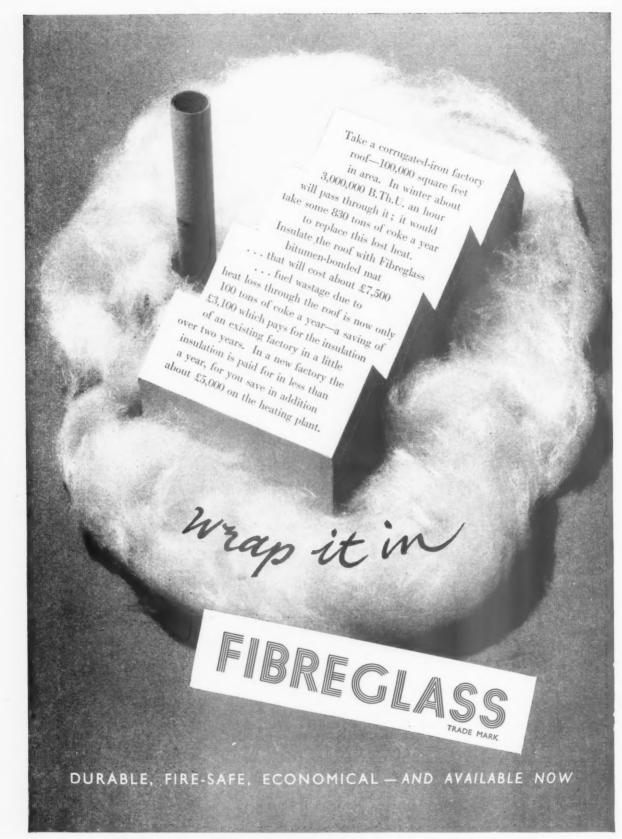
planning that unless the architect has either collaborated with a production expert like a modern contractor (which has the disadvantage of tying him to that firm), or has the advantage of an impartial quantity surveyor who has made a study of these problems, such fine ambitions are but rarely realized. But what is wrong with describing the aims of the architect fully in the bill, both in the general description and in the details?

THE Q.S. IN AMERICA

America, Germany and Holland are making the fullest use of the factory progress man and of the cost accountant. Indeed, it was the cost accountant who first drew the attention of technicians to the advantages of the progress man-and I like to think of the quantity surveyor in his fullest function as something of the cost accountant to the building trade. If the Americans have realized the value of the progress man, and if my analogy is reasonable, it may be asked "why do they not want the quantity surveyor "? In fact, quantity surveying as a profession is making comparatively rapid strides in America. It may be growing as a profession in a way strange to us but typically American. For instance, I know of a young British Chartered Quantity Surveyor over there whose bill of quantities I examined quite recently. As he said, it was crude by British standards, but I understand that there were opportunities for quantity survevors to set up over there on the lines he has. The idea is that the quantity surveyor applies for the drawings and details of a scheme from the architect or engineer and draws up a priced bill of quantities for it. This he does quite free lance, and he then advertises and sells the priced bill to contractors, or he has a number of contractor clients on his list. In each case, apart from making a detailed study of the district of operations, labour supply, rates, materials, etc., upon which he bases his general price, he also adjusts this to each firm-or they adjust it themselves-according to their peculiar ability in tackling a certain type of job or certain trades. In fact it is quite a point for these quantity surveyors to make in saying that such and such a goodly percentage of their " bids " were successful. Or that their bids are consistently among the first few tenders and so on. A bit unprofessional, we may think on this side, but out of which is bound to arise a real and independent profession which, I am sure, will in time be used directly by the client rather than the builder, because this is what several impartial American authorities are pressing for: people like J. Andre Fouilhoux, writing on " Drawings, Specifications and Inspections" in Engineering News Record, 500

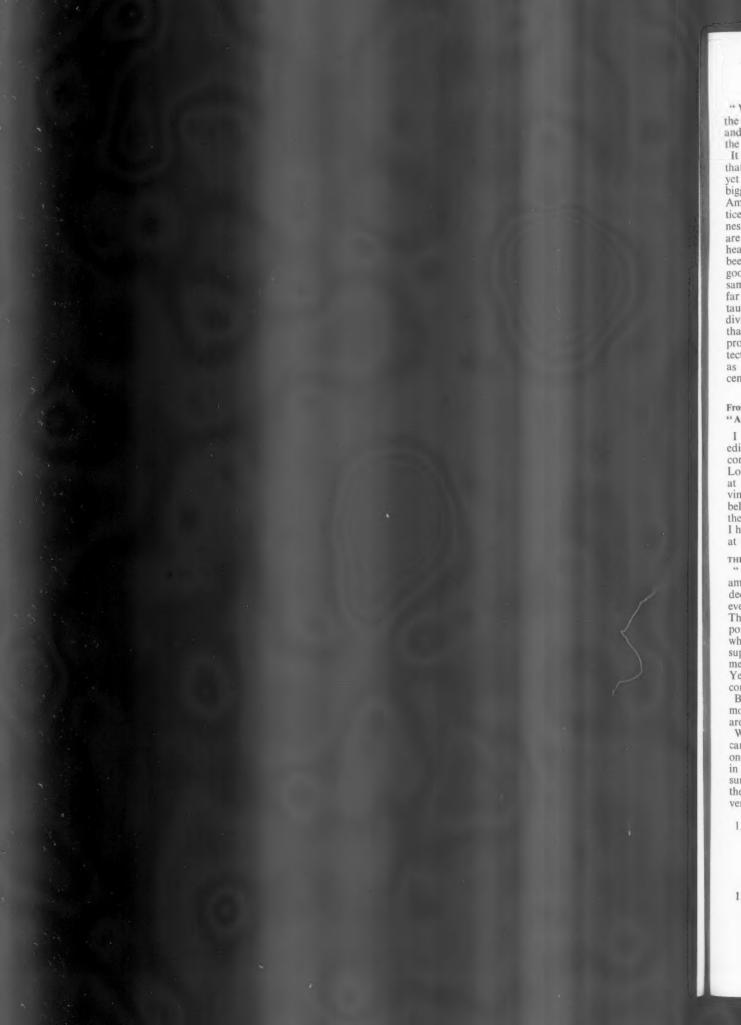
M. Kahn on "Does the Quantity Survey Help?" and "What the Quantity Survey Means" in American Contractor, to mention but a few similar articles. And Professor Frank Whitworth Stubbs, Professor of Civil Engineering at Rhode Island State College, reviews the whole business nicely. He says: "When a call for bids is made on a project, it is the common practice for each contractor submitting a bid to make his own survey. Under ordinary conditions each contractor must figure several jobs before his is successful in securing one. This means that the overhead charges for each succeeding job must include the cost of preparing the survey for the jobs that have been awarded to competing organizations. Thus the overhead charge piles up until a job is finally secured, then the cycle starts all over again, and continues until the contractor is awarded another job. A method which is used in England and which is gaining favour in this country (my italics) is to have one schedule of quantities prepared by an independent quantity surveyor. All contractors submitting bids on the project in question will use the common schedule. The cost of a quantity survey varies between one and two per cent. of the cost of construction. Such cost should be paid by the owner, as the quantity surveyor would be just as much an adviser of the owner as the architect or engineer. In fact the engineer, architect and quantity surveyor would work hand Certainly the cost of prein hand. paring bids is included in the contractor's overheads, and the owner pays for the quantity survey service whether he knows it or not.

" It would seem that the English system has distinct advantages over the system in vogue in America. - Contractors would compete upon the basis of price alone and not upon prices and quantities as they now do. The responsible contractor makes a complete quantity survey and is very careful to include all items. An independent quantity surveyor would make it practically impossible for the irresponsible contractor to omit any items and thereby underbid a responsible firm except on a basis of cost. The quantity survey when priced by the contractor would be the basis for computing payment for extra work and for figuring the credit for work omitted. (Professor Bowen, please note.) Under our present system the item of extras has attained a position of some importance. The use of the quantity surveyor will ultimately tend to lower construction costs as a result of contractors omitting all or part of their contingency item and a reduction in their overhead expenses. This will also come about from the additional check on the architect or engineer by the quantity surveyor picking up errors and ambiguities in the plans.



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"With a quantity survey available the contractor can make a better layout and give more time to the studying of the probable unit costs."

It was overlooked by Professor Bowen that if the quantity surveyor was not yet generally in association with the bigger architectural practices of America, the bigger architectural practices usually have a very sound business member-or American architects are more business-minded (or is it hardheaded?)-than ours. It has often been asked whether one can expect a good artist or architect to be at the same time a good businessman in so far as costs are concerned. Britain has taught the world the advantages of the division of labour, so it is no wonder that the quantity surveyor is a British product, and it is better that the architect should use the quantity surveyor as his "business brain" and concentrate upon his architecture.

From

"ANOTHER QUANTITY SURVEYOR"

I am surprised a paragraph in your editorial of March 18 did not draw comment much earlier. Perhaps London may just have raised a smile at it, but there are many in the provinces who, I am sure, will have believed it. I will, therefore, tread on the coat tail, somewhat belatedly, for I hoped better men would have done so at once.

THE MENACE OF P.C. SUMS

"It is beginning to be remarked among architects that, over the past few decades, the prime cost item figures ever more largely in building contracts. The item represents proprietary components and methods of construction which are quoted lump sum by the supplier and which are not customarily measured and valued by the surveyor. Yet his fee is still based on the total contract figure."

Builders and Quantity Surveyors have more than "begun" to remark; they are very worried about it.

Why are there so many p.c. items, and can they be avoided? I have before me one of many similar bills of quantities in which the prime cost and provisional sums represent about half the value of the contract, and, at the risk of being verbose, will list the items.

- 1,100 Pre-cast open trough type floors and roofs supplied and laid.
- 450 Asphalt tanking and damp proof courses supplied and laid.
- 1,700 Portland Stone facing supplied and fixed.
- 600 Semastic tile paving supplied and laid.
- 275 Asphalt roof covering supplied and laid.

The Architects' Journal for April 22, 1964

- 25 Non-slip tiles supplied and laid.
- 50 Builder's work connected with shop fitting.
- 3,100 Structural steelwork supplied and fixed.
 - 120 Ironmongery supplied and fixed.
 - 75 Toilet cubicles supplied and fixed.
 - 185 Metal windows and doors supplied and fixed.
 - 140 Metal windows and doors not fixed.
 - 70 Service entrance gates supplied (no drawing showing these or their fixing).
 - 420 Metal lantern lights supplied and fixed.
 - 225 Sanitary fittings supplied.
 - 75 Connection to water main in road (position not drawn on any drawing).
 - 70 Connection to gas main in road (position not drawn on any drawing).
- 1,500 Goods and service hoists supplied and fixed.
- 1,200 Electrical installation complete.
 - 90 Gas water heaters supplied.
 - 10 Gas lighting points (positions and number not known).
 - 30 Wrought iron railings supplied (no drawings available).

Every quantity surveyor, at any rate with pre-war experience, will have measured the trade work represented by each of those sums, and when drawings come from some sources today the surveyor enjoys measuring these trade quantities. Why not always?

ADEQUATE INFORMATION

In assessing the fee for preparation of quantities on a job with such a mass of p.c.s, the surveyor does in fact take the extent of the p.c. bill into consideration. The scale is a recommended schedule of fees and abnormalities such as p.c. sums for work normally measured will vary the scale if the actual work involved in preparing the bills is substantially varied. On the other hand the work of measuring variations is considerably affected by these masses of p.c. sums, and fees must reflect this at some time. None of these p.c. items is free from the bugbear of variations. How does the quantity surveyor accurately survey and negotiate prices in an account for varied steel, concrete floors and roofs of varying thicknesses, steel windows of numerous sizes and shapes, etc., from the solo tenders accepted by the architect and submitted by the tenderer in the first instance in a manner having every appearance of being designed to prevent the surveyor from working out rate prices?

If the architect does not obtain adequate instructions from the client at the proper time, and to the extent required to enable him to prepare complete drawings and specifications, surely neither the quantity surveyor nor the builder can do their duties at the right time and in the right order. If the architect also considers it is in the best interests of his client that someone else should design the steel, the hollow floors, the asphalttanking, the heating and lighting, the railings and gates, the stonework, etc., and that someone else should find out where in the road are the water and gas mains and the sewer, all this information should surely be obtained before the drawings go to the quantity surveyor.

TECHNICAL SECTION

which all these details are missing. A recent comparison of the above job and another with p.c.'s for heating and lighting showed that the taking-off cost with all the p.c.'s was only 0.06 per cent. less than the other job. The architect did suggest a reduced QS fee, as your article infers would be proper.

There is nothing slows a taker-off more

than having a set of drawings from

The builder, too, is stopped for this or that so-called specialist, acting as nursemaid to them all, and for the most part is seeing them do work his own men could do at least as well and invariably cheaper. At the end of it all he acts as postman and go-between, whilst the surveyor tries, often with no great certainty about the result, to arrive at a true account, with nothing except his experience and instinct to work on.

THE GOOD OLD DAYS

I still have vivid recollections of an architectural pupilage in which such things as stress diagrams, heat insulation factors, light intensity, had very real meanings, and in which the wonderful steel and concrete catalogues full of tables, and the heating catalogues with their boiler and radiator heating capacities, and lighting fittings catalogues with their weird little diagrams, all meant something to the architect and were well thumbed and referred to constantly. Many is the time I have worked for days in stockinged feet and with felt pads on my knees, setting out full size details of stone and carved work whilst the quantity surveyor worked with magnificent $\frac{1}{2}$ in. drawings at his side and came in occasionally to check against the full sizes in production. Can anyone tell me if the clients of today are any more difficult than the clients of those days? We are supposed to live in a more enlightened age; does that enlightenment reach the man who wishes to spend money on building? I do feel that when the client knew of the vast amount of draughting work he took far more precautions to make his mind up about what he wanted before he had it committed to paper beyond the 1/8 in. scale sketch stage. That, I think is the secret of why we get so many variations and p.c.'s now. On the face of it, variation now is made to seem so simple, and to involve so little-until the bill of variations and the fees account comes along.

[501



PUDLO GUARDS AGAINST RISING DAMPNESS AFTER THE WORST FLOODS FOR YEARS

In January 1953, the defence wall holding back the tidal waters of the River Great Ouse was breached by the high tides.

As a result of this disaster the site of the Fropax Canning Factory at West Lynn was flooded to a depth of approximately six feet and the water remained over the site for many weeks before it was pumped back over the sea wall.

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23.1 FANS Hand Public turers A d design the av ledge points tect to consid makin purpo office types cleane brief the v types. on in orderi

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24.1 ART LIGH

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The Architects' Journal for April 22, 1954



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

23.195 heating: ventilation FANS

Handbook of the Fan Engineering Industry. Publication No. 2/1953. (Fan Manufac-turers' Association Ltd. 3s. 6d.)

A detailed understanding of either the design or selection of fans will be beyond the average architect, but a general knowledge of fan types, uses and important points in specification would help the architect to ensure that his heating engineer has considered various possibilities before making his recommendations. For this purpose this handbook would be a useful office reference. It describes the various types of fan, discusses air heaters, air cleaners and ducts, and then gives some brief notes on the application of fans to the ventilation of a number of building types. Finally, there is a useful check list on information needed to be given when ordering fans.

23,196 heating and ventilation

HEAT TRANSFER BY RADIATION

The Calculation of Heat Transfer by Radiation. Fire Research Special Report No. 2. (HM Stationery Office. 1953. 1s. 6d.)

Methods for calculating radiation transfer by heat. A highly technical document of interest to engineers.

24.169 lighting ART GALLERY AND MUSEUM LIGHTING

Lighting an Art Museum. I. E. S. Lighting Data Sheet 17-42, (Journal of Illuminating Engineering Society, USA, Nov., 1953.)

Two page illustrated description of a relatively inexpensive artificial lighting intallation in a gallery for showing oil paintings and occasionally table displays. The installation consists of standard warm white fluorescent lamps housed in simple ceiling mounted fittings running round the room 6 foot distant from the walls. Lamps are in pairs either side of a central solid baffle and with separate switching so that light can be directed on to the walls, or to the centre of the room, as desired. The part of the fitting serving the centre lighting is provided with obscured glass to reduce glare. The reflection factors of walls, floor and ceilings are given, also a table of brightnesses. The average maintained vertical illumination on the paintings is 20 ft, candles: 32 ft, candles

with all lamps on. From the illustrations the walls would seem too light for comfortable viewing of pictures of average brightness.

25,105 water supply and sanitation BALL VALVES

Ball Valves (Portsmouth Type) Excluding Floats. BS 1212: 1953. (British Standards Institution. 6s.)

A revised standard including a number of changes. Architects who like to know full details of such equipment should familiarise themselves with the new standard. Others should be aware of its existence in referring to BS in specifications.



Ouestions to the Technical Editor. The Architects' Journal, 9, 11 and 13 Queen Anne's Gate, S.W.I. **3079 ARCHITECTS' FEES**

In 1951 I asked a firm of architects to design a house for me costing not more than £1.500 (for the building only and excluding land, architect's fees, etc.).

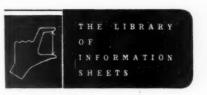
For several reasons there were hold-ups and tenders were only invited last year. The lowest was £2,700 and the highest more than £3,300. I was rather shocked but the architect suggested waiting for two or more years. While I thought this over I agreed to wait but now have received a letter suggesting I pay something on account. What I am concerned about is that I fail

to see the architect has justified any payto see the architect has justified any pay-ment in view of the fact he has not designed a house which could be anywhere near the price I had in mind. In that case should I pay something at all? It is not that I am wanting to get out of paying on the basis of a house to cost $\pounds1.500$ but I could not consider the building of a house to cost $\pounds2.700$ or more and archi-ter's fees on top

tect's fees on top.

If an architect is told explicitly that A his client cannot pay more than a certain sum, then the architect, having made preliminary calculations based on the client's requirements, must say whether or not the building can be erected for the sum the client can pay. If it cannot be so erected and the client is not prepared to reduce his requirements so as to bring the cost of the building within his means, then the client can abandon the project and the architect would be paid a fee for his preliminary services.

In this case, as the lowest tender was £2,700, the preparation of drawings and specifications for the purpose of obtaining tenders was work for which the client got no benefit, and if he had been told in the The benefit, and if the build been told in the early stages that the building could not be built for £1,500, the architect's fees for drawings and specification would not have been incurred. It would seem, on the in-formation given in the enquirer's letter, that the architect is only entitled to a fee for the architect is only entitled to a fee for his preliminary services.



TECHNICAL SECTION

CANCELLATION

Sheets 19.G1, 19.G2, 19.G3 and 19.G4, published 5.4.51, 14.7.49, 28.7.49 and 8.12.49 respectively, have been cancelled for revision, and should be removed from collections.

19.G2 was republished on 1.4.54, 19.G1 and 19.G3 are republished in this issue, and 19.G4 will be republished shortly.

REFERENCE BACK

Library.

32.D7, 32.D8, 32.D9 and 32.D10 These Sheets were described in the last end of year Revisions List as being revised for republication. We are now informed by the manufacturer that Sheets 32.D7, 32.D8, and 32.D9 are in order and do not require revising, and that 32.D10 is cancelled. The latter should, therefore, be withdrawn from the



An alphabetical index covering Information Centre items and special articles published in the Technical Section during the twelve months ended December 31, 1953, is being prepared. Readers who wish to have a copy-it is free of charge -should complete the form below and post it to the Technical Editor, THE ARCHITECTS' JOURNAL, not later than May 10, 1954.

Please send me the Information Centre Index for 1953 :

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Please ask manufacturers to send further particulars to :--

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Buildings Illustrated

Church Hall at Stevenage, New Town, Herts. (Pages 484-488.) Architect: Professor C. Holliday, M.ARCH., F.R.I.B.A., M.T.P.I., formerly Chief Architect, Stevenage Development Corporation; Deputy Chief Architect, L. G. Vincent, A.R.I.B.A., M.T.P.I.; assistant architect in charge of contract, D. Stirling Craig, A.R.I.B.A., M.T.P.I.; Assistant Architect, J. H. R. Stevenson, A.R.I.B.A. Concrete Consultants: Twisteel Reinforcement Ltd. General Contractors: William Sindall; Subcontractors: precast concrete coping, Low Giddings Ltd.; wood block flooring, Hollis Bros. Ltd.; thermoplastic tiles, Semtex Ltd.; terrazzo, W. B. Simpson & Sons; cedar shingles, W. H. Colt (London) Ltd.; felt roofing. The Cambridge Asphalte Co.; timber windows, Herbert E. Taylor & Co.; folding doors, The Sliding Door Manufacturing Co.; kitchen fittings, Duncan Tucker (Tottenham) Ltd.; ironmongery, Alfred G. Roberts Ltd.; metal windows, Williams & Williams Ltd.; bell bracket, B. Finch & Co. Ltd.; bell, John Taylor & Co.; sanitary fittings, John Bolding & Sons Ltd.; gas installation, The Stevenage Electrical Engineering Co.; light fittings, Hume Atkins & Co.; heating engineers, Weatherfoil Heating Systems Ltd.; lettering and notices, Drakard & Humble; fencing, Supreme Fencing Ltd.

House in Mott Street, High Beech, near Loughton, Essex. (Pages 489-493.) Architect: John Barton, A.R.I.B.A. Consultants (lattice trusses), Bottwood Engineering Co. Ltd. Quantity Surveyors: Mercer & Miller, A./A.R.I.C.S. General Contractor: James Whiffen & Sons Ltd. Sub-contractors: dampcourses, Engert & Rolfe Ltd.; concrete blocks, Thermalite Ltd., Cement Marketing Co. Ltd.; bricks, Uxbridge Flint Brick Co. Ltd.; slate sills, Bow Slate & Enamel Co. Ltd.; shingles, W. H. Colt (London) Ltd.; roofing felt, Permanite Ltd.; patent glazing, Haywards Ltd.; patent flooring, Semtex Ltd.; Langley London Ltd., Fitzpatrick & Son (Contractors) Ltd.; waterproofing materials, Industrial Asphalts Co. Ltd.; central heating, Radiation Ltd.; electric light fixtures, Merchant Adventurers of London Ltd., Courtney Pope Electrical Ltd.; ventilation, Vent-Axia Ltd.; sanitary fittings, Adamsez Ltd.; door furniture, Yannedis Ltd.; casements, Crittall Manufacturing Co. Ltd.; rolling shutters, Acrow Ltd.; sunblinds, J. Avery & Co.; metalwork, Universal Metal Furring & Lathing Co. Ltd.; tiling suppliers, Carter & Co. (London) Ltd.; wallpapers, Cole & Sons (Wallpapers) Ltd.

Bungalow at Killicks Corner, Dover Hill, Folkestone, Kent. (Pages 494-495.) Architect: C. W. H. Wright, A.R.I.B.A. and Michael Crux. Sub-contractors: bricks, Ashford and Noccolt stock; shingle roof, Hall & Co.; glass, Folkestone Glass Works; patent flooring, Marley Tile Co. Ltd.; sanitary fittings, Knowles & Co.; casement windows, Henry Hope & Sons Ltd.; joinery, Channel Woodcraft Ltd.; furniture, Flashman & Co. Ltd.; Camelon convector (solid fuel), Camelon Iron Co. Ltd.

Bungalow at 27 Roundwood Drive, Welwyn Garden City, Herts. (Page 496.) Architect: Michael Meacher, A.R.I.B.A. General Contractor: E. & A. Burns. Subcontractors: bricks, Eastwoods Ltd.; roofing felt, Permanite Ltd.; patent flooring, Haskell, Robertson Ltd.; grates, Allied Ironfounders Ltd.; casements, E.J.M.A. and Rippers Ltd.; wallpapers, John Line & Sons Ltd.

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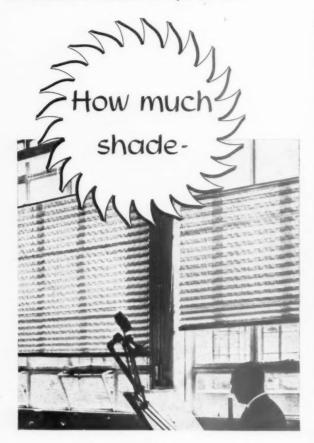
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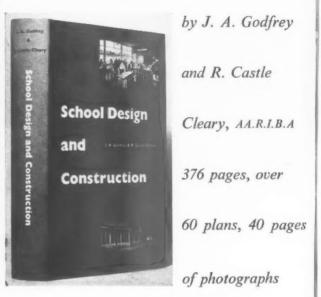
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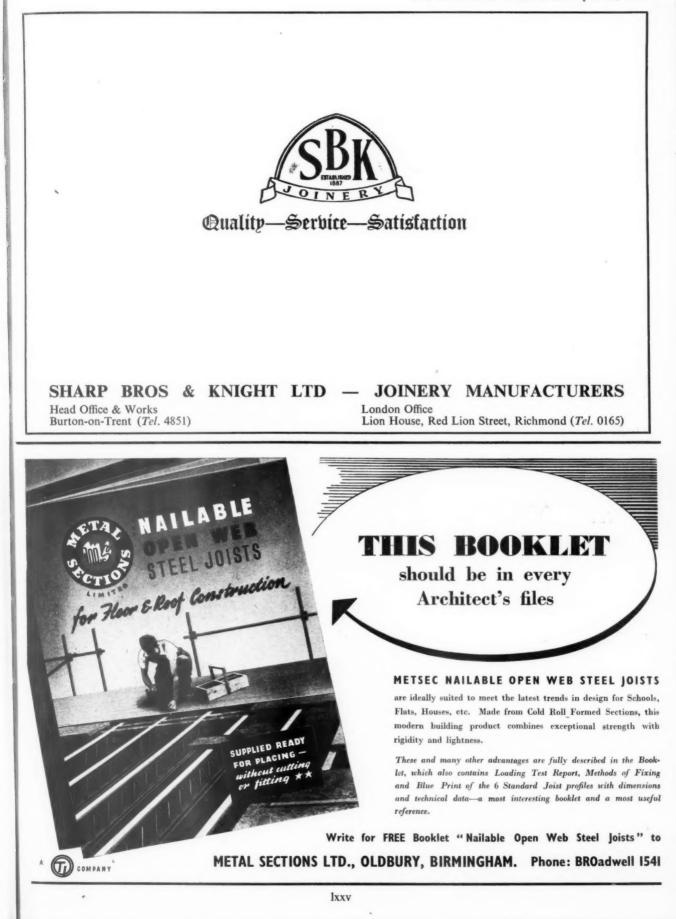
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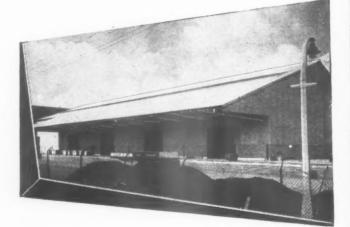
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CLASSIFIED ADVERTISEMENTS

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

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

Public and Official Announcements 258. per inch; each additional line, 28.

25s. per inch; each additional line, 2s. The engagement of persons auswering these advertisements must be made through a Logal Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she or the employment, is excepted from the provisions of the Notification of Vacanies Order, 1952. CORBY DEVELOPMENT CORPORATION. Applications are invited from suitably qualified persons for the following appointments:--(a) SENTOR ASSISTANT ARCHITECT. 2780× 245 (3)×255-2950. (b) ASSISTANT ADDITION

(a) SEATON ASSETSATION (TWO). $\pounds 630 \times 10^{-10}$ (b) ASSISTANT ARCHITECT (TWO). $\pounds 630 \times 10^{-10}$

(b) ASSISTANT ARCHITECT (TWO). \pounds 630 × £30 (4)- \pounds 750. (c) JUNIOR ASSISTANT ARCHITECT. \pounds 525 × £25 (2)- \pounds 575. The appointments are required in connection with large-scale construction projects associated with the development of a New Town. Candidates must have had suitable experience in, for appoint-ment (a) the design and execution of large-scale housing and other building works, etc., and (b) detailed design and construction in an architect's department.

detailed design and construction in an architecture department. All appointments are subject to one month's notice on either side, the provisions of the Local Government Superannuation Acts, and to the pass-ing of a medical examination. Applications, stating age, education, training, qualifications, experience, past and present appointments and salaries, together with the names of two referees, must be received by the undersigned not later than the 28th April, 1954. Housing for married candidates available. R. F. BROOKS GRUNDY, General Manager. The Stone House, South Road,

The Stone House. South Road, Corby, Northants. 2308 NEWCASTLE REGIONAL HOSPITAL BOARD. REGIONAL ARCHITECT'S DEPARTMENT. Appointment of : (a) ONE ASSISTANT ARCHI-TECT; and (b) TWO ARCHITECTURAL ASSIS-TANTS.

Appointment of: (a) ONE ASSISTANT ARCHI-TECT; and (b) TWO ARCHITECTURAL ASSIS-TANTS. Applications are invited for the following per-manent (superannuable) appointments on the Headquarters Staff of the Regional Architect, Philip H. Knighton, M.B.E., A.B.I.B.A. :-(a) One Assistant Architect-associateship of Royal Institute of British Architects and good experience of design and con-struction of public buildings essential. Commenc-ing salary within Grade £600 to £655 according to length of practical experience since registering. (b) Two Architectural Assistants--Inter. R.I.B.A. and some practical experience essential. Commencing salary within grade £440 to £625 according to practical experience and for doing good-class work in an expanding depart-ment. Evening study facilities for Final avail-able at King's College of Durham University in Newcastle. Whitey Circulars P.T.B. 19 and 20 prescribe salary scales and service conditions. State training, experience, whether married, present post and salary, war service, date avail-able and names of three referees of whom at least two should be architests. Applications to the Secretary by 30th April, 1954. Dinira, Osborne Road, Newcastle-on-Tyne, 2. ZIME

 Applications to the secretary by with April, 1998.

 Dintra, Obbarne Road, Newcastle-on-Tyne 2.

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Civic Centre, Birmingham, 1. 12th April, 1954. 2357 <text><text><text><text><text><text><text><text>

C. M. S. WELLS, Clerk of the County Council.

Aroliccats should have outstanding design ability. Bayes and the should have outstanding design ability. More every two months, may be paid for six months to newly appointed married officers of the Council unable to find accommodation. Applications on forms, giving further particulars of the appointments, are obtainable from Mr. F. B. Pooley. County Architect, County Offices, Aylesbury, and returnable by 10th May, 1954. 2336

2336 HARROW URBAN DISTRICT COUNCIL. ENGINEER AND SURVEYOR'S DEPARTMENT. Applications are invited for the appointment of ARCHIFECTURAL ASSISTANT, A.P.T. Grade IV., salary scale £580 to £625, plus London "weighting," in the Department of the Engineer and Surveyor (Mr. J. H. Melville Richards, A.M.I.C.E., M.I.Mun.E.). Candidates should have good office experience, and preference will be given to those holding recognised professional qualifications. The dulies of the posts will include the preparation of draw-ings and specifications, and supervision of works on any buildings or works of maintenance and recognized professional supervision of works of the post will include the preparation of the supervision of the

The appointment will be subject to the provi-sions of the Local Government Superannuation Acts: the passing of a medical examination; and the National Joint Council's Scheme of Conditions

Service. The Council is unable to assist in obtaining

The Council is unable to assist in obtaining housing accommodation. Canvassifig will be a disqualification. Forms of application may be obtained from the undersigned, to whom they should be returned not later than Friday, 7th May, 1964. D. H. PRITCHARD, Clerk of the Council. Council Offices, Harrow Weald Lodge, Harrow, Middlesex. 2290

COUNTY BOROUGH OF DONCASTER. BOROUGH ARCHITECT'S DEPARTMENT. Applications are invited for the appointment of a Temporary QUANTITY SURVEYING ASSIS-TANT, Grade A.P.T., VI (6695-420×420×425-4760). Applicants must be suitably qualified and have had good experience in the preparation of Bills of Quantities for all types of work, valua-tions for interim certificates, and the settlement of final accounts. The appointment will be subject to one month-

of final accounts. The appointment will be subject to one month's notice on either side and to the National Joint Council's Scheme of Conditions of Service and the terms of the Local Government Supersonnua-tion Act, 1937, and the successful applicant will be required to pass a medical examination. Forms of application can be obtained from the Borough Architect. L. J. Tudker, A.B.I.B.A. F.I.Hag. 15, South Parade, Doncaster, and musi to monday, the 17th May, 1954. Canvassing, directly or indirectly, will be a disqualification. H.R. WORMAND

H. R. WORMALD, Town Clerk.

1, Priory Place, Doncaster. April, 1954.

April. 1954. 2340 TETTENHALL URBAN DISTRICT COUNCIL ENGINEER AND SURVEYOR'S DEPT. APPOINTMENT OF ARCHITECTURAL DRAUGHTSMAN. Applications are invited for the appointment of Architectural Draughtsman, at a salary within the range £395 to £460 per annum. The com-mencing salary will be fixed in accordance with obility and experience.

mencing salary will be fixed in accordance with ability and experience. Applicants should be quick and experienced draughtsmen, with a sound knowledge of building construction and able to work up drawings from sketch stage. Previous experience in an Archi-tect's office will be an advantage. The appointment is temporary, but will be subject to the provisions of the Local Government Superannuation Act, 1937, and medical examina-tion

Applications, stating age, experience, and details of previous appointments, together with the names of three referees, should be sent to the Engineer and Surveyor, Council Offices, Upper Green, Tettenhall, not later than Saturday, the 8th May, 1954.

GEORGE V. CORNEY, Clerk of the Council.

13th April, 1954.

Clerk of the Council. 255 WEST MIDLANDS GAS BOARD. WALSALL AND DISTRICT DIVISION. ARCHITECTURAL ASSISTANT. ARCHITECTURAL ASSISTANT. ARCHITECTURAL ASSISTANT. And the second state of preparing sketch plans, working drawings, and architectural details in connection with new industrial projects with a minimum of supervisio. The commencing salary will be in accordance with the experience and qualifications of the candidate, and within the range of Grade VI (c510-c590 per annum) of the National Salary Scales for Gas Staffs. The post is pensionable, and the successful candidate may be required to pass a medical examination. Applications, stating age, full particulars of education, qualifications and experience, together width the names of two referees, should be addressed to Mr. E. Hardiker, Divisional General Manager, West Midlands Gas Foard, Walsall and District Division, Walsall Factory Estate, Tame Bridge. West Bromwich Road, Walsall, to reach in within 15 days of the appearance of this advertisement. E. H. CURETON. Bridge, West him within 1 advertisement.

F. H. CURETON, Secretary to the Board.

BOROUGH OF KING'S LYNN. HOUSING ARCHITECT'S DEPARTMENT. Applications are invited for the appointment of a QUANTITY SURVEYOR. Salary (A.P.T. V.A.) 2650-2710. Bref.

a QUANTITY SURVEYOR. Salary (A.F.T. V.A.) 2650-6710. Preference will be given to candidates who are Associates of the Royal Institution of Chartered Surveyors, and who have had experience of Hous-ing Works. The appointment will be subject to the National Scheme of Conditions of Service, and is super-annuable. The successful candidate will be re-quired to pass a medical examination. Applications stating age, and giving full parti-culars of qualifications and previous appointments, and naming two referees should be addressed to G. Holmes, A.R.I.B.A. 17, Queen Street, King's Lynn, not later than Friday, 30th April, 1954. Canvassing disqualifies. E. W. GOCHER, E. W. GOCHER. Town Clerk. 2311

Town Hall, King's Lynn, Norfolk.

Town Hall, King's Lynn, Norfolk. 231 LINDSEY COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT. Vacancy on permanent staff for — (a) SENIOR ASSISTANT (Architect), Grade A.P.T., VI (£695-£760), for person holding Final R.I.B.A., with two years' practical experience. (b) ASSISTANT QUANTITY SURVEYOR. Grade A.P.T., Va and VI (£650-£760), for person holding Final R.I.C.S. N.J.C. Conditions of Service. Canvasing will disqualify. Relationship to member or senior officer of the Council to be disclosed in writing with application. Application, stating age, quali-fication and experience, with names of two persons to whom reference can be made, to be sent to me not later than 27th April. 1954. A. RONALD CLARK A.B.I.B.A., A.M.T.P.I., Council Officer of Lineal

County Architect.

County Offices, Lincoln.

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R.I.B.A., y Architect. 2318

BRITISH ELECTRICITY AUTHORITY. EAST MIDLANDS DIVISION. Applications are invited for the following posi-tions within the Division :-ENGINEERING DRAUGHTSMEN (CIVIL). CONSTRUCTION DEPARTMENT. (Vacancy No. 1/54/AJ.) Candidates should have experience in design and detail of reinforced concrete structures, piled and slab foundations for heavy plant, cuivers, cable data of the structures of the structure buildings. The salary will be in accordance with Grade 5 (2567-1671 per annum) of Grade 6 (433-2567 per annum) of Schedule D of the National Joint Board Agreement.

detail of heavy reinforced concrete heavy foundations, retaining walls, bridges and the like. Preference will be given to candidates who are Corporate Members of the Institute of Civil Engi-neers or equivalent qualifications. Salary will be in accordance with Grade 3, 4780-2884 per annum of Schedule D of the National Joint Board Agreement. Closing date for receipt of applications is 3rd May, 1954. The above positions will be pensionable within the provisions of the British Electricity Authority and Area Boards Superannuation Scheme. Applications should be submitted on the official Establishments Officer, British Electricity Authority, Barker Gate, Nottingham, and should be retarned to the undersigned by the date stated. Please quote Vacancy Number, *L. F. JEFFREY*, *Divisional Controller*.

2312 COUNTY BOROUGH OF BOOTLE. Applications are invited for the appointment of a Temporary ASSISTANT ARCHITECT, at a salary in accordance with Grade A.P.T., Va (£650-270 p.a.). Preference will be given to those having con-iderable experience on the design and planning of schools.

⁴¹ Schools, Application forms are obtainable from the Borough Surveyor, Town Hall, Bootle, to whom they should be returned by Friday, 14th May, 1954.

HAROLD PARTINGTON, Town Clerk. 2339

2339 LANCASHIRE COUNTY COUNCIL COUNTY ARCHITECT'S DEPARTMENT. Applications are invited for the following appointments on the permanent staff... APT GENIOR ASSISTANT ARCHITECTS. APT Grade VII (2735-2630). Experience of school building required. APT Grade VII (2735-2630). Experience of SCO SUBSTANT ARCHITECTS. APT Grade VII (2735-2630). Experience of SCO SUBSTANT ARCHITECT, A.P.T. Grade V (220-670). General expgrience required. Application forms, to be returned by Monday, 3d May, 1954, obtainable from the County Archi-tect, County Hall, Preston. 2313

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2313 CORPORATION OF DUBLIN. TEMPORARY PLANNING ASSISTANT, Latest date for receipt of applications: 7th May, 1954. Salary: £975 per annum, inclusive of temporary

 Salary: 2975 per annum, inclusive and salary: 2975 per annum, inclusive and salary and sal

BOROUGH OF LARNE. The Larne Borough Council invite applications or the undermentioned temporary posts:— (a) DEPUTY PLANNING OFFICER. Salary ange £940-£1,195 p.a. for

(a) DEFUTT FLANARY PARAMETERS
 (b) TWO PLANNING ASSISTANTS. Salary range £675-£1.000 p.a.
 (c) ONE PLANNING ASSISTANT. Salary range £355-£625 p.a.
 Commencing salary within the above ranges will be determined according to qualifications and synapreparameters.

Experience. It is anticipated that employment will be for a period of at least two years.

It is anticipated that employment will be for a period of at least two years. *Qualifications:* Candidates for (a) must be Registered Architects by examination, possess a recognised qualification in Town Planning, and have adequate experience in Town Planning Work. Candidates for (b) must be either Registered Architects by examination, Corporate Members of the Institute of Civil Engineers or Associates of the Royal Institution of Chartered Surveyors. In addition, candidates must possess a recognised qualification in Town Planning or have adequate experience in Town Planning Work. Candidates for (c) must have passed the Inter-mediate Examination of the Royal Institute of British Architects or have adequate drawing office experience.

British Architects or have adequate drawing office experience. Preference will be given to candidates who served with H.M. Forces during war-time, pro-discharge the duties efficiently. Applications, giving date of birth, full particu-lars of qualifications and experience, stating the post applied for, with copies of two recent testi-monials, should be sent without delay to the undersigned. ROBERT LYTTLE,

ROBERT LYTTLE, Town Clerk.

Town Hall, Newcastle-upon-Tyne, 1. 8th April, 1954. 2310

COUNTY OF CORNWALL. Applications are invited for the appointment of PLANNING ASSISTANT. on A.P.T., Grades III-IV, in the County Planning Department. Salary will be according to qualifications and ex-perionce

Salary will be according to qualifications and ex-perience. Candidates should have passed the Intermediate Examination of the Town Planning Institute, and had previous experience in the office of a local Planning Authority. Preference will be given to those who have had architectural training. The usual conditions of the Local Government Service will apply. Applications, together with the names and addresses of three persons to whom reference may be made, should be addressed to the County Planning Officer, County Hall, Truro, not later than the 7th May, 1954. Clerk of the County Council. County Hall, Truro.

Clerk of the County Council. Clerk of the County Council. Clerk of the County Council. Conversion of the County Council. CORPORATION OF GLASGOW. ARCHITECTURAL AND PLANNING DEPARTMENT. ASSISTANT QUANTITY SURVEYORS. Applications are invited from persons having general experience and holding the A.R.I.B.A. qualification or the A.R.I.C.S. qualification. Scale t520-670 with placing according to age and experi-ence. Posts are superannuable, subject to medical examination. Form of application may be ob-tained from the Principal Administrative Officer, 20. Trongate, Glasgow, C.L. Clin. Activity of the County Councils.

e, Glasgow, C.1. *A. G. JURY. City Architect and Planning Officer*

CAMBRIDGESHIRE COUNTY COUNCIL. ARCHITECTURAL ASSISTANT. Applications are invited for the appointment of an Architectural Assistaat, in the Architect's De-partment on Grade IV (£580×215-£625) of the National Scheme of Conditions of Service. Applicants should have passed the R.I.B.A. Intermediate Examination, or its equivalent, at one of the recognised Schools of Architecture, and should have had experience in an Architect's office. The appointment will be subject to the pro-visions of the Local Authorities' Superannuation Act, 1937, and will be terminable at one month's notice on either side. Applications, stating qualifications and experi-ence, accompanied by one recent testimonial, and the names of two referees, should be sent to the undersigned not later than Saturday, 1st May, 1954. CHARLES PHYTHIAN.

CHARLES PHYTHIAN, Clerk of the County Council. 10th April, 1954.

tect. County Hall, Preston. 2280 MINISTRY OF AGRICULTURE AND FISHERIES require Temporary ARCHITEC-TURAL DRAUGHTSMEN, minimum age 20, at Aberystwyth, Bristol and Nottingham. Practical experience required; Intermediate R.I.B.A. or R.I.C.S. standard an advantage. Opportunities for establishment through competitions held periodically. Starting salary according to age and location, from £351 los. to £533 128. (men) and £522 88. (women). Write, giving age, qualifica-tions and experience to Ministry of Agriculture and Fisheries 23/25, Soho Square, London, W.I., quoting EP 584A. 2338 COUNTY BOROUGH OF WEST HAM. Applications are invited from suitably qualified Architect/Planners for the following appointments to work under Thomas E. North O.B.E., F.R.I.B.A., Dist.T.P. (Borough Architect and Planning Officer), on the reconstruction pro-gramme of the Council. The posts are established. (a) ONE SENIOR ASSISTANT, Grade A.P.T., (b) ONE ASSISTANT, Grade A.P.T.,

VII.
 (b) ONE ASSISTANT, Grade A.P.T., V/Va.
 (c) ONE ASSISTANT, Grade A.P.T., I/III. There are also a number of GENERAL ASSIS-TANT (Technical)—General Division Scale—posts available.

available. Application forms from 70, West Ham Lame, Stratford, E.15 (returnable by 10th May, 1954). 2316

LONDON COUNTY COUNCIL. ARCHITECTS DEPARTMENT. Vacancies for ARCHITECTS in Schools and Housing Divisions. Salary to 2721. Particulars and application forms, from Archi-tect (AR/EK/A/2). County Hall, S.E.1. (374.) 2205

tect (AR/EK/A/2). County Hall, S.E.1. (374.) 2206 CORPORATION OF THE CITY OF ABERDEEN. TOWN PLANNING DEPARTMENT. Applications are invited for the post of DRAUGHTSMAN in the salary grade 2490 to 6255 per annum. Applicants should possess practical drawing office experience. Further particulars of the appointment are obtainable from the Director of Town Planning. 5. Bon-Accord Crescent, Aber-deen, to whom applications should be submitted on or before 3rd May, 1954. J. C. RENNIE.

Architectural Appointments Vacant

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

The engagement of persons answering these advertisements must be made through a Local iffice of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a veronan aged 18-69 inclusive unless he or she is, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

CO-OPERATIVE WHOLESALE SOCIETY, LTD. ARCHITECTS DEPARTMENT, LONDON, PLICATIONS are invited for the following appointments:—

 (a) ASSISTANT ARCHITECTS, of Intermediate R.B.A. standard, capable of preparing sketches, working drawings and details under supervision of Senior Architects.
 (b) TAKER-OFF, with experience of com-mercial/industrial buildings.
 (c) The WORKERS-UP (commencing salary to 6600 p.a., according to age and experience). The appointments are permanent and offer prospects of up-grading. Successful candidates will be required to undergo medical examination for computory superannuation scheme. Applications, stating age, experience, quali-fications, and salary required, to W.J. Reed, F.R.I.B.A., Chief Architect, Co-operative Whole-sale Society, Ltd. 99, Leman Street, London, B.1.

Town House, Aberdeen. 5th April, 1954.

J. C. RENNIE, Town C.erk.

2315

JUNIOR ASSISTANTS and ARCHITEC-TURAL DRAUGHTSMEN required by Multiple Shop Co. in the London area. Excellent working conditions, staff canteen, superannuation, 5-day week. Experience required in surveys, à in-scale working drawings and details under super-vision. Please reply, stating age and salary required, to Box 2150.

J UNIOR ARCHITECTURAL ASSISTANT re-quired for Works Department in large Engineering Firm. Knowledge of construction and capable of working in close conjunction with con-tractors. Temporary post 1/2 years. Ideal for Student. State experience and salary required. Box 2934 Student. Box 2284.

A RCHITECTURAL ASSISTANTS required. Applicants should have completed their National Service and have had at least 2 years' office experience. Apply in writing, stating age, training and experience, to the Chief Staff Archi-tect, Ilford, Ltd., Romford, Essex. 2254

A SSISTANTS-one Inter. standard and one Final standard-required for general practice in small Midland manufacturing town. Full details of experience and salary required to Box 2238.

A RCHITECTURAL ASSISTANT, Student R.I.B.A., with office experience, required for responsible position in Lincolnshire office, state age, experience and salary required. Box 2200.

S ENIOR ARCHITECTURAL ASSISTANTS re-quired. Associates R.I.B.A. with previous office experience. Knowledge of industrial work an advantage. Salary ±800-£900 according to capabilities. Write Priestman & Lazenby, 101, Spring Bank, Hull. 2193

REQUIRED for Architects' office, Central Interested in design and construction. Write, stat-ing experience and salary required. Box 2182.

VACANCY shortly in small private office, Gray's Inn, London, for ASSISTANT of Inter-mediate R.I.B.A. standard. Write Box 2341.

A SCHITECTURAL ASSISTANT, up to Inter. R.I.B.A. standard, required for Architect's Department of Progressive Furniture Combine, with H.Q. in London and branches throughout the country. Ability to survey existing premises and prepare working drawings and details with min-mum of supervision. Salary: £450-£550. Contri-butory superannuation scheme. Write, stating age and giving details of experience, to Box 2343.

The second secon

A BCHITECTURAL ASSISTANT required in write, with particulars, to:-S. Powell Bowen, A.R.I.B.A., Alliance House, Princes Drive, Colwyn Bay. 2344

A RCHITECTURAL ASSISTANT (20/25) re-quired in Architectural Department at Reading: Applications, marked confidential, staling 'age, experience, and salary required, should be addressed to R. E. Southall, A. R. I.B.A., H. & G. Simonds, Ltd., The Brewery, Reading.

MR. F. X. VELARDE, F.R.I.B.A., Liverpool, requires an ASSISTANT. He would like someone about 26 years of age, who could grow into his ways and methods. The work to be done is varied, chiefly churches, houses and schools, with occasional small alterations. Please apply in writing to 9, Windsor Buildings, George Streek, Liverpool, stating experience and salary required. 2346

A RCHITECTURAL ASSISTANT wanted for country practice in North Essex. Salary: 2400 p.a. Write, stating experience, etc., to Box 2342.

SENIOR ARCHITECTURAL ASSISTANT re-quired, preferably with some art training. Excellent prospects for first-class draughtsman, with good sense of design and ability to supervise output of others. Apply, stating age, experience, salary required, to Box 2333.

A RCHITECTURAL ASSISTANT required. General practice. Quick and accurate draughtsman. Age, experience, and salary re-quired. to A. W. J. Mullins, L.R.I.B.A., 78, Thoro'fare, Woodbridge, Suffolk. 2332

A SSISTANT required for Architect in South-West London, with general practice. Prospects for suitable applicant, with experience up to Final standard. Box 2320.

A RCHITECT'S ASSISTANT required. Must be good draughtsman; working drawings, details, and good knowledge of construction. Ex-perience in supervision an asset. Write, stating previous experience and salary required, to H. S. Goodheart-Kendel & Partners, Kirkland House, 22, Whitehall, S.W.I. 2321

QUALIFIED ARCHITECT'S ASSISTANT re-quired for busy West End office. Able to carry through work from sketch plan stage to completion. Salary £600-£700, or by arrangement. Box 2322.

JUNIOR ARCHITECT'S ASSISTANT required for busy West End office, Intermediate standard. Salary: £400-£500 per annum. Box 2323.

QUALIFIED and experienced SENIOR ASSIS-TANT required by provincial private prac-tice with varied works in hand. Apply giving full details and salary required to Deacon & Laing, 9, St. Paul's Square, Bedford. 2262

R EQUIRED for Architects' office, Central London area, young qualified ASSISTANTS interested in design and construction. Write, stat-ing experience and salary required. Box 2325.

Resperience and salary required. Box 222. EXPERIENCED SENIOR ASSISTANT re-quired immediately in busy general practice, Southend-on-Sea. A.R.I.B.A. or Final standard, Good prospects for young man with initiative, able to make surveys, prepare working drawings and specifications, with minimum super-vision. Five-day week. Write full particulars, age, salary required, to Box 2330.

ED GBASTON. BIRMINGHAM. - Architects have vacancies for two experienced ASSIS-TANTS, one A.R.L.B.A. and one A.R.I.C.S. Interesting old-established practice, with oppor-tunities for advancement. Apply by letter, stating age, training, experience, salary, etc., to Box age, 2327.

SENIOR AND JUNIOR ARCHITECTURAL ASSISTANTS and Draughtsmen or women required in busy office in the Home Counties. Some experience essential. Large varied practice. Please state experience and salary required. Box 2137.

QUALIFIED GALIFIED ARCHITECT required im-tropical experience, to take complete charge of large contracts in Aden. Approximately 18 to 24 months' contract in first instance. Full par-ticulars to Box 2303.

A RCHITECTURAL ASSISTANT required im-mediately. Experienced in the preparation of working drawings and details from sketch drawings. Apply stating qualifications, age, experi-ence and salary required to -Welch & Lander, 38, Gloucester Place, London, W.1. 2273

A. GEAR, A.B.I.B.A., at 12, Manchester Square, London, has vacancies for ARCHI-TECTURAL ASSISTANTS of Intermediate or Final standard interested in the design of pre-fabricated structures. Apply above address. 2274

SENIOE ARCHITECTURAL ASSISTANT required, full experience in preparation of Working Drawings, Details, and supervision of office and Industrial Buildings in the London Ares. Good knowledge of construction and design essential. Apply in writing giving full particu-lars of qualifications, age, experience and salary required to Box 9829.

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RCHITECTURAL ASSISTANTS required for A A busy practice engaged upon schools, industrial buildings, offices, etc. Write, giving full particulars of qualifications, experience and selary required, to Johns & Slater, F./A.R.I.B.A., 22, Foundation Street, Ipswich.

JOHN H. D. MADIN, Chartered Architect, A.R.I.B.A., 83/85, Hagley Road, Edgbaston Birmingham, requires one JUNIOB ASSISTANT, Write, giving details of experience. 2324

SAMUEL MORRISON & PARTNERS re-quire ASSISTANTS for interesting contem-porary work in the following spheres: schools, housing, factories and shops, with particular emphasis on industrial design. New offices are to be opened and they will be situated in a pleasant old vicarage in its own grounds. Salary accord-ing to ability and experience. Derwent House, Full Street, Derby. 230

A RCHITECT requires additional SENIOR and JUNIOR ASSISTANTS for Leicester branch. Apply in writing to C. Edmund Wilford, A.R.I.B.A., 2, Hastings Street, Leicester. 2287

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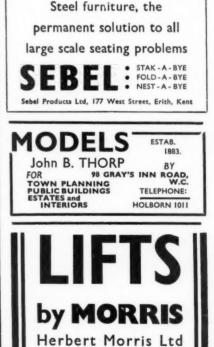




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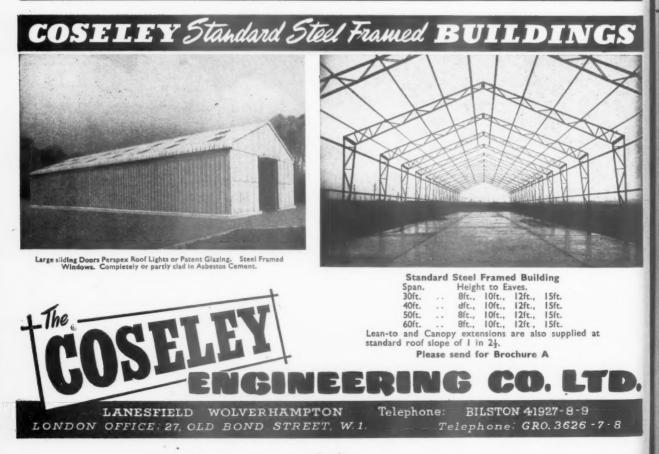
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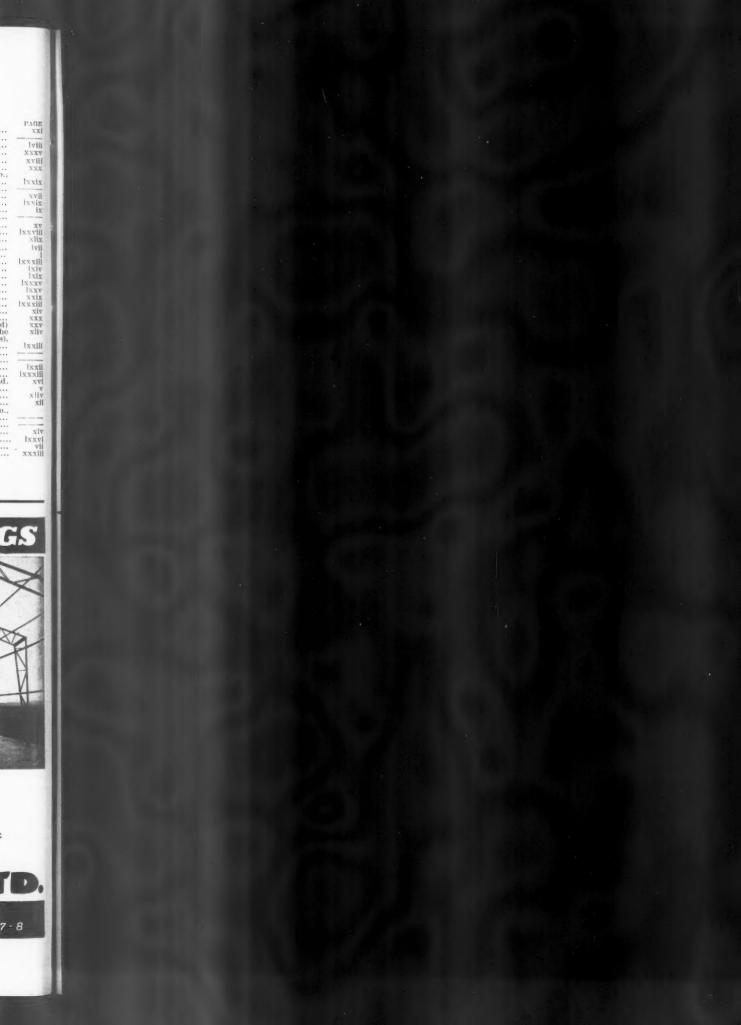
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