THE ARCHITCHERSY, JOURNAL for October 22, 1953 THE ARCHITCHERSY, JOURNAL for October 22, 1953 JOURNAL for October 22, 1953 THE ARCHITCHERSY, JOURNAL for October 22, 1953 JOURNAL for October 22, 1953 JOURNAL for October 22, 1953



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contents

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

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40, Piccadilly, W.1. Regent 4448 **EJMA**

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FS (Eng.) Faculty of Surveyors of England. 67, Oxford Street, W.1. Gerrard 0021
GC Gas Council. 1, Grosvenor Place, S.W.1. Sloane 4554
GG Georgian Group. 27, Grosvenor Place, S.W.1. Sloane 2844
HC Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1. Whitehall 2881
IAAS Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.

ICA Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1. Grosvenor 6186 ICE Institution of Civil Engineers. Great George Street, S.W.1. Whitehall 4577 IEE Institution of Electrical Engineers. Savoy Place, W.C.2. Temple Bar 7676 Illuminating Engineering Society. 32, Victoria Street, S.W.1. Abbey 5215



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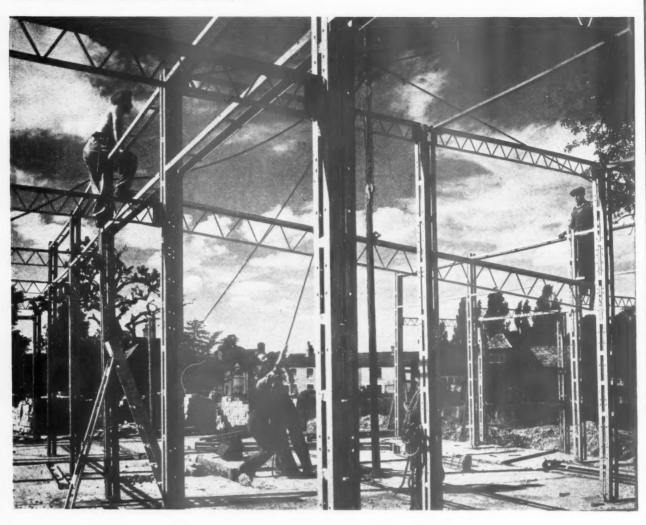
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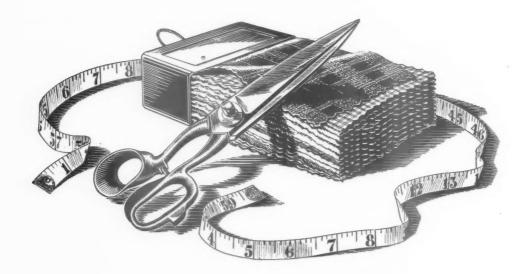
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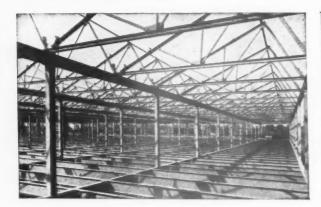
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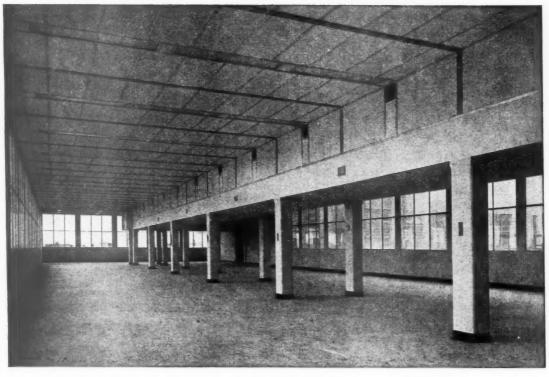
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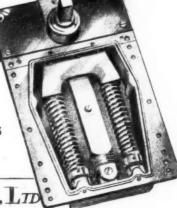




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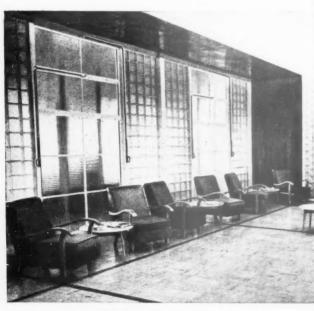
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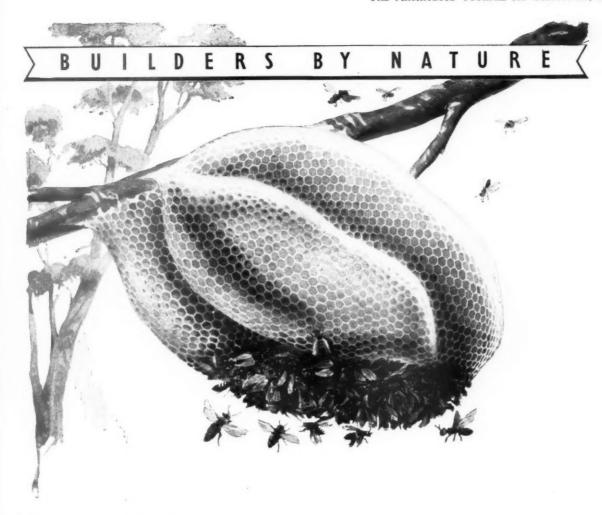
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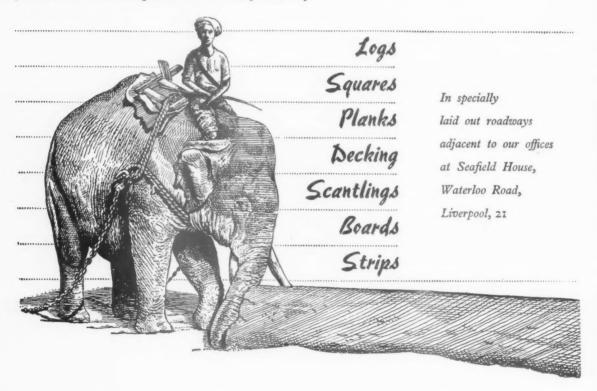


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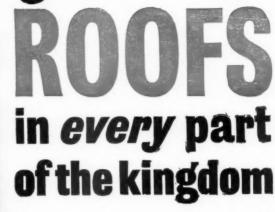
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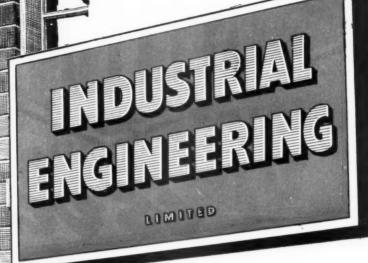
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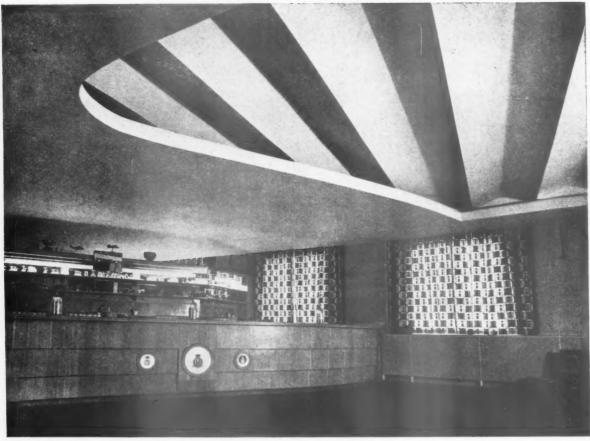
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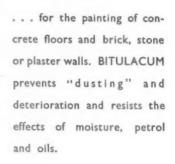
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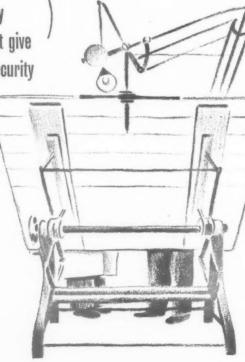
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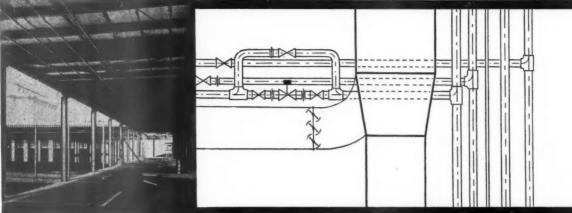
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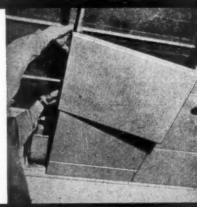
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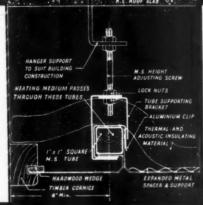
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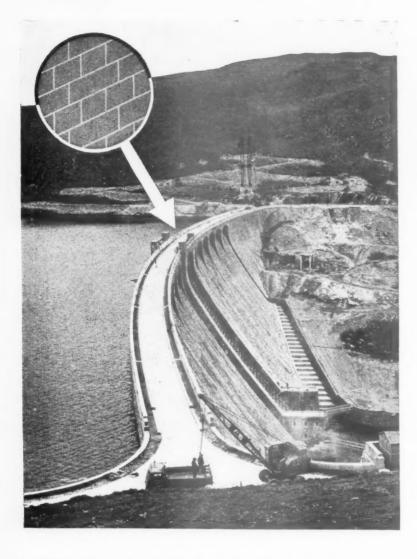
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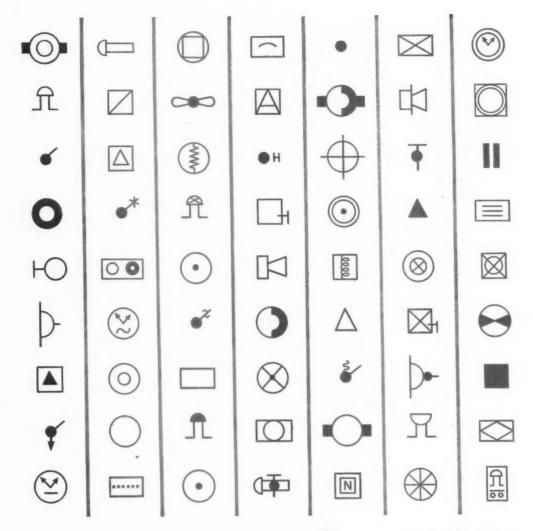
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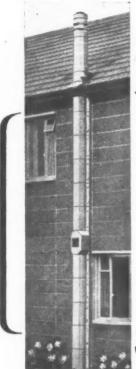
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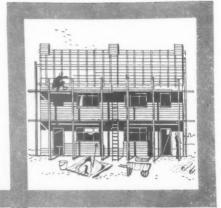
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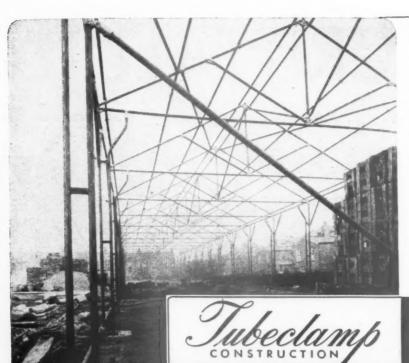


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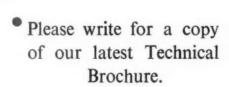


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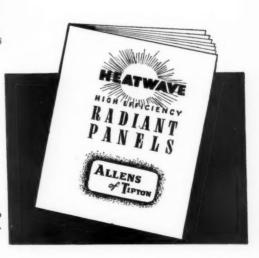


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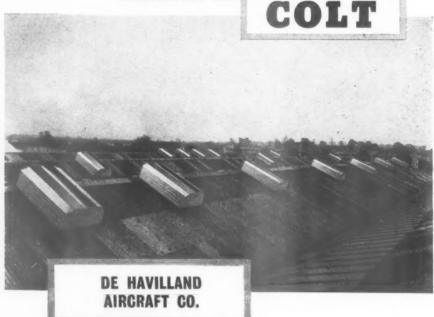
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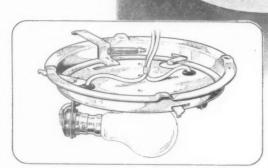
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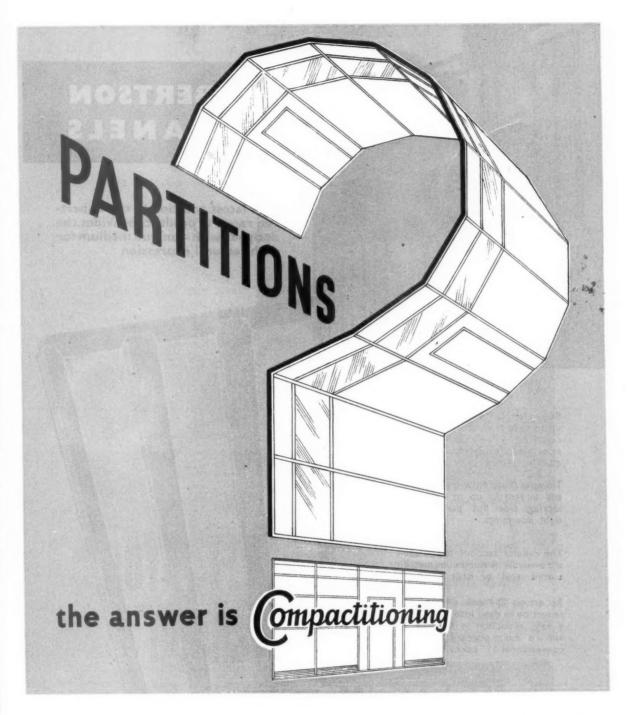


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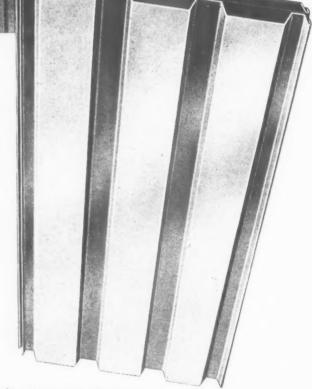
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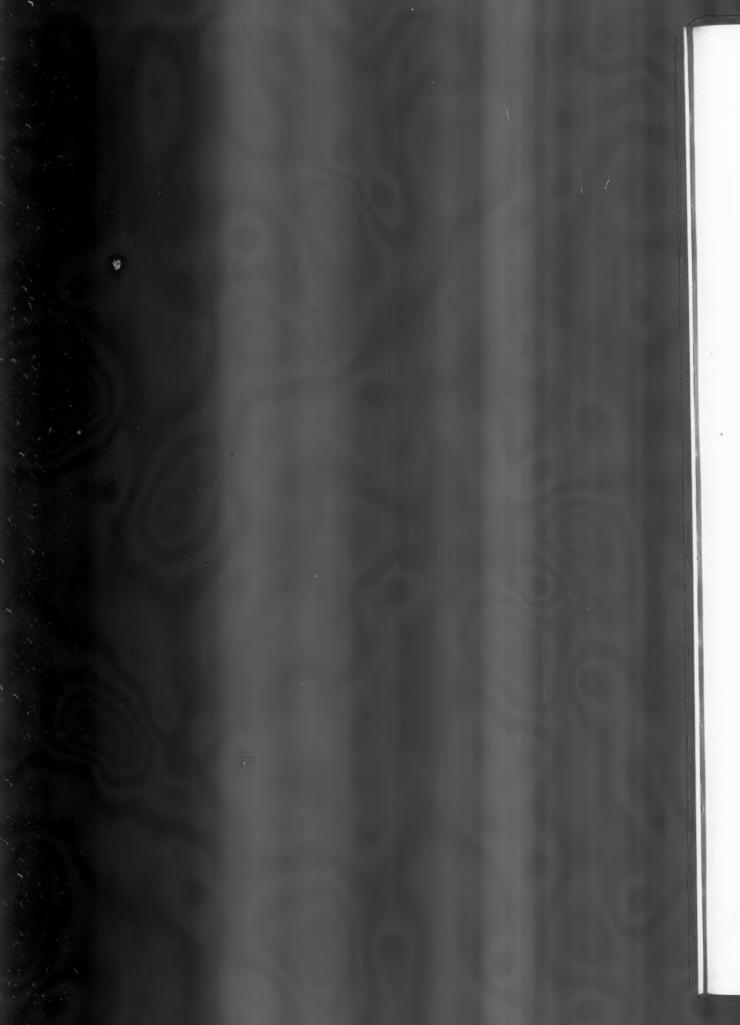
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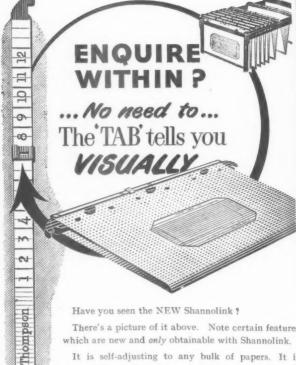
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The boards and metal fixing components are light and easy to manipulate and two men handled the job comfortably. The boarded roof looks trim and even reflects more light.

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The 42% fuel saving over the six months October to March 1952 is clearly shown in this graph. The top line shows the heat input before insulating the roof; the dotted line traces the input after insulation. Heat saved by insulation equals 4,416,200,000 B. Th. U's or 219.05 tons of coal.

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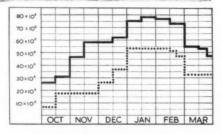
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SOUTH BANK TRIUMPH

The LCC's South Bank lay-out has had a good press, and well it deserved to. It is a triumph of imaginative planning, promising to possess many of the qualities the 1951 exhibition on the same site was admired for, but which we feared would never materialize in permanent form, so many were the handicaps to be overcome.

But in a magical way these have melted away one by one: the blocks of Government offices that were threatened and then withdrawn, the wrongly sited National Theatre that was suddenly moved to a much more sensible position, and so on. At last we have a river frontage planned in

depth, and with the contribution its building might make to the *skyline* of London, as well as to its efficiency and its amenties properly regarded.

More strength to the hands of Dr. Martin and his staff and the LCC committee who have backed them up in taking this splendid beginning to a satisfactory ending.

POWER STATION DESIGN

The report of Sir Hugh Beaver's committee on how to make power stations cheaper (see editorial on page 497) makes interesting reading, which should gladden the hearts of all architects. It contains a very generous pat on the back for architects, a recommendation that they should be built into the design team from the word "go," and the thinly veiled implication that architects are less stick-in-the-mud than civil engineers. Good.

NEW KENSINGTON SOCIETY

The newly-founded Kensington Society (it intends to preserve, and watch over, the borough's amenities, and to press for the highest standards in its future development) went off to a rattling good start at its inaugural meeting last week. Something like 700 people (from what are called all walks of life) packed the Town Hall to hear Victor Pasmore's doctor brother (the Society's founder) speak briskly and wittily for over an hour upon the history of Kensington, from 2000 B.C.—when the Celts tracked through the forests, up to 1940-and the blitz. Much of it was as familiar as the many notables that have made Kensington their home in the past. But it was news-at least to ASTRAGALthat both Beatrix Potter and Pablo

Picasso have been among Kensington's residents.

The Society has arranged other lectures for the winter—by Gibbs-Smith and and Sir Hugh Casson among others—and it hopes for as much public support and as useful a life as the Chelsea Society has had since its foundation. Architects should note quarian society pledged to resist, on that it is not just another antiprinciple, all new building. All the Society hopes for—as we do—is better building. ASTRAGAL sends it his best wishes and a membership form.

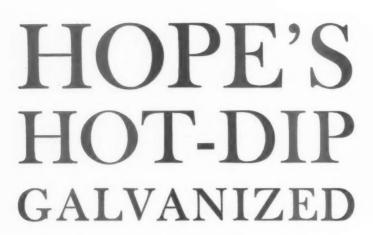
KINDLY RESTORATION

It is good news that Ightham Mote, which has not been occupied since 1951, is to be bought by an American, who proposes to repair it—without altering its appearance—and then live in it for some months each year. ASTRAGAL thanks the nameless purchaser both for his proposal to restore the place and for his kindness in leaving it where it is, instead of carting it to California.

DARKEST IRELAND

Architectural Survey* by Luan P. Cuffe is a neat booklet claiming to give an annual review of "all current architecture in Ireland." It is quite nicely produced, but it is doubtful whether it lives up to its claim. There is nothing very exciting-or incidentally very Irishabout the work shown. I suppose, once The Round Tower Age is passed, that the Irish tradition is an English tradition. In the 18th century this was a good thing; in the 20th century it merely makes Ireland-architecturally speaking-into a chunk of provincial England, and this, architecturally speaking, is depressing.

* Parkside Press Ltd., Dublin. 5s.



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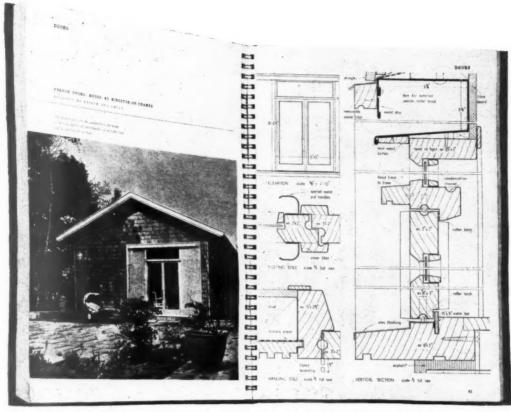
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A miniature reproduction of a volume of Working Details, to be published next week. See note below.

THUMB SAVER

Have you, dear student of Working Details, often wished—like ASTRAGAL -that in these 3-D days, someone would discover a way of looking at two sides of a page at once? If so, you will be glad to know that somebody has thought about this question, and has managed to find an answer. The illustration at the top of this page will show you what I mean. A selection of Working Details from the JOURNAL, which are to be published next Thursday in a book,* are presented so that each detail faces its photograph, instead of backing it. In addition, as you can see from the illustration, the book, which is the first in a series, is bound so that it will lie flat when opened.

One other point. You may often have spent some time looking for a Working Detail showing—say—concealed lighting, which you remember seeing but cannot find under the "Lighting" heading. The book is so well indexed that you may quickly discover your lighting detail in another

section where it takes second place to some other feature. This saves an awful lot of wear and tear on the thumbs, which can then be used for counting the bank-notes earned in the time that might have been wasted if you had not acquired the book.

BUILDING IN PARIS

The picture reproduced below is not, as you might suppose, the result of



applying Plastic Theory to a concrete structure, but is simply a new building in Paris reflected in its garden-pool. A spy contact who has just returned from the City of Light says that this particular block of flats, which is the work of Lubetkin's old partner Jean Ginsbourg, is one of the sights of the city at present, and the street outside is always full of parked cars and evening strollers look-



ing at it (pictures above and below). Although one cannot think of any recent buildings in England which have had



^{*} Architects* Working Details. (Volume1). Edited by D. A. C. A. Boyne. (Architectural Press, 21s.)



South Bank, 19??

When the South Bank Exhibition closed, just over two years ago, there were some fears that its site would be neglected and a great planning opportunity lost. But early in 1952 Sir Hugh Casson was called in to advise on temporary development, and before the excellent planting and landscape work on the downstream section had been completed, the MOW decided to relinquish the upstream section, on which it had intended to build government offices. This gave the LCC Town

Planning Division the chance of preparing plans for the permanent development of the whole site. After choosing a new site for the proposed national theatre in the upstream section, where it would not quarrel with the architecture of the Festival Hall, and providing a temporary layout in the upstream section, the LCC has now made public its plans for future development of the area. These plans, which put to shame much of the redevelopment work in the city, are described on pages 501-506.

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section had been completed, the MOW decided to relinquish the upstream section, on which it had intended to build government offices. This gave the LCC Town

quite this effect on the public, it is only fair to point out that this is almost the only modern building which has been built in Paris lately, and its detailing, since it is a high-rental block, has a smoothness and high finish which impresses even the French. It stands within a stone's-throw of such sacred sites (to the modern movement) as the Square du Docteur Blanche and the Rue Mallet-Stevens and Ginsbourg's flat, which is right at the top, commands an impressive view of the Eiffel Tower in one direction and the Bois de Boulogne in the other-but not for long, since an even taller block is scheduled to go up soon on the side towards the Bois.

My colleague had also had reason to lock up one of the pioneers of Modern Architecture whom most people have forgotten about—André Lurçat. The brother of the now better-known Jean Lurçat, the tapestry designer, he lives just outside Paris at Sceaux, where he has built a number of small houses. It seems that his Left-wing tendencies do not prevent him from continuing to put up houses which are still



Modern-Movement in idiom (picture above), but out of deference to the Ile-de-France tradition he faces some walls with a beautiful local limestone which is full of sea shells and fossils.



I am told that this stone is of a dazzling whiteness and rather crystalline, and wonder whether there is anything like it in England.

ASTRAGAL

POINTS FROM THIS ISSUE

Proposals for South Bank Permanent Development ... pages 493 and 501

Professor Bowen writes about architectural training ... page 498

Architecture in Madrid page 509

Building Techniques in the USSR page 515

The Editors

MORE POWER FOR ARCHITECTS

THE architectural profession will welcome the Report of the Committee of Inquiry into Economy in the Construction of Power Stations. This body, which has no particular reason to favour architects more than engineers, recommends that the British Electricity Authority should not only employ architects, but also employ them in the right way. It also recommends that the Authority should employ architects with open minds, allow them to experiment with new techniques, and make them "equal partners in the design team from its early stages."

Behind these recommendations lies, no doubt, the recognition that to put a power station in a monumental brick box is not the cheapest way to cover those parts of the generating process which need covering, and that the suggestion for the infinitely cheaper "power station in the open air" came

not from engineers, but from architects.

As far as the question of how to build the more obviously architectural parts of a generating plant is concerned, the Committee deplores the unthinking use of brick and of in-situ concrete, preferring corrugated sheeting (of practically any material), glass, and large pre-cast slabs. Functional and structural honesty is recommended, and the Royal Fine Art Commission (whose views against monumentality are quoted with approval) are excused from the charge often put upon them of being the reason for "extravagant architectural treatment."

If the Committee's recommendations are acted upon we should at last begin to get some power stations as exciting to look at as "the largest artefact" ought to be. The importance of these recommendations can hardly be over-estimated, since it seems likely that economic conditions will shortly compel action along the lines which the committee have suggested, and the reversal, which is clearly implied, of the common official view that architecture is no more than an expensive top dressing, might in time affect the views of other official and semi-official bodies.

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The Journal's Guest Editor, Professor Bowen, continues to give results of his enquiry into the state of the architectural profession. (The names shown in the headpiece above were taken at random from the Architects' Register and are not related to the article.)

Guest Editor:

Professor IAN BOWEN Methods of Training

A S the profession is at present constituted, the length of the "training period" which has been undergone is, no doubt, abnormally long, owing to the interruption of the war period; for the "training period" has to be measured as the interval between entry to an architectural office (or into full-time architectural training) and date of registration. But the war years cannot be written off in all cases as completely wasted from the point of view of training. Study was possible for some, experience was gained by others, and special educational facilities were made available in the war and post-war period. In addition to the "abnormal" effects of the war, there are some more lasting influences upon the length of the qualifying period. These, too, are re-flected in the background of those now registered as architects.

The composition of the profession, according to our sample, can be divided into major methods of entry as follows:

Method of Entry	Percentage
Trained in architectural schools Combined office experience and schools	25
training Office-trained, and RIBA finalists	12 26
Office-trained, but without RIBA finals	37
	100

It is generally true to say that those in the first of these groups entered professional employment later than those in the next two groups, and took, on average, less time to complete their studies up to RIBA finals, or the equivalent. Even so, of those trained, wholly or partly, in the schools (including those who also had office experience), two-thirds finished in four or five years, 10 per cent. finished in six to seven years, and 23 per cent. finished in eight or more years. Office-trained RIBA finalists, to take the other extreme, took even longer to complete, three-quarters of them requiring eight or more years for their period of study.

AGE OF ENTRY

Eighty-eight per cent. of the office-trained finalists in the sample entered paid employment at the age of 20 years or less; 4 per cent. of the wholly school-trained finalists entered at 20 or less; 62 per cent. entered between the ages of 21 and 25, and the rest at the age of 26 or more. Sixty-one per cent. of those who combined school training with office work entered employment at 20 years or less. And 66 per cent. of the people in this group required eight or more years to complete their training.

No doubt few office-trained architects began their studies seriously until they were in their twenties. The "length of study" statistics quoted above refer to the statements made by the persons concerned. In objective terms of the actual age at which the different groups attained RIBA finals, or its equivalent, the percentage figures were:—

	Schools Traine J	Combined	Office- trained Finalists
21-24 years 25-30 31 and over	 67 28 5	28 44 28	21 36 43
	100	100	100

This shows that office training, while enabling the young architect to earn money earlier, implies that he will take longer to finish his training.

While war service has had some effect on the figures in this table, it seems clear that the office-trained finalist begins his career earlier but qualifies not only after longer training, but at a greater age, than the schools man. In other words, his much earlier years of employment do not (on average) enable him to reach the qualified level at the same age as the fully-trained university- or schooltrained architect; the tortoise does not overtake the hare. There are exceptions of course. For instance, as the table shows, 21 per cent. of office-trained finalists succeeded in qualifying by the age of 24; but the handicap imposed by acquisition of experience on length of study is shown by the bias towards higher age groups among both officetrained finalists and those with "combined" training.

OFFICE TRAINING AND SALARIED ASSISTANTS

The office-trained architect has a better chance than the school-trained architect of being appointed as a salaried assistant before the age of 31. This does not mean that he is more suitable for employment at a younger age. A high percentage of the school-trained men are not available for appointment at all in the early twenties, and, in any case, more than half of the school-trained men also get salaried jobs before the age of But he stands a good chance of getting an earlier appointment (and one or two years' seniority in the office) because he happens to be on the spot. But the office-trained finalist has, of course, entered the office as a pupil at a much younger age than the schools entrant.

FINANCIAL CONSIDERATIONS

It seems clear, then, that the architectural schools produce (and will continue to produce) registered architects at an earlier age than other forms of training. The evidence of our sample suggests that the main barrier to full-time training at schools is financial. About half of those who attended full-time schools. and even those who took a combined form of training, were dependent on private means during their period of training. Many of those (41 per cent.) who reached finals level by way of parttime training took both evening classes and correspondence courses, although 38 per cent. of them managed on evening classes alone.

PRIVATE OFFICE TRAINING

Statistics alone cannot measure quality. In the light of the comments received from many both in, or outside of, our sample, the importance of office training, as estimated by various fully qualified practising architects, deserves a fuller discussion later in this series. The statistics show that private offices trained 93 per cent. of those following a combined course, and 84 per cent. of those who were office trained. Fifteen per cent. of the latter were trained in public offices. This percentage is less than the proportion of the profession represented by the public offices. Private office training is still very important.

But pupilage is, of course, no longer regarded as in itself sufficient training; hence the necessity for evening classes, correspondence courses and dayrelease.

The long period of training needed, whatever means of entry is sought, changes the whole character of the profession from its aspect in the 1880's or 1890's; or even as compared with the 1920's. A young man does not become an architect nowadays until he is in his late twenties, or even well into his thirties. This rules out an early bold

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entry to a professional career typified by setting up a brass plate, for by these later ages of entry few are prepared for years of hardships and struggle to build a new practice from scratch.

Hence, if the not-so-young newlyqualified architect of today does not want to become an assistant, he must buy a partnership in an existing practice, or-if he has no capital-he must be taken into partnership by a generous patron already in the profession, or wait for someone to die or retire. The outlook could scarcely be more different from that which faced Wren, or for that matter Lutyens; nor can the increased length of training automatically compensate for the brilliant selectivity of the self-taught man of genius, or of great talent, who, as a youthful principal, learned by "doing" from an early age.

Even those prepared to enter a period of assistantship have fewer prospects of a principalship today, though not necessarily so great an insecurity as their predecessors.

if it were designed by Mies, but that they have done everything they could to avoid this disaster. They really need not worry. Their building will not be criticized according to the extent to which it looks as if it were by Mies. It will of course be criticized on its own merits. If it turns out that indeed they have created a work of architecture, rather than just another very good school, whatever formal qualities it has will be theirs. Perhaps it will owe some thanks be theirs. Perhaps it will owe some thanks to Lake Shore, but then Lake Shore itself owes some thanks to the Fagus factory. and is none the worse for it.

and is none the worse for it.

It seems as if the Smithsons regard Mies' "formalism" as a quality in his work which can be avoided, while emulating other, less reprehensible qualities. But, of course, Mies's formal vocabulary cannot properly be considered apart from his structural and spatial ideas, or from his architectural philosophy. The lesson which can be learned from him, or indeed from any of the other giants of architecture, is that a building is also architecture only when the conception behind it is so complete that the parts are inseparable from the whole. Admittedly this is difficult to achieve, so Admittedly this is difficult to achieve, so difficult that only a handful of architects are capable of it, but it is well worth the effort.

It is quite possible that this is all old stuff to the Smithsons, but their publicized statement, if accurately reported, leaves one unhappily in doubt.

JOHN WEEKS.

Water-Closets

Sir,—I am gathering material for a not-too-serious book on Water Closets since the time of Sir John Harington. I would be grateful to any of your readers who feel inclined to let me have a note of any un-usual information, historical data, anecdotes or curiosities relevant to this subject. or curiosities relevant to this subject.

I hope to cover such matters as the fanciful names sometimes given to their wares by imaginative manufacturers and also the many polite euphemisms, past and present, for the use of closets. Contributions to these will be gratefully received.

JOHN PUDNEY. Bank House, Chipstead, Sevenoaks, Kent.

LETTERS

J. Hanna, A.R.I.B.A. John Weeks, A.R.I.B.A. John Pudney

People's Architecture

People's Architecture

Sir,—Disappointingly, neither in F. R. S.
Yorke's Diary nor your remarks about our
freedom to break with tradition (October 1)
was there any attempt at a profound assessment of "People's Architecture."

Our light-hearted attitude reminds me of
the situation in the opening lines of La
Fontaine's fable of the grasshopper and
the ant. Having gaily cast away our
national heritage as anachronistic we may
yet, when the serious business of life presents itself, realizing the dearth of expression in our "modern" art, find ourselves
looking to the example of our prosperous
and industrious neighbour.

Even now, to judge by the article in the
latest RIBA Journal, we must have recourse to tradition when there is a serious
matter to express.

when we have done with the real anachronisms in modern life—colonial wars and costly preparations for new crusades—

the consequent prosperity will no doubt create the conditions of an expressive and popular national architecture for which our present dead-pan efforts would be revealed as inadequate. The contrasts between the artistic content of the underground station hall illustrated and our own Underground or Paris Metro (however much pasted with posters), or of the Moscow skyscrapers and, say, the Uno slab, should illustrate this

It is possible, after all, for architecture to be an art which can evoke genuine appre-ciation from the man in the street!

Swansea.

Formalism Avoided

SIR,-Your issue of September 10, which I have only just seen, contained some fascinating photographs of a school under construction at Hunstanton, designed by Alison and Peter Smithson. The Smithsons ought certainly to be congratulated on their brilliant design and I look forward im-patiently to a visit to the completed

patiently to a view building.

I was, however, surprised to read in the accompanying text that in conversation with the AJ Editors, the architects stated as one of their aims: "Structurally . . . to use steel as an architectural material, but to avoid the formalism of Mies van der Pohe . ."

What did they mean? They appear to be on the defensive; it is as if they are explaining before the critics get at them, that in using steel architecturally they could not avoid making their building look a little as

The design by E. I. Graaf, A.R.I.B.A., of Johannesburg, which was awarded the first prize of £1,000 in the recent architectural competition for Uganda Electricity Board Headquarters, Kampala. The second prize-winning design was illustrated in the JOURNAL for September 10.

J. HANNA.

London.



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SOUTHPORT

Engineer Replaces Architect

Southport Municipal Council at a recent meeting decided by 23 to 22 votes not to appoint a new borough architect and town planning officer, but to amalgamate his department with and under that of the borough engineer and surveyor. Brian Bunch, until recent, y the architect and town planning officer of Southport, now holds a similar appointment at Northampton. (See ASTRAGAL'S comment on p. 337 of the JOURNAL for September 17.) September 17.)

HC

Play Areas Competition

The first prize in the Housing Centre Trust competition for an illustrated essay on a play around flats has been awarded equally to an entry by Elizabeth Beazley with illustrations by Petronellay Cundy-Cooper and an entry by A. B. Grove a d G. F. Chadwick. Entries submitted by J. A. C. Higgins, Alan Richard Mason and John Peake were highly commended. There were 17 entries. The competition conditions were published in the JOURNAL for April 23. in the Journal for April 23.

HIGH PADDINGTON

Basis for Investigation

A number of leading firms in the building industry have formed a committee to examine the technical problems of high building in the UK. They have taken as the basis for their examination the High Paddington scheme prepared by Sergei Kadleigh, which was illustrated in the JOURNAL for February 26, 1952. R. A. Allan, MP for Paddington South, has accepted the chairmanship of this committee, which will include the following firms:—Concrete Development Co. Ltd., Crompton Parkinson Ltd., Matthew Hall and Co. Ltd., Hoiland and Hannen and Cubitts Ltd., Waygood-Otis Ltd., Williams and Williams Ltd., Willment Bros. Ltd.

The committee have appointed the following consultants to advise them in their investigations:—Freeman, Fox and Partners, R. T. James and Partners, Dr. A. W. Skempton, Carr, Rudd and Partners.

Skempton, Carr, Rudd and Partners.

G. Mansell, assistant editor of the Architect and Building News, is acting as public relations officer for the committee.

CAMBRIDGE

University Scheme Approved

A committee appointed by the building syndicate of Cambridge University has recommended that the University should accept Sir Hugh Casson's proposa's for the development of the 13.2 acre site at Sidgwick Avenue. The scheme by Sir Hugh Casson (with whom Neville Conder is in active partnership) will be described in a later issue of the JOURNAL.

EDINBURGH

Plastic School

A primary school for 650 pupils costing £100,000, designed by George L. Walls and Duncan for Edinburgh Corporation is to be built with walls of 2-in. thick cellular plastic panels. Preliminary plans for the school, which will be situated at Drylaw South, have been approved by Edinburgh Dean of Guild

WINDSOR

Pleasure Gardens

The proposed pleasure gardens at Windsor, designed by James Gardner for W. S. Ellis Ltd., the promoters, have been criticized in Windsor. The Parks Committee has recommended the council to reject the scheme. The Windsor and Eton Society expressed disapproval of the scheme, by 98 votes to 21. Nevertheless, Windsor Town Council have agreed to lease land for gardens providing suitable terms can be agreed upon, and to appoint an ad hoc committee to conduct negotiations.

OBITUARY

Franz Singer

Franz Singer died on October 2, in Berlin, at the age of 57. He began work as a painter, then joined the Bauhaus, under Walter Gropius, in 1919. His first work was for the theatre. He designed the Schlosspark Theater in Berlin-Steglitz and many settings for plays. As director of the Werkstätt Bildender Kunst

in Berlin, between 1923 to 1926, he was responsible for the production of well-designed furniture, lamps, wallpapers, etc. The Kindergarten at the Goethehof in Vienna and other buildings in Austria gave him a name in this country, and in 1937 he became consultant architect to the John Lewis Partnership and was, amongst other things, responsible for the ladies' hairdressing department in Peter Jones. His plans for a new John Lewis building in Oxford Street are yet to be used. He remained consultant architect until 1947. A few weeks before his death he left England for Berlin to design a house.

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The entry for the competition for sea-front flats at Dover, illustrated on page 480 of the JOURNAL for October 18, was the joint work of Brian Carmichael and Douglas D. Smith, not Brian Carmichael, as stated.

DIARY

Crane Gantry Girders for Steelworks. J. S. Terrington, J. M. Hawkes. At the ICE. 11, Upper Belgrave Street, S.W.1, 5.55 p.m. OCTOBER 22

Some Social Aspects of New Town Development. G. Brooke Taylor. At the TCPA, 28, King Street, W.C.2. (Sponsor: Students' Planning Group.) 6.30 p.m. OCTOBER 22

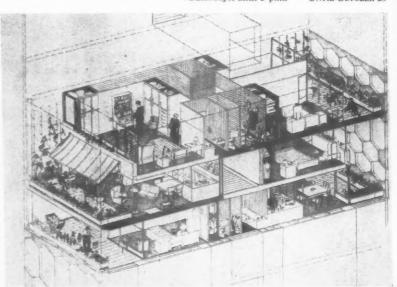
Contemporary Spanish Architecture. Exhibition at the BC, 26, Store Street, W.C.1. Weekdays, 9.30 a.m. to 5 p.m.; Saturdays, until 1 p.m.

OCTOBER 27-NOVEMBER 14

Notes in Passing. Sir Hugh Casson at the AA, 34, Bedford Square, W.C.1. 8 p.m. OCTOBER 28

Flats at Marine Parade, Dover. Exhibition of competition designs at the RIBA, 66, Portland Place, W.1. Weekdays, 10 a.m. to 7 p.m.; Saturdays, until 5 p.m.
UNTIL OCTOBER 28

Architectural Photography. Exhibition at the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA and Royal Photographic Society.) Weekdays, 10 a.m. to 7 p.m., until 5 p.m. UNTIL OCTOBER 29 Saturdays, until 5 p.m.



An impression of the living accommodation in High Paddington (see news note)

PROPOSED SCHEME FOR

SOUTH BANK DEVELOPMENT

On the following pages are details of a scheme prepared by the LCC's Town Planning Division as a guide to future development of part of the South Bank Comprehensive Development Area—the part which housed the Festival of Britain Exhibition, in 1951. This will be the second area to be developed in accordance with the recommendations of the Administrative County of London Development Plan; the first was Lansbury, and it is of interest that the Reconstruction Group for the East End scheme has also worked on the South Bank proposals. The scheme was prepared under the

direction of the Architect to the Council (J. L. Martin), the Senior Planning Officer (Arthur Ling), and the Assistant Senior Planning Officer, Reconstruction Areas (P. Johnson-Marshall), by the following team:—R. J. Sharpe (in charge of the South Bank Comprehensive Area), and C. G. L. Shankland (in charge of the detailed scheme) supported by M. L. Jenkins, W. Kay, G. C. Goldman, S. J. Sagan, J. Jaraczewska (Mrs.), W. A. Clarke and D. Cole. Work was done in consultation with the LCC's chief engineer and county surveyor, J. Rawlinson.

Aerial view, showing South Bank scheme superimposed.



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SOUTH BANK DEVELOPMENT

The redevelopment of the South Bank has long been a cherished ideal of Londoners and of the LCC. In fact, the LCC took the first step in this redevelopment before World War I when County Hall was erected across
Westminster Bridge. Land for further redevelopment was purchased before World
War II, and in 1943 Professor Abercrombie
and Mr. Forshaw, in the County of London
Plan, suggested a comprehensive reconstruction scheme for the riverside area, with sites for public buildings, offices, theatres and gardens. After the war the Council prepared plans for the whole of the South Bank from Southwark Bridge to Vauxhail Bridge, and in the development Plan it has been submitted to the Minister of Housing and Local Government as a Comprehensive Develop-ment Area under the Town and Country Pianning Act, 1947. Immediately the Festival of Britain was over, the Council, anxious to enable the public to continue its enjoyment of the riverside amenities, carried out a tem-porary scheme, laying out the site with lawas, flower beds and paved walks, with provision for adults' and children's recreation and amusement. Meanwhile work was proceeding on plans for the permanent development of the site. The following report, issued by the LCC, describes these plans:—

THE basic conception of the scheme is the grouping of a number of large public and office buildings in such a way as to give a feeling of spaciousness and vitality at a focal point on the south bank of the river, and to present to the moving eye of the Londoner a continuously interesting series of visual compositions, both in height and

depth. The buildings on the riverside in particular have been chosen for their liveliness in the evening, so as to avoid the "dead" character so often associated with central office areas.

THREE LEVELS

The scheme will have three levelsground level for pedestrians and essential vehicular access; a lower level for vehicle parking; and an upper level for pedestrian promenading and intercommunication from building to building, extending, right across the site, from Waterloo Bridge to the Air Terminal and to Waterloo station at platform level.

The scheme will be bisected by the Hungerford Railway Bridge into the "Upstream" and "Downstream" sectors. These will be linked internally by a widened and realigned Belvedere Road, and along the riverfront by a paved riverside walk, through what will be memorial gardens to commemorate those Londoners who lost their lives in the war.

UPSTREAM SECTOR

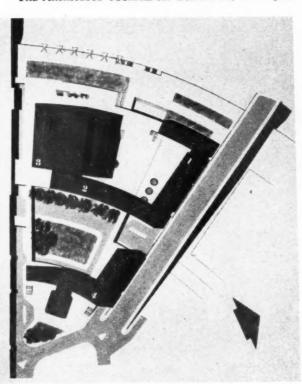
On the Upstream sector, behind these gardens, the National Theatre and a new hotel will be sited, while between Belvedere Road and York Road there will be a large office complex and an

Air Terminal. The buildings will be grouped to form two major inter-connected "places," one of which might be called Theatre Square and the other Terminal Square. A third and smaller "place" will have some shops along one side. The dominating feature of this sector

will be a tall office building 25 storeys high, which will be sited with careful regard both to its appearance within the area itself and also to its outline in the general silhouette of central London. This building will stand out above the main height level of the other buildings, which is generally 11 storeys. Careful thought has been given to the contribution these buildings can make towards the river scene. They should enhance the views from the north bank across the river and add new views by taking maximum advantage of the visual effect of the wide speed of the river from within the site itself.

From the Victoria Embankment one will see an asymmetrical composition designed essentially in three dimensions. The major scheme is a great "place" (Theatre Square) stretching back from the riverside with the tall building making an emphatic closure at the far end. Along its south side will stand the National Theatre, with County Hall beyond. Along the north side will be the hotel, with its balconied façade enriched by an elegant café-restaurant set over a long



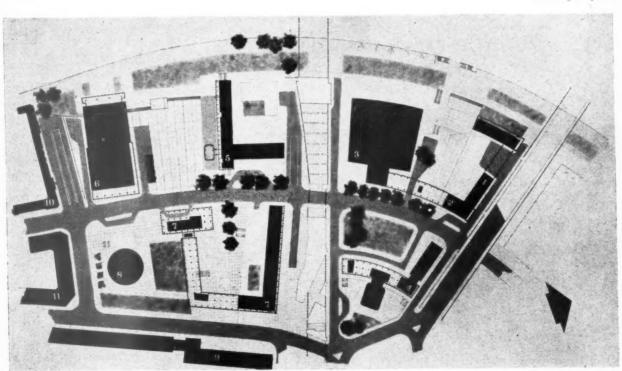


Site layout.

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Ground floor plan.



I. Conference Centre.

- 9. Offices. 10. County Hall.
- 11. New county offices.

reflecting pool, which will run the full length of the hotel façade. The main block of the hotel, 11 storeys high, will be set at right angles to the three-storey south wing overlooking Theatre Square. It will stand back from the

river front, and the space between it and the river will be used for the hotel's main restaurants, lounges and entertainment rooms at ground level, while at first floor level there will be a large promenade with roof gardens and

paved spaces where visitors can enjoy the magnificent views of the river, the Houses of Parliament and Westminster Abbey beyond.

Walking through Theatre Square one will catch a glimpse of the Air

^{2.} Art Gallery.

^{3.} Royal Festival Hall.

^{4.} Offices.

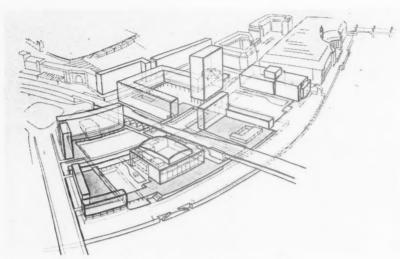
^{5.} Hotel.

^{6.} National Theatre.

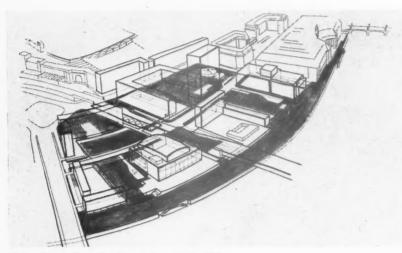
^{7.} Offices.

^{8.} Airways Terminal.

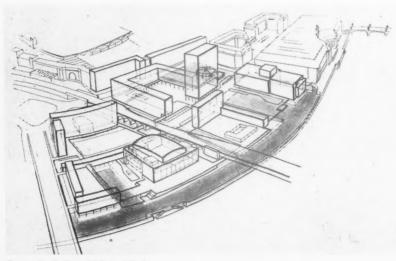
SOUTH BANK DEVELOPMENT



Upper level, for pedestrians and for communication between buildings.



Ground level, for pedestrians and essential vehicles.



Lower level, for vehicle parking.

Terminal building between the high office building and the National Theatre. On entering Terminal Square one will find that it is enclosed on all four sides; to the south will be the new section of County Hall, to the west the National Theatre, to the east the tenand eleven-storey buildings on British Railway land adjacent to Waterloo Station, and to the north the eleven-storey wings of the international head-quarters for the Shell Petroleum Co., Ltd. In contrast to the paved surface of Theatre Square, this square will have a considerable area of grass, and in it there will be the upper level of the Air Terminal concourse building.

HELICOPTER STOP

Underneath the Terminal Square is the main accommodation of the Air Terminal, with its passenger halls, coach station and ancillaries, with vehicular access by ramps off Belvedere Road, and pedestrian access from the underground station at basement level. It is suggested that to the east, over the roof of Waterloo Station, there shall be a Helicopter Air Stop, with provision for access to and from the Air Terminal.

Enclosed on three sides by the Shell Office buildings and open on the west to Belvedere Road, there will be a third open space, with a group of shops along its north side, and views and access to York Road and Terminal Square under the buildings, which will be raised on columns.

DOWNSTREAM SECTOR

The Downstream sector will have two major squares, one paved and one green. The Royal Festival Hall will be linked with an international Conference Centre, to be built alongside Waterloo Bridge, the actual link being in the form of an Exhibition Gallery following the curve of Belvedere Road. It is intended that the whole complex can in fact be used as a single unit or as separate buildings.

CONFERENCE CENTRE

The Conference Centre, which will consist mainly of halls and meeting rooms, will be a comparatively low building, with its east front set back at first floor level to form a broad terrace, and will form the east side of a square which will be open to the river but will be enclosed on the west by the Royal Festival Hall and on the south by the Exhibition Gallery, the latter up on columns to leave the way through from Belvedere Road.

From Waterloo Bridge one will be able either to pass straight on to the upper level terrace of the Conference Centre, or descend to the riverside gardens.

Beyond Belvedere Road it is proposed

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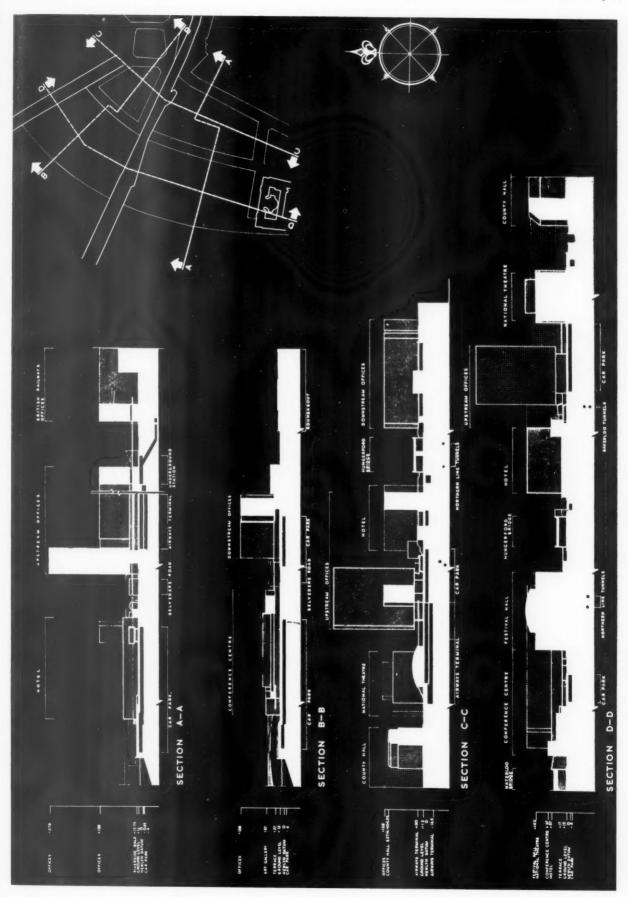
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Sub-ground level plan.



to site an office building with shops on the ground floor, planned so as to form a green area in front of the Royal Festival Hall and to fit in with the present roundabout at the York Road/ Waterloo Road intersection, and with an enlarged roundabout, should it be decided ultimately to replace Hunger-ford Bridge by a road bridge.

VEHICLE CIRCULATION

While special emphasis has been placed on the needs of pedestrians, and, indeed, the whole river front has been given over to them, full opportunity is being taken to plan comprehensively for vehicular traffic and parking.

The access roads will be of adequate width (Belvedere Road will be 70 ft. wide with a 30-ft. strip of open space alongside for most of its length), and large underground car parks with a total capacity of some 1,000 cars are under consideration. As the technical details of these are still under examination the proposals are shown in outline form only.

PLANNING CONTROLS

This part of the South Bank Comprehensive Development Area has been zoned for Public Buildings as the predominant use and "programmed" in the first five-year period.

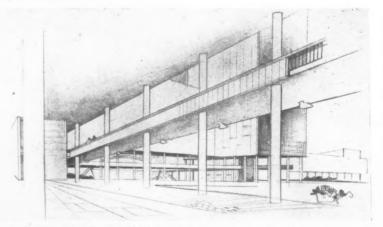
The Plot Ratio is 5:1 over the whole sector, but the comprehensive nature of the development under one ownership has given the opportunity of varying the floor space on each site so as to give the best architectural result and the maximum amount of open space.

The scheme has been developed in accordance with the Daylighting Controls, which are applied by the Council

to development generally.

KEY WHITE HORIZONTAL VERTICAL CROSS

Airways Terminal Possible Public and Private Public Car Park London Transport



Above. a ske'ch by Dr. Martin, which is intended to illustrate the effects of massing and varying pedestrian levels, rather than architectural style. The view is of the courtyard of the upstream office building, with the 25-storey block and National Theatre in the background.

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The following news letter from Niall Dublin, written by Montgomery, covers a number of the events of interest to architects that have occurred in Northern Ireland in recent months.

NIALL MONTGOMERY Irish News Letter

W HEN Northern Ireland's auctioneers held their last dinner, their president said their numbers did not increase rapidly only because of extreme care in the selection of members, and severe tests of their capacity, experience and integrity. The Minister for Justice thanked the president-his political opponent and an ex-Minister-for his assistance in piloting their registration Bill through parliament. Outside, unregistered, with noses flattened against the plate glass, stared the architects, no auctioneers

There are still architects carrying on in private practice, but the government knows about it, and the people have been told to stand firm and not to panic. P. Smyth, Minister for Local Government, rarely speaks in public without mentioning that architects' fees are responsible for the high building costs obtaining. Mr. Lemass, Minister for Industry and Commerce, scolding his hosts, the Master Builders, at their dinner in January—note the fatalistic eating motif!—broke the high costs down into "restrictive trade practices, outmoded or inefficient techniques, and high professional fees." A dignified protest from the architects' president, published next day in all the papers, failed to bring the government crashing into the dust.

DIRECT LABOUR

But who has ever seen a state or municipal building job truly costed, with exact allocations of administrative and architectural salaries, to say nothing of the wild direct labour money? In Dublin the direct labour thing has become such a fantasy that the "units" have been instructed to tender henceforth for their work. This may be connected with the reconstruction of the four-storey eighteenth-century Gardiner Street mansions-it is said to have worked out at something like £22,000 per house, exclusive, no doubt, of salaries to clerks and clerkitects!

In March, a suggestion from a senior building contractor that the defunct building trades council be reorganized was welcomed as a good idea by the architects. There is a feeling that if builders, workers, engineers, architects and quantity surveyors could be brought together at that level, the standard of building might be im-

proved, and that worker and contractor might be persuaded that the own worst enemy of each is not the other. What, in effect, does either want that the public can't be made to pay for?

DOLLAR WATCHING

The government, some time ago, set up a dollar-watching organization to advise industrialists on how best to style their produce for foreign markets. Industrial development has been considerable in the last decade and, though the Skibereen Eagle's eye is no longer on the Tzar, local manufacturing birds have great hopes of hypnotising into their nests great flocks of the eagles stamped on the backs of US dollars. This explains the current interests in standards, though there is as yet no branch of the Modular Society in Dublin! A committee of industrial captains-and scientific batmen-was set up in the new year to investigate the possible benefits of a switch-over to the metric system. The Institute for Industrial Research had been formed in May, 1952, with fifty members, mostly scientific and industrial people also. The Standards Bureau, lodged in a pleasant building designed by Eoghan Buckley, President of the RIAI, and his partner, John O'Gorman, keep plugging away, issuing specifications for concrete blocks, paint, and the like. This is not the futile duplication of BSI's work that it sounds; internal manufacturing and market conditions are distinct enough to warrant special attention.

The Electricity Supply Board, a considerable corporation, just past its silver jubilee, employs private architects wherever there is work for them. This is, perhaps, because it is one of the few organizations of its kind to be controlled, as it should be, by technical men rather than by clerks. Architects were employed by the ESB in the £6 million Erne river scheme which Mr. Lemass opened in October. He announced that the Board's projects in the immediate future will cost about thirty-five millions. The Lee river scheme, involving two stations, and scheduled to cost about two and a half millions, will shortly be put in hand, and future plans also include additional stations for Dublin, and the harnessing of three more small rivers. Store Street Bus Station is nearly finished. Its new Portland stone overcoat, blue and gold mosaic sports jacket, shell concrete frilled shirt and immaculate red brick trousers look good. People can't remember now whether it took ten or twenty years to build, and there is the usual fantastic chat—(a) when completed it will accommodate not more than 2 No. buses at a time, and/or (b) it has been offered to the Roman Catholic Archbishop for conversion into a cathedral.

Dublin's architectural score in this century seems to be all on the transport side. The first hit, Dublin Airport Terminal Building, a classical job, com-

pleted in the '40s, set a pattern later imitated in the vast building at Washington Airport, but was considered to be much too big for Dublin. Aer Lingus, the operating company, announced some time ago that they are extend-The control room goes up one storey, and other extensions are contemplated for cargo handling, outward passengers, and general administration. It will be interesting to see the extent to which FitzGerald permits these distractions to affect the

proportions of his building.
When Ireland submitted herself to

that routine investigation by wandering groups of solemn Americans, which is such an astonishing feature of modern European civilization, the result was an instruction to cease the programme of hospitalization and housing which the country's industrial development did not justify. Enormous embarrassment for the government-the work of erecting house and hospital is such excellent exercise for the voter who hopes to occupy both! And yet, the withdrawal, for investment in indigenous agricultural and industrial projects, of moneys frozen in foreign securities is also unthinkable—it would savour of capitalism and the exploitation of the worker. (No one thinks it odd that Ireland does not have that exotic Danish figure, the specialist in farm building design.)

A new hospital at Ballyowen, Dublin, was opened last year. It cost half a million and was designed, in collaboration with Hugo Duffy, by Louis Peppard and John Manahan, winners, at a tender age, of a competition for the job. Their victory, against all the available "expert" talent, was exciting because it seemed to show that in architecture expertise implies no corner in design. Ballvowen as built bears no relation to the winning drawings; it is a pleasant layout of prefabricated buildings, very rapidly and efficiently erected, and designed to last not more than twenty vears. Ardkeen, in Waterford, another therapeutic city, with 250 beds at £3,500 per bed, was also opened last year; it is a fine scheme, of which the designers were Nolan and Quinlan of Dublin, in collaboration with Willie Morrissey of Clonmel.

ARCHITECTS IN THE NEWS

Occasionally architects are mentioned in newspaper reports—the allusions are not always credits. There was, for instance, that item relating to the construction of a 481-bed hospital for Cork under consideration by the Corporation. Quote When the chairman remarked that the fees paid to professional consultants were based on the total amount of the bill, there were protests from several members Unquote.

Parliament voted £600,000 for schools last year. In March of this year it was admitted that about 650 new buildings are needed. Education has a vigorous Minister, but 'is small-time politically-maybe because children have not got votes. New national schools, when they do get built, are distinctive-massing, colouring and detailing appear to be carefully considered, and are generally a credit to the Public Works architect, Basil Boyd Barrett. Secondary and private schools, as well as vocational schools, are usually by architects in private practice—again, it isn't always possible to find out from the Press reports. A very decent example of the vocational type of school, designed by Andrew Devane, a pupil of Frank Lloyd Wright, was opened early this year at Lucan, Co. Dublin.

Perhaps the most interesting factory in the news in the last year was the heavy industrial plant opened in Carrick-on-Suir, Co. Waterford, by Unicast Ltd., of Cornwall; they do precast prefab houses. The Dwyers-a fabulous textile dynasty-opened a quarter-million pound cotton-spinning plant in Youghal, Co. Cork, the National Cash Register Company dropped a neat brick factory into a field in Dublin, a new woollen yarn mill went up in the ugly town of Kiltimagh, Co. Mayo, and Drogheda got to work extending its large cement factory. Galway plans to have a chinaware factory soon, Clare is to have another tannery, Waterford has a vast new wallboard plant. Not all of these projects are devised by architects. but it should be said that industrial people generally are more amenable to architecture than many of the "enlightened" client groups.

FRENZY IN YOUGHAL

Last summer the people of Youghal lashed themselves into a fine frenzy over the rebuilding of the town bridge. It's about seventy years old, describes itself as dangerous, and its back is encrusted with tar barrels, so if it does collapse when you're crossing you won't be travelling fast enough to reach the other side. One side stands the city of Waterford; Cork City stands to the south. The former asked for an enquiry and their engineer infuriated the local tradespeople by reporting that from the technical point of view a site further down river would be best. The tradespeople refused to contribute to the reconstruction, on the grounds that such moneys should come out of national motor taxation funds. town triumphed when it called in a Dublin consultant who offered to repair the existing bridge and stake his reputation on it. Youghal is where Sir Walter Raleigh lived, smoked, and effected the historic introduction of the potato to the Irish nation. Odd word pontificate!

There is a fine view from the Clontarf road across Dublin bay to the new oil city in the Alexandra dock area. Corporation in September started to reclaim the Clontarf foreshore, said it would take several years, would cost

several thousand pounds. In December, Clontarf residents held a meeting in the city to protest against the dump-Agitated councillors addressed them, said dumping would take twenty years, spoke of proposals to hide the dump-and the view-with a 1,500 ft. by 10 ft, high hoarding, decorated, and with floral decorations in front." City Manager later in the month told the Corporation that he had, in fact, a contract for a hoarding with a certain well-known British firm of advertising space people. Follows second mass meeting of protest against dump and hoarding, and another deputation to the Corporation in January of this year. A councillor protested that "they had been told that this was a managerial function in which they had no say. Nothing has happened; nobody has mentioned the Town Planning Department; the hoarding stands.

CONCERT HALL

Michael Scott is on the board of the company formed to build Dublin's Concert Hall, a structure which occupies in the municipal consciousness the sort of position the trip to Moscow has in Tchehov's Three Sisters. There was a recent rumour that the Corporation had approved a site for it "in principle," and a newspaper has given the thing a sub-leader saying musiclovers not cease clamour early start construction long-awaited concert-hall. Exactly the same Michael, namely Scott, lecturing the PEN Club in January, was reported as saying that churches built in Ireland are a disgrace to architectural expression. The accuracy of the statement probably would not be affected by the removal of the words "in Ireland," but recent statements emanating from sources close to the high episcopal command suggest a hardening of the official view that art and devotion are inconsonant. This is a technical matter which architects could not challenge, but the profession have the impression that the high episcopal insistence that churches can best be designed only by unqualified architects is perhaps carrying the thing a bit far. In the case of at least three new churches opened during the year architects were not named; no doubt this was out of charity, that great iournalistic weakness

Time's ally, fire, visited the county Meath in May, 1952, to snatch an eighteenth century mansion house from the damp fingers of the Fire Brigade, brought all the way from Dublin for the occasion. The place, Lagore, is doubly interesting archæologically-and it was there, in 1934, that a Harvard expedition excavated some crannógs. The crannóg is an artificial island, about 14 yards in diameter, consisting of a layer of logs, on a layer of logs laid radially, on layers of loosely woven twigs, on layers of larger and smaller stones. On top

stood the units which late Bronze Age voters no doubt regarded as scandalously cynical efforts to solve the housing problem.

September, 1952, a four-foot drop in the level of Lough Gara, in Ireland's dreariest and most badly-drained county, Roscommon, showed up a colony of crannog bases, and some canoes, mostly 25 ft. long, 18 in. deep, all monoxylous! By the end of October, following a further drop in the lake level, the score was 112 crannógs and 17 canoes—no doubt a typical flood area housing scheme-together with some Bann flakes and zoomorphic brooches. By November, reporters were defying people to find a Roscommoner who didn't know that a Bann flake is a four and a half thousand-year-old stone knife, complaining in the same breath that many of the finds had been destroyed by these lay scholars, reporting that the archæologists had broken the crannógs down into two classes—(a) 4,500 years old, and (b) 2,000 years old, built on piles.

Some months ago a market research consultant, member of an American commission to investigate the industrial health of the Irishry, thrust into the hands of a native a £500 cheque, with instructions for the immediate erection of a memorial to W. B. Yeats, and with the sole stipulation that an equivalent contribution be put forward by the indigenes. The money grew, and, by September, many and varied instructions for its spending were being cried from the minarets. Lord Killanin, former operator in London's Fleet Street, wants it poured into a tower in Galway which Yeats had converted for Mrs. Yeats; Sligo's indignant burgesses met by torchlight to affirm that only in Sligo could Yeats be fittingly honoured; various Dublin citizens wrote to the papers saying no it should be a new tower, a statue in St. Stephen's green, a poetry prize, and finally-to the secret delectation of the crannogminded-a castle-in-the-water where poets might dwell and ply their special craft.

BRONZE AGE PICASSO

That's about all, except for the discovery, in a ritual fire pit opened at Fourknocks, Co. Meath, last Autumn of a skeleton crouched beside a slab carrying a horrifyingly clever portrait-some Bronze Age Picasso had been put away, complete with offering. (It would be nice to end with one of the million pound estimates so "casually" scattered through this piece, but unfortunately nobody seems to know what sort of money the Britannic statesman, Sir Alfred Lane Beit, gave for Russborough, a wonderful Palladian mansion in Co. Wicklow, but it has 100 rooms and there are 550 acres with it, so-at Ballsbridge ratesthey probably gave it to him for twenty millions, excluding auctioneer's fees.)

Age ndathe

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enty fees.)



WORKING DETAIL

COVERED WAYS AND CANOPIES: 9

CANOPY OVER MAIN ENTRANCE: RESEARCH LABORATORIES IN LONDON, W.12

Professor Basil Ward of Ramsey, Murray and White, architect: J. R. Hudson, chief assistant

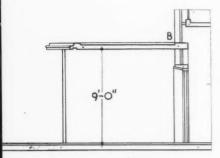


The canopy, supported outside by three slender steel columns, is also supported behind the glazing.

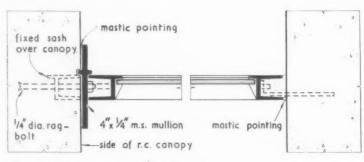
COVERED WAYS AND CANOPIES: 9

CANOPY OVER MAIN ENTRANCE: RESEARCH LABORATORIES IN LONDON, W.12

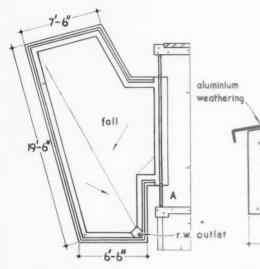
Professor Basil Ward of Ramsey. Murray and White, architect: J. R. Hudson, chief assistant



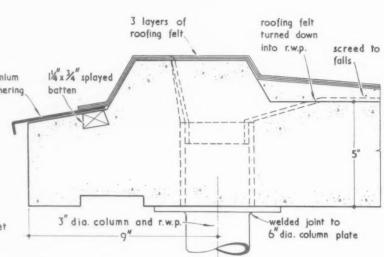
SECTION THRO' CANOPY.
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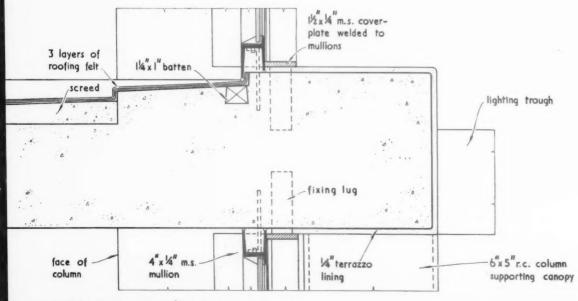
DETAIL AT A. scale 4 full size



PLAN OF CANOPY. scale $\frac{1}{8} = \frac{1}{1} - 0^{"}$



DETAIL AT EAVES. scale 1/4 full size



DETAIL AT B. scale 1/4 full size

WORKING DETAIL

CASH DESK: SHOP IN LONDON, W.2

A. V. Pilley, architect

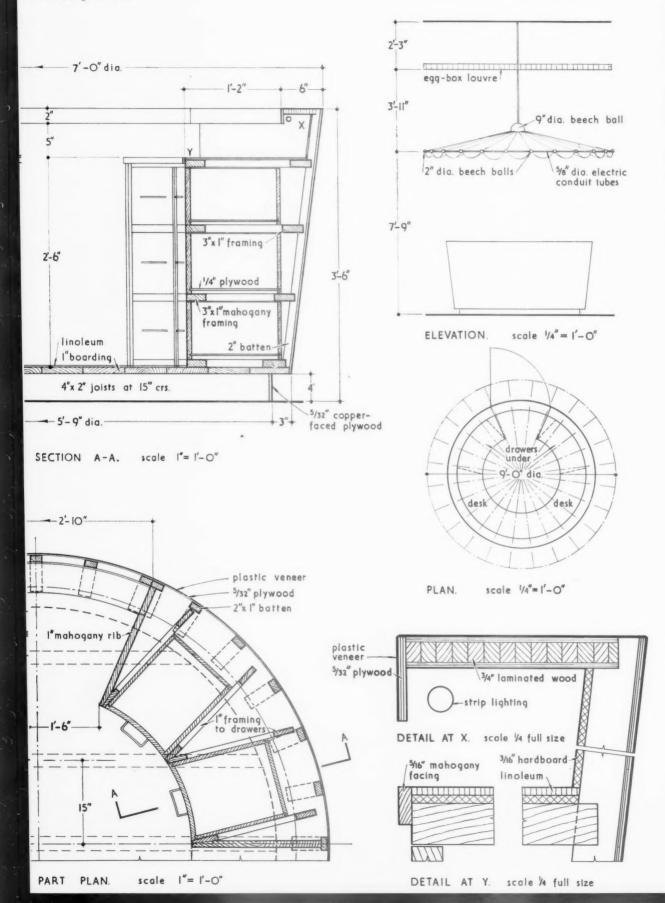


The desk, which occupies a central position in the shop, is veneered with plastic sheeting and has a suspended canvas canopy on a tubular metal frame.

WORKING DETAIL

CASH DESK: SHOP IN LONDON, W.2

A. V. Pilley, architect





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ARCHITECTURE IN MADRID

The exhibition of contemporary Spanish architecture, which opens at the Building Centre next Tuesday, will be the first exhibition in this country to show Spain's post-(civil)-war develop-





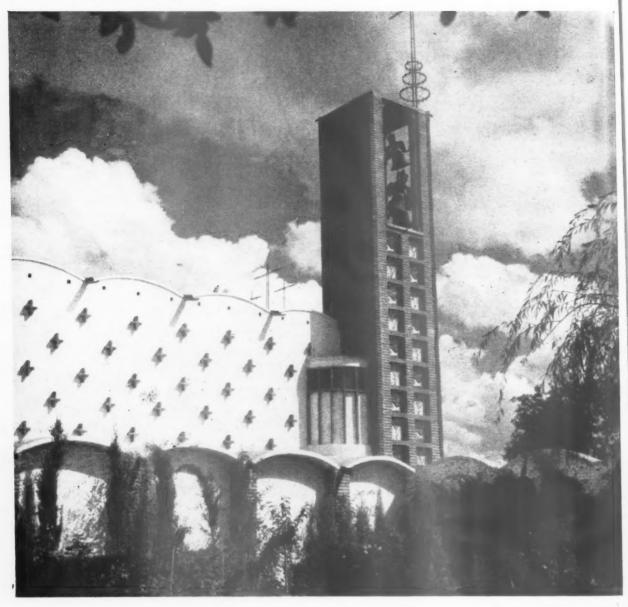


ment. The illustrations on this and the following page, taken recently in and around Madrid, are of the most recent contemporary buildings in the capital. Madrid is growing rapidly much in the same way as Rome. Speculative blocks of flats are being built in great numbers on the northern side of the city (290 buildings were completed in 1951). Although there are height limitations these are waived at strategic points so that many vistas, and the skyline in general, are punctuated by skyscraper blocks. There appears to be no municipal housing but some low cost flats are being built. The first maisonette block, six storeys high, built without steel or wood and designed by Torres Cabrero, will soon be completed. The new garden suburb of Puerta de Hierro, remarkable in contrast to the dry country surrounding Madrid, contains many contemporary houses and many in the traditional style, the latter mainly the work of Fernando Urrutia. It is only in the last year or so that designs of important buildings have broken away from the Escorial-nationalist style and the contemporary style is now firmly entrenched. Above left, a block of flats in Avenida de Francisco Silvera designed by Torres Cabrero. Centre left, flats in the Viso district designed by Luis Gamir. Below right, a building for the Consejo Superiorde Investigaciones Scientificas in the Calle Serrano, designed by Miguel Fisac. Below left, the military school in the Castellana designed by Gutierrez Soto.





ARCHITECTURE IN MADRID (continued)



Above, a small parish church outside Madrid designed by Luis Laorga. The green courtyard, flanked by the church, presbytery, stores and a screen wall, forms a startling contrast to the arid

surroundings. Below left, a house on the road to Escorial, designed by Fernando Cavestany. Below right, a house in the suburb of Puerto de Hierro, designed by Carlos S. Miguel and Manuel Haen.





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The hutti

PRIMARY SCHOOL

in KIDDERMINSTER, WORCESTERSHIRE

designed by F. W. B. YORKE and H. M. BARKER, in association with

F. R. S. YORKE, E. ROSENBERG and C. S. MARDALL; associate-in-charge,

T. R. EVANS; assistant architects, J. G. FRYMAN and W. PACK; consulting

engineers, CLARK, NICHOLS and MARCEL; heating consultants, OSCAR

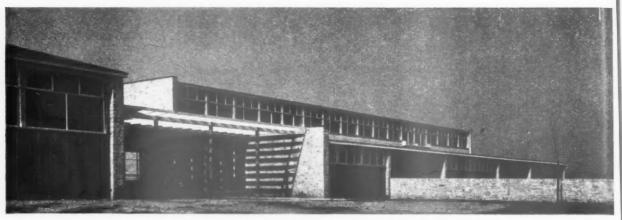
FABER and PARTNERS; quantity surveyor, OSWALD A. WAINWRIGHT

The junior stage of the Birchen Coppice County Primary School for the County Education Department is for 320 pupils. The kitchen is designed to serve the infants' school, when this is built, and the dining room will be linked to the infants' dining-assembly hall, which is now under construction. The site slopes downwards slightly to the east, where the outlook is over rather dull housing and hutting, but it is bounded on the west side by an escarpment which gives magnificent views over the Severn valley. The classroom block has its main windows facing these views.

The junior school from the south. The assembly hall is on the right.

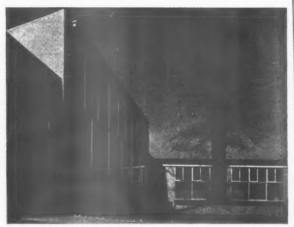


esigned ourb of Haen.



GENERAL.-The main circulation on the ground floor of the classroom block has cloakroom bays on each side and is lit by a broad lantern light. The classroom block and the assembly hall have a light steel frame; the administration block and kitchen have brick load-bearing walls. The classroom wing has precast first floor units and compressed straw roof slabs on hardwood joists, and the cloaks and lavatory area has a reinforced concrete frame and roof and brick in-filling walls. The assembly hall has timber framing and vertical hardwood boarding externally, above and below windows. The end walls are constructed in stone with a cavity and a 4½-in. common brick inner skin. Heating is by low pressure hot water radiators and hot water is provided by multi-point gas heaters. Work commenced on the school in January, 1951, and it was occupied in September, 1952. The contract price was £58,800 and the nett cost per sq. ft. on the contract price was £2 9s. 4d. The general contractors were A. H. Guest, Ltd. For sub-contractors see page 522.

Above, from south - east. assembly hall, which has a copper-covered roof with concealed gutters, is on ex-treme left. Right, the south window of the kitchen and the dining room beyond.





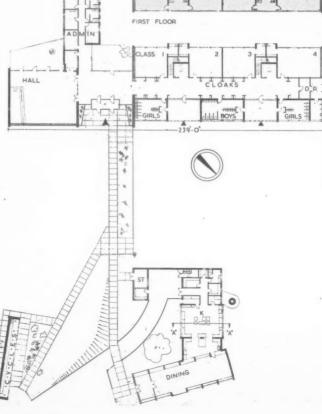
HALL

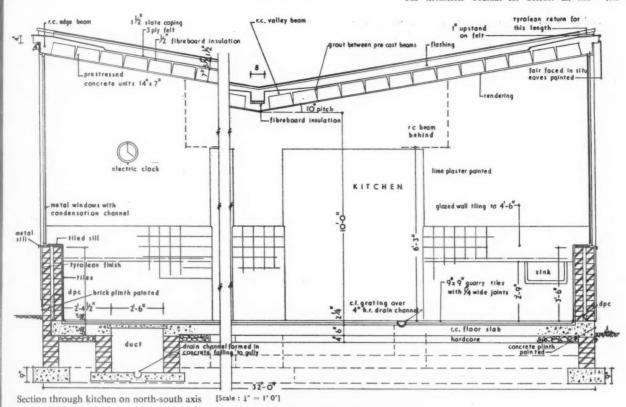
Site plan

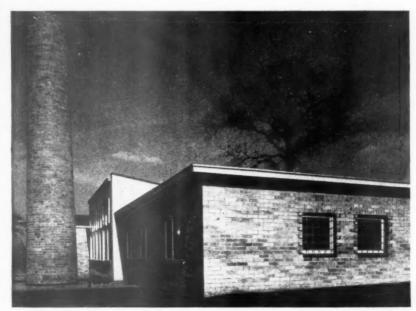
PRIMARY SCHOOL

at KIDDERMINSTER, WORCS. designed by F. W. B. YORKE and H. M. BARKER

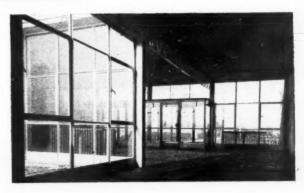
> Ground and first floor plans [Scale : 1' 0']







Left, from the north-west. The boiler house chimney, left, and the north window of the kitchen, centre. Over the main preparation area there is a prestressed butterfly roof. Below, the entrance hall of the junior school.





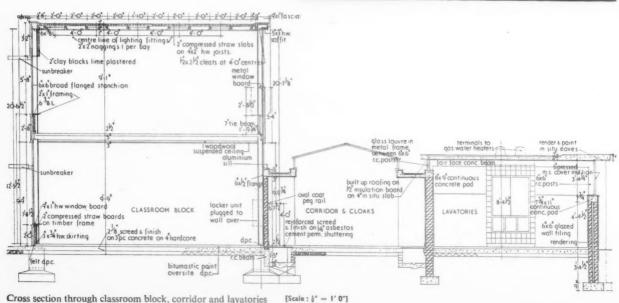


PRIMARY SCHOOL

in KIDDERMINSTER WORCS. designed by F. W. B. YORKE and H. M. BARKER Left, the south-west facade of the assembly hait. Above the windows is vertical hardwood boarding. Below left, the assembly hall, which has a floor of beech strip. Below, ground floor corridor in the classroom block. Lavatories (bottom right) lead off to the right. The walls are covered with glazed tiles.







Cross section through classroom block, corridor and lavatories

TECHNICAL SECTION

In its report on district heating published last week* the DSIR sub-committee that has been studying the subject since 1942 states quite firmly that "the practicability of district heating under British conditions, and the economics and advantages which may accrue from its adoption cannot be doubted."

The committee goes on to say, however, that "the reaction of the British public to such a service cannot . . . be assessed technically, and there would appear to be an urgent need that some representative schemes should be started in this country and kept under careful scrutiny for a few years. Both thermal and thermal-electric schemes should be included."

Unfortunately, all the new British schemes, with the exception of Pimlico, are only thermal, and Pimlico, says the committee's chairman, A. C. Egerton, in his foreword to the report, "although thermal-electric, is to be regarded as the seizing of a convenient opportunity rather than as a typical development." The Wythenshawe (Manchester) scheme, now abandoned, would, Mr. Egerton continues, "have served well as a representative thermal-electric scheme."

It is, perhaps, pertinent to ask, therefore, that this scheme, and the reasons for its having been abandoned, should be re-examined, in the light of the report and Mr. Egerton's remarks. And if, on re-examination, it is still not considered suitable to be proceeded with, then how about a scheme for one of the New Towns?

District Heating. Parts I-V. Post War Building Study No. 31. (HMSO, 1953, 7s. 6d.) and District Heating. Part VI. Post War Building Study No. 32. (HMSO, 1953, 10s.) The report will be dealt with in greater detail in next week's JOURNAL.

17 CONSTRUCTION: GENERAL building technique in the USSR

This week's special article

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. The author of the following article on building technique in the USSR, Cecil C. Handisyde, has asked us to explain that it is based on his personal impressions during the recent three-week tour of the Soviet Union by a group of British architects. During the tour, a distance of about ten thousand miles was covered and much of the time was spent in looking at old buildings, schools of architecture, parks, etc. The time available for studying present-day building was, therefore, too little for Mr. Handisyde to do more than get general impressions, based on quick glimpses of a number of buildings and visits to a few building sites.

Perhaps the most important single factor, which seemed to operate in all the towns we visited, was that almost all building work is on a large number of large building organizascale, mainly on large blocks of tions—a condition quite different from

flats of heights varying from 6 to 14 storeys. This results in, or at least makes convenient, the use of a small that in England. Possibly, this type of organization and this type of building programme is also one of the main reasons for the extremely large number of cranes to be seen wherever work is in progress.

CRANES

The cranes around most new buildings are mostly of the tower type, on fixed rail runs. We saw 22 of these cranes around two new blocks of flats during our journey from the Moscow airport into the city. This is rather exceptional, but most building sites in Moscow seem to have at least two and nearly always more, cranes. In other towns, such as Stalingrad, Kiev and Leningrad, similar tower cranes are in use, but not, apparently, in such numbers—it being more usual to see two, and sometimes only one, per building. These cranes are available in a number of types and of varying size, but the ones we saw being used on a 14-storey block of Moscow flats were 54 metres high, with a reach of 34 metres and a capacity of 5 tons.

LABOUR

Alongside the great scale of the work, and the apparent high degree of mechanization, it is important to set one other main factor in order to appreciate the general situation. A very large proportion of the building labour is female and often consists of untrained or partly-trained peasant women only recently introduced to towns and to building work. Figures for the proportion of such labour were not obtained, and doubtless the proportion varies from town to town, but we gained the impression that well over half the building workers are women. Apparently, the more skilled jobs, such as operating hoists, the actual laying of bricks, etc., are carried out by men, but women do labouring, including trench digging by hand on at least one job, and also such jobs as painting and, sometimes, plastering.

GENERAL QUALITY OF THE WORK

Except on "key" jobs, such as the Moscow Metro and the new University building, the standard of craftsmanship is very low indeed. On some work, such as brickwork later to be covered up, the lack of attention to quality is probably justified by the greater output achieved and, since the quality is sufficient for strength, it is adequate. In the UK, we may, in fact, waste time and money on an unnecessarily high standard of finish in parts of our buildings. On the other hand, the very poor quality of finishes is hardly satisfactory, though it may well be an inevitable result of a vast programme of fast building with a limited skilled labour force.

All the workers are on some kind

of bonus-for-results system of payment, and many of them appear to be able to exceed their "targets" by as much as 200 or 300 per cent. (To what extent this is causing the poor standard of finishes we were not able to discover during our hurried visits to building sites.) At the entrance to a site it is quite usual to see a large board on which the output records of the building "gangs" are shown.

An exception to the general standard

An exception to the general standard of craftsmanship is the work we saw in Yerevan, the capital of Armenia, where the quality was generally good, and the stone carving and metalwork of a very high standard indeed.

RESTORATION WORK

In view of the obvious shortage of skilled labour for the enormous programme of new building, it is especially noteworthy that very fine restoration work is being carried out in all the towns we visited. This restora-tion work is on such an enormous scale, and generally of such a good standard of craftsmanship, that it must absorb a considerable number of skilled workers who can ill be spared. We saw restoration work in progress inside the Kremlin, on churches and other old buildings in Kiev, on many of the magnificent 18th century buildings in the centre of Leningrad and on the summer palaces outside Leningrad, which were almost completely destroyed during the war. At Peterhof, for example, the palace facade has already been rebuilt and the superb fountains restored, including the long water supply line which feeds the fountains with a permanent pressure supply from distant hills. Of particular note is the great care being taken to restore mosaics and frescoes, and, in the art galleries, the considerable amount of careful cleaning of old paintings that is being carried out.

BUILDING EXHIBITION

Also worth special mention is the impressive Museum of Building Construction in Moscow. This is a very large and well set-out permanent exhibition of building materials and building technique—something like a much larger version of our Building Centre, but with more building plant and building methods displayed, and, of course, without any "com-mercial" exhibits. Apart from its size and the well-displayed material, we noted that individuals and parties of building workers visit the exhibition in fair numbers, that the staff includes a considerable number of people who are experts in specialized subjects and who can answer fairly detailed and difficult technical questions, and that an offshoot of the main exhibition is set out in another part of Moscow-

in a park. Here, an avenue some hundreds of yards long is lined with exhibits, including full-scale examples of new methods of construction and a great deal of building plant, such as cranes, etc. All this is open to the public and semi-permanent in character, and of considerable interest to the people. This is an idea which might well be copied in other countries.

GENERAL CONSTRUCTION SYSTEMS

Except in the relatively small number of very high buildings in Moscow and in a few industrial buildings. there is virtually no sign of steel frame construction in new work and we saw very little in situ reinforced concrete work. At present, most buildings up to 14 storeys high are being built with solid load-bearing brick walls. However, this system is now regarded as out of date and the use of a system of precast concrete framing is likely to become general. The r.c. frames consist of precast units, each two storeys high. We saw examples of this system of construction in the Museum of Building and some members of our party visited a job where is was being used (see Figs. 1-3). On that site, the frames were cast on the ground and then lifted into position, but large new factories are being built for the production of these frames and other r.c. units.

Both in r.c. frame construction and in buildings with solid walls, floors are of precast concrete units. Sometimes these are about 3 ft. wide, spanning from the outer walls to a central spine wall, but the tendency appears to be towards using a very large floor unit of full room size, up to 6.40 metres \times 3.60 metres, and weighing over two

Stair flights are nearly always of single precast concrete units, often complete with granolithic finish, although this is often insufficiently protected to prevent a good deal of damage during subsequent work.

PRECAST CONSTRUCTION

At the Building Exhibition, we saw a model of a factory said to be under construction and intended for the large-scale production of concrete units. The process is to be fully mechanized and run on the production-line method. The system of production demonstrated by the model consists of four production lines —one for ordinary floor slabs, one for large floor slabs and large wall panels, one for landings and stairs, and one for columns, lintels and partitions. Formwork is to be mechanically brushed and greased, reinforcement placed and prestressed, and concrete poured from an automatic chute above the form which will travel along part of the production line. Finishes are to be added when required and with mples and a ch as the naracto the might es.

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Building with STEEL

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Structural steelwork has won world-wide acceptance by its simplicity, by the efficiency with which it provides wide spans, by its compactness and adaptability, and by its overall economy.

The strength and security of steelwork are consistent; steelwork is proof against hidden mistakes on the site, and its design is forthright and easily checked.

STEELWORK IS NOW UNRESTRICTED



From the palaces of Emperors and the tombs of the noble dead the world has slowly gathered its precious heritage of Chinese porcelain and lacquer-ware — a wealth of fragile beauty that is beyond price. Among such treasure, in the Victoria and Albert Museum, is a superb vase of Cinnabar lacquer attributed to the reign of Ch'ien Lung. The colour of the Vinyl Tile illustrated is a Lacquer Red, standardised by the British Colour Council: it is based upon the brilliant red in Chinese lacquer-ware that is both an inspiration and a challenge to artists and designers of our Western civilization. The colours in the Semtex Vinyl and Semastic Decorative Tile ranges were chosen in collaboration with the British Colour Council.

** One of the nineteen plain and tone-on-tone colours in the Vinyl Tile range

VINYL MASTIC

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are installed by

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Found Found brick struc cast were far a are a laid acros

BRICK So abou Sovie made It m brick the s some we utually the product then steam cured for 20 hrs. We were told that the factory labour force would be 200 and the output from the one factory enough for the construction of 350,000 sq. metres of living accommodation per year. A number of similar factories are being, or are about to be, built in or near to several of the big towns.

FOUNDATIONS

Foundations to the buildings with brick walls which we saw under con-struction were mostly of large precast concrete units. Details of these were not noted at the time, but, as far as the author can recollect, they are about 5 ft. × 1 ft. on plan, being laid side by side, with their length across the width of the foundation trench.

BRICKWORK

So many stories have been heard about high rates of bricklaying in the Soviet Union that a special attempt was made to obtain some reliable figures. It must first be realised that Soviet brickwork, as we saw it on most of the solid wall types of flat block, is something quite different from what we usually mean by the word. Virtually none of it is face work, and the walls are very thick-on high

blocks about 2 ft. at the top and 3 ft. to 3 ft. 6 in. at the base. Bricks are about $9\frac{1}{2}$ in. \times $4\frac{3}{4}$ in. \times $2\frac{3}{4}$ in. and a high proportion of them are of the 'perforated" type, similar to those so often seen on the Continent. Both clay and sand-lime bricks are usedoften both types in the same wall. The walls we saw appeared to be fairly perpendicular, but mortar joints varied greatly in thickness and obviously no great trouble was taken to keep courses level, or to fill the joints particularly carefully. Walls between flats were said to be normally 13 bricks thick for sound insulation. Bricks are transported in metal wire cages, each cage containing about 90

bricks. They are packed at the kilns and transported to the site, where the cage is hoisted by crane into the required position. Mortar is hoisted in skips. External scaffolding is not used, and all brickwork is laid "over-

A brickwork team usually consists of

five people-two men, who do the actual laying, and three women. One woman shovels mortar from the skip on to the wall and roughly levels the bed with her shovel. The other two unload the bricks and place them on the wall roughly in position. The male bricklayers merely move the bricks to their final position, one working on the outer half of the walling and one on the inner, using trowels to give the mortar bed a somewhat better level.

Output for a team of five working in this way on fairly straightforward walling 2-3 ft. thick on a job we saw in Moscow was in the region of 4,000 to 4,500 bricks per 8-hr. day. We were told that a good team can go up to 8,000 per day and that the maximum is about 12,000 per day per team. On similar work on a job in Leningrad we were told that the "target," or basic rate, was 5,000 per day and that the rates being achieved on the site were about 7,500, again per 8-hr. day.

Figs. 1-3, The use of precast r.c. framing for multi-storey flats in Moscow. Left, a precast column, 2 storeys high, being placed into position by crane. Below, a joint between precast column and beams being made by welding together projecting steel plates. Bottom, completed framing; note the large tray-type floor units and the fluepipe ventilators to internal bathrooms.











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Fig. 4, bricklaying in the USSR; the first member of the bricklaying team pouring mortar on to the wall.

WALL FINISHES

Considering the fine appearance of the exposed brickwork of the huge wall around the Kremlin, we were disappointed to see very little other work in brick facings. There are a few rather hideous late 19th century brick-faced buildings, but hardly a single recent building was designed for brick facing. Most of the buildings put up since the war have been designed for external rendering, although often, in order to obtain quick occupation, the rendering is not done until some time after the building is otherwise completed. In a number of not very old buildings the rendering is showing signs of cracking and deterioration.

There seems to be a strong move towards the use of other facing

materials and many brick walled buildings are now being finished in glazed ceramic slabs. These are usually between 9 in. and 18 in. high and up to 27 in. long. They have a projecting nib, 3 in. deep, along their bottom edge, which is built into the brickwork as the wall goes up. These slabs are usually buff in colour and, although more than one shade of this colour is used, the overall effect seems rather featureless.

In some towns, notably in Kiev, decorated faience tiles are used. The result, in the opinion of at least several of our party, is highly unpleasant—not so much because of the material, but because of the crude designs of most of the decoration and the way in which it is used over large areas of walling.

We saw a few examples of textured precast concrete external wall units, and it seems that this type of finish is likely to become more generally used when the new precast concrete factories get into production. Some slabs of this kind that we saw in Leningrad were $1\frac{3}{8}$ in. thick and about 3 ft. \times 2 ft. on face.

One cannot leave the subject of wall finishes without mentioning the really beautiful tufa stone walling we saw on all the new work in Yerevan. This stone, in moderate sized pieces, is obtainable in a variety of colours, including deep buff, browns, pink and, in one variety, almost purple. It has a beautiful texture; yet it can be carved with fine detail. In Yerevan, incidentally, not all the new building is in large blocks of flats; we saw there some very attractive smaller blocks of flats and houses.

INTERNAL FINISHES

In the Moscow Metro, the circulation areas of Moscow University and a number of other public buildings and monuments, a great variety of

beautiful marbles have been used for floors, columns and wall facing. We also saw imitation marbling on plaster walls which was so well done that it was difficult to decide whether it was real or not. On the important buildings the general standard of finishes is good, and we saw some particularly good craftsmanship in decorated plaster ceilings. In the Metro there is also some very fine craftsmanship in panels of coloured glazed ceramic. All floors in flats are of wood,

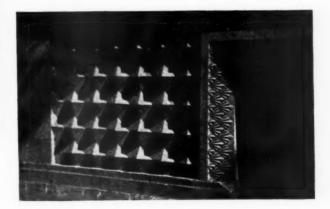
usually soft wood blocks, though in some cases 3-in. t. and g. boarding is used over a rough boarded sub-floor. Walls of rooms are nearly always papered, in rather flowery patterned paper, and tenants are not given a choice of pattern. On most walls this paper is fixed direct on to unplastered plasterboard. Plasterboard joints are taped and the plasterboard itself is often fixed to the walling with gypsum adhesive. Plastering is usually confined to staircase walls and window reveals, and there is always a precast decorated plaster cornice and a plaster centre piece from which the main room light is hung. Our hosts were quite shocked to learn that we no longer regard a decorated cornice as essential to a living room.

In the buildings we saw under construction, the large concrete floor units had upstand ribs, across which heavy timber boarding was being fixed, with a wood block parquet finish on top. In the Building Exhibition, however, we saw floor slab units the "trays" of which had been filled with lightweight concrete, covered with a sound deadening layer and which had the floor finish ready fixed.

In an office building we visited, some of the precast floor units had been treated on the underside, after erection, by "painting" with a thick paint applied with a trowel. The surface of the concrete units had been cast



Above, Fig. 5, the ceramic tile facing of the new Moscow University building Right, Fig. 6, external wall treatment in Yerevan; note the carved mouldings in pink tufa stone.





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against steel shuttering and the joints between the units were V-shaped. The result on this building seemed satisfactory.

ROOF FINISHES

Flat roofs appear to be out of fashion and were said to be unsuitable for snow. Pitched roofs are almost all covered with large flat sheets of very thin cast iron. This, painted, appears to be a traditional material, but developments have taken place and there is now a special system of manufacture in which the sheets are "oiled" immediately after casting. This apparently provides a material which does not need painting; it is cheaper than a galvanised finish and is believed to have a 20-year life. The sheets are about 4 or 6 ft. long and 2 ft. wide, with interlocking joints between them.

SPEED OF BUILDING

Information about the speed of building work was a little confusing. The enormous University Building in Moscow was apparently built in three years. Considering its size, this appears phenomenally fast.

Ordinary blocks of flats are built at varying speeds. Six months for an 8- or 10-storey block seems to be considered a fairly common target, but a 9-storey block of 140 flats which we saw in Leningrad had taken 15 months, while the very large 12/14storey block of over 600 flats near the Moscow University, which is considered an "urgent" job, looks like taking 18 months. On this last job, where 9 cranes are in use, there were 980 workers on the day of our visit (when the building was mainly up to roof level, with its lower storeys almost complete). The labour force early in the job was about 500 and it is expected to rise to about 2,000 towards the end of the job. The size of the building is 230,000 cu. metres.

MISCELLANEOUS

Concrete placing from central mixing depots was described to us and it was



Fig. 7, a group of roof terminals to internal bathrooms of a block of flats.

said that mixed concrete was pumped for a distance of over half a mile.

Electric wiring in high buildings is normally in conduit. Glass tubes, with rubber corners, all covered with asphalt, are said to be used sometimes. In some blocks of flats surface wiring in rooms is in ordinary flex.

Internal bathrooms are usual. Ventilation is by means of an individual flue, sometimes made in precast concrete blocks; sometimes in long lengths of pipe (see Fig. 7). Plumbing is to some extent prefabricated, and always internal, except for rainwater pipes which are very large in size, usually of zinc, and always discharged over pavement or courtyard.

We were told of a form of plasterboard being made with an admixture of straw; this product is said to hold

nails and screws.

A somewhat unusual development which we saw at the Building Exhibition was "melted stone." Both basalt and limestone have been used in this way-the stone is melted at high temperature and then cast, sometimes into floor tiles, sometimes into pipes, and sometimes into decorative units. This seems to be a recent development, but some very large statues high up on the University building were made by joining together large numbers of pieces of limestone cast to special shapes in this way. The advantage claimed for the use of cast limestone for these statues is that they will remain unchanged in colour in spite of exposure. Great hardness and resistance to chemicals appear to be the advantages of the cast basalt floor tiles and pipes.

Glass pipes for domestic drain stack pipes were seen at the exhibition, the pipes being made either by spinning or by vertical drawing. Jointing is by sleeves with rubber gaskets. An interesting detail we noted was that although plumbing services in some hotels seemed rather rough-and-ready, the flushing systems to w.c.'s always worked well and easily.

Heating to all blocks of flats is from a central plant, often from a district heating system run from a combined heat/electric power station. seems to be a flat-rate charge for heating, based on the floor area of the flat. Heat meters are not used. In Stalingrad, natural gas is used for cooking and for hot-water services in some

Refuse is disposed of by chutes from kitchens to basement collection cars. The Garchy system is being considered, but has not yet been tried.

Lift wells in flats are fitted with temporary cages for use during building operations; materials too big to go in these, but required during the later stages of building work, are hoisted by the outside cranes and landed on small

scaffold platforms built out from the wall below large window openings, the window frames in such openings being inserted later.

Heat insulation of flats is determined according to three climatic zones. In Siberia brick walling 70 cm. thick or the equivalent is required for walls. In European Russia the standard is 64 cm. In the Black Sea area, 38-51 cm. Roof insulation standards are the same as for walls. We were told that for buildings up to 5 storeys high, lightweight concrete block walls are sometimes used. We did not see any examples of this, but some lightweight bricks, giving good heat insulation, are made by mixing in sawdust or clinker -the reduction in weight below normal bricks being about 30 per cent. The technician who gave us this information said, however, that he would prefer to use a normal perforated brick if the holes could be arranged so that mortar did not get into them.

For brickwork mortar a cement-limesand mix of something like 1:2:9 is fairly common, though we were told that clay is sometimes added, and a direct cement/clay mix is being developed. Dry powdered clay is used. but the difficulty is to get the clay well dispersed. This clay mix was des-cribed to us as being "like the mortar used with fire resisting bricks."

Although walls are built without scaffolding, a very light type of scaffold is sometimes used subsequently to allow men to point up the joints, e.g. in concrete slab faced walls. This light scaffolding is used up to 7 storeys high and is said to be very economical.

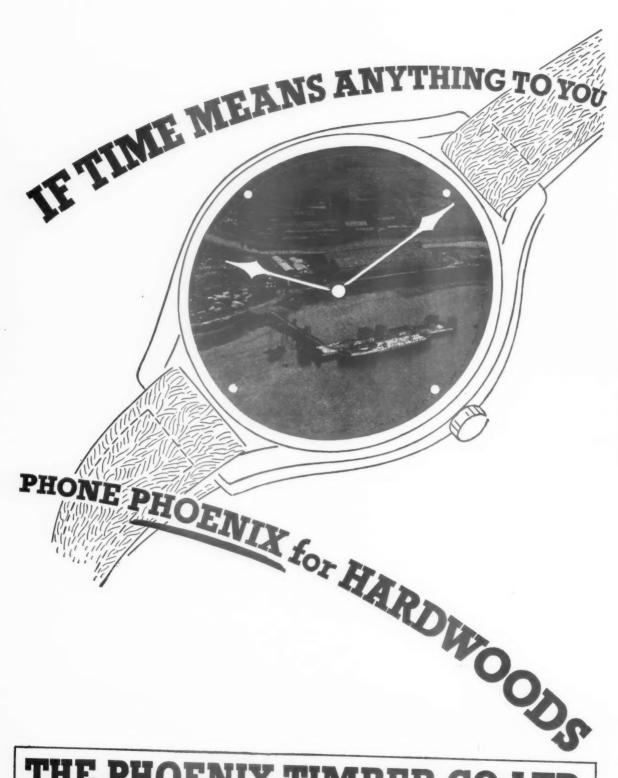
Prestressed concrete pipes are sometimes used for town water supplies. Sleeve joints are used, with an expanding cement. There is no trouble from corrosion.

Although we saw no mechanical rendering being applied, we were told that it is done in two ways: sometimes a lime mix is pumped up and cement added at the nozzle of the gun; sometimes a plasticiser is used, in which case the whole mix is pumped.

SUMMARY OF OBSERVATIONS

Work is mostly on a large scale and, on the whole, is being done faster per building than is normal in this country, though at the expense of the quality of the finishes. Mechanisation, i.e. the use of large plant, such as cranes, and small tools, is common, but much work is done by unskilled or semiskilled labour, which appears to be much more numerous for the size of building than we would employ.

Most work at present under construction is done in a traditional manner, but there are considerable signs that a big change is coming, mainly in the direction of large precast concrete construction, with units standardized and factory made.



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Glazed ceramic wall finishes are being introduced widely for external facings. Facing bricks are scarcely ever used. Although there is clearly a good deal of research and experiment going on, there is little sign of any startling new developments in materials or constructional methods.

Building sites appear to be even more untidy than ours usually are and we received the impression that breakages and damage during building must be a source of much wastage.

APOLOGY

The information in this article was obtained from a limited number of very hasty visits to building sites, etc. Also, the difficulties of interpretation were sometimes considerable. hoped that what has been reported is correct but, under the circumstances, some errors or misunderstandings may well have occurred. It is regretted if such has, in fact, been the case and an apology is offered to any of our Russian architect hosts if what they said has been mis-reported. Wherever we went they did their best to explain what was going on and were always ready to answer our many questions. It is hoped that it will be possible for a return party to visit this country for a further exchange of information and

CECIL C. HANDISYDE

THE INDUSTRY

From the Industry this week, Specialist Editor No. 14 (Structural Engineering) describes and comments on a new prestressing system.

A NEW PRESTRESSING SYSTEM

The new Gifford-Udall prestressing jack, developed by Udalls in conjunction with their consulting engineer, E. W. H. Gifford, and the "CCL" anchorage system, are the results of close co-operation between the J. J. Udalls Building Co., of Southampton, and Cable Covers Ltd., of Westminster, the manufacturers of "Falurit," the well-known rope clamping system.

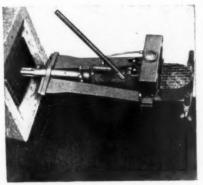
rope clamping system.

The new system is designed to effect the stressing of individual wires, for which the makers use a light 5-ton combined jack and pump unit capable of being handled by one man. The jack will tension wires up to 0.276 in. in diameter and for wires of any diameter the outer size of the anchor grip remains the same. Extension is measured on an adjustable rule, \(\frac{1}{2}\) in. being allowed in the calculations for slip in the anchorage, and the jacking load can be read directly from a gauge. Jacking would be from one end only, up to 80 ft. length of beam, the normal jack travel being 4\(\frac{1}{2}\) in., but alternative forms are available for pre-tensioning work, with up to 14 in. travel. The jack weighs only about 60 lb. and can be hired, or purchased outright for £60.

In post-stressed work, the "CCL" grips bear against a mild-steel anchor plate and form a neat compact anchorage. This plate is bedded in the concrete member, no allowance being made for grout, which must be fed by a tube through the top or side of the beam. The wires can be arranged in groups of up to 12, in the usual sheathing or pre-



Above, the C. C. L. standard anchor grip. In pretensioned work these grips may be recovered and used many times over. Below, the Gifford-Udall prestressing jack and pump. Weight 56 lb. Price, £60.



formed duct. In pre-tensioning, the anchor grips are recoverable.

The makers claim that the system will be speedy (one wire stressed every 3 minutes by only one man), flexible, in that any number of wires can be used, and economical, because of the low cost both of the jack and the anchorages. The system should be particularly useful for small jobs and may well gain greater popularity on the building site than in civil engineering work. (Cable Covers, Ltd., Prestressed Concrete Division, St. Stephen's House, Westminster, S.W.1.)

QUESTIONS & ANSWERS

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

3071 THE EFFECTS OF DETERGENTS

I shall be most grateful for any information you may be able to supply on the effect of modern detergents on the proper functioning of small septic tank systems as used in private country houses. From my observations, I am inclined to

systems as used in private country houses. From my observations, I am inclined to think that considerable trouble is in store for owners of houses which are served by this system of drainage and who use fairly large amounts of detergents.

With regard to the particular case with

which I am now dealing, in spite of a considerable fall to the outflow, the distribution trenches are failing to carry the effluent away. Inspection of the tank shows a complete absence of the usual crust on the surface of the contents of the tank and a considerable quantity of the usual foam and bubbles associated with detergent powders. There is little doubt that the anaerobic process has completely broken down and that suspended solids are being discharged to the distribution arms, causing them to became silted up.

Can you suggest any remedy other than the disuse of the preparations containing deter-

gents ?

Incidentally, the septic tank was only installed in 1946 and is of a design which has given perfect results in other cases in the past and before detergent cleansers came into general use.

An adequate amount of soaps and detergents as used by a normal family, for all purposes, including washing, should not cause the trouble you are investigating; it is only when excessive use of these materials takes place that the trouble develops.

The only solution in your case is: (i) Stop using excessive quantities of detergents; (ii) entirely empty the tank and start afresh; (iii) clean the distributors on the filter bed; (iv) remove, as far as possible, any excessive surface clogging of the filter bed.

3072 BROAD-FLANGED R.S.J's.

Q Can you give me any idea of the basic cost of broad-flanged R.S.J's, as compared with ordinary R.S.J's?

A Add about £2 10s. per ton to the basic price.

3073 SEWAGE DISPOSAL PLANT

I have been asked to check the small sewage plant to a hostel, which consists of a settling tank approximately 6 ft. long, 3 ft. 6 in. wide, and 3 ft. 6 in. deep, and a filter bed, with the usual tippler. The maximum capacity of the hostel is 58 persons.

Can you give me any data on these plants? How many gallons per person per day is it usual to allow? I understand that the settling tank should be of such a capacity as to hold the maximum amount of sewage for 24 hours. Is this correct?

A The settling tank for a small sewage disposal plant should, if possible, be not less than 5 ft, deep below the liquid level and should have a capacity sufficient for one day's flow, which is generally taken as 40 gallons per person. This means that the tank you are inspecting is very much below requirements.

The tank should have dipping pipes at both

The tank should have dipping pipes at both inlet and outlet and should, if possible, have a baffle board about one-third of the distance away from the inlet taken above the level of the liquid, but not reaching to the bottom of the tank.

We would suggest that a tank 5 ft. deep, 4 ft. wide and not less than 10 to 12 ft. long would be the answer to your problem.

Announcements

It is announced with regret that Mr. Edward Armstrong has retired from practice owing to ill health. The practice will be continued by his partner, Mr. Frederick MacManus, F.R.I.B.A., in the style of Edward Armstrong (continued on page 522)

Readers requiring up-to-date information on building products and services may complete and post this form to the Architects' Journal 9, 11 and 13, Queen Anne's Gate, S.W.1

ENQUIRY FORM

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

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& Frederick MacManus, from 28, Gloucester Place, Portman Square, London, W.1 (Welbeck 2273-4).

Michel and Lois Ventris, A/A.R.I.B.A., have moved to 19, North End, London, N.W.3 (Tel.: Speedwell 4540).

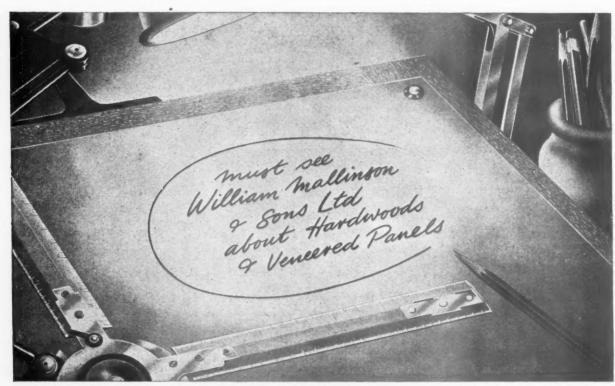
Clifford Culpin & Partner, of 3, Southampton Place, W.C.1, have opened a branch office at 3, Verulam Buildings, Grays Inn, W.C.1. Their telephone number Chancery 5395-6-7 serves both offices.

Hawksley Constructions (member of the Hawker Siddeley Group Ltd.), have moved to Bentham, Gloucester (Tel.: Witcombe 3251).

At the annual general meeting of the National Association of Lift Makers (NALM) held in London recently, R. E. Landsbert (of J. & E. Hall Ltd., Dartford) was elected chairman of the council for the forthcoming year. He replaces L. J. Gooch (of Marryat and Scott Ltd.), the council's chairman for the past three years. The new vice-chairman is J. F. Fothergill (of Pickerings Ltd., of Stockton-on-Tees). The Association now has 28 member firms—more or less the entire industry. For its size, the industry is playing an increasingly important part in the export drive: the value of lift exports in 1952 amounted to £1,400,000; for the first 6 months of this year, the figure is already about £900,000. At the Association's annual dinner, the 7th, held after the annual general meeting, the guest of honour was H. Vincent Mace, president of the Institute of Quantity Surveyors, who said that lifts were one of the many modern conveniences we tended to take for granted. The modern lift was, he continued, a model to any passenger conveying appliance—both in safety and rapidity of development. The professional man could not be expected to be acquainted with all the technicalities of the modern building; hence, said Mr. Mace, the importance of such associations as that of the lift manufacturers.

Buildings Illustrated

Birchen Coppiee County Primary School (Junior Stage) at Kidderminster, Worcs, for the Worcestershire County Council, County Education Department. (Pages 511-514,) Architects: Francis W. B. Yorke & H. M. Barker, F./L.R.I.B.A., in association with F. R. S. Yorke, E. Rosenberg & C. S. Mardell, F./F./A.R.I.B.A.; T. R. Evans, A.R.I.B.A., associate-in-charge; J. G. Fryman, A.R.I.B.A., and W. Pack, A.R.I.B.A., assistant architects. Consulting engineers: Clark, Nichols & Marcel. Heating consultants: Oscar Faber & Partners. Quantity survey-ors: Oswald A. Wainwright, F.R.I.C.S. Clerk of works: G. Forrest. General foreman: J. Foxall. General contractor: A. H. Guest Ltd. Sub-contractors: dampcourses, tanking, roofing felt, William Briggs & Sons Ltd.; concrete blocks, Calderete Ltd.; reinforcement, Twisteel Reinforcement Ltd.; bricks, Himley Brick Co. Ltd., and Uxbridge Flint Brick Co. Ltd. (facings), London Brick Co. Ltd. (commons); stone, London & Sussex Merchants Ltd. (Hornton Stone), Stephen Bagley Quarries (local stone); structural steel, Hills (West Bromwich) Ltd.; tiles, R. G. Robertson (Tiles) Ltd.; slates, Bow Slate & Enamel Co. Ltd.; copper roofing, Frederick Braby & Sons Ltd.; lavatory partitions, Flexo Plywood Industries Ltd.; glass, Pilkington Bros. Ltd.; patent glazing, casements, window furniture, Williams & Williams Ltd.; woodblock flooring, Vigers Bros. Ltd.; central heating, Rosser & Russell Ltd.; electric wiring, Midland Electricity Board; electric light fixtures, Hailwood & Ackroyd Ltd., and Revo Electric Co. Ltd.; fans, Vent-Axia Ltd.; sanitary fittings, Stitson's Sanitary Fittings Ltd.; stairtreads, Jac onella Ltd. (concrete tiles); door furniture, Rennis Ltd.; bells, clocks, Gent & Co. Ltd.; rolling shutters, Haskins; sunblinds, Tidmarsh & Sons; fibrous plaster, H. H. Martyn & Co. Ltd.; metalwork, cloakroom fittings, Mount-ford Bros.; joinery, Tylers (Architectural) Ltd.



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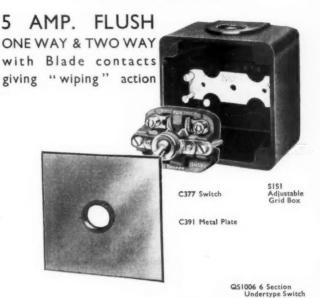
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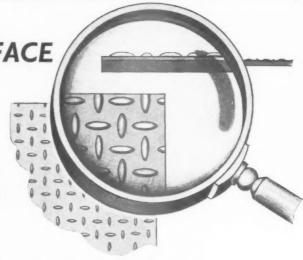
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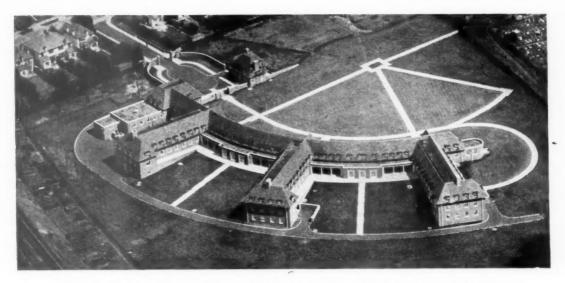
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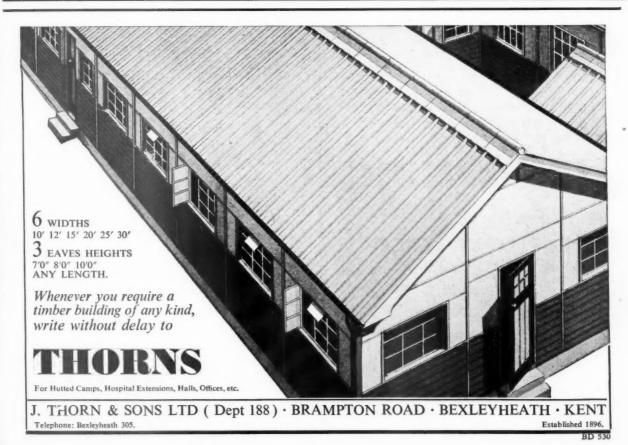
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County Architect: JOHN HARRISON, A.R.I.B.A.

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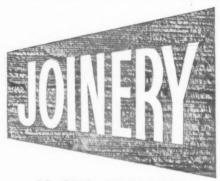
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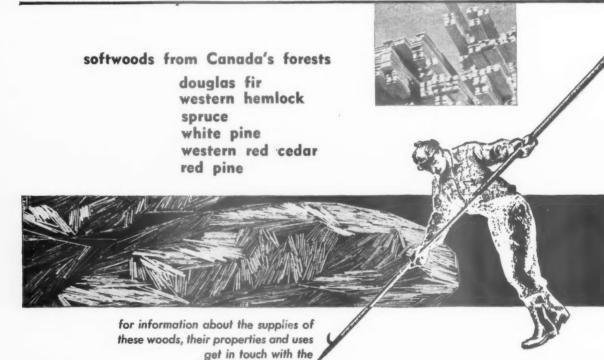
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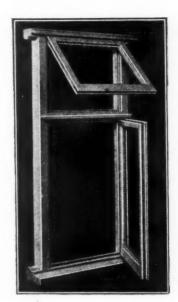


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Compiled under the editorship of both the Association for Planning and the School of Planning, it covers the entire new syllabus of the Town Planning Institute. It affords an opportunity of systematic study in physical planning and is divided into sections on 'Geography', 'Planning Survey', 'Social Survey', 'Transport', 'Industry and Power', 'Law and Economics', all of which are contributed by leading experts.

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Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9. 11 and 13, Queen Anne's Gate, Westminster, S.W. 1. and should reach there by First post on Friday morning for inclusion in the following Thursday's paper.
Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address

given above.

Public and Official Announcements

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

Excepted from the provisions of the Notification of Vacancies Order, 1952.

LONDON COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.
TECHNICAL ASSISTANTS required for specialist section dealing with furniture design, colour schemes, exhibition work, etc. A.R.I.B.A. or specialist section dealing with furniture design, colour schemes, exhibition work, etc. A.R.I.B.A. or specialist qualifications. Salary up to £721. Application form and particulars returnable by 31st October, from the Architect (AR/EK/F&D/3). County Hall, S.E.1. (1096).

BOROUGH OF HESTON AND ISLEWORTH.

ENGINEER AND SURVEYOR'S

DEPARTMENT.

Applications are invited for the appointment of GENERAL ARCHITECTURAL ASSISTANT at a salary in accordance with A.P.T. Grade III (£525 ×£15-£570) plus London "weighting."

Applicants must have had good general architectural experience. Other things being equal preference will be given to candidates who have passed the R.I.B.A. Intermediate Examination.

The Council is unable to assist the successful candidate with housing accommodation.

Particulars of the appointment and form of application may be obtained from the Borough Engineer and Surveyor, 88. Lampton Road. Hounslow, to whom applications must be submitted by noon on Monday, 2nd November. 1953.

HAROLD SWANN.

Council House, Hounslow.

MINISTRY OF WORKS.

Council House, Hounslow.

MINISTRY OF WORKS.

Vacancies exist in London in the Chief Architect's Division for ArchiteCTURAL ASSISTANTS with recognised training and fair experience. Employment will be on a wide variety of Public Buildings including Atomic Energy and other Research Establishments, Telephone Exchanges and Housing.

Salary: Up to £628 per annum. Starting pay according to age, qualifications and experience. Although not established posts, many have lang term possibilities and competitions are held periodically to fill established vacancies. Reasonable prospects for promotion to Leading and Senior Architectural Assistant.

State age, nationality, full details of training and experience to Chief.

prospects for promotion to Leading and Senior Architectural Assistant.

State age, nationality, full details of training and experience to Chief Architect. W.G.10/C.A.3. (G), Ministry of Works, Abell House, John Islip Street. London. S.W.1.

BOROUGH OF KETTERING.

APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment at a salary according to experience within Grade A.P.T. I (2465 × 215-4510).

The appointment will be subject to the Local Government Superannuation Acts, and to the provisions of the National Scheme of Conditions of Service, and the successful candidate will be required to pass a Medical Examination.

Applications stating age, status, qualifications, experience, past and present appointments, with dates, and accompanied by copies of at least two testimonials must reach the undersigned not later than Monday, 26th October, 1953.

D. DUNSFORD PRICE.

Town Clerk's Office.

High Street. Kettering.

Town Clerk's Office. High Street, Kettering. 5th October, 1953.

High Street. Kettering.

5th October, 1953.

OXFORD REGIONAL HOSPITAL BOARD.

Applications are invited from onalified Architects and Quantity Surveyors to fill the following posts in the Regional Architect's Department. Compulsory superannation. A car is desirable.

PRINCIPAL ASSISTANT ARCHITECT Scale I—61.69. \$40—61.250.

ASSISTANT ARCHITECT £600 × £25(7) × £30(3)—2655.

ASSISTANT QUANTITY SURVEYOR £600 × £25(7) × £30(3)—2655.

Applications stating age, training qualifications and previous experience with the names of two referees should be submitted to the Secretary, Oxford Regional Hospital Board. 43. Banbury Road, Oxford, not later than 5th November, 1953.

EASTERN REGIONAL HOSPITAL BOARD (SCOTLAND). ASSISTANT QUANTITY SURVEYOR. Salary:

ASSISTANT QUANTITY SURVEYOR. Salary: t600-2865 per annum.
Candidates must be Corporate Members of the R.I.C.S., and have had experience in the Scottish Mode of Measurement.
Applications including particulars of three referees, should be sent to the Secretary, Eastern Regional Hospital Board, 430, Blackness Road. Dundee, not later than 14 days after insertion of this advertisement.

COUNTY BOROUGH OF BARNSLEY.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.
APPOINTMENT OF TEMPORARY ASSISTANT
ARCHITECT.
Applications are invited from suitably qualified
persons for the appointment of Temporary
Assistant Architect in the Borough Engineer's
Department at a salary in accordance with
A.P.T. Grade V (£955-£646 per annum).
Applicants should be good draughtsmen and
have had experience in the design of Municipal
housing schemes and/or public buildings.
The appointment will be subject to (a) the
Scheme of Conditions of Service for A.P.T.C. Staff.
(b) any other general conditions of employment
in operation within the Corporation from time to
side.

side.

Applications, stating age, present and previous appointments, experience, qualifications, etc., and giving the names of two persons for reference, should reach the Borough Engineer, Town Hall, Barnsley, not later than Monday, 2nd November, 1963.

Canvassing will disqualify and applicants should disclose whether to their knowledge they are related to any Member or Senior Officer of the Council.

A. E. GILFILLAN, Town Clerk.

Town Hall, Barnsley. October, 1953.

BOROUGH OF BASINGSTOKE.
BOROUGH ARCHITECT'S DEPARTMENT.
Applications are invited for the appointment
an architectural assistant Grade IV

(1555—2600). Applicants must have reached the standard of the Intermediate examination of the R.I.B.A. and to have had good experience in housing of contemporary design. The appointment will be subject to the provisions of the Local Government's Superannuation Act, 1937, to the National Joint Council's condition of service and the successful candidate will be required to pass a medical examination. Applications stating age, qualifications and giving details of education and experience, together with copies of two recent testimonials, are to be submitted to the Borough Architect, (Eric Almond, Dipl. Arch. R.I.B.A.), Municipal Buildings, Basingstoke, not later than 30th October, 1935.

MEIRION O. JONES.

Municipal Buildings, Basingstoke,

BBBW VALE URBAN DISTRICT COUNCIL.
ARCHITECT'S DEPARTMENT.
Applications are invited for the undermentioned appointment on the permanent staff of the Architectiva Department of the permanent staff of the Architectiva Department of the Programment of the Architectiva Department of the Programment of

ct's Department:—
ASSISTANT ARCHITECT (Grade A.P.T., III).
alary: £525×£15—£570.

ASSISTANT ARCHITECT (Grade A.P.T., III).
Salary: £525×£15—£570.
Applicants should have passed the Intermediate
Examination of either the Royal Institute of
Architects or the Royal Institution of Chartered
Surveyors (Building Sub-Division), and should
have had good general architectural and surveying
experience, not necessarily in Local Government
Offices. In addition some knowledge of Quantities
would be an advantage.
The Architect's Department has a full programme of work covering Housing Estates. Slum
Clearance and Reconstruction Schemes, layout of
new parks and open spaces, Town Planning Administration, and general Municipal Building
work.

ministration, and general Municipal Building work.

The appointment will be subject to the provisions of the Local Government Superannuation Acts, 1937-1955, and the National Conditions of Service. The successful applicant will be required to pass a medical examination, and the appointment will be subject to one month's notice in writing on either side.

The Council are unable to provide housing accommodation.

Applications stating age, qualifications and experience, together with the names of two referees to whom reference may be made, should be delivered to the undersigned not later than Wednesday, the 28th October, 1953.

Applicants must state in their applications whether, to their knowledge, they are related to any member of the Council or senior officer under the Council.

Canvassing, directly or indirectly, will disposality.

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R. E. HERRERT.
Clerk of the Council.

District Council Offices, The Walk.

Ebbw Vale, Mon.

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in Architecture recognised by the Royal Institute
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body; (iii) at least 2 years' practical experience
in a salaried post in. Town Planning. Civil Engineering or Architecture. Age: between 21 and 35
on 12th October, 1953; relaxable for experienced
men.

Applications on forms (and other information)

men.
Applications on forms (and other information)
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by the 16th November, 1953.

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3rd DECEMBER, 1953.

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are 8 weeks paid and the home.

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For details apply to your nearest Army Recruiting Office, or write to War Office (AG10/R24) London, S.W.I.

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London, S.W.I.

ROROUGH OF FALING.

TWO CLERKS OF WORKS (Temporary) required for supervision of Housing Contracts. Salary: £650 p.a., and otherwise in accordance with the Scheme of Conditions of Service for the Miscellaneous Classes of Officers. Candidates must be thoroughly experienced, and preference will be given to members of the Institute of Clerks of Works of Great Britain Incorporated. Form of application, further particulars, etc., from the Borough Engineer and Surveyor, Town Hall, Ealing, W.5. Completed applications to the undersigned not later than 2nd November, 1953.

E. J. COPE BROWN,

Ealing, W.5.

DENBIGHSHIRE COUNTY COUNCIL

COUNTY ARCHITECT'S DEPARTMENT.

The above County Council invites applications for the under-mentioned appointment in the County Architect's Department, Wrexham, viz.: ONE ASSISTANT QUANTITY SURVEYOR, A.P.T. Division, Grade V. Salary £595—£645 per annum.

County Architect's Department. Wrexham, viz.;

ONE ASSISTANT QUANTITY SURVEYOR.
A.P.T. Division, Grade V. Salary £595—£645
per annum.
Candidates must have passed the Intermediate Examination of the Royal Institution of Chartered Surveyors (Quantities Section), and have experience in "taking off" for all types of building works undertaken by a County Authority.
In addition, he should be familiar with, and will be required to undertake, "working up" in all stages, measurement of works on site, interimetrificates, and final accounts.
The appointment is subject to (a) the National Conditions of Service for Local Government Administration, etc., Officers; (b) the Local Government Superannuation, Act. 1937; (c) the passing of a medical examination, and (d) one calendar month's written motice on either side to expire at the end of a calendar month.
Applications, giving age, qualifications and particulars of present and previous appointments, and accompanied by copies of three recent testimonials, to be sent to the undersigned, by not later than the 6th day of November, 1935.

Clerk of the County Council.

County Offices, Ruthin.

STAFFORDSHIRE COUNTY COUNCIL
EDUCATION COMMITTEE.

WORKS MANAGER—ARCHITECT'S DEPT.
Applications are invited for the position of the Education Architet's Department, with experience in a similar appointment, embracing the maintenance of school properties and execution of the Education Architet's Department, with experience in a similar appointment, embracing the maintenance of school properties and execution of minor building schemes, Grade A.P.T., VIII (£760-£935 p.a.). The position calls for an energetic man capable of organising and expanding a direct works department. Further details and form of application can be obtained from:

A. C. H. Stillman, F.R.I.B.A.,
County Education Architect,
Gren Hall, Stafford.
TH. EVANS.
Clerk of the County Council.

TYRONE COUNTY EDUCATION
COMMITTEE.
Applications are invited for the following

appointments:

(1) ARCHITECTURAL ASSISTANTS, of Intermediate R.I.B.A. standard. Experience will determine point of entry to salary scale, £400×£20 to £600 p.a.

(2) TO ASSISTANT ALL DRAUGHTSMEN, with

determine boint of entry to salary scale. £400× £20 to £600 p.a.

(2) ARCHITECTURAL DRAUGHTSMEN, with at least two years' experience. Salary up to £400 p.a., according to experience. Salary up to £400 p.a., according to experience. Application forms and conditions of appointment may be obtained from the Chief Education Officer. Omagh. Co. Tyrone, N. Ireland. Applications should reach him by Monday, 2nd November, 1953.

MONMOUTHSHIEE COUNTY COUNCIL. APPOINTMENT OF ARCHITECTURAL STAFF.
Applications are invited for the following posts in the County Architect's Department under N.J.C. Conditions:

TWO ARCHITECTURAL ASSISTANTS. Salary: £100-£450, according to age.
Forms of application, particulars of posts and conditions of service, can be obtained from the undersigned.

Applications together with copies of three testimonials must be forward to salary ends.

conditions of service, can be some some supersigned.
Applications, together with copies of three testimonials, must be forwarded to the County Architect, Oueen's Hill, Newport, Mon., not later than Saturday, 7th November, 1953.
VERNON LAWRENCE, VERNON LAWRENCE.
County Hall Newport, Mon., 9746

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BRITISH ELECTRICITY AUTHORITY.

EAST MIDLANDS DIVISION.
Applications are invited for the following positions within the Division:
CYIL ENGINEERING DRAUGHTSMEN,
Construction Department. (Vacancy No. 22/53.)
Candidates should have experience in design and detail of reinforced concrete structures, piled and slab foundations for heavy plant, culverts, cable subways, etc., for general building construction drainage and sanitation schemes, associated with office and administrative buildings.
The salary will be in accordance with Grade 5 (£657-£57) per annum) or Grade 6 (£453-£567 per annum) or Schedule D of the National Joint Board Agreement.
ENGINEERING DRAUGHTSMEN (ME-CHANICAL), Construction Department. (Vacancy No. 44/53.)
Senior Draughtsmen are required in the Mechanical Section of the Construction Department at North Wilford Power Station. Candidates should have experience in one or more of the following:—

(i) Design and layout of Power Station. Candidates should have experience in one or more of the following:—

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

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

Salary and conditions of service will be in accordance with the National Joint Board Agree.

equipment.

Salary and conditions of service will be in accordance with the National Joint Board Agreement. Grade 5 (£557-£671 per annum) and Grade 6 (£433-£567 per annum) of Schedule D, according

ment. Grade 5 (£867-£671 per annum) and Grade 5 (£433-£567 per annum) of Schedule D, according to experience.
ENGINEERING DRAUGHTSMEN (ELECTRICAL). Construction Department. (Vacancy No. 61/53.)
Candidates should have experience in the preparation of layouts and diagrams for the installation of E.H.T. and L.T. Switchgear, transformers, E.H.T. and L.T. cables; knowledge of protective gear systems would be an advantage.
The salary will be in accordance with Grade 5 (£567-£671 per annum) or Grade 6 (£433-£567 per annum) of Schedule D of the National Joint Board Agreement.
The above positions will be pensionable within the provisions of the British Electricity Authority and Area Boards Superannuation Scheme.
Applications should be submitted on the official form, which may be obtained from the Divisional Establishments Officer, British Electricity Authority, Barker Gate, Nottingham, and should be returned to the undersigned. Please quote Vacancy Number.

L. F. JEFFREY, Divisional Controller.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT, A.P.T., Grade IV (£555-£600), in the Borough Surveyor's Department. Candidates should have the Intermediate Examination R.I.B.A. or equivalent, and experience in housing and other architectural work.

The appointment will be subject to the National Scheme of Conditions of Service and the Local Government Superannuation Acts, 1937 and 1953. Applications, in envelopes suitably endorsed, stating age, qualifications and experience together with copies of not more than three recent testimonials, to reach me not later than Saturday, 31st October, 1953.

CHAS. E. BRADBURY.

Town Hall, Wallsend-on-Tyne.

Town Hall, Wallsend-on-Tyne.

DRAUGHTSMAN AT BRIXTON SCHOOL OF BUILDING, Ferndale Road, S.W.4. With experience approaching later, R.I.B.A.—able to prepare working drawings from prelim, sketches. Rate of pay 68s, 9d. (min.), 209s. (max.). Comm. rate according to oualifications and experience. 384-hour week. Further particulars and application form from Secretary, returnable within 14 days. (1116)

MINISTRY OF WORKS.—ARCHITECTURAL ASSISTANTS required in Edinburgh, Historic Buildings and Ancient Monuments Section, for the preparation of measured drawings and reports on such buildings throughout Scotland, and also preparation of repair and preservation details and minor new works schemes.

Previous experience of this type of work is not necessary, but good draughtsmanship, architectural training and enthusiasm for this interesting specialist work is essential.

Salary: £335-£613 commencing salary, according to age and experience.

Applications, stating age and giving details of training and experience, to be sent to The Secretary, Ministry of Works, Room 122, 122, George Street, Edinburgh, 2.

CLARE BURAL DISTRICT COUNCIL.

Applications, stating age and giving details of training and experience, to be sent to The Secretary, Ministry of Works, Room 122, 122, George Street, Edinburgh, 2.

CLARE RURAL DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL

ASSISTANT.

Applications are invited for the appointment of Architectural Assistant, at a salary in accordance with Grade III or IV of the National Salary Scales, together with a travelling allowance.

Applicants must be well experienced in Building Contract procedure, supervision of house building, the preparation of interim valuations, and the settling of final accounts.

The appointment will be subject to the National Conditions of Service, the Local Government Superannuation Acts, the satisfactory passing of a medical examination, and to one month's notice on either side.

Applications, and the names of three persons to whom reference may be made, should reach me not later than 30th October, 1953.

J. ALLPRESS.

Clerk of the Council.

Stonehall, Clare, Sudbury, Suffolk.

9th October, 1953.

Applications are invited for the temporary appointment of an Assistant Clerk of Works, at a salary in accordance with Grade A.P.T., II (£495-£540).

Applicants must have sound knowledge of building construction and be capable of supervising housing contracts. The appointment will be subject to the Conditions of Service of the National Joint Council for Local Authorities, A.P.T. & C. Services. Applications, stating age, qualifications, present and past appointments, with details of experience, and the names of two referees, must be sent to the undersigned by first post on Monday, 2nd November, 1953.

H. PLINSTON.

Clerk of the Council.

The Council House, Letchworth, Herts.

9th October, 1953.

H. PLINSTON.

Clerk of the Council Examination of the Instructional Engineers or hold an equivalent qualification, candidates should have had considerable experience in preparation of main drainage and sewage disposal schemes, and experience in works of water supply will be an advantage.

The appointment will

administration and the state of the side.

An essential 'user allowance (up to 10 h.p.) is attached to this appointment, where the successful candidate provides his own motor car.

Applications, stating age, qualifications, present and past appointments, together with names of two referees, must be sent to the undersigned by the 2nd November, 1953.

WILFRID L. BROAD.

Council Offices, Lower Port View,
Saltash. Cornwall.

9th October, 1953.

9749

SOWERBY BRIDGE URBAN DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL ASSISTANT, GRADE V.

Applications are invited from suitably qualified and experienced persons for the appointment of Architectural Assistant in the Engineer and Surveyor's Department, at a salary in accordance with Grade V of the A.P.T. Division of the National Scale of Salaries.

Applicants was have had experience in preparing plans, specifications and quantities, and interim and final accounts for Housing work.

The applintment will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act. 1937. Housing accommodation will be provided if required.

Applications stating are qualifications and a

Housing accommodation will be provided if required.

Applications, stating age, qualifications and experience, together with the names of two persons to whom reference may be made, should be delivered to the undersigned, not later than Monday, the 2nd November, 1953.

ALFRED WOMERSLEY,

Clerk of the Council.

23, Wharf Street, Sowerby
October, 1953.

9748

October, 1953.

COUNTY BOROUGH OF SWANSEA.
LOCAL EDUCATION AUTHORITY.
TO BUILDERS.
Tenders are invited for the erection of a new Infants' School at Clase, Swansea. Drawings and General Conditions of Contract may be inspected at the Borough Architec's Office, The Guildhall, Swansea, to whom application by builders wishing to tender should be made with a deposit of £5 on or before Saturday, 7th November, 1953. Bills of Quantities, when ready, will be issued only to those who so apply. The deposit will be refunded after delivery of a bona-fide Tender (not subsequently withdrawn) and the return of all documents.
Tenders must be delivered to me on or before the date stated in the Form of Tender, and in accordance with directions to be issued.
No guarantee is given that the lowest or any other Tender will be accepted.
T. B. BOWEN,
Town Clerk.
The Guildhall, Swansea.

The Guildhall, Swansea. 20th October, 1953. 9792

HUYTON-WITH-ROBY URBAN DISTRICT
COUNCIL.
APPlications are invited for the established position of Architect. Applicants should be Registered Architects and/or Corporate Members of the R.I.B.A., or holders of a degree in Architectural work with practical experience in the design and development of public buildings of all types, flats and houses, and must be capable of controlling, as a Chief Official, the separate Architect's Department recently established by the Council.

The appointment will be subject to the Superannuation Acts; to the passing of the necessary medical examination; and the Conditions land down by the Joint Negotiating Committee for Chief Officials of Local Authorities. The salary will be on the range commencing at £1,050 per annum, rising by four equal annual increments to £1,250.

Applications, accompanied by the names and addresses of three reference

annum, rising by four equal annual increments to £1,250.

Applications, accompanied by the names and addresses of three referees, must be sent to the undersigned in envelopes clearly marked "Architect," so as to arrive not later than the 11th November, 1953.

Any relationship to a Member or Chief Officer of the Council must be disclosed, and canvassing is a disqualification.

The question of providing living accommodation will be considered by the Housing Committee, if necessary.

(The district is a rapidly developing area, with a population of about 57,000.)

H. E. H. LAWTON,

Clerk of the Council.

Council Offices, Huyton, Lancs.

Council Offices, Huyton, Lancs. October, 1953. 9771

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ASSISTANT ENGINEER (CIVIL).
No. 3 (Portsmouth) Sub-Area. Salary: N.J.B., Class J. Grade 10, Column 1 (£680 per annum).
N.J.B. Conditions of Service.
The duties of the post will include, under the general supervision of the Sub-Area Civil Engineer, responsibility for the preparation of designs and drawings for new buildings and similar work in connection with modification and repairs to existing buildings throughout the Sub-Area. Candidates should have had experience in design and construction of building and civil engineering works, including steel and reinforced concrete structures.
The person appointed will be required to contribute to the B.E.A. and Area Boards' Superannuation Scheme, if eligible.
Applications, on forms obtainable from the Sub-Area Secretary, Lower Drayton Lane, Cosham, Portsmouth, and returned to him in envelopes suitably endorsed not later than 26th October, 1953.

Architectural Appointments Vacant

Architectural Appointments Vacant

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

The engagement of persons answering these
advertisements must be made through a Local
Office of the Ministry of Labour or a Scheduled

Employment Agency if the applicant is a man
aged 18-64 inclusive or a woman aged 18-69
inclusive unless he or she is, or the employment, is
excepted from the provisions of the Notification
of Vacancies Order, 1952.

A SSISTANT required for large general Archi-tectural Practice with offices in Maidenhead. Some experience in specification writing essen-tial Salary £300 to £500, according to experience.

VACANCY arises for Articled Pupil (Architectural or Building Surveying) in City
form. Box 9468.

A RCHITECTURAL DRAUGHTSMAN required for busy office in Home Counties. Good salary to suitable applicant. Reply Box 9670. A for busy office in Home Counties. Good salary to suitable applicant. Reply Box 9670.

YOUNG Midland office-trained ASSISTANT required for Norfolk office. Car driver; competent Surveyor, Draughtsman and Detailer. Knowledge of Final Accounts a distinct advantage. Apply with details of experience and salary required to Box 9675.

YOUNG ASSISTANT, up to Inter. R.I.B.A. standard, with good constructional knowledge, required for Architects' Department of Multiple Retail Company, with H.Q. in London. Occasional travelling involved. Write, stating age, experience, and salary required. Box 9725.

RCHITECTURAL ASSISTANT required for Assistant Reply Box 9669.

SENIOR and JUNIOR ARCHITECTURAL ASSISTANTS required for Norwich private practice. Varied works in progress throughout Norfolk, Suffolk, Essex, and in London. Reply in writing, giving full particulars of qualifications, if any, age, previous experience, and salary required. Box 9701.

tions, if any, age, previous experience, and salary required. Box 9701.

PRAUGHTSMAN, SHOPFITTING.—Preference ence man with Art School Training. Reply before end October, stating age and shopfitting experience, to Managing Director, A. Edmonds & Co., Ltd., 91, Constitution Hill, Birmingham. 9700

RCHITECTURAL ASSISTANT required immediately in busy practice, North-East. Good draughtsman, experience in surveys, sound construction and detailing. Salary according to experience. Pull particulars, Box 9716.

RCHITECT.—PARTNER or CHIEF ASSISTANT, with view to partnership, required in established North Midlands Firm to succeed retiring Partner. Capital mot essential. Connections an advantage. Write Box 9717.

RCHITECTURAL DRAUGHTSMAN required for detailing, also site layouts. High standard of draughtsmanship absolutely essential, and previous knowledge of non-traditional construction an advantage. Apply Trusteel Corporation, Heath Road, Oxhey, Herts. Watford 6256.

A RCHITECTS' ASSISTANT required for Glasgow office. Apply, stating age, experience, and salary required, to Messrs. Launcelot H. Ross & Lindsay, 79, West Regent Street, Glasgow, 9772

C.2. 29772

EXPERIENCED ARCHITECTURAL ASSISTANT required for busy general practice in Birmingham. Write, stating previous experience and salary required. To Box 9776.

A CAPABLE ASSISTANT is required for a private firm of Architects Westminster. The qualifications necessary are quick and accurate draughtsmanship, practical knowledge of the supervision of all types of building work, and able to complete a job from sketch plans to final stage. The vacancy must be filled immediately. Write, stating age, details of experience, and salary required, to Box 9775.

NGLISH STEEL CORPORATION, LTD. Sheffield. require SENIOR ARCHITECTURAL ASSISTANT for the design of and alterations detailing past experience, age, etc., to be forwarded to Office Manager, P.O. Box 57, Sheffield.

JUNIOR ARCHITECTURAL ASSISTANT required for medium sized general practice in West End. Applicants should be approaching Intermediate B.I.B.A. standard. Write, stating age, experience, and salary required. Box 9773.

QUALIFIED ASSISTANT required in beyone medium sized office in the Midlands. Experience in design of industrial buildings essential. State age, qualifications, and salary required. Box 9778.

ARCHITECTURAL ASSISTANTS required in the Midlands.

meutum sizeu omce in the Midlands. Experience in design of industrial buildings essential. State age, qualifications, and salary required. Box 9778.

ARCHITECTURAL ASSISTANTS required in office with varied practice, including stores, flats, offices, hotels, factories and general commercial work.

(a) Fully qualified Assistant, with considerable office experience; age 30 to 35.

(b) Assistant, with good office experience and up to R.I.B.A. Intermediate standard.

Apply in writing to Lewis Solomon, W.C.I. stating experience, salary required, etc. 9779.

ARCHITECTURAL ASSISTANT required, with experience in design of industrial buildings and capable of preparing surveys, working drawings and details. Applications, stating age, education, experience and salary required, should be addressed to E.M.A., Cadbury Brothers, Ltd., Bournville, Birmingham.

ASSISTANT ARCHITECTS required by a large commercial organisation. Sound all round training in the profession essential, including supervision of work. Excellent opportunities for men of initiative. Apply in writing, giving details of experience, age, and salary required, to Box No. T.3722/1. Foster Turner & Everetts, Ltd., 11. Old Jewry, E.C.2.

ULALIFIED ARCHITECT required by old-established firm of building and civil engineering contractors in South Midlands. Experience of design and layout of housing schemes essential. Reply, stating age, full details of experience and present salary, to Box 9774.

ACALYELDA ASSISTANTS. Simonarchitectural assistants interested in reinforced concrete industrial structures. The main fields covered are coal preparation plant, coke ovens, chemical plant, and power stations. The work offers excellent experience and good scope. A Pension Fund and D.O. Bonus Scheme are in operation. Apply, giving age and details of experience, to Staff & Training Division (Excellent opportunity of experience, to Staff & Training Division (Excellent opportunity of Experience of private office

Stockport, Cheshire.

ASISTANT ARCHITECT required for General Practice, Final R.I.B.A. stage or recently qualified, experience of private office essential. Flat can be made available. Salary 1500—1600, according to experience. Please write giving age, qualifications and training to Ernest L. Smith & Son, L/A.R.I.B.A., Melville, Chambers, Sandown, I.W.

L. Smith & Son, L/A.R.I.B.A., Melville, Chambers, Sandown, I.W.

ARCHITECTURAL DRAUGHTSMAN required in the Lendon Co-operative Society Works Department, Whita Road, Manor Park, E.12. General architectural drawing experience necessary, and preference will be given to applicant with experience of structural detailing. Commencing salary £442 per annum inclusive. Write stating age, details of career and technical qualifications, to Staff Office (AJ), 54, Maryland Street, Stratford, E.15.

JUNIOR ARCHITECTURAL ASSISTANT required in Central London area office. Must be at least Intermediate R.I.B.A. with good standard of draughtsmanship and capable of carrying out accurate and detailed surveys of existing buildings. Experience on shop building and fitting out an asset. Please write to Box 9761.

ARCHITECTURAL DRAUGHTSMAN required, capable of preparing working drawings from Architects sketches. Able to work on own initiative. Starting salary up to £500 per annum. Under 30 years age preferred. Please send details, age, qualifications and experience to Personnel Manager, Schweppes Ltd., 1/4, Connaught Place, London, W.2.

ARCHITECTURAL ASSISTANT required with knowledge of Quantity Surveying. Write giving full particulars of experience, age and salary required to the Secretary, Hewitt Brothers, Ltd., Tower Brewerry, Grimsby.

ARCHITECTURAL ASSISTANTS, Advanced Intermediate or Final Standard, required immediately. Preference given to applicants with at least three to four years' practical experience. Interesting work including schools and churches. Apply: Jennings, Homer & Lynch, 3 and 5, Church Street, Brierley Hill. Telephone: 7845/6.

A RCHITECTURAL ASSISTANT required for busy Taunton office of Chartered Architects. Inter to Final Standard with some years office experience. Reply stating age, experience and salary required to Box 769.

A SSISTANT required for general practice in North Devon, knowledge of housing an advantage. Salary £500 per annum. Box 9768.

RCHITECTURAL ASSISTANT required small office. West Central district. £350, 0. Write full particulars, Box 9791. £550.

A RCHITECTURAL ASSISTANT required. Intermediate standard. House available. Full particulars to W. S. Hattrell & Partners, 1, Queens Road, Coventry.

CHARTERED ARCHITECTS, Merseyside, require experienced SENIOR ASSISTANT, Good drauptisman, with sound knowledge construction, design and detailing, etc., essential. Write in confidence, giving experience, age, and salary required, to Box 9789.

Architectural Appointments Wanted

Architectural Appointments Wanted

A SSISTANT, neat draughtsman, having comprehensive experience, requires position where enthusiasm and imagination appreciated and scope for personal expression in good contemporary work allowed. Interested landscape design. Preferably in S. or S.E. Excellent references. Car driver. Single. Kindly reply Box 780.

HIGHLY experienced ARCHITECT, foreign qualifications, seeks responsible appointment as CHIEF ASSISTANT or RESIDENT ARCHITECT. Vast experience in all type of works in many countries. References provided. Will accept appointment in any county. Apply Box 784.

WIDELY experienced assistant; surveys, specifications, design, with contemporary outlook, quick, accurate draughtsman, Part 2. Special Final, school trained, seeks position of responsibility promising a future of interest. Box 789.

SENIOR ASSISTANT (35) desires post London area. 15 years' varied experience all branches of the profession. Neat, accurate, quick draughtsman. Surveys, working drawings details, perspectives. Rough sketch to contract drawings. Site supervision, levelling, specifications, etc. Industrial buildings, schools, hospitals, flats and housing. Conversions, estate layout, multi-storey buildings, etc. Excellent testimonials. Salary: 4700 per annum. Box 781.

CHIEF ASSISTANT, A.I.A.S. (31), seeks new appointment offering prospects of advancement. Extensive industrial, schools, flats, shops and housing experience, including multi-storey buildings. Coventry/Birmingham areas preferred. Large progressive industrial organisation replies particularly welcomed. Present salary £750. Box 9783.

ARCHITECTURAL ASSISTANT seeks London situation. Capable all work, drawings, details. Housing experience. Salary £500. Box

A.I.B.A. (school trained), age 33, with 6 4 years' post-graduate experience, seeks responsible position within easy reach of Romford, Essex. Box 791.

A R.I.B.A. (33) seeks senior post in office where experience and initiative are rewarded by scope for advancement. Box 790.

ENIOR ASSISTANT (45), A.A. trained.
Registered Architect. Wide general experience, mainly London. Excellent testimonials.
Responsible position required, London or Sussex.
Gilbert, The Chase, Albourne, Hassocks, Sussex.
'Phone Hurstpierpoint 2165.

ENIOR ASSISTANT (late 40's), in administrative posts over last 15 years, seeks London engagement (not c/w). Own car. Salary £850.

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of Vacancies Order, 1952.

THE CO - OPERATIVE WHOLESALE SOCIETY, LTD., invite applications for the appointment of a JUNIOR STRUCTURAL ENGINEERING ASSISTANT on the staff of the Manchester Architect's Department.

Applicants should have experience in detailing structural steel or reinforced concrete with design qualifications to Higher National Certificate standard or equivalent.

The appointment is permanent, with prospects of promotion. Successful candidate will be required to undergo a medical examination for entry into a compulsory Superannuation Scheme. Applications, stating age, experience, qualifications and salary required, to be addressed to G. S. Hay, Esq., A.R.I.B.A., Chief Architect, Cooperative Wholesale Society, Ltd., 1, Balloon Sireel, Manchester.

SECRETARY Typing, ability to orga week, hours 9-6 Box 9756. LADY SEC required Please state es

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SECRETARY required for Architect's office. Typing, Shorthand, Book-keeping, and ability to organise small office essential. 5-day week, hours 9-6. Write, giving full particulars, to Box 9756.

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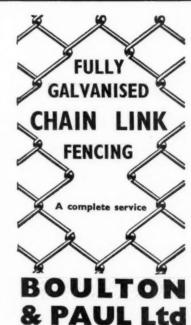
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A.J. INFORMATION SHEET 23ZI published July 23rd, 1953

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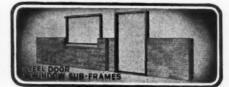
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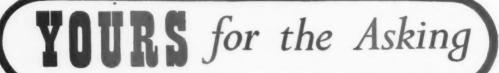




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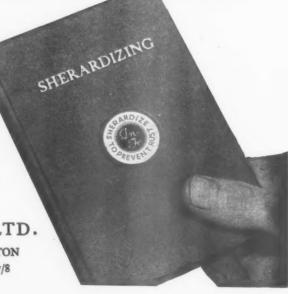
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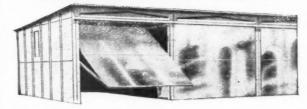
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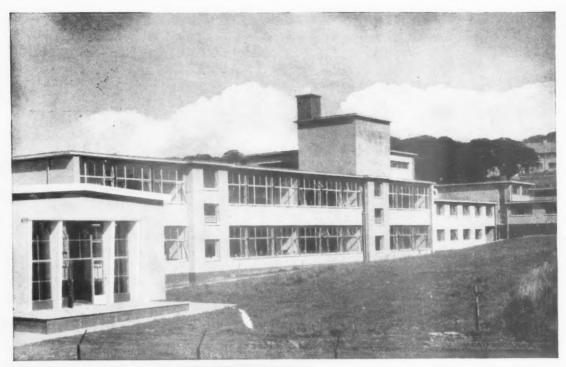
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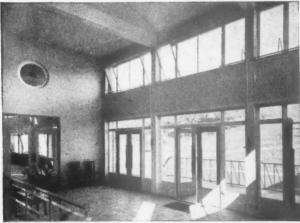
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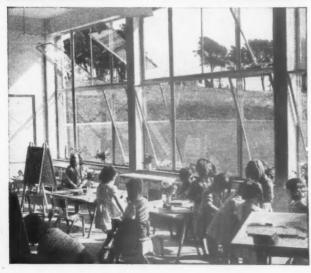
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