# ARCHITEC



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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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#### BUILDINGS CURRENT

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

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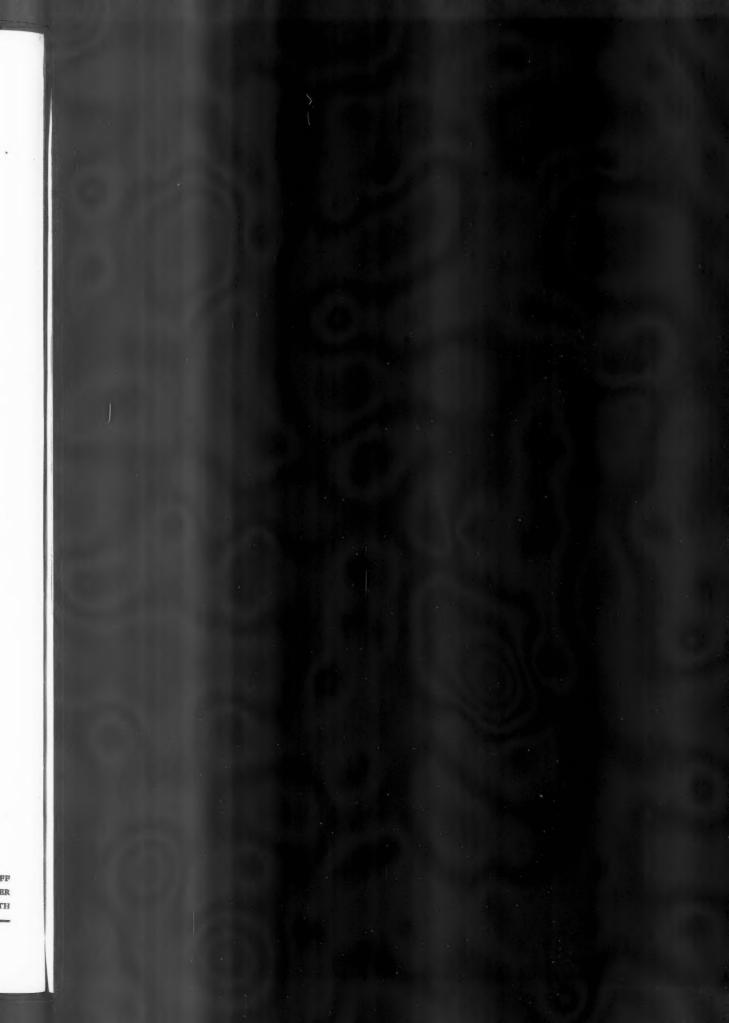
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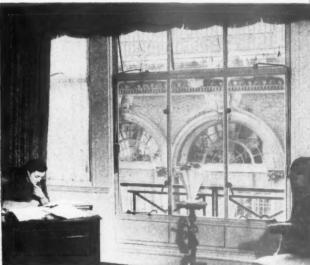
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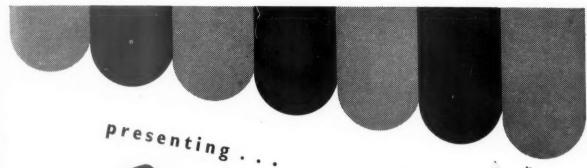
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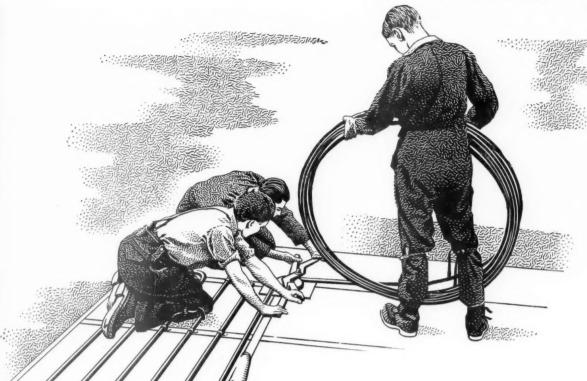
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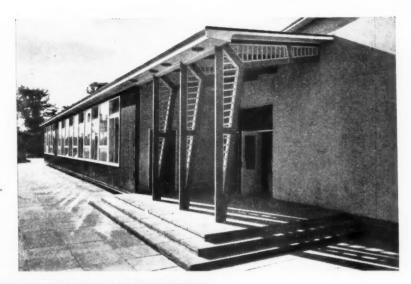
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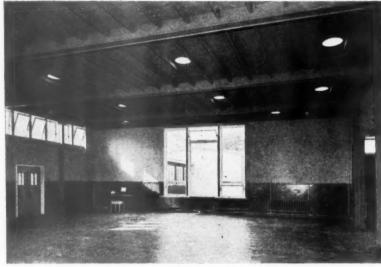
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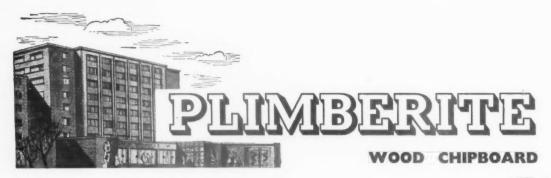
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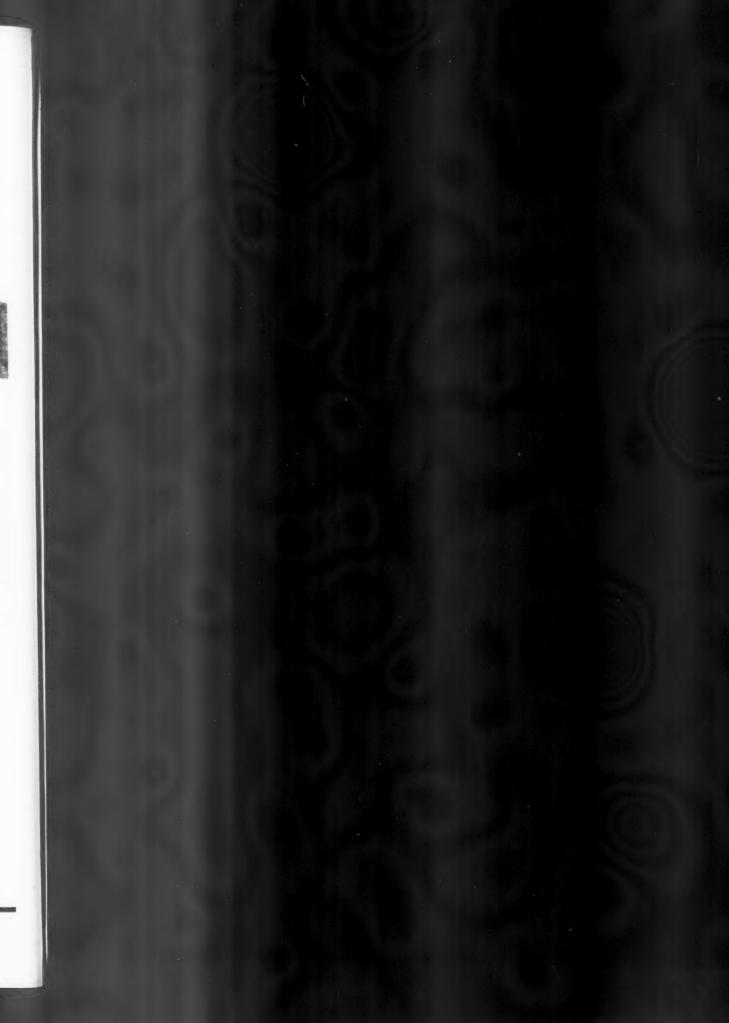


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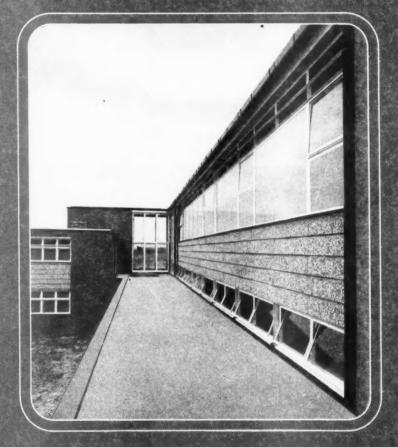








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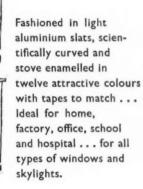
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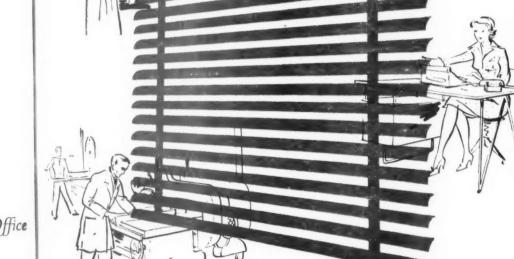
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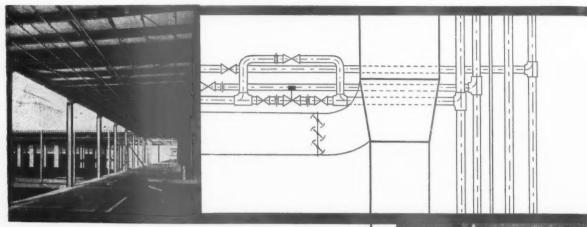
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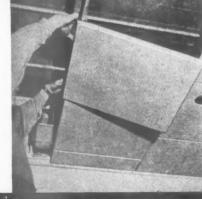
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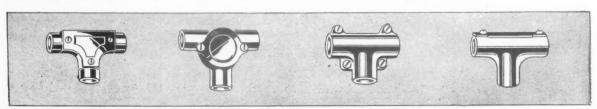
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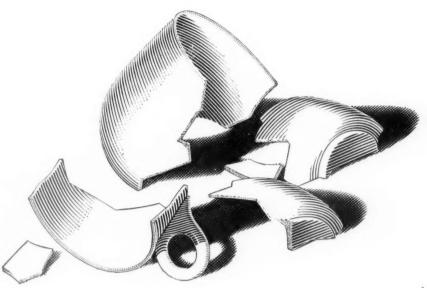
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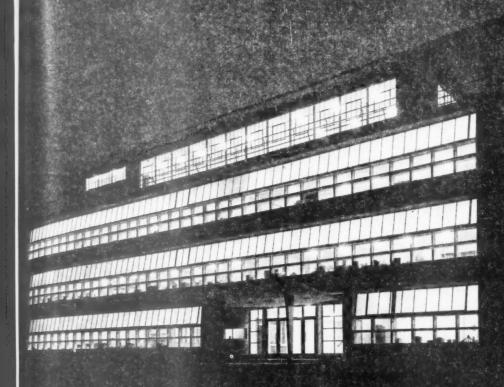
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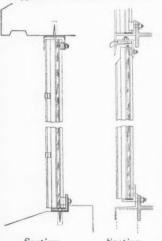


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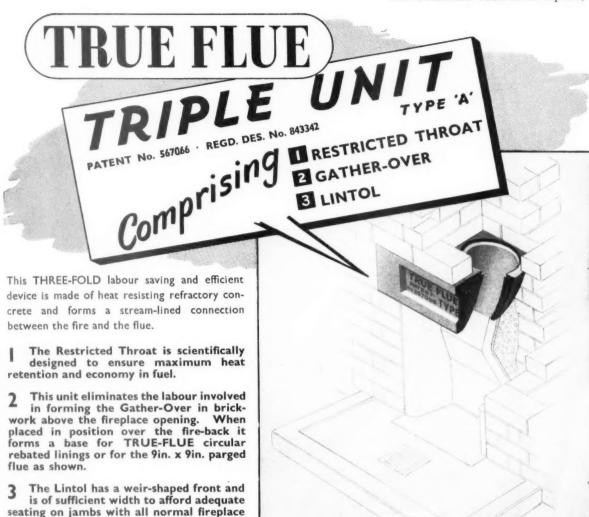
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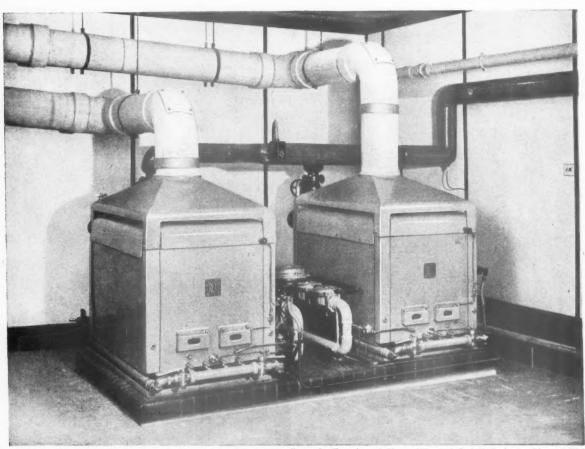
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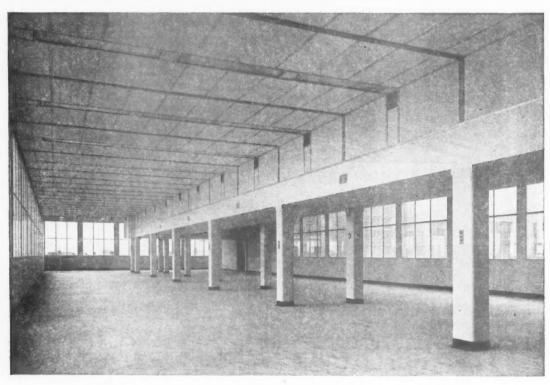
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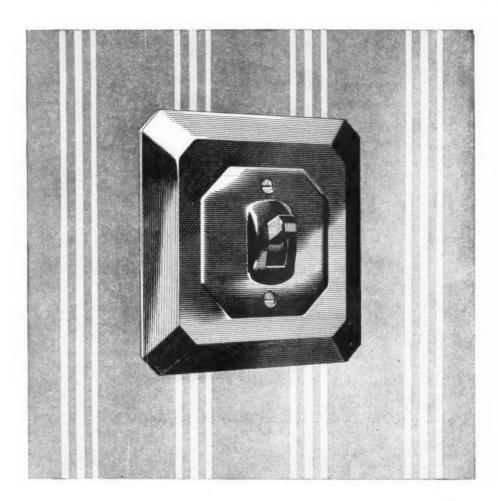


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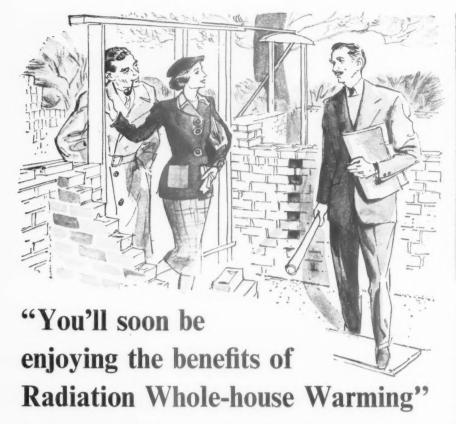
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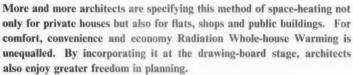


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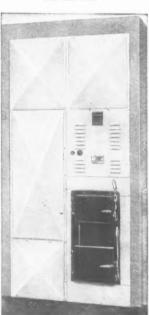
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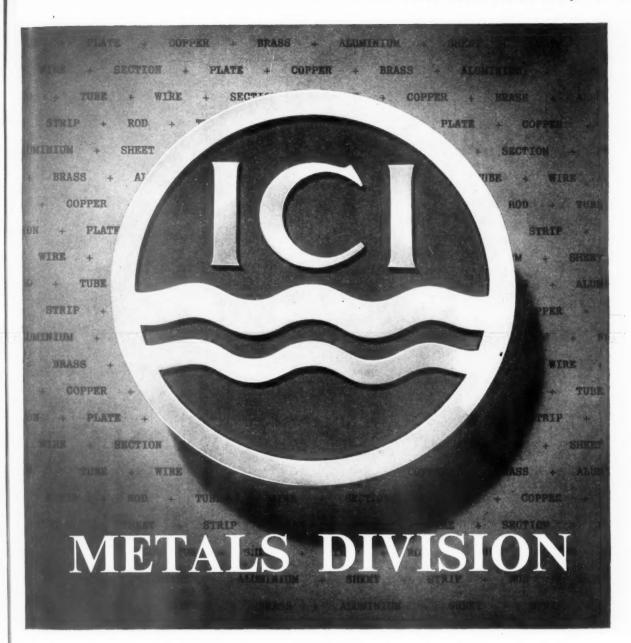
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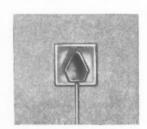


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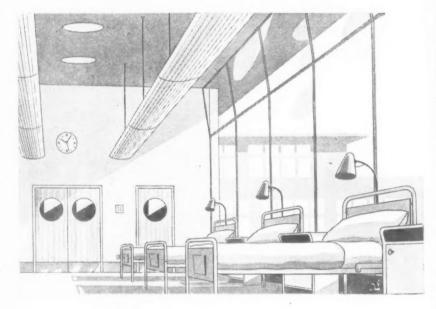
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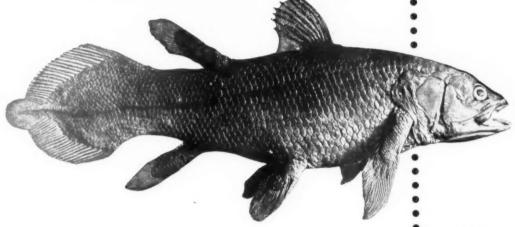
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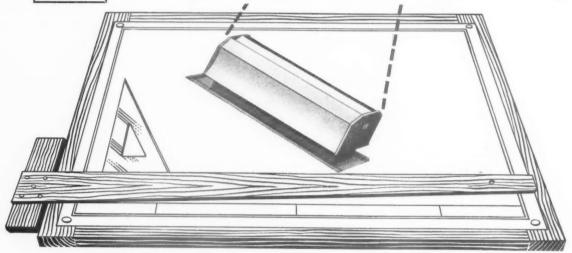
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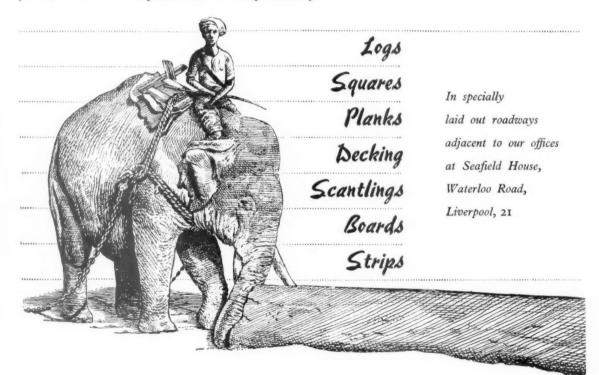
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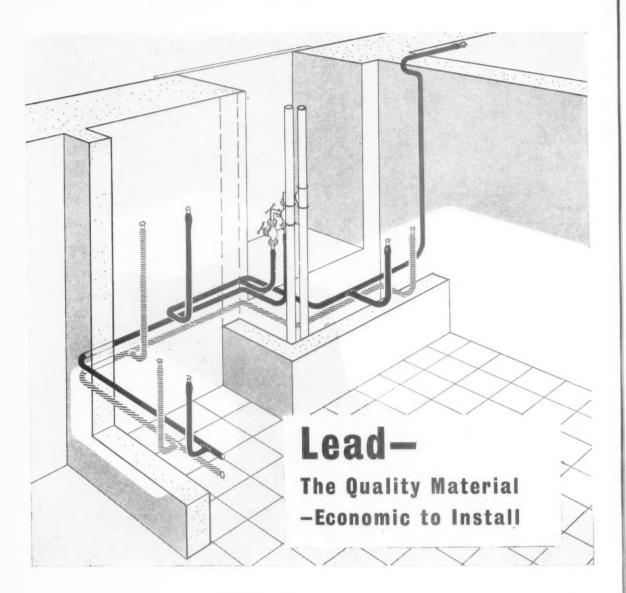


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The Council's Technical Information Bureau will gladly help with problems on the use of Lead Sheet and Pipe in building work. Details of the main uses are given in a series of Information Sheets and Bulletins, which can be obtained by applying to the Council. Well designed modern plumbing is compact in layout; for concealment and protection against frost damage main distributions are commonly fixed in ducts. Branch connections, usually short, from the main to the appliances and fittings, have to be fixed in a confined space.

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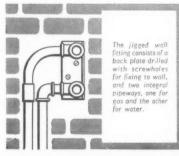
And how about your tenants! Have they an alternative to the solid fuel heating system—or do they stoke all year round, and so waste solid fuel? Well, there is an alternative. Once again Ascot take the lead to make it possible, with the jigged wall fitting.

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The Ascot jigged wall fitting cuts the cost of installing gas water heaters to a matter of a few shillings per house. 44 housing authorities have already adopted it. Over 20,000 have been installed. The jigged wall plate will take the Ascot 503 range and the Ascot RS52/1 boiling water heater. A leaflet is available, and full details will gladly be supplied.



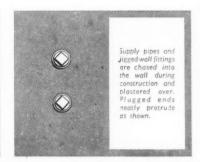
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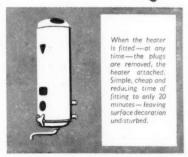
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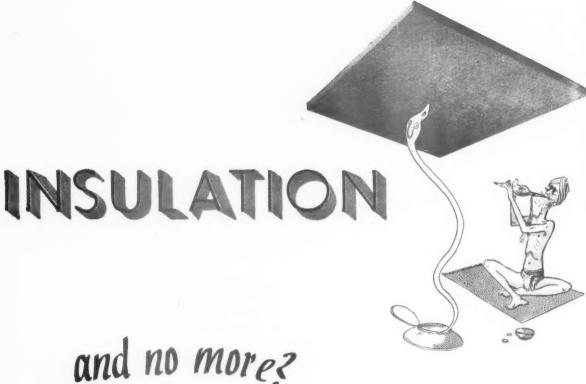
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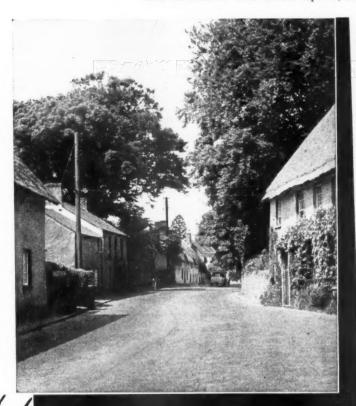
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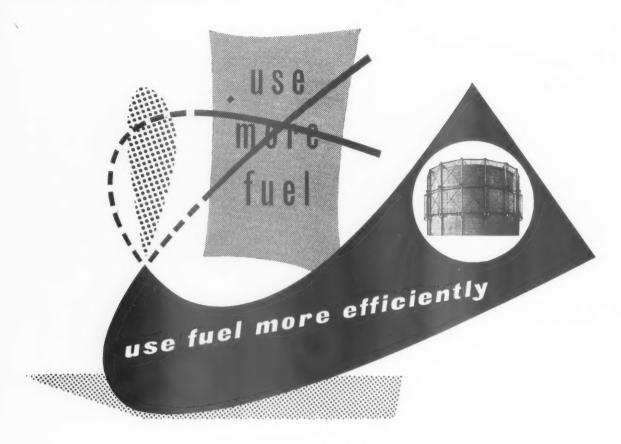
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But, whether it is the heating of individual houses or large public buildings, Gas and Coke have their parts to play and the Gas Industry is anxious to co-operate to the full with those who desire to find the best way of achieving improved standards of heating with the most economical use of basic fuel resources.

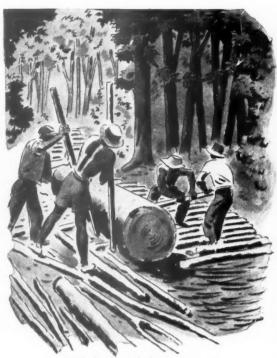
### Where to go for information about Gas

If you are considering the use of Gas, however tentatively, your first move should be to get in touch with the Gas Undertaking serving the area in which the job is situated. Through it you have access to the combined technical resources of the entire Gas Industry. The following list gives the addresses and telephone numbers of the Area Boards. Where there is any uncertainty as to which Area Board is concerned, The Gas Council will be pleased to give you the correct address.

Scottish Gas Board: 26, Drumsheugh Gardens, Edinburgh, 3. Edinburgh 34331/5. Northern Gas Board: 30, Grainger Street, Newcastle-upon-Tyne, 1. Newcastle-upon-Tyne 26101. North Western Gas Board: Bridgewater House, 60, Whitworth Street, Manchester, 1. Manchester Central 8121. North Eastern Gas Board: Bridge Street, Leeds, 2. Leeds 32571/8. East Midlands Gas Board: Beverley House, University Road, Leicester. Leicester 23201/5. West Midlands Gas Board: 6, Augustus Road, Edgbaston, Birmingham, 15. Edgbaston 3616. Wales Gas Board: 1 and 2, Windsor Place, Cardiff. Cardiff 28621. Eastern Gas Board: 2, The Abbey Garden, London, S.W.1. Trafalgar 5373/7. North Thames Gas Board: 30, Kensington Church Street, London, W.8. Western 8141. South Eastern Gas Board: Katharine Street, Croydon, Surrey. Croydon 4466. Southern Gas Board: 164, Above Bar, Southampton. Southampton 76362. South Western Gas Board: 9a, Quiet Street, Bath. Bath 60411/5.

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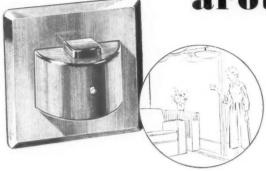


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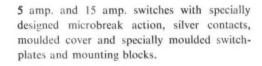
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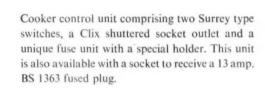
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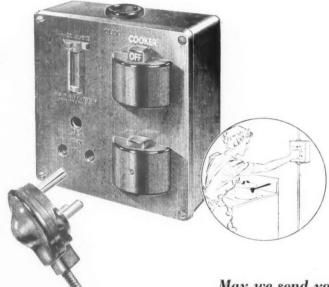


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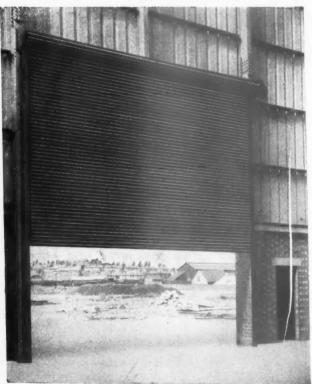


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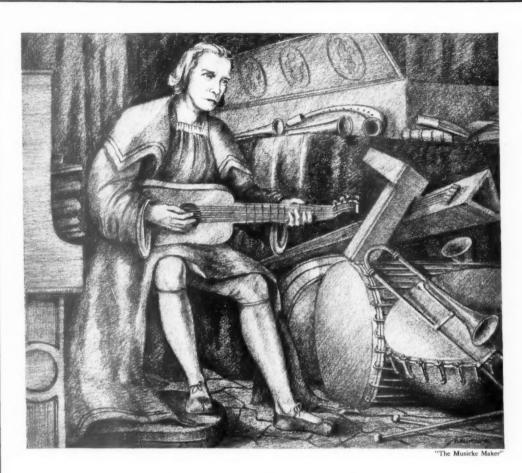
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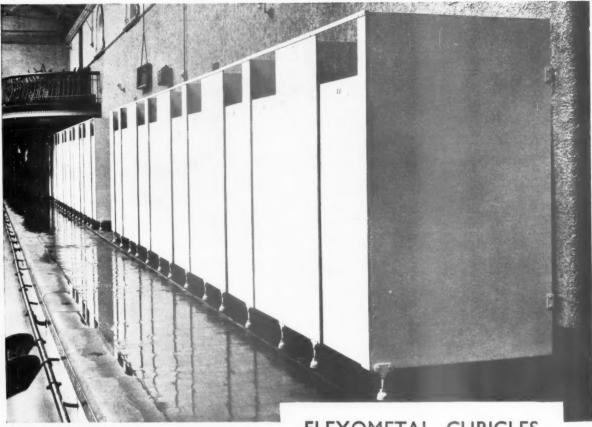
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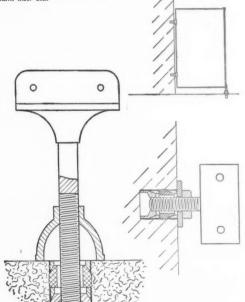
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CORB GOLD MEDALLIST

The ceremony at the RIBA last week when Le Corbusier was invested with the Royal Gold Medal was a genuinely moving one, because in the acclamation that came from the crowded hall one could sense much more than admiration—real affection for a master who has devoted a lifetime to fighting for the acceptance of ideas which, as time goes on, become more and more clearly the ideas that matter, and who has put us all in his debt.

The speeches that preceded the ceremony, considering that praise of a great man tends to bring forth clichés rather than constructive thoughts, were of an unusually high standard. They came from M. Lebel of the French Embassy, Sir Herbert Read, Robert Matthew, Wells-Coates and Colin Glennie, a student from the AA, and the last was by no means the least thoughtful and to the point.

The sight of Le Corbusier being led by the hand to the platform by the two past Gold Medallists who had been chosen to do so, Charles Holden and Edward Maufe, was one that no one who saw it is likely to forget. Surely nowhere but in England could this have been thought of, let alone take place. Elsewhere architects so opposed in everything they think and do would have been sworn enemies outside the office as well as in. Whether that is our strength or our weakness is an arguable question.

Le Corbusier's stamina is remarkable. He was kept on the run for the whole of the two days he was in England, beginning with BBC recordings within an hour or two of his arrival at the airport and ending with an AA dinner for which there had to be balloting for places, so great was the demand. He took it all without flinching, and I am told that at the lunch given to him by the executive committee of the MARS Group the only thing that seemed to be worrying him serjously was how to get his gold medal through the customs on his return.

### JAMES MACGREGOR

With the death of James Macgregor (announced in the JOURNAL last week) there passes from the profession one of the most gentle, kind and sensitive of men. With those qualities went a wide view of architecture, for it is not every man who could leave the office of Sir Edwin Lutyens to be an effective

member of the AA Staff, and then become head of the Cambridge School.

Macgregor's death will leave a question mark hanging over that school. Theoretically it should be the greatest of the English schools of architecture—comparable with Harvard or MIT. In practice—even with Macgregor there—it remained a modest three-year course. Will it now be possible for the Faculty of Fine Art, the RIBA and ARCUK to get together and do something about it?

#### THAT SIXPENCE

Some weeks ago I said I hoped that the building trade operatives would not strike over the employers' rejection of the wage claim for another sixpence. but would make use of the arbitration machinery set up under the National Joint Council rules. The strike-orarbitration ballot finished just before Easter and seems to have been very strongly anti-strike, so now we may all heave a sigh of relief and assume that our jobs will go on without any trouble. The operatives have done the sensible thing, for a strike would have made the industry very unpopular at a time when housing lists are so long.

### MONOPOLIES

The Monopolies Commission is to investigate the London Builders' Conference after all. The announcement in The Times last week said that "tendering practices . . . with others" are to be referred to the Commission. What this means I don't quite know, but it might be not a bad thing—if the Commission has the right to do so—to enquire into the industry as a whole or, at any rate, into those parts of it where price rings are thought to operate.



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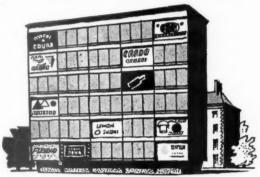
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WRITING ON THE WALL

The above illustrations are reproduced from the recent issue of World's Press News in which architect Alexander Barrie discusses, with admirable good sense, the relationship of outdoor advertising and architecture-an "affaire" which, as he remarks, has been moving slowly for some years and shows no signs of increasing in The TCP Regulations of warmth. 1948 are not, apparently, working too well. This is partly due to the inconsistency of interpretation which must be expected where matters of opinion are concerned—i.e., when is a poster "blatant" (to use the Regulations' adjective) and when is it suitable (and therefore probably not seen or read)? -and partly because the Regulations are themselves prohibitive and therefore discourage a more active approach to the problem. If advertising is agreed Alexander Barrie (see left) suggests that architects should make use of "the advertisers' colourful contribution to townscape". Above and right, examples by David Chalmers who also provided the top picture. (Reproduced by permission of World's Press News.)

to be a useful activity—and I really can't go into this now—then space must be found for it to operate—and the best way to allay the alarm of the "anti-posterites" is, of course, first to produce better posters and, secondly, to choose poster sites more carefully so that the poster, when up, is not destructive of the surrounding scale.

The first task is feasible and, as Professor Guyatt recently pointed out in the *Architectural Review*, badly needs doing; the second is much more difficult, since it really means not only



examining each and every site on its merits, but *re*-examining each site when the poster is changed.

Mr. Barrie suggests that the poster industry should set up its own self-disciplinary council to check over this matter of amenity. There are obvious standards to this since all such æsthetic panels—from the Royal Fine Art Commission down to the most obscure rural planning committee—are liable at times to internal conflict of opinion, built-in prejudices and foolish decisions. Nevertheless, by preventing



### Gold Medallists, Past and Present

Backed by the serried ranks of his admirers, his disciples, and the merely curious; flanked by Professor Holden (right) and Sir Edward Maufe, the two previous medallists who accompanied him to the platform at the RIBA head-quarters, Le Corbusier listens to speeches in his praise as he waits to go forward and receive the Royal Gold Medal for architecture for 1953. That the sentiments of the speakers were shared by the house was shown by the applause which greeted his first appearance, and—at the bestowing of the medal—two great bursts of acclamation, each lasting over two minutes, a proper tribute to the unique achievements of this small man who looks not unlike a successful industrialist turned lay preacher (which, indeed, is what he is) and has forcibly opened the eyes of the world to a vision of a new way of living in cities. Every speech dwelt on Le Corbusier's regard for the

human individual. In his own speech (page 451) he spoke of Man as le seul objet de mon étude, and he will be remembered, long after other gold medallists are forgotten, as the practical poet who insisted on the primacy, in architecture, of the inhabitant. Now that his famous and muchmisquoted aphorism has passed into the common verbal currency of us all, we begin to see that the operative words are not une machine but à habiter, and as we re-read his books. re-study his sketches, and re-visit his buildings, we see that he has always regarded architecture as a way of increasing the happiness of men. For such a man, and for such an ideal, a three-inch disc of gold is only a token recognition, and the sincerity with which the architects of Britain have bestowed it upon him will be measured by the degree to which we are able to live up to the standard he has set the world.

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the worst excesses from being submitted it would at least soften up the "no - advertising - at -any-price-or-anyplace" opposition which has made the present situation so discouraging to all concerned, and is a constant source of enquiries and appeals.

### CAR PARKS

It is becoming clear that we may be in for a Battle of the Squares. We need car parks in central areas. To put them under the squares is an answer-a snap answer. But if it means destroying the trees it is so unthinkable that the battle may never have to be fought. No one, however, must be bamboozled into acquiescence by the compromise proposal to destroy only some of the trees. In an excellent letter to The Times, Miss Brenda Colvin has said that to put car parks under part only of each square will so disturb drainage, moisture, nutrients, etc., that all the trees will be doomed anyway. The squares will become mere roof gardens over garages. Shades of Derry and Toms!

However, if you cannot grow trees on a flat roof you can very well Troop the Colour there. There can be no possible objection to a really enormous car-park under the Horse Guards Parade. And one can think of similar places where neither trees nor main sewers need be disturbed. In the main, however, proposals must come (and no doubt will come) from the proper source—the LCC Planning Department.

### HIGH BUILDINGS

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Did you see Alfred Bossom's letter on High Buildings in The Times on the same day that Miss Colvin's was published? It would be difficult to conceive of a more wrong-headed letterand over a name that still, one supposes, has some influence. (He speaks, of course, from experience, for at the last Modular Society meeting he modestly admitted to having designed one hundred skyscrapers himself.) His main arguments were (a) that high buildings cast shadows over neighbouring blocks (of course they do, if they are allowed to be too close to each other); and (b) that a multitude of small open grates make a lot of smoke (of course they do if you have them).

**ASTRAGAL** 

POINTS FROM THIS ISSUE

Corbusier Receives RIBA Royal Gold Medal .. pages 445, 448 and 451

Monopolies Commission to investigate tendering

practices .. .. .. .. pages 445 and 452

Estimate of number of future architectural students .. page 450

Architects' guide to use of hardwoods .. .. page 467

The Editors

### TROPICAL ARCHITECTURE

THE conference on tropical architecture held last week at University College, London indicated not only the growing pace of development in the tropics but a growing interest in the building problems there. Inevitably, the larger number of the 200 delegates attending came from British territories, but at no time did the conference torget that it was an *international* conference concerning itself with building anywhere in the tropics—an area lying roughly between the 23rd North and South Parallels and covering 40 per cent. of the globe's surface. This area contains an infinite variety of conditions and climates. It has one thing in common—a lack of winter—and its problems are solar ones.

Though some of the forty or so countries have great building traditions, many are either new or under-developed. In all there is an almost limitless demand for housing, schools, communications and industrial buildings. A great deal of building is going on and much more is projected but it is a fraction of the total need.

We now realize that survival is conditional on our recognition of Wendell Wilkie's "one world" principle. Any backwardness in any part of the globe involves us all. And although the broader problems and solutions must repose with the statesmen, the building industry and its technicians will be concerned with their implementation and must equip themselves accordingly. Much research has been done on tropical building. Much information exists. Yet for the most part it remains isolated and unco-ordinated. The purpose of the conference—and it is hoped it will be a permanent one—was to bring together such knowledge and those who were able to impart it. This it did with excellence. The results will be published later.

The conference was brought to a close with a fine resolution, calling on the organizing committee to continue its work and to foster:—(1) Improved educational facilities for students and architects interested in work in the tropics, and particularly the establishment of permanent centres for the study of architecture and planning at ordinary and post graduate level. (2) The encouragement of local building crafts

and their proper use in contemporary building. (3) The publication of information on Tropical Architecture and Planning. (4) The establishment of research and information centres on a regional basis. (5) The organization of further conferences.

Professor Sir Patrick Abercrombie suggested, in his closing speech, that the conference should not remain a separate organization but should tie itself to some existing body, such as the International Union of Architects. We endorse this view but suggest that it is yet too early to decide which body should be asked to take the conference under its wing.

This table takes no account of national service, which is no bar to registration and does not hamper the prospective architect for more than a few years.

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And numbers will not be reduced by the new regulation requiring a specified period of practical experience prior to the examination for professional practice; qualification will simply be delayed. As no information is yet available as to the full effects of this regulation, it has not been considered here.

### FOCUS ON

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# YOU

Professor Ian Bowen and Martyn J. Webb continue their investigation into the state of the architectural profession by estimating the number of people who will study architecture in the next few years. In their next article they will give estimates of the number of registrations that will be made in three years. The title-piece above is reproduced from a page chosen at random in the Architects Register, and the names have no direct connection with the article

### Guest Editor: Professor IAN BOWEN

### Future Output of Students

The routes to RIBA, diploma or even degree finals are many, but we can broadly summarize them as (a) full time training at recognized schools and colleges, providing their own inter

finals examinations; (b) full time training at schools and technical colleges, in preparation for the RIBA finals; and (c) other forms of training which are not full time (including the evening student and part-time day student, as well as the student who takes his interafter full-time study at a technical college and his finals after part-time study).

Since records are kept of the number of students attending full-time courses, it is not difficult to estimate the future output from these centres. But as the figures for full-time study shown in the following table include both courses at recognized schools and colleges and at technical colleges, there is a possibility of slight inaccuracy in them. ever, the data available show the numbers of students at full-time centres in each year of the course. Thus, by assuming that every student will finish his training on time we get the following figures for possible successful full-time candidates in the next four years:-

# PART-TIME AND EXTERNAL STUDENTS

Since part-time students do not come under a particular branch of the architectural educational system—and indeed there is no obligation that they should make use of the many facilities offered them—data about them are not easy to obtain. Before the war roughly half those qualifying by examination did so after part-time study and although the ratio is much lower today, there are signs that this form of training is becoming of increasing importance.

The only way we can assess numbers of part-time students is by considering how many present themselves for RIBA finals each year. Before the war roughly 550 external students sat for finals; of these about 31 per cent. passed parts I and II and a further 18 per cent. passed part I or part II. The numbers since the war have grown tremendously and in 1951 there were

Year	Recognized schools	Technical colleges	Total	Corrected tota	
1953 1954 1955	950 850 771 817	161 200 184 206	1,111 1,050 955 1,023	1,111 1,000 914 970	

In the final column an allowance is made for the fact that something like 25 per cent. of those commencing training at technical colleges leave at inter standard. Even so, those remaining are not guaranteed success, and from previous years' entries and results it appears that only about 60 per cent. of full-time students complete their training successfully (some withdraw and others fail to pass their exams.

Accepting 60 per cent. as the success rate, we find that the full-time centres as a whole are likely to produce the following numbers.

Year.				Successful candidate
1953				667
1954				600
1955				548
1956				582

over 1,600 candidates for the finals—more than three times the pre-war average. The pass rate was, however, considerably lower than in pre-war days, averaging only 28 per cent. for the whole examination and 8 per cent. for one or other part of it. In 1951 there were nearly 450 successful external students, compared with 190 in

Professor Bowen has indicated in an earlier article that there is little or no sign of any reduction in the numbers of evening and part-time students studying at MOE centres. We can expect, therefore, that over 1,000 students are likely to present themselves to the examiners during the next few years. Thus it would not be unreasonable to expect that at least 300 (and possibly more) candidates will be successful in each of the years under review.

The Royal Gold Medal was presented to Le Corbusier at the RIBA headquarters last week. His witty speech is printed below.

### RIBA

### Le Corbusier accepts Royal Gold Medal

### Le Corbusier :-

I offer my thanks to Her Majesty the Queen, who has been good enough to honour me in a way which moves me deeply and of which I am deeply appreciative.

I have listened with interest to the speeches which have been made, and I am conscious of the kindness shown to me in doing me this great honour. I wish to admit, what I think that you have recognized, that it is always the human being, Man, that I have sought to study, not as a professional architect but as a discoverer, and also as a traditionalist. I have always had my feet in the past, and my head in the past too. My roots are in the past, though not in the Dark Ages of the academies. At the same time, I have tried to take a step towards the future. It has been my object always to be simple and direct, to be both an engineer and a poet.

After all the flowers which have been showered on me, I should like to try to show you another aspect of Le Corbusier, Le Corbusier as a cheval de fiacre. If tonight I am wearing this magnificent medal, it is because I was a cheval de fiacre for more than forty years. During all that time I worked for all the days that God made, and often in the evenings as well, with one aim in view, to follow the truth and let my conscience be the judge of whether my work was good.

Before you presented me with all these bouquets I received, like a true cheval de fiacre, many blows with a whip, but this did not alter my outlook or change my aims. I should like to tell you something about what happened to me, because it will perhaps show you at what a price one can, perhaps, succeed in making something of one's life.

In all my life of more than sixty years I have really only had one client, and that was for the Unite d'Habitation at Marseilles. I was asked "Will you make a great building for these people?" and I replied "Yes, on one condition, that I am not to be bound by any rules." They agreed, and so I started work on this building, which embodies a great many of my pro-

posals for the modern town, the town of today. I was governed by the cosmic laws of space, by my respect and admiration for nature, by the needs of the family and the recognition of the home as the fundamental unit of society and the hearth as the centre of the home. My work there has its roots in the past, in the Grande Chartreuse, which for fifty years has appealed to me by its harmony and its perfect association of the individual and the collective.

### "MAGNIFICENT" MARSEILLES

That is the positive part of what I have done. I have created something at Marseilles, as I realized when, on October 14 last, at 9 o'clock in the morning, I saw it completed and inhabited. There was general agreement that it was magnificent, and I was the first to say so. I always had confidence that it would prove to be so, in spite of all the attacks that were made upon it, and on October 14 of last year I realized that here was a new achievement, not of an architect but of the constructive spirit of our time.

Now let me tell you something which will show you that I am, after all, modest. I began in 1923, when I built a village at Pessac. For eight years this village remained uninhabited, because for eight years it was refused a water-supply, until in the end the Gov-ernment had to intervene. In 1925 I built the pavilion "L'Esprit Nouveau" at the Exhibition of Decorative Arts in Paris. It was the most hidden-away building in the whole exhibition, and came upon you, as you went round the exhibition, as a sudden apparition, as something wholly unexpected. The international jury wanted to give me a diploma of honour, but one of the best architects in France, himself a medallist, protested; he said, "Whatever it may be, it is not architecture." battle, you see, was already joined.

Then there was the competition for the new League of Nations building in Geneva. Twelve kilometres of plans were submitted, and I sent in about a hundred metres. That was not accepted, for reasons which I thought were a little short of abominable. That was followed by plans for the Centrosoyous building in Moscow, which were first of all accepted, but then they wanted a balcony on the facade, and in the end my proposals were dropped. I was asked to prepare plans for the Palace of the Soviets, and these were first of all accepted and then declined.

#### AMERICAN INFERIORITY

In 1935 I decided to go to America for a change of atmosphere, and there I found—you may not believe it, but it is true—Americans who were suffering at that time from an inferiority complex. A model of my design for the Palace of the Soviets was exhibited

—of all places!—at the Rockefeller Foundation in New York, where it aroused the admiration of young Americans. That model, two metres long, is in the museum of the Rockefeller Foundation. Another project on which I worked at that time was refused on the dual plea that it was revolutionary and out of date.

With some Brazilian architect friends I worked on plans for a Ministry building in Rio de Janeiro. That building was actually put up during the war. I found out that it had been through seeing an illustration of it in an English magazine, and I recognized it at once as our palace, put up six or seven years after we designed it.

Then came the reconstruction of France after the occupation. Everybody seemed to be working on this, and the Minister who was responsible said to me, "What are you reconstructing" I replied, "Nothing, Mr. Minister." He said, "Well, you built a town once. Why not reconstruct that?" He made inquiries from his staff, and they told him that all the work had been allotted to somebody or other, so he said, "Well, there is always La Rochelle. It is not destroyed at present, because the Germans are still there, but the Allied Armies are closing in, and in a fortnight it will be destroyed, and then you can rebuild it." Happily, however, it was not destroyed, and so I did not have to rebuild it.

I ought also to mention the town plan for Algiers. Over a period of years I made a number of plans without any fee for a new town, and people said, 'If it could come true it would be marvellous," but it did not come true. Algiers was the last of such plans. I made a plan for Barcelona which was accepted by everybody, but then the revolution came. I made a plan for Stockholm, but they said that they recognised the hand of the author, and it was put on one side. There was a plan for the left bank of Antwerp in 1933. In 1938 I did a plan for Buenos Aires, but seven years later one of the Ministers said, "If we bring in Corbusier, it will seem to show that we can't do it ourselves." A plan for Bogota was accepted, but then there was a political revolution.

All that represents the work of a cheval de fiacre. It meant a vast amount of work by head and hand and collaboration with large numbers of people. My plan for La Rochelle, which was a good plan, was silently put aside; I was not called on to do anything, and the town was reconstructed on other lines. At St. Die, which I was asked to rebuild, people said, "Are you going to make us live in huge barracks?" and everybody, from the bourgeoisie to the workers, rejected the idea. That shows you a little of the nature of the work which I have accomplished during my career.

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### TENDERING

### Investigation by Monopolies Commission

The Monopolies Commission is to investigate

Builders Conference.

Mr. Thorneycroft, President of the Board
of Trade, gives in a Parliamentary written
reply the full reference, which relates to the supply of new buildings costing more than £1,000 in the administrative counties of London and Middlesex, and adjoining parts of Essex, Hertfordshire, Kent, and Surrey. The commission is instructed to investigate and report on:

Whether conditions to which the Monopolies and Restrictive Practices Act applies in fact prevail.

If so, whether either or both of the following things are done by the parties concerned as a result of or for the purpose of preserving those conditions—(a) communicating to a person other than the person calling for tenders for the construction of a building the amount of any proposed tender for such construction in accordance with any agree-

ment or arrangement so to communicate; (b) adjusting the amount of any proposed tender for the construction of a building in accordance with any agreement or arrangement between the proposed tenderer and any person other than the person calling for tenders for such construction.

If so, whether either or both of those things operate or may be expected to operate against the public interest.

### CRAWLEY

### Building Progress: Report by Sir Thomas Bennett

By the end of March 1,640 dwellings, grouped in three neighbourhoods, were in use at Crawley.

This was announced recently Thomas Bennett, chairman of the Crawley Development Corporation, when he made his annual report to a meeting of elected representatives. This report contained the

representatives. This report community following information:—

The population of Crawley is now over 15,000. It is hoped that 2,500 houses will have been completed by the end of the year. As the three-bedroom type of house in the most popular, the Corporation's year. As the three-bedroom type of hearis the most popular, the Corporation's
building programme has been adjusted as
follows. Four per cent. of one-bedroom
houses, 15 per cent. of two-bedroom houses,
75 per cent. of three-bedroom houses, and 1 per
cent. of four-bedroom houses, and 1 per
cent. of five-bedroom houses. There is a great demand for living rooms that are sub-divided, especially where there are children. A separate kitchen boiler for heating the hot water and warming the kitchen is proving popular. Staircases leading directly from living rooms are not liked, nor are communications between kitchen and front door through the living room. Twenty-five houses are being built for sale

freehold at prices between £3,000 and £3,800. These houses, of which 30 have already been built, will have three or four bedrooms, and all will have garages. 549 garages have been built or are under con-

struction.

There are sixteen factories in production, covering an area of 368,000 sq. ft. and employing 1,380 people. Another twelve factories are being built. Three churches are under construction. One school, accommodating 600 pupils, and two temporary schools, accommodating 280 pupils, have been completed; four schools, with accommodation for 1,810 pupils, are under construction. Seven shops have been completed, and twelve are being built, and work has and twelve are being built, and work has commenced on the town centre, which is to consist of twenty-four shops and a restaurant.



Left, a prestressed concrete bridge over the Heddon River Hunter's Inn, Lynton, Devon, designed by the County Engineers' Department. This bridge replaces one of ten washed out in the floods last year. The new bridge has a span of 40 ft. Construction is of hollow concrete trough units which have been placed end to end and prestressed by the Freyssinet system.



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Readers will have learnt from last week's JOURNAL that the contemporary room had the most votes in the DIA's recent "Compare and Choose" poll on Charing Cross Station. Pictures are published here to show out-oftown readers that the room voted best by most people really was contemporary, and that the other room was exactly the sort of room that is generally regarded as "what the public wants." It seems that the furniture trade may have to start changing its ideas.

### DIARY

Some Timber Problems Answered. R. P. Woods. At the BC, 26, Store Street, W.C.I. 7.30 p.m. APRIL 10 7.30 p.m. Mural Paintings Exhibition at the RIBA, 66, Portland Place, W.1. Weekdays, 10 a.m. 7 p.m.; Saturdays until 5 p.m.

APRIL 10-MAY 2

Tour of Harlow New Town. Starting from ICA, 17-18, Dover Street, W.1. 9.30 a.m.

Work of Ernest Newton. R. E. Enthoven. Library Group meeting at the RIBA, 66, Portland Place, W.1. 6 p.m. APRIL 13 APRIL 13 Modern Housing Construction. R. W. Wates. At the RICS, 12, Great George Street, S.W.1. 5.30 p.m. April 13 Discussion on Harlow New Town. At the Institute of Education Assembly Hall. North Entrance, Malet Street, London, W.C.1. (Sponsor: ICA.) 8 p.m. APRIL 15

Architecture and the Decorative Arts. Sir Hugh Casson. At CVE, 13, Suffolk Street, S.W.1. 2.15 p.m. April 15

Quantities and Qualities. Richard Sheppard. At the RICS, 12, Great George Street, S.W.1. 6 p.m. APRIL 15 Annual Reception. At the AA, 34-36, Bedford Square, W.C.1. 8.30 p.m.

Economy in the Use of Structural Materials. G. A. Gardner, R. Morton and L. P. Creasy At the ISE, 11, Upper Belgrave Street, S.W.l.

The Unknown Political Prisoner. Exhibition of prize-winning entries and runners-up. At the Tate Gallery, Millbank, S.W.1. Week-days 10 a.m.-6 p.m.; Sundays, 2 p.m.-6 p.m. UNTIL APRIL 30

### BUILDINGS IN THE NEWS



Exhibition Pavilion at Bulawayo, Southern Rhodesia

Above, the Tanganyika Pavilion at the Rhodes Centenary Exhibition, which is to be opened at Bulawayo, Southern Rhodesia, on May 30. The pavilion was designed in the Public Works Department, Tanganyika.

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6 p.m. PRIL 30



### YWCA National Headquarters and Hostel in London

Right, the reception lounge, and below right, the chapel in the YWCA national head-quarters and hostel, Bedford House, Baker Street, W.1. The house was formerly the town mansion of the Dukes of Bedford. The conversion was by Peter Goodridge. The hostel contains accommodation for 130 women. The cost of all buildings, purchase of the lease, conversion, modernization and new equipment was £80,000. (The cost of a new hostel with similar accommodation would have been £130,000.)





Vehicle Assembly Shop at Coventry

Above, the new vehicle assembly shop for the Daimler Co. Ltd. at Coventry (designed by Wood and Kendrick and Williams), which replaces the assembly shop destroyed by enemy action in 1940-41. The cost was approximately 31s. 4d. per sq. ft.



Flats at Hammersmith

Above, a block of flats in Tunis Road, Hammersmith, W.12, designed by the Borough Engineer's Department; architect in charge, C. S. Bevan. There are sixteen flats with an average floor area of 741 sq. ft. Cost of building was £31,985.



### Air Terminus at Manchester

Above, the main traffic hall at Manchester (Ringway) Airport, formerly the airmen's mess of an RAF station designed by Norman and Dawbarn. The outline scheme for conversion to a terminal building was prepared by Bernard Fellowes, chief architect of the Ministry of Civil Aviation, and developed and elaborated by Leonard C. Howitt, Manchester's city architect. The cost of conversion was £19,527; furnishings, carpets, curtains, etc., cost £11,838.

### SHOWROOMS

### AND OFFICES

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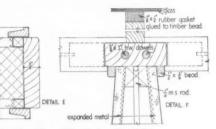
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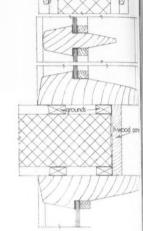


Offices and showrooms for Messrs. Dick and Goldschmidt, Ltd., have been redesigned by J. M. Austin-Smith and Partner. The clients, who originally occupied the ground floor and basement of the building, recently acquired the top floor—also for use as offices. Part of the warehouse on the ground floor has been converted to showrooms, as seen in the photographs above and below. The photograph top, opposite, shows the entrance and enquiry desk. On the top floor, four directors' rooms, which overlook the street, are divided from the main office area, seen in the photograph, bottom, opposite, by a sound-proof





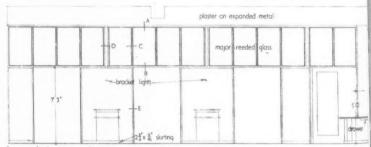
Details at E and F [Scale: 3' = 1' 0']



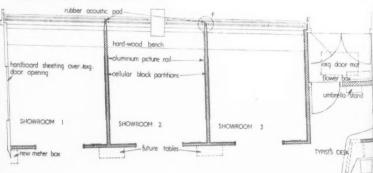
Details at A, B, C, and D

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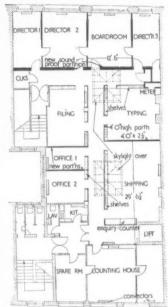
Internal elevation of new screen



Plan of ground floor showrooms [Scale: \frac{1}{2}" = 1' 0"]

partition (see Working Detail in the JOURNAL, December 12, 1952). For the outer office it was found impossible to fit a satisfactory working plan to the position of the existing skylights if full-height partitions were used, so 4-ft. high STREET, LONDON, W.1 |





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Plan of third floor [Scale: 34" = 1'0"]

partitions are used. Under these low partitions are shelves and radiators. General contractors, Hall, Beddall & Co., Ltd. For sub-contractors, see page 474.



One section of the British Sociological Association's 1953 Conference, held recently at Queen Elizabeth College, Kensington, dealt with "Design and Planning-Buildings, Towns and Countryside". Extracts from three of the papers circulated in advance to members of the conference are published below.

### PLANNING

### Sir William Holford, R. Gardner-Medwin and John Madge

Sir William Holford:-

Particular plans are made for a variety of special reasons. The incentives run the whole gamut of human emotions, including at least four of the Seven Deadly Sins. Going round some recent high-density housing in a city of the USA, I was told by the responsible official: "These apartment blocks could never have gone through the city council, if we hadn't named them after certain of the councillors." In another after certain of the councillors." In another instance, in this country, every point of importance in the development of a Borough (where one local authority was the planning authority and the other the housing authority) was judged on the basis of simple contradiction. If the County proposed it, the Borough automatically went into opposition, and vice versa. The general lines and broad intentions of a plan can be worked out, given a sufficient period of time. But to do this successfully, there must be some fixed points, some predictable situations which will permit the planning process to become effective. At the moment so much is in a state of flux. In the first place, there is seldom any policy decision as to whether a particular planning

decision as to whether a particular planning decision as to whether a particular planning procedure (e.g., consultative planning, straight-forward programming or the operation of statutory provisions) is going to be useful for a particular situation. This is the first point at which the sociologist should have something to say.

Secondly, where the need for planning is taken for granted or is imposed by statute, there is a measure of public agreement as to what should be escaped or avoided, but very little agreement on the positive purposes of the plan. "The idea of a purposive policy of town and country planning," says the Schuster Report, "has been forced on the nation by the mess resulting from unplanned development since the from unplanned development since the Itom unplanned development since the Industrial Revolution. 'Si argumentum requiris circumspice' has been and remains the most effective answer to those who question the necessity for a positive planning policy." ning policy."

I think it is fair to say that the mess was

I think it is fair to say that the mess was largely made by people who knew what they wanted and got it without too much scruple for the public interest and without a co-ordinating agency. Now planning has been accepted—both officially and in the minds of a majority of people—as the way out of chaos. And the maiority of people are only beginning to know (a) what they want, and (b) what they can have. Here

again the sociologist and the planning technician should have something to say.

Thirdly, in the routine application of the Thirdly, in the routine application of the new planning system to a wide variety of different problems in this country, the very terms used in the Planning Acts, Regulations and Circulars, such as "amenity," "flexible planning," "sound planning," balanced communities," "decentralization," and "high density," require elucidation as to their social as well as their territorial implications.

Fourthly, or perhaps I should say concurrently, the methods and the influences of actual planning operations require testing. This will take time, and can hardly be of value in the present period of plan-making. But before the quinquennial revisions of the new Development Plans are subjected to new Development Plans are subjected to Public Enquiry and to assessment by the Minister, it would be of the utmost value to have a body of case histories, objectively written and constructively critical in tone, which would give some real guidance, to administrators and technicians alike, on what can be achieved, at what cost, and with what social effects.

A beginning in producing case studies, at least of the planning operations themselves—that is, of the approach to planning and of the methods used for this work—has been made by the Social Research Unit which Mrs. Ruth Glass directs on behalf of my Department at University College, London. The ideas and functions of several local planning authorities, both of the officers and members, have been examined: the prinmembers, have been examined: the principles behind the plan, plan-making and development control. The preliminary results of these studies indicate that the word "planning" is perhaps not always appropriately applied to the work that is being done. Various activities are called by that name—the drafting of maps and of building programmes, and the administration of statutory provisions. The justification of the whole process however—the tion of statutory provisions. The justifica-tion of the whole process, however—the consideration of planning purposes—tends to consideration of planning purposes—tends to be rather neglected. Just because planning policy, like sociology, is everybody's concern, it is nobody's job. The positive purposes of planning, especially, remain conflicting and vague. The two main themes—preservation and development—tend to be confused with one another, and the criteria by which to judge what should be changed or preserved, and how this should be done. or preserved, and how this should be done, or preserved, and how this should be done, are rarely stated explicitly. And, of course, strategy cannot be developed as long as the objectives are ill-defined. Our own results show that the uncertainty of the approach to planning is reflected in the organization of the work: examples of "unplanned" planning departments can only too easily be found. In the light of current experience there are therefore, many questions of ence there are, therefore, many questions of organization which have to be reconsidered: organization which have to be reconsidered: the range of skills and knowledge needed for the various stages of the work; the difficulties of communication between different specialists and between technicians and administrators; division of labour, social relations inside a planning department and those between the planners and the "public."

### R. Gardner-Medwin:-

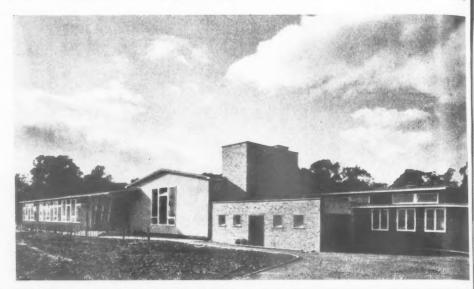
I believe that the framework we have evolved for housing and community planning evolved for housing and community planning is fundamentally sound and workable, but at many stages it fails to solve the problems satisfactorily when we have our essential social basis in mind. Let us consider some of the stages in our "development planning under the 1947 Planning Act and the accompanying New Towns Act.

1. We work on the principle that every housing area must fit into a comprehensive development plan based on a survey of social and technical need. Excellent. But how

### PREFABRICATED TIMBER SCHOOL FROM AUSTRIA AT

Dycorts Infants' School, on the LCC Estate at Harold Hill, was designed by H. Conolly, County Architect, Denis Senior, Deputy County Architect, W. C. B. Smith, Assistant County Architect, and M. Mc.P. Crammond, assistant archi-Right, from the south-east, the end wall of the assembly hall can be seen to the left of the tank tower. Centre right is the dining space and servery; centre left, the assembly hall. Below, a general view from the south-west. Centre, opposite page, the kitchen and, bottom, the main entrance and the southwest classroom wing. Owing to the urgent need for school places on this

rapidly growing estate, it was decided to erect a school of prefabricated timber components. These components were made in Austria to details supplied by the County Architect. After fabrication they were shipped to this country in ferry trucks and unloaded at Harold Hill station for transporting to the site. There are three blocks, each containing three classrooms







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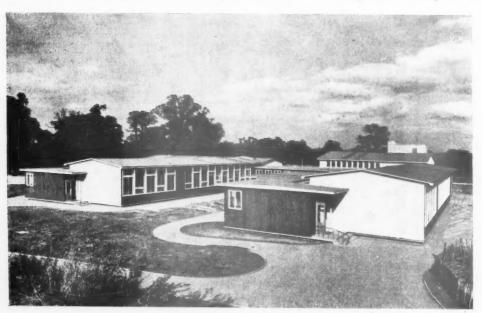
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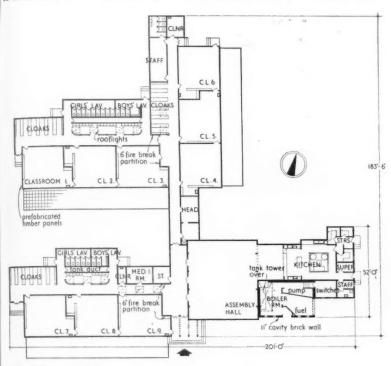
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and cloakrooms and lavatories, planned on a 5-ft. grid. The floor space provided per place is 44 sq. ft. The assembly hall has a dining recess with servery into the kitchen. To ease the erection of units a slab was built above ground level, resting on ground beams supported by mass concrete piers which penetrate the clay below shrinkage level. This slab is cantilevered over

the ground beams to prevent damp rising. All external wall units are insulated with aluminium foil, insulation board and felt, with close boarding inside and Vjointed vertical boarding or lightweight building slabs made of wood shavings and magnesite cement outside. The exterior of the assembly hall and classroom gable ends have a tyrolean finish, and London stock bricks are used for the boiler house and tank tower. Roofs are formed of 10-deg. trusses,



HAROLD HILL, ROMFORD, ESSEX



Plan [Scale : 1'8" = 1'0"]

purlins and ceiling joists and finished with roof boarding and felt. The total cost of the buildings was £54,850 (net cost per place £139). The quantity surveyors were F. C. Harris & Partners. The general contractors were Thermo-Insulated Units, Ltd., and Dowsett Engineering Construction, Ltd. For sub-contractors, see page 474.





socially sound are these surveys? Is the technique of assessment and interpretation understood? For instance, are assumptions on journey-to-work based on ad hoc measurements or on sound social criteria? Are density determinations, proportions of houses and flats, etc., based on the bias of members of council or on sound statistics of family structure and family choice?

2. We design our housing estates in terms of "neighbourhood units." Good social policy, but is the theory over-simplified, or blindly applied in areas where the principle is irrelevant? What are our criteria of size? Have we the right balance between journey-to-school, size of school, distribution of types of schools and playgrounds? Are we guessing on the distribution of shops? Do we understand the real social requirements of a "neighbourhood," as opposed to technical devices—such as planning the neighbourhood within main traffic routes, the housing sites within economic drainage areas, etc.

3. We plan New Towns as part of a planned decentralization policy, or to form the centres of new industrial developments. Good regional planning. But are we getting the best social and æsthetic results? Are we taking full advantage of the opportunities for combined social and technical experiment in these towns? Are they really being studied as yardsticks for future policy in community planning?

4. Housing standards are studied by new committees; new pamphlets suggest ingenious new "space-saving" solutions. But are these based on a sufficiently comprehensive study of the use of house space and house equipment?

The answers to most of these questions are far from satisfactory if applied to the country at large, though there are isolated cases where some excellent work is being done to put community design on a sound footing. But in our central and local authorities "research" is suspect and is seldom regarded as a priority in the financial lists.

Even the New Towns Corporations (who have plenty of encouraging reasons for doing intelligent research, even if they are financially controlled by the central authorities) have not come up to expectations. Social-technical collaboration for experimental development was at the root of the idea when these new communities were founded. But now Peterlee has decided that a social adviser is an unnecessary luxury, and East Kilbride in Scotland, while recognizing, in the early stages, the value of a specialist in landscape architecture, has never employed a sociologist, or thought it worth while to maintain a social survey of its development. They do employ, however, an Industrial Development Research Officer, which is an improvement on most of the English new towns.

What we need very badly at present is a widespread social-technical survey into how some of our post-war houses are being used, with a view to an economic assessment of the various types. This should precede an equally thorough investigation of factory methods for producing carefully designed units appropriate for the right types of houses.

But our problem is to convince Civil Service administrators and Treasury officials that investment in work of this kind is not only socially desirable (this, of course, is never argument enough!) but also economically advantageous to the country's economy.

### John Madge:-

Year after year, extremely costly decisions have to be taken on issues which we believe would benefit from the searchlight of social science. On an extremely small scale the help of social scientists is evoked, and some-

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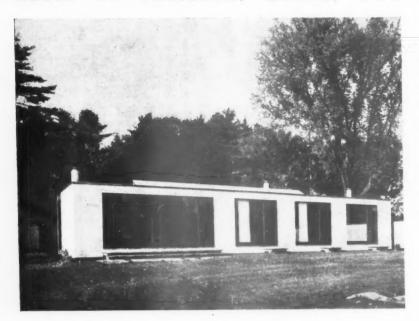
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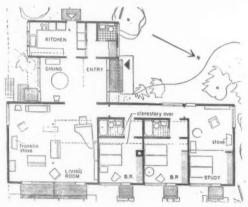
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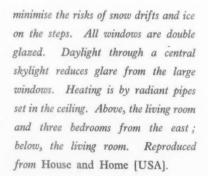
### HOUSE AT PORTLAND, MAINE, USA



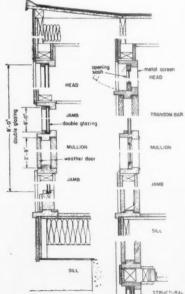
This house at Portland, Maine, USA, was designed by Serge Chermayeff. The whole house is cantilevered out 12 in. from the foundations. All exterior doors have open oak slat steps. These two devices are intended to cater for variations in snow level and to



Detail through bedroom walls



Ground floor plan [Scale: 14" = 1'0"]





times even then their advice, rather than being used constructively, is filed away as an insurance against any possible awkward questions that might arise. In contrast with the almost embarrassing faith in the social sciences displayed today by the American public, in this country the spiral has hardly broken outwards.

What can be done about it in the field of

What can be done about it in the field of building and physical planning. So far the method used by would-be investigators has predominantly been the method of the massinterview. In my view, this technique has been adopted without sufficient criticism of the methodological flaws that have to be accepted with it. Apart from the possibilities of deception and distortion in the course of data collection, the docile acceptance of statistical results can be very misleading. Take an example: a survey suggests that you increase the proportion of satisfied people by increasing the size of certain rooms. At first sight this seems such a self-evident result that no further examination is required. But a review of the manner in which the conclusion was reached shows that other interpretations of the same data are almost as reasonable. The method used was to relate the known size of a room to the proportion of informants who declared themselves satisfied with it. But let us suppose, as is in general true, that the rooms of modern low-cost houses were bigger than those in comparable inter-war houses, and that the occupants of post-war houses were in a particularly satisfied frame of mind because their new homes had rescued them from squalor and congestion. In this case there lies an intervening variable which may, for all we know, swamp the more elementary function of floor area.

This is only one example of a fact that is fundamental to empirical logic, namely that observation and surveys can provide information and hypotheses but cannot confirm theories. In science there is no substitute for experiment. It is the duty of the social scientist to put his theories at the mercy of an experiment if he possibly can. Many people say that he cannot, and so they console themselves with inferior forms of proof. I believe that they are at once too complacent and too pessimistic, because as well as being necessary, the social experiment is perfectly possible and is, in fact, almost

happening every day.

What we have to wipe from our minds is the idea that an experiment in the social sciences should look like one or another of the types of experiment that the other sciences have developed. We have a mental picture of a chemist testing the properties of some new product, or of the behaviourist psychologist trying tricks on some rats in a maze, and we try to think up neat controllable situations in which we could similarly test the theories of social science. But oddly enough the more we try to be, like natural scientists, detached and objective observers, the less scientific we do in fact become. What distinguishes experiments with people from experiments with things is that we experimenters are people, too, and will only fully understand what is happening if we come down from our pedestals on to the floor and actually become part of the experiments in the social sciences that have so far been conducted this is what has to a large extent taken place. The principle of participation, and moreover of participation under real-life conditions, is inescapable. In this version, the important function of the social scientist is not to make a record of strange habits so much as to guide the experimental group towards clarifying their own objectives and, with clarification, to lead them towards attaining these objectives. We thus observe that the social scientis scientist

We thus observe that the social scientist has a dual function to perform. He can contribute not only to the devising of plans that fit the needs of people, but also to the equally tricky process of fitting people into plans.

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The Architects' Journal for April 9, 1953 [459

SHOP

in St. GEORGE'S STREET, CANTERBURY, KENT designed by ELLIS E. SOMAKE, staff architect to the DOLCIS SHOE CO.

assistant architect, GEOFFREY UFFINDELL consulting structural engineer, MALCOLM GLOVER quantity surveyors, GARDINER and THEOBALD

This new store has been rebuilt on the same site as the original Dolcis shop, which suffered a direct hit during the war. After the war the authorities took advantage of the devastation to widen St. George's Street at this point and a site of 48-ft. frontage and 80-ft. depth was allocated to the company's use. On the ground floor, 33 ft. of the frontage is being used by Messrs. Dolcis and the remaining 15 ft. is let to another retailer. The first and second floors are used as offices, with a separate entrance.

View from the south across St. George's Street.



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brick elevations approved in the case of other buildings in the street. On the south-east elevation the main facing material is ribbed Mount Sorrel granite precast stone panels. The staff rooms at mezzanine level, to the rear of the building are faced with panels of deep red tyrolean finish The insignia of the company is incorporated as part of the design on the front and rear elevations in place of the more usual fascia panel. The shop front has show windows framed in light drawn bronze sections, in contrast to the building mass above.

SERVICES.—Heating is by means of a low pressure gas-fired central heating system, with pump circulation. The system is thermostatically and clock controlled and is completely automatic.

The general contractors were G. H. Denne & Son, Ltd. (for the structure) and Courtney, Pope Ltd. (for shop fitting). For sub-contractors see page 474.

#### SHOP

in ST. GEORGE'S STREET, CANTERBURY, KENT designed by ELLIS E. SOMAKE

PLAN.-The shoe store, which is 80 ft. deep, is entered through a deep lobby from St. George's Street. The offices and staff accommodation on the upper floors are reached by a separate entrance facing a side road. The boiler house is at roof level. A new system of fitting children's shoes has been introduced-a row of raised seats, fitted with straps, on a special platform, so that assistants may fit shoes without using fitting stools.

CONSTRUCTION.—The frame is of reinforced concrete with 11-in. cavity panel walls. On the south-east elevation there is a screen wall of knapped flint at ground floor level, echoing the colour and texture of the tower of St. George's Church, 100 yards away.

FINISHES.—The south-west elevation is faced with 23 in. High Broom bricks, in keeping with





#### FURNITURE AND FITTINGS: 33

#### WORKING DETAIL

EXECUTIVE'S DESK: OFFICES IN LONDON, W.1

Robin Day, designer; Michael Rosenauer, architect to the building; Sir Hugh Casson (in association with Misha Black of Design Research Unit), interior designer



The desk is veneered in straightgrained walnut and the blockboard top is covered in leathercloth and ash veneer

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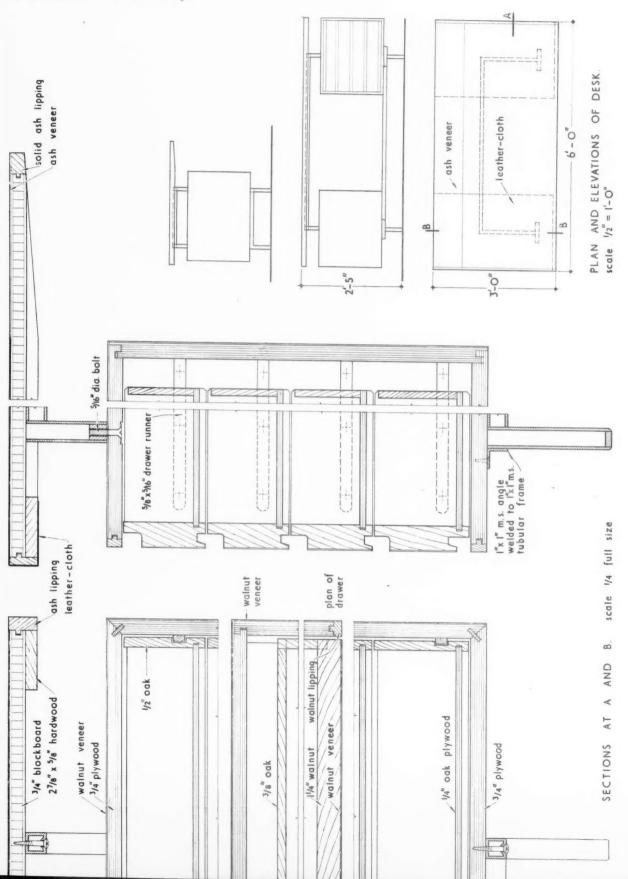
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#### WORKING DETAIL

EXECUTIVE'S DESK: OFFICES IN LONDON, W.1

Robin Day, designer; Michael Rosenauer, architect to the building; Sir Hugh Casson (in association with Misha Black of Design Research Unit), interior designer



#### WORKING DETAIL

ROOFS AND CEILINGS:8

ASSEMBLY HALL CEILING : TECHNICAL COLLEGE AT HATFIELD

Easton and Robertson, architects

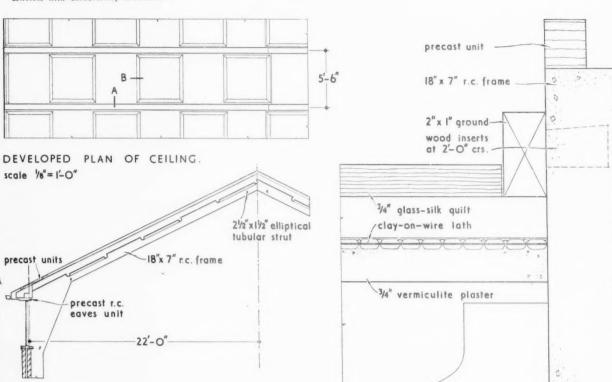


The ceiling is formed from vermiculte plaster on clay-on-wire lath, each moulded panel having a surface of acoustic felt

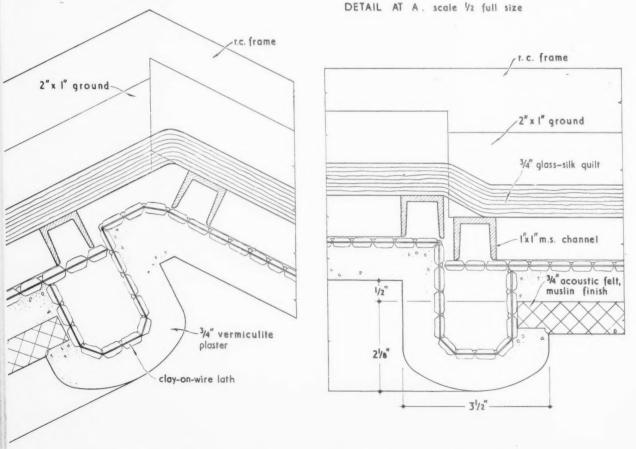
#### WORKING DETAIL

ASSEMBLY HALL, CEILING: TECHNICAL COLLEGE AT HATFIELD

Easton and Robertson, architects



DETAIL AT A soul to the control of t

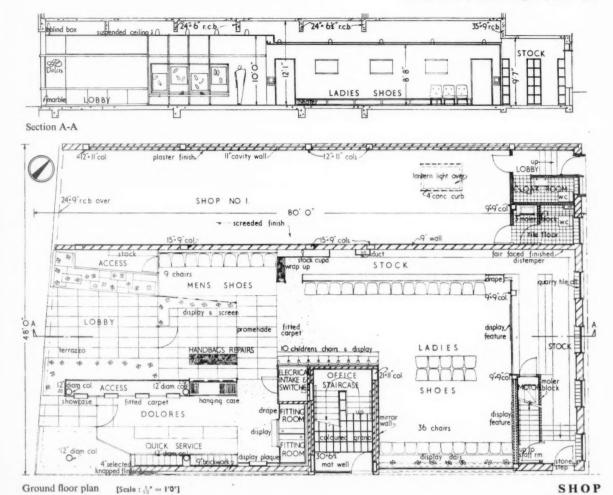


DETAIL AT RIDGE. scale 1/2 full size

SECTION THROUGH ROOF. scale 1/8"= 1'-0"







in ST. GEORGE'S STREET, CANTERBURY, KENT designed by ELLIS E. SOMAKE

The main entrance from St. George's Street.



#### **FACTORY**

at HARLOW NEW TOWN, ESSEX

designed by FREDERICK GIBBERD, architect-planner, Harlow Development Corporation

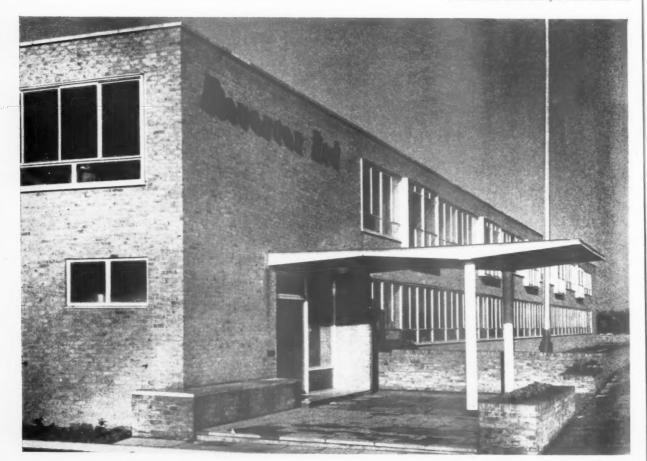
VICTOR HAMNETT, executive architect, G. T. GOALEN, senior architect

reinforced concrete consultant, O. W. GILMOUR, Chief Engineer to the Corporation

quantity surveyor, OSWALD E. PARRATT

The site of this factory for Revertex Ltd. was originally allocated to two standard factories of 20,000 sq. ft. each and is  $1 \cdot 6$  acres in area. The eastern boundary of the site faces one of the secondary roads of the industrial estate and the Corporation requires that wherever possible the main frontage of a factory site should be developed with a two-storey office block, as seen in the photograph below.

The administrative block from the south-east.



Right, main from the hall. is of patent gated

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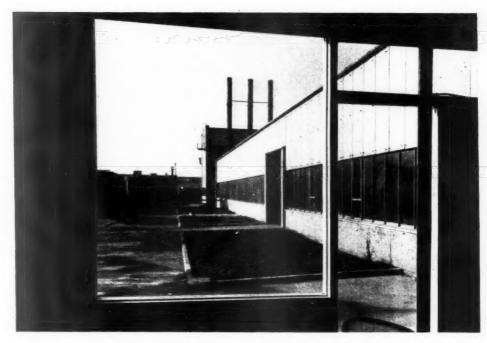
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Right, the south wall of the main production area seen from the office block entrance hall. The wall cladding is of London stock bricks, patent glazing and corrugated asbestos cement sheeting.

built up roofing

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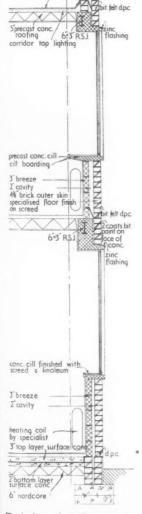
ory

-east.

SITE.—A service road designed to give rear access to a terrace of sectional factories adjoins the south boundary. To the north of the site the ground is reserved for a future extension. The sub-soil is generally gravel, with an area of soft clay near the west boundary. The ground slopes sharply from east to west.

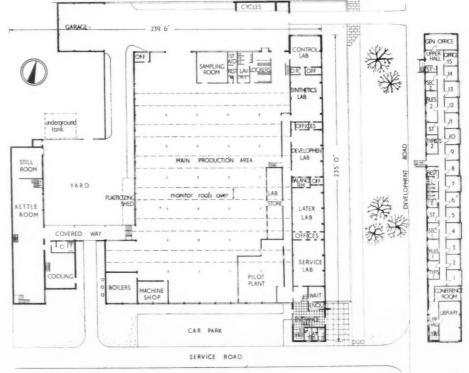
PLAN.—Two quite separate types of production had to be accommodated; the manufacture of syn-

thetic resins and the compounding of rubber latex. The raw materials used in the former process are highly inflammable, and it was desirable that the "kettles" in which this process is carried out should be in a separate building, linked by covered way to the main block. However, since it was the wish of the clients and the Corporation that special-purpose buildings should be kept to a minimum and a standard type of factory construction used wherever possible, a scheme was devised consisting

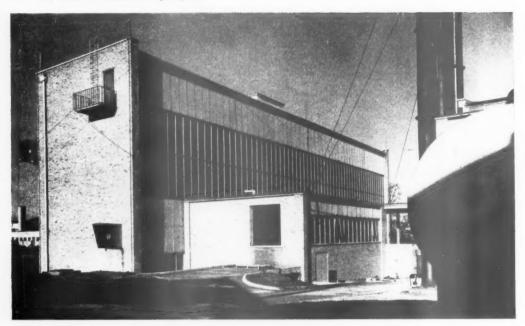


Typical section through east wall of office block E

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



Ground and first floor plans [Scale: 4" = 1'0"]



Left, the "kettle" room, used for the manufacture of synthetic resins, seen from south-east. Below left, the main working floor of the "kettle" room, which consists of a high level gallery with a chequer plate floor.

KETTLE ROOM

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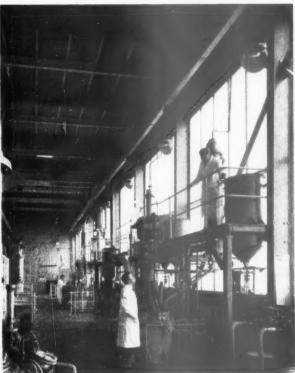
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blocks to sill height, vertical patent glazing and above this asbestos cement sheeting; the "kettle" room has north and south walls of brick and flanking walls of patent glazing and asbestos cement sheeting.

framed; the two-storey block has brick panel

walls and precast concrete floor and roof; the main

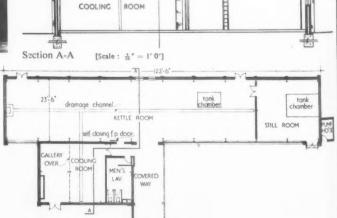
factory building has cavity walls of brick and clay

#### FACTORY

at HARLOW NEW TOWN, ESSEX
designed by FREDERICK GIBBERD
architect-planner, Harlow Development Corporation

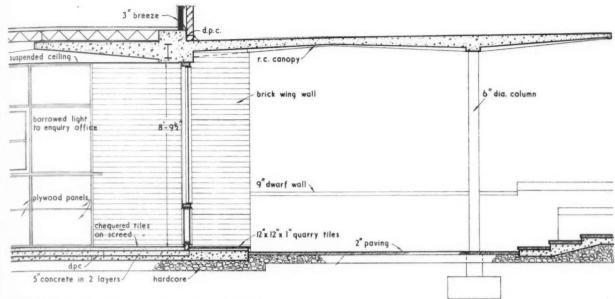
of two main buildings: a "kettle" room, and a standard factory and office block. The office block also contains a number of laboratories on the ground floor, with easy access to the main production area.

CONSTRUCTION .- All three blocks are steel-



[Scale: ½" = 1'0"]

Plan of "kettle" room

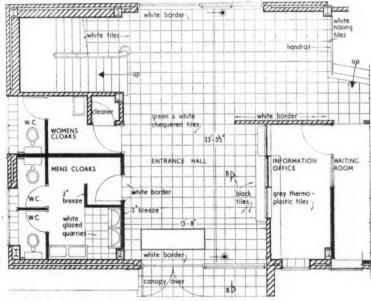


Section B-B through entrance and canopy [Scale: \ \"= 1' 0"]

FINISHES.—The roof of the office block is insulated with vermiculite concrete screed and covered with three layers of bitumen felt; the flat roof of the main production area and the sloping roofs to monitors consist of wood-wool slabs in 7 ft. and 6 ft. lengths, supported on channels, screeded and finished with felt; the "kettle" room roof is of precast concrete tiles on steel tees with similar finish. All facing bricks are London stocks. The office block has window surrounds of artificial Portland stone. Private offices on the first floor have large picture windows. Windows are painted white, with light grey steel mullions.

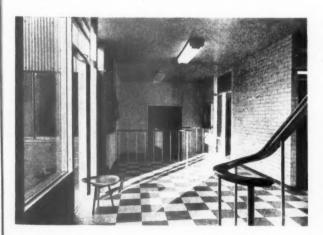
SERVICES.—Since large quantities of steam were required in the production it was decided to heat the main building by steam unit heaters; calorifiers supply low pressure hot water to office radiators.

The general contractors were Rush & Tompkins Ltd. For sub-contractors see page 474.



Plan of office entrance [Scale: \" = 1'0"]

Below, the reinforced concrete canopy over the office entrance. Below left, entrance hall.

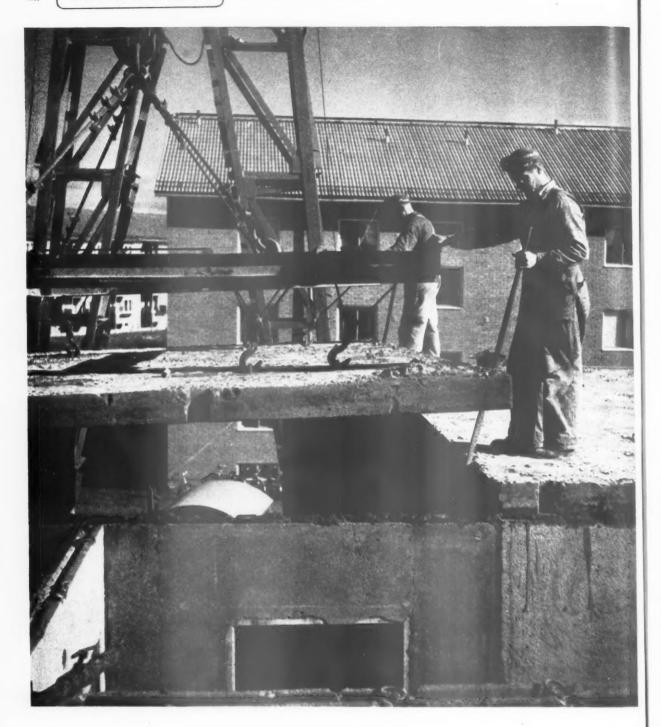




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#### Building With Large Units

New techniques in building need not ape the motor car industry, and in the Swedish building system described and illustrated on pages 469-471 (one stage of which is seen above—lowering a precast floor slab on to the precast wall units) the large building elements are not made in a central factory, with heavy overheads, but in an ad hoc "factory" on the site. This development is parallel to that which has produced the War Department housing described and illustrated in last week's JOURNAL. It resembles

it, too, in that the wall panels are "self-finished," needing no plastering. The use of these storey-height wall units and precast floor slabs up to about 150 sq. ft. in area raises the question, what is the optimum size for building elements? Judging by the success that this system of construction, and similar systems used in France and in the USSR (see JOURNAL for Sept. 13, 1951, and July 7, 1951, respectively), have achieved, the answer seems to be, elements larger than those usually used in this country.

1467

#### TECHNICAL SECTION

The value of the Codes of Practice published through the BSI is becoming increasingly recognized and the Codes are being used more and more for daily office reference. It is known, however, that in very few architects' offices is there anything like a comprehensive set of the Codes and we doubt whether many people are aware of the fact that as many as 86 Codes have been issued in their final form.

Unfortunately, many architects may have been deterred from purchasing the individual Codes because of their high price—a complete set, bought individually, would cost £16 18s. 6d. It is good news, therefore, that arrangements have now been made for the 86 Codes to be sold as a complete set at a price of £12. It is hoped that this may encourage more architects to purchase this most valuable reference series.

This raises the general problem of how all the new information and data pouring out of BSI, BRS, other branches of DSIR, MOW and the various trade development associations can best be disseminated. Only an architect very hard up for clients can possibly hope to read all the documents published by these organizations. Might short, but intensive, "refresher courses," at the main schools of architecture, be the solution?

This week's special feature

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## 13 MATERIALS: TIMBER the "new" hardwoods

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 each free year

In the MOW economy memorandum on the use of timber many suggestions were made regarding the substitution of hardwood for softwood, but no guidance was given as to which hardwoods would be suitable for the various purposes mentioned. In the short article below, Arthur Jones gives architects the information they need. He lists only materials that are reasonable in price, readily available and not excessively difficult to "work". His article is followed by a short feature giving the results of recent TDA's tests on notched timber beams.

In the MOW economy memorandum on the use of timber in building work\* 59 purposes are listed for which the use of softwood is forbidden, or allowed only in special circumstances. For no less than 46 of these purposes the Ministry suggests hardwood as an alternative to do the job and, as all hardwoods, except four North American species, can be used without any restriction, this would appear to offer the architect a suitable solution.

Since the end of the war Britain has been importing hundreds of species of hardwood, most of which were un known commercially before the war.

<sup>\*</sup> Use of Timber in all Building Work. MOW Economy Memoranda No. 4. (HMSO, 1952. 6d.)

This does not mean they have no value; in fact, some have earned themselves excellent reputations and will doubtless continue to be used even if and when softwoods are again available without licence

To help the architect in his choice of a suitable hardwood there is a useful publication of the Forest Products Research Laboratory—Hardwoods for Building and General Purposes.\* In this, scores of species are listed, and notes are given on their properties, but no indication is given as to their availability (which could vary from year to year) or their price-two factors of utmost importance to the architect.

In the schedule which forms the most important part of this article are listed most of the purposes for which the Ministry recommends the use of hardwood, together with suggestions as to

\* (HMSO, 1951, 1s. 3d.)

the species which are most suitable. Generally, the species recommended are the cheapest that will do the job, and those most likely to be readily available from timber merchants. This does not necessarily mean that these species are the best; nor does it mean that they are the only timbers which could be used. For example, teak, greenheart, jarrah or Burma paduak could be used in almost every case. but such strong, heavy timbers are too dear. (Teak would make wonderful fencing, but it would cost at least three times as much as some other timbers which are good enough for this purpose.) They do not appear, therefore, among the suggested species.

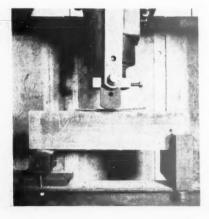
All the imported hardwoods listed are now available; all are reasonable to "work"; and most of them cost between about 16s. and £1 per cu. ft., except iroko (about 30s.). Ecuador and Chilean laurel, meranti, coigue, saraya and abura can be obtained for as little as 14s. or 15s. per cu. ft. For comparison, softwood is about 12s. per cu. ft. in qualities suitable for the purposes listed in the schedule.

Idigbo, agba, meranti (red and vellow), serava (red and white), afara and obeche have a certain tendency to brittleheart\* in large logs, while idigbo, sweet chestnut, oak and coigue react with ferrous metals when damp. other timbers mentioned are not liable to these defects.

For some of the jobs listed in the schedule, home grown hardwoods can, of course, be used, and they have been included in the schedule. Most of them are reasonable in price and carpenters and joiners are more acustomed to their use.

"A defect in which parts of the timber are harder and more brittle than the remainder

	SCHEDULE OF HARDWOOD	DS FOR USE IN BUILDING		
Purpose	Suggested Timbers	Purpose	Suggested Timbers	
Site pegs, supports to notice boards, shuttering and form- work	abura, agba, red or yellow meranti, red or white seraya, iequitiba.	External wall framing, boarding and barge boards	elm, jequitiba, oak, sweet chestnut, meranti, seraya.	
WOIK	jequinoa.	Lintels and exterior door frames	oak, iroko, meranti, seraya.	
Road forms and screed boards	idigbo, agba, nyankom, red or white seraya, red or yellow meranti.	Floor joists, strutting, purlins, ridges, hips, valleys and ceiling joists and roof boarding	abura, sapele, agba, gurjun keruing, idigbo, red or yellow meranti, seraya, ramin, krabak East African camphorwood idigbo, agba, meranti, seraya.	
Fencing and hoardings	sweet chestnut, elm, agba, abura, oak, beech (if treated), meranti, seraya.	Fascia boards and eaves soffits		
Shoring and strutting	idigbo.	Pipe casings and boards	agba, elm, idigbo, meranti, seraya.	
Sheeting of excavations and trenches	agba, elm, idigbo, Ecuador laurel, red or white seraya,	Window boards, reveals and door linings	abura, East African camphorwood, meranti, seraya.	
	red or yellow meranti.	Floor coverings	afara, afzelia, agba, beech, birch, muhuhu, muhimbi, gurjun, sapele, krabak, meranti, seraya, oak.  abura, afara, beech, ash, meranti seraya, obeche, coigue, oak.  yellow meranti, coigue, white seraya, sycamore.	
Piling	elm.			
External tank supports	idigbo, iroko, oak.	Skirtings, architraves and pic-		
Porches, cantilever hoods, can- opies	sapele, sweet chestnut, red or	ture rails		
	white seraya, red or yellow meranti.	Draining boards		



#### TDA TESTS ON NOTCHED TIMBER BEAMS

Horizontal shear is a prime consideration in any beam notched at its end, and a sharp re-entrant angle causes a concentration of stress at this point, so creating a potential weakness. Tests carried out recently by TDA to obtain information on the behaviour of notched beams when loaded to destruction have shown that some benefit can be obtained in beams notched to half their depth by boring a small hole at the re-entrant angle before the notch is cut. By boring a hole (\frac{1}{2} in. was used in this experiment, because it is a convenient size to drill by machine or hand on site), it is possible to avoid much of the potential weakness caused during the cut of the notch. The hole is drilled before the notch is cut, and the danger of the saw running past the shoulder of the notch (whether cut by hand or machine) is eliminated. Normally, no matter how carefully the notch is cut, it is difficult to avoid running past the shoulder, thus creating a point of weakness in the form of the start of a split. In theory, the larger the hole drilled the smaller is the concentration of stress at the re-entrant angle, but for obvious practical reasons the hole has to be kept small, particularly when cutting This system of boring in notched beams is particularly important in building today, when the natural tendency is to use the smallest size of timber compatible with safety. and SOFTWOODS

by PHOENIX of course!

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#### INFORMATION CENTRE

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

#### 10.103 design: building types RECENT SCHOOLS

School Buildings, 1945-51. Bruce Martin, (Crosby Lockwood & Son Ltd. 1952, 25s.) Apart from a very brief introduction and summary, this book consists of illustrations of 22 recent school buildings-12 from England, 4 American, 3 Swiss, 2 Swedish and one from Holland.

Each school is illustrated on 4 pp. in a standardized manner which makes comparistandardized manner which makes comparison simple. The first page gives basic information, on the second Mr. Martin has attempted to show the character of the building, on the third he lists the main building elements and shows their relationship by means of a plan and section through an outer wall. On the fourth page is illustrated the building system

an outer wall. On the fourth page is illustrated the building system.

Photographs are good and numerous and diagrams are clear. The amount of information given is enough only to give a general idea of each school and there is no critical analysis and no description of the reasons for choice of plan or system of construction. One can compare the different schools but it is difficult to draw any very useful con-clusions from the information given.

#### 13.104 materials : timber LAMINATED SHAPES

Laminated Shapes. (Aero Research Technical Notes. Bulletin No. 120. Dec. 1952.) Seven-pp, illustrated brochure on methods of producing bent timber shapes by laminating. Particularly applicable to furniture, but with some reference to large-scale work.

#### 18.122 construction: theory REINFORCED CONCRETE

Simple Examples of Reinforced Concrete Design. Oscar Faber. (Oxford University Press. 1952. 9s. 6d.)

Fourth edition of well-known book giving practical examples of the design of various concrete structures. 90 pp. 30 diagrams.

1 Sociology. 2 Planning: General. 3 Planning: Regional and National. 4 Planning: Urhan and Rural. 5 Planning: Public Utilities, 6 Planning: Social and Recreational. 7 Practice. 8 Surveying. Specification. 9 Design: General. 10 Design: Building Types. 11 Materials: General. 12 Materials: Miscellaneous. 11 Materials: Miscellaneous. 12 Materials: Miscellaneous. 13 Materials: Miscellaneous. 14 Construction: General. 18 Construction: Theory. 19 Construction: Details. 20 Construction: Complete Structures. 21 Construction: Complete Structures. 21 Construction: Complete Structures. 21 Construction: Complete Structures. 21 Construction: General. 12 Sundation. Acoustics. 23 Heating Ventilation. 24 Lighting. 25 Water Supply, Sanitation. 26 Services Equipment: Miscellaneous. 27 Furniture, Fittings, Supply, Sani Miscellaneous. Miscellaneous.

Dr. Faber, in the 1st edition of this book pointed out that its purpose was to help the beginner in reinforced concrete design to produce reasonable designs for simple struc-This sums it up fairly; there are many ways in which the experienced designer cuts down in his structure, but the principles he uses should not be given to the student to digest at an early stage in his studies.

digest at an early stage in his studies. The present edition has been revised in the light of CP 114: 1948 and Chapter V, 1952. Designs are given for a simple roof, a warehouse, circular and square tanks, a retaining wall and a water tower. The examples are clearly explained step by step and should be easy for the beginner to follow. The illustrations desirated water towers. illustrations depicting details of reinforce-ment in beams, etc., err generally in having too many hooks.

#### 25.91 water supply and sanitation MULTI-STOREY BUILDINGS

Modern Sanitation in Multi-Storey Buildings. J. H. R. Crabtree. (The Sanitarian. Jan. 1953.)

Nine-page general article dealing mainly

with drainage. Some general information, some detailed. Useful tables on sizing of pipes, etc. Author considers that a modified one-pipe system, without anti-syphonage pipes, is suitable for use in buildings of up to 5 storeys, but that for higher buildings the ordinary one-pipe system should be used.

25.92 water supply: sanitation

#### ONE PIPE SYSTEM

One-Pipe (Single Stack) Plumbing for Housing: Part II—Principles of Design. BRS Digest No. 49. (HMSO, 1952. 3d.)

Further note on single-stack plumbing for houses. Describes reasons for self-siphonage and induced siphonage and way to avoid these. Fairly detailed recommendations for position, type and size of connections with useful table of the various connections which have to be made, the dangers to be guarded against and design recommenda-

(Continued on page 471)

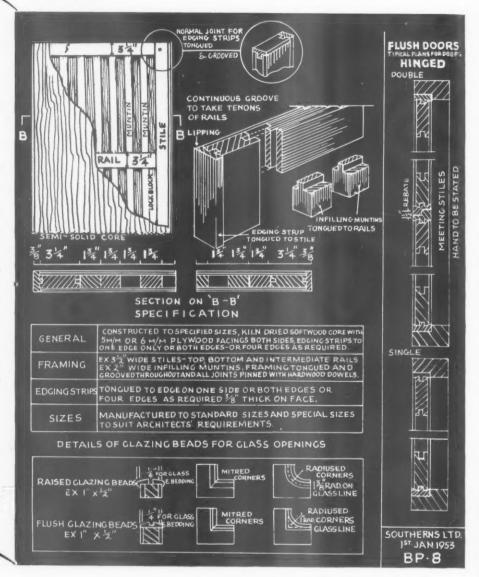
#### SWEDEN: BUILDING LARGE WITH UNITS

This Swedish system of building, similar to that described in the JOURNAL for September 11, 1952, is based on the use of large precast concrete or aerated concrete wall and floor slabs. These are cast horizontally on a specially prepared casting bed near the centre of the site (see photograph below) and hoisted into position by means of a crane-often, as in the photograph on page 470, a Portal crane. Doors, windows, etc., are incorporated in the wall panels when they are cast, and the surfaces of the units are treated so that no plastering is required. After the wall units for a particular floor have been hoisted into



## ROYAL-FLUSH DOORS

\* The neat simplicity of " Royal Flush" doors belies the work involved in producing them. These specifications give some idea of the intricate designing and careful workmanship demanded of Southern's craftsmen " behind the scenes."

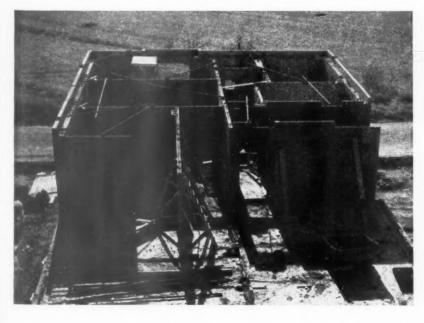


"Royal Flush" are the highest grade of plywood faced flush doors, veneered to architects' specifications and guaranteed without qualification for use in Schools, Hospitals, Houses, Industrial and Commercial buildings.



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## SWEDISH BUILDING SYSTEM (continued)

position and held temporarily by adjustable tubular props and timber struts, reinforcement and grout is placed in the channels between each pair of units (formed by grooves in their edges) and horizontally in the grooves in the top edges of the units (see photograph, left). This forms, in effect, a reinforced concrete "frame" that provides the building with stability. The casting bed may consist of trestles and boarding, covered with hardboard. This is oiled to give the concrete a smooth surface. Alternatively, the units can be cast

for outside painting

\*89% of architects specify white lead paint

\* From a widespread research carried out in August 1952. Original replies can be seen at on London Office.

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#### SWEDISH BUILDING SYSTEM (continued)

on a 4-in. concrete slab, which can later serve as the floor of a garage or playground. If the work is done in very cold weather, pipes cast in the concrete can have hot water pumped through them to prevent freezing in the freshly cast concrete. The external wall units are 13 in. thick; they are made of aerated concrete with a weight of 70 lb. per sq. ft. The floor slabs are  $6\frac{1}{2}$  in. thick, reinforced in both directions. The lifting hooks are arranged with great accuracy to avoid undue moments; they are attached to the main reinforcement. The water: cement ratio is very low, so that the units can be hoisted into position 2 or 3 days after they are cast. Schieferola is added to the concrete to increase the workability of the very dry mix, and to diminish risk of shrinkage. All the concrete is vibrated. Staircases, landings and balconies also consist of precast concrete units. In the photograph below, a workman is seen placing the greut in the grooves in the top edges of the wall panels. The buildings in the background of this photograph and the photographs on pages 466, 469 and 470 are blocks of flats built by means of this constructional system.



(continued from page 469)

tions. With this system of drainage, which with some plans may show an economy and also has the advantage of better appearance, it is essential to design more carefully and specify more precisely than with normal drainage design of the vented type.

26.102 services and equipment: miscellaneous.

GYMNASIUM EQUIPMENT

Gymnasium Equipment, BS 1892:1952. (British Standards Institution. 12s. 6d.)

Replaces earlier BS that dealt with equipment for schools; now covers requirements for the Services, too. It deals with dimen-

sions, materials and construction, with a few notes, in some cases, on installation. An addendum may be issued later to cover subsize apparatus for children.

#### ENQUIRY FORM

I am interested in the following advertisements

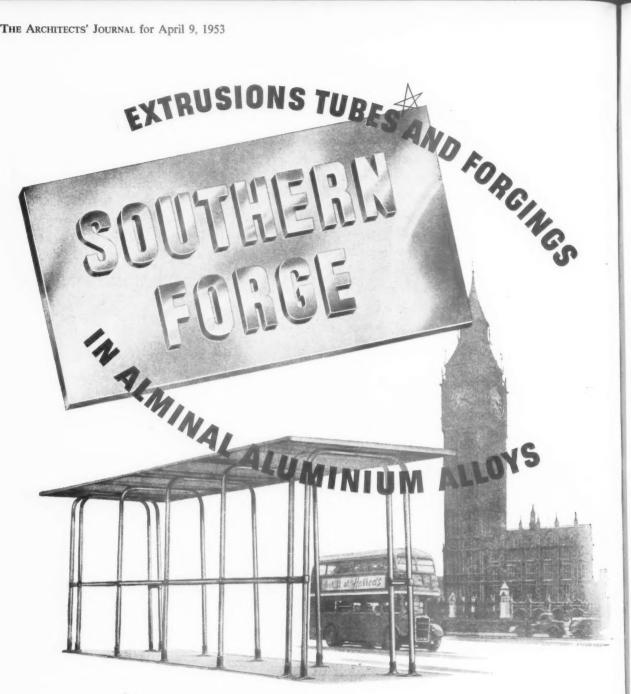
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#### INFORMATION CENTRE INDEX FOR 1952

An alphabetical index covering Information Centre items and special articles published in the Technical Section during the twelve months ended December 31, 1952, is being prepared. Readers who wish to have a copy—it is free of charge—should complete the form below and post it to the Technical Editor, The Architects' Journal, not later than April 23, 1953.

Please send me the Information Centre Index for 1952:

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Addres	5 <b>5</b>			
(Block	letters)			



Another outstanding example of the application of Southern Forge tubes is their use in the new London Transport bus queue shelters\*; now a familiar sight in London. These shelters take full advantage of the easy working qualities of aluminium alloys and there is no need for painting. # Manufactured by S.M.D. of Slough.

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#### THE INDUSTRY

From the industry this week, Brian Grant reports on two items of news concerning electrical installations, a guide to choosing adhesives, a cooker, a solid fuel boiler and plastic roof lighting.

#### **FUSED PLUGS**

The standard plugs for use with the 3-kW. rectangular section sockets to BS 1363 all have to be fitted with a cartridge fuse of the appropriate rating. Replacement is not a difficult matter, but it needs a small bladed screwdriver which is not always available in the average household. The illustration shows the "D.S." plug, which completely overcomes the difficulty as no tools of any kind are needed. The fuse is clipped to the live pin, which is hinged so that it can be swung forward from the face of the plug; the spent fuse can then be replaced in a few seconds with fingers only. Price is 42s. per dozen in brown; 48s. 6d. in white. (D.S. Plugs Ltd., Ordsal Electrical Works, Manchester, 3.)

#### INDUSTRIAL WIRING

Callender's Cables have produced several types of purpose designed wiring system for houses, factories and farms, but for many industrial applications a high degree of resistance to moisture and corrosion is necessary, and a recent booklet describes their latest all-insulated industrial wiring system. This is a surface wiring type which includes non-metal sheathed cables and insulated junction boxes and fittings; properly installed, it is completely watertight, and virtually proof against fumes and corrosion, and it is recommended for use in chemical factories, laundries, breweries, paper mills, dye works and other buildings with similar atmospheres.

The cables are insulated with vulcanized rubber and sheathed either in tough rubber or PVC, depending on the service conditions. All junction boxes and fittings are moulded in a brown phenolic insulating material which is non-hygroscopic and more or less corrosion proof; all cable entries have watertight glands sealed with rubber bushes.

The range of fittings includes junction boxes in various sizes, ceiling rose and lampholder boxes, switches and socket outlets with a resilient moulded plug unit which is secured with a screwed ring, making the whole assembly watertight. The system is suitable for use where the voltage to earth does not exceed 250, and includes 3-phase AC with earthed neutral and an inter-phase voltage not exceeding 440, or DC 3 wire (middle wire earthed) up to 500 v. (British Insulated Callender's Cables Ltd., Norfolk House, Norfolk Street, London, W.C.2.)

#### CHOOSING ADHESIVES

Nowadays, it seems possible to provide a high strength bond between so many different materials that the choice of the right type of synthetic adhesive is a matter for specialist knowledge. An exceptionally handy little leaflet has just been produced by Aero Research; this shows the right adhesive to use for bonding a number of different materials, and there is also a table giving the essential data about each resin,

the curing times, temperatures and pressures, as well as the maximum working temperatures at which the bonded materials should be used. (Aero Research, Ltd., Duxford, Cambridge.)

#### SMALL DOMESTIC BOILERS

Most readers will probably know the "Agamatic" boiler, which has been on the market for several years. There is now a smaller version known as the "25/40," which is not intended for central heating but for the supply of domestic hot water for households of up to 6 people, though there is enough capacity to spare for a small secondary circuit such as a towel rail. Control is by an adjustable thermostat and coke consumption is reduced to as little as 8 oz. an hour when the boiler is "idling." Coke is the recommended fuel, but any other smokeless fuel is suitable. The boiler will also dispose of all the normal kitchen refuse—a very useful point, as so many of the new solid-fuel appliances are rather fussy about what they burn. It is 2 ft. 4 in. high by 1 ft. 6 in. wide and 1 ft. 6 in. deep; flow and return connections can be on the right or the left or through the centre of the back plate. Price is £29. (Aga Heat Ltd., 20, North Audley Street, London, W.1.)

#### NEW ELECTRIC COOKER

The photograph, bottom right, shows the new GEC type "DC 753" cooker, which has been designed for households of 8. The oven is, as usual, thermostatically controlled, and there are three-heat switches for the two boiling rings and the griller, though a simmerstat is available as an extra. The oven has a three-piece interior which is easily removed for cleaning, and the hob is hinged so that access to the hot plates is simple. Overall dimensions are 21 in. wide by 19 in. deep, with a height of 43\frac{1}{4} in.. including the splash back. Price is \(\xi\)29, or \(\xi\)1 less with legs instead of the plinth; standard finish is grey mottle, but there are green or cream alternatives at slight extra cost. (The General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2.)

#### ROOF LIGHTING

It is now some years since ICI introduced corrugated "Perspex" sheeting for top lighting and windows. Since the end of the war a translucent (but not transparent) plastic material, reinforced with glass fibres, has been in use in America, and is now being produced in this country by Cascelloid Ltd., a subsidiary of the British Xylonite Co. The material, known as "Cascalite," is produced in 6-ft. and 8-ft. sheets, both 30 in. wide, and at a price which works out at roughly 6s. per sq. ft.—slightly more or less according to the quantity of sheets ordered. At the moment, only the standard 3-in. corrugation is in production, but any other profile can be made to order, and many of them will, presumably, become standard stock as the demand grows.

The material weighs only 8 oz. per sq. ft. and is produced in 4 shades—pale green, pale yellow, an ivory which is only just off white, and an untinted version which has about the same degree of transparency as rather scratched celluloid. Acid resistance is good and the glass reinforcement means that the material is more or less shatterproof. It can be drilled or sawn with ordinary tools and is fixed just like any other kind of sheeting, the obvious advantage being that in a roof the lighting can be placed exactly where it is wanted. The price per ft. may seem rather high but it must be remembered that there is nothing to be added for glazing bars or skylight framing. (Cascelloid Ltd., Abbey Lane, Leicester.)



The "DS" 3-kW fused plug, with cartridge fuse clipped to hinged live pin, for easy replacement.



The new and smaller version of the "Agamatic" boiler—the "25/40." Price £29.



The new GEC "DC753" cooker, designed for an 8-person household; price £29.

#### Buildings Illustrated

Remodelled Offices and Showrooms for Messrs. Dick & Goldschmidt Ltd., at 33-34, Great Pulteney Street, London, W.1. (Pages 454-455.) Architects: J. M. Austin-Smith & Partner, A./A.R.I.B.A. Quantity surveyors: Young & Brown. General contractors: Hall, Beddall & Co. Ltd. Sub-contractors: Ground and third floors: electrical installation, Duncan Watson (Electrical Engineers) Ltd.; light fittings, Troughton & Young (Lighting) Ltd.; ironmongery, Yannedis & Co. Ltd.; internal telephones, Automatic Internal Telephones Ltd.; Third floor: doors, Jayanbee Joinery Ltd.; metal door frames, Henry Hope & Sons Ltd.; acoustic tiles, Horace W. Cullum & Co. Ltd.; electric radiators, Hurseal Ltd., and E. K. Cole Ltd.; electric water heater, Heatrae Ltd.; light fittings, Merchant Adventurers of London Ltd. Ground floor: heating installation, Norris Warming Co. Ltd.; floor—cork tiles, Armstrong Cork Co. Ltd.; front door handle, Rennis Ltd.; lettering, The Lettering Centre.

Dycorts Infants' School, Romford, Harold Hill Site No. 5, Essex. (Pages 456-457.) Architects: H. Conolly, F.R.I.B.A., County Architect; Denis Senior, F.R.I.B.A., Deputy County Architect; W. C. B. Smith, A.R.I.B.A., Assistant County Architect (Education); M. Mc. P. Crammond, A.R.I.B.A., assistant architect. Quantity surveyors: E. C. Harris & Partners. General contractors: Supply of prefabricated timber components and materials, Thermo Insulated Units Ltd.; erection contract, Dowsett Engineering Construction Ltd. Sub-contractors: Stock bricks, Eastwoods Sales Ltd.; floor tiling, Summers & Co. Ltd.; wood block flooring, Hollis Bros. Ltd.; sanitary fittings, Dent & Hellyer Ltd.; heating boilers, The Watkin Heating Co.

Ltd.; heating services, S. J. Frith & Son Ltd.; electrical services, Eastern Electricity Board; cloakroom fittings, ironmongery, Comyn Ching & Co. Ltd.; roller shutters, Shutter Contractors Ltd.; felt roofing, William Briggs & Sons Ltd.; ventilating domes, Frederick Braby & Co. Ltd.; lettering, The Lettering Centre; fencing, Penfold Fencing & Engineering Co. Ltd.; W. I. Gates, Grundy Arnatt Ltd.

Shop at 13, St. George's Street, Canterbury, Kent, for the Dolcis Shoe Co. (Pages 459-461.) Architect: Ellis E. Somake, F.R.I.B.A., Staff Architect to the Dolcis Shoe Co.; Assistant Architect-in-charge: Geoffrey Uffindell, A.R.I.B.A. Consulting Structural Engineer: Malcolm Glover, B.SC., M.INST.C.E., A.I.MECH.E., M.I.STRUCT.E. Quantity Surveyors: Gardiner & Theobald. General Contractors: G. H. Denne & Son Ltd. (for the structure); Courtney Pope, Ltd. (for shop-fitting). Sub-contractors: reinforcement, Constel (Structures) Ltd.; metal windows, Williams & Williams Ltd.; heating installation, Rosser & Russell Ltd.; electrical installation, Courtney Pope (Electrical) Ltd.; stone facings, Kendell's Stone & Paving Co. Ltd.; sanitary ware, W. N. Froy & Sons Ltd.; floor tiles, Semtex Ltd.; facing bricks, Richard Parton Ltd.; balustrading and handrails, Grundy Arnatt Ltd.; ironmongery, A. J. Binns Ltd.; incinerators, William Sugg & Co. Ltd.; slate cills, Anselm & Odling; drapes and carpets, F. G. Minter (Decorations) Ltd.; paints, Thos. Parsons & Sons, Ltd.; false ceilings, Tomei & Sons Ltd.; terrazzo, Marriott & Price Ltd.; wallpapers, Primavera; pneumatic cash tubes, Lamson Engineering Co. Ltd.; blinds, Artistic Blind Co.

Factory for Revertex Ltd., on the Industrial Estate, Harlow New Town, Essex, for the Harlow Development Corporation (W.

Eric Adams, C.B.E., General Manager), (Pages 462-465). Architects: Frederick Gibberd, F.R.I.B.A., M.T.P.I., Architect-Planner to the HDC; Victor Hamnett, B.SC., A.R.I.B.A., A.R.I.C.S., A.M.T.P.I., Executive Architect; G. T. Goalen, B.ARCH., A.R.I.B.A., A.M.T.P.I., Senior Architect (Industrial Development). Consultant (Reinforced Concrete): O. W. Gilmour, Chief Engineer, M.A., M.A.I., M.I.C.E. Quantity Surveyors: Oswald E. Parratt. General Contractor: Rush & Tompkins Ltd. Clerk of Works; W. Horsnell. General Foreman: H. J. Ramsbotham. Sub-contractors: bricks, Eastwood Sales Ltd. (2nd hard London Stocks), London Brick Co. Ltd. (Wire Cuts); artificial stone, Stuarts Granolithic Ltd.; structural steel, Dawnays Ltd.; fireproof construction, Concrete Ltd. (precast r.c., floor and roof to office block); ceramic tiles, Langleys (London) Ltd.; roofing felt, General Asphalte Co. Ltd.; patent flooring, Korkoid Decorative Floors and Revertex Ltd.; waterproofing materials, R.I.W. Protective Products Co. Ltd.; wood wool slabs, Thermacoust Ltd.; asbestos cement sheeting and flashings, Turners Asbestos Cement; central heating, ventilation, water supply, W. Richardson & Co. Ltd.; boilers, Clarkson Boiler Co. and Clarkson Thimble Tube Boilers; electric light fixtures, Crompton Parkinson Ltd.; patents, Williams & Williams Ltd.; sanitary fittings, B. Finch & Co., door furniture, signs, Lockerbie & Wilkinson Ltd.; casements, Williams & Williams Ltd.; marble, The Mosaic & Terrazzo Precast Concrete Co.; painting sub-contractor: George Jones Ltd., oil paints and distemper supplied by Mander Bros. Ltd.; emulsion paints based on "Emultex" (a plastic emulsion produced by Revertex Ltd.) supplied by Vitretex (England) Ltd.; Cementone supplied by Joseph Freeman, Sons & Co. Ltd.; office fittings, Cygnet Joinery Co.

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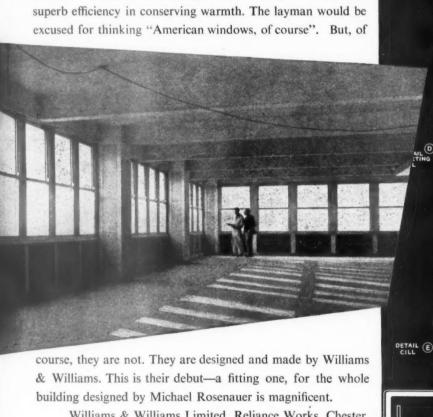
THE WEEKLY NEWSMAGAZINE

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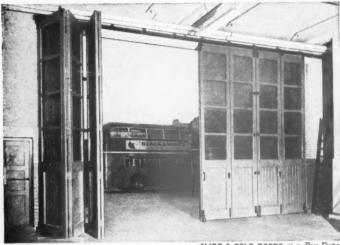
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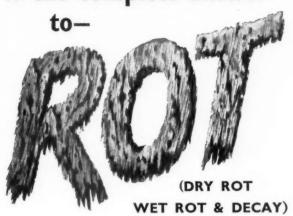
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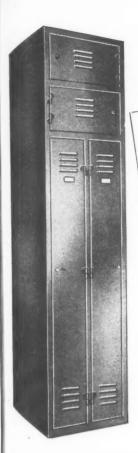
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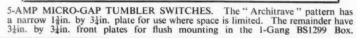
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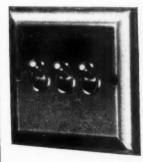
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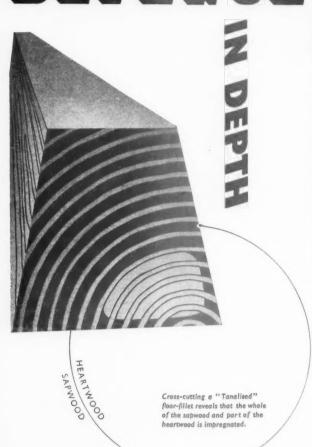


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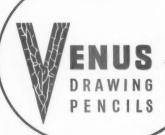
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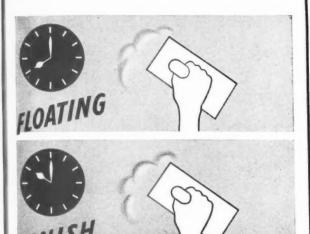
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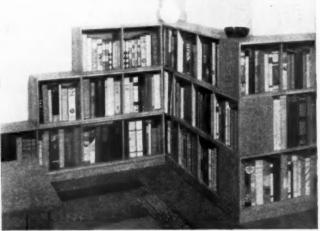


housing. They offer great opportunities for imaginative use and can be 'tailored' to fit any room. And don't forget, Purchase tax has just been abolished on the majority of UNIX sections, and rigorously pruned on the remainder . . . it means a reduction in price of up to 20 per cent. on some units. Come and inspect specimen arrangements of UNIX in our showroom, where you can see the other PHOENIX bookcases as well—still today's finest value.

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# structura steelworl

- DESIGN

The large illustration shows standard sectional factories for the Marlow Development Corporation.

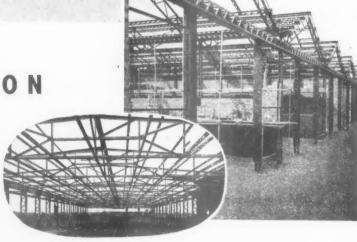
The high-tensile steel used has a yield point more than twice as high as that of mild steel, and the lattice construction employed can esuit in cutting down the weight of steel needed by half.

Executive Architect: V. Hamnett, B.Sc., A.R.I.B.A., A.R.I.C.S.

Inset—Frecting part of the all-welded structure which we designed and supplied to the I.C.I. Deep lattice beams and light stanchions have been used with nearly a fifty per cent saving in steel requirements, as compared with ordinary R.S.J. construction.

Architects: Messrs. J. Douglass Mathews & Partners.

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DREADNOUGHT FIREPROOF DOORS (1930) LTD., 26 VICTORIA ST., WESTMINSTER, S.W.I

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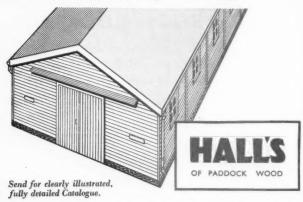
# LARGE

# TIMBER BUILDINGS

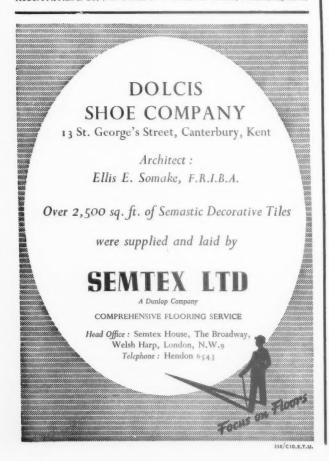


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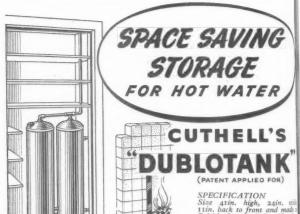


Standard Factory, Harlow Industrial Estate, Harlow Development Corporation, Executive Architect: V. Hamnett, B.Sc., A.R.I.B.A., A.R.I.C.S.

- \* IDEAL FOR FACTORY ROOFS
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SPECIFICATION
Size 41in. high, 24in. w
11in. back to front and made
British Standard Specification
maximum test pressure 45 lbs.
square inch. Unit complete
three 1in. tappings for for
return and hot draw-off, one
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or immersion heater.

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The "Dublotank" is designed to fit into narrow fireside cupboards and only needs a wall depth of Tin. In its standard form the "Dublotank" is extremely strong and is suitable for a working head of up to five flats.

Low initial cost. Costs only a few shillings more than ordinary circular tank of equal capacity and strength.

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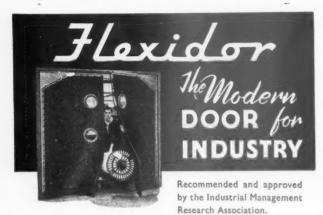
PRODUCTION for more exports, production for the home market . . . how can production be increased? Two important ways are by the elimination of unnecessary handling of materials and by the more intensive use of power tools. In fact, by calling in Electricity to help.

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BRITISH ELECTRICITY is doing everything possible to ensure the supply of electricity for these vital needs. Last year, all records for plant installation were broken: more than 1½ million kilowatts—equivalent to over 2 million horsepower—of new plant began feeding the National Grid. Every effort is being made to maintain this progress.

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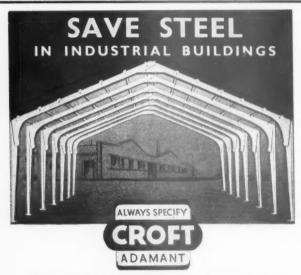


Safe for operatives, trucks, trolleys and products. Draught reducing and self closing.

Constructed from heavy rubber, swinging in channel surrounds, they are made to suit any size aperture up to 8-feet wide. Full details are available in Leaflet No. 31 from :

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# plastics IN BUILDING

by JOSEPH B. SINGER, B.SC. (Arch.), A.R.I.B.A.

HERE FOR THE FIRST TIME is a comprehensive text-book giving up-to-date information on the practical application of plastics in the building industry—information of the greatest importance not only to architects but also to builders and their operatives. The author, who is an architect and scientist and is recognised as a leading authority on his subject, has divided the book into four parts. Part I deals with the history and general outline of the plastics industry; part 2 with plastics for exterior work; part 3 with plastics for interior work; and part 4 with the future possibilities of plastics in building. Under these headings are discussed the uses of plastics for walls, roofs, glazing, floor coverings, heat and sound insulation, plumbing and sanitation, furniture, electrical equipment and lighting, etc. In addition there are a glossary of trade terms, a bibliography and general index.

> Bound in full cloth boards. Size 8\frac{3}{2}in. by 5½in. 176 pages, including over 50 line diagrams and 30 half-tone illus-trations. 18s net, postage 5d inland

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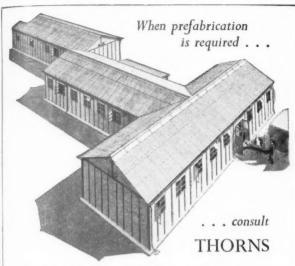
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Timber framed. Timber covered or asbestos covered. 10′ 12′ 15′ 20′ 25′ and 30′ SPANS 6′ 7′ 8′ and 10′ EAVES (or any size and design to your specification)

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Oven-Over-Fire All Night Burning Combination Grate. The Cooker for all purposes.





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Continuous Burning Fire for Economy, Efficiency and Comfort.

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### CLASSIFIED ADVERTISEMEN 1

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**

25s. per inch; each additional line, 2s.

25s. per inch; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment is excepted from the provisions of the Notification of Vacancies Order, 1982.

BOROUGH OF TOTTENHAM.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the established post of ARCHITECT, at a salary in accordance with A.P.T., Grade VI or VII, i.e., £670 to £735 per annum, or £710 to £785 per annum, plus London weighting allowance of £20 or £30 per annum, according to age.

Candidates must possess a Final professional qualification.

The Council are unable to offer housing accommodation.

Form of application and conditions of service obtainable from the Borough Engineer, Town Hall, Tottenham, N.15, to whom applications must be delivered not later than Saturday, 18th April, 1953.

M. LINDSAY TAYLOR, Town Clerk

LONDON COUNTY COUNCIL.
OFFICIAL ADVERTISEMENT.
LONDON COUNTY COUNCIL invites applications from ARCHITECTS in private practice for inclusion in a new panel with a view to acting in a professional capacity for:—
(a) major new educational projects costing over £100,000; (b) major new educational projects costing £100,000 or less; (c) war damage reinstatement and alteration and improvement works of all values to education buildings.

Application forms may be obtained from the Clerk of the Council (E.1), The County Hall, S.E.1, and should be returned not later than 24th April. (300)

COUNTY BOROUGH OF BARNSLEY.
BOROUGH ENGINEER AND SURVEYOR AND PLANNING OFFICER'S DEPARTMENT.
APPOINTMENT OF SENIOR PLANNING
ASSISTANT.
Applications are invited for the appointment of Senior Planning Assistant, at a salary in accordance with A.P.T., Grade VII (£710-£785 per annum). A car allowance will be paid in accordance with the prevailing scheme for essential users.

annum). A car allowance will be paid in accordance with the prevailing scheme for essential users.

The appointment will be subject to the Scheme of Conditions of Service for A.P.T.C. Services, to the General Conditions of Service within the Corporation as varied from time to time, and to the provisions of the Local Government Superannuation Acts.

Candidates must have had extensive experience in Town Planning Institute, or hold an equivalent qualification. The person appointed will be incharge of the Town Planning Institute, or hold an equivalent qualification. The person appointed will be incharge of the Town Planning Section of the Department and directly responsible to the Borough Engineer for all planning matters.

ASSISTANCE IN OBTAINING HOUSING ACCOMMODATION WILL BE GIVEN IF NECESSARY.

The successful applicant will be required to pass a medical examination, and the appointment will be subject to one month's notice on either side.

Applications, stating age, present and previous appointments, experience, qualifications, etc., together with the names of three referees, should be addressed to the Borough Engineer and Surveyor and Planning Officer. Town Hall, Barnsley to reach him not later than Wednesday, 22nd April, 1955.

Canvassing will disqualify, and applicants should disclose in their applications, which the should disclose in their applications, which the contents are the province of the contents of the

April, 1953.
Canvassing will disqualify, and applicants should disclose in their applications whether to their knowledge they are related to any member or senior officer of the Council.

A. E. GILFILLAN,

Town Clerk.

Town Hall Barnsley. March, 1953.

March, 1953.

NORTHAMPTON BOROUGH ARCHITECT'S

1. ASSISTANT ARCHITECT (EDUCATION).
A.P.T., V. (£595-£645).
2. JUNEOR ARCHITECTURAL ASSISTANT.
A.P.T., I (£465-£510).
Particulars of above appointments and forms of application, to be returned by 20th April, may be obtained from the Borough Architect's Department, Guildhall, Northampton.

C. E. VIVIAN ROWE.

Town Clerk.

8501

BOROUGH OF BLYTH.

BOROUGH ENGINEER'S DEPARTMENT.

AMENDED ADVERTISEMENT.

Applications are invited for the appointment of a JUNIOR ARCHITECTURAL ASSISTANT. The salary for the appointment will be Grade II of the A.P.T. Division, £495 per annum to £540 per annum, by annual increments of £15. Candidates should hold the Intermediate Examination of the R.I.B.A.

The appointment is subject to the Local Government Superannuation Act, 1537, the Scheme of Conditions of Service of the National Joint Council, one month's notice on either side, and the passing of a medical examination.

Applications, endorsed "Junior Architectural Assistant," stating age, qualifications, training and experience, must be delivered to the undersigned, with copies of three recent testimonials, not later than 24th April, 1953.

Canvassing will disqualify, and applicants should disclose relationship with any member or official of the Council.

EDWIN W. CARTER.

"Dinsdale," Marine Terrace, Blyth, Northumberland.

EDWIN W. CARTER,

"Dinsdale," Marine Terrace, Blyth,
Northumberland.

8479

BOROUGH OF HESTON AND ISLEWORTH.
ENGINEER AND SURVEYOR'S

DEPARTMENT.

ARCHITECTURAL ASSISTANT.

Applications are invited for the post of Architectural Assistant, on the permanent staff of the Borough Engineer and Surveyor, at a salary within the Grades A.P.T., H or HI (2495-£570), plus London "weighting," appropriate to the qualifications of the person appointed, in accordance with the provisions of the National Scheme of Conditions of Service.

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

Applications, on forms to be obtained from the Borough Engineer and Surveyor, 38, Lampton Road, Hounslow, must be returned to him not later than noon on Monday, 20th April, 1953, appropriately endorsed.

HAROLD SWANN.

Town Clerk.

Council House, Hounslow

8478

LONDON COUNTY COUNCIL.

Council House, Hounslow

LONDON COUNTY COUNCIL.

ARCHITECTS and SURVEYORS required for safety regulations of Theatres and Special Buildings and for general building regulation work. Salaries up to £696, according to experience.

A.R.I.B.A. or A.R.I.C.S. essential. Particulars and application form (for return by 30th April) from Architect, AR/EK/TBR/3, County Hall.

S.E.1. (325)

S.E.1. (325)

Vacancies exist in the Chief Architect's Division for ARCHITPCTURAL ASSISTANTS with recognised training and fair experience. Vacancies are mainly in London. Successful candidates will be employed on a variety of Public Buildings, including Atomic Energy and other Research Extablishments, Telephone Exchanges and Housing.

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London Salary: Up to £628 per annum. Start-ing pay according to age, qualifications and experience. Rates outside London are slightly

experience. Bates outside London are slightly lower.

Although these are not established posts, many have long term possibilities and competitions are held periodically to fill established vacancies.

Apply in writing, stating age, nationality and full details of training and experience, to the Chief Architect. Ministry of Works. Abell Honse, John Islip Street. London, S.W.1, quoting reference W.G.10/C.A.1.

reference W.G.10/C.A.1.

Solf COUNTY COUNCIL OF NORTHUMBERLAND. COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the post of ASSISTANT ARCHITECT. A.P.T. Grade VI (salary £570 per annum rising to £735 per annum) on the permanent staff of the Department.

The appointment will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination.

Applicants should have had at least 2 years experience in an Architect's Office.

Application stating age, qualifications and previous experience, accompanied by recent testimonials should be forwarded to the County Architect, County Hall, Newcastle-upon-Tyne, not later than Wednesday, 15th April, 1953.

Architect, County 1941, Newcastic-upon-tyne, not later than Wednesday, 15th April, 1953. 5508

COUNTY COUNCIL OF NORTHUMBERLAND.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited for the post of ARCHITECTURAL DRAUGHTSMAN up to a salary of £600 per annum according to age and experience.

The appointment will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act, 1937.
The successful candidate will be required to pass a medical examination.

The work will consist mainly of minor building alterations, drainage schemes, etc., carried out under the supervision of the Buildings Surveyor.
Applicants should be able to prepare working drawings for minor improvements and alterations to buildings, and to make surveys and use a level, also to prepare specifications, etc., for minor works.
Application stating age, qualifications and previous experience, accompanied by recent testimonials should be forwarded to the County Architect, County Hall, Newcastle-upon-Tyne, not later than Wednesday, 15th April, 1963.

WEST RIDING OF YORKSHIRE TERRITORIAL AND AUXILIARY FORCES ASSOCIATION.
Applications are invited for the appointment of ASSISTANT ARCHITECT. Salary: £525×£25-

Applicants should have sound general expen-ence in the preparation of working drawings and details, and a knowledge of specification writing will be an advantage.

The appointment will be subject to entry in-the Association Superannuation Scheme, and will be terminable by one month's notice on either side.

Applications, stating age, qualifications and ex-perience, together with names of two referes, should be forwarded to: The Secretary, Wes Riding of Yorks. T. & A.F.A., 20, St. George's Place, York, not later than 16th April, 1953.

Applications are invited for the appointment of SENIOR TOWN PLANNING ASSISTANT (Peg. No. 13), in the City Engineer and Surveyor's Office, at a salary in accordance with Grade A.P.T. VI, of the National Scales, i.e., 1670-1735

Applicants should a scales, i.e., 1670-1735

per annum.

Applicants should preferably be A.M.T.P.I.,
A.M.I.C.E., or A.M.I.Muni.E., and have had considerable experience in the administration of the
Town and Country Planning Act, 1947, and, in
particular, dealing with applications for (a)
Planning Permission and (b) Display of Advertisements.

The appointment is superannuable.

Analizetions on the accountry

Planning Petrilission and type its ements.

The appointment is superannuable. Applications on the prescribed form to be obtained from the City Engineer and Surveyor, Town Hall Bradford, together with three testimonials, mist be received by the undersigned not later than Monday, 27th April 1953. No housing accommodation will be provided by the Corporation.

W. H. LEATHEM,

Town Clerk.

Town Hall, Bradford.

Town Hall, Bradford.

BRITISH ELECTRICITY AUTHORITY.
EAST MIDLANDS DIVISION.
Applications are invited for positions as CIVIL
ENGINFIERING DRAUGHTSMEN in the Construction Department at North Wilford.
Candidates should have experience in design and detail of reinforced concrete structures, piled and slab foundations for heavy plant, culvers, cable subways, etc., for general building construction, drainage and sanitation schemes, associated with offices and administrative buildings.
The salarty will be in accordance with Grade 5 (£557—£671 per annum) or Grade 6 (£433—£561 per annum) of Schedule D of the National Joint Board Agreement.

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

The appointments 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 No. 22/53.

L. F. JEFFREY.

L. F. JEFFREY, Divisional Controller. 8512

CITY AND COUNTY OF BRISTOL.
CITY ARCHITECT'S DEPARTMENT.
Applications invited for the following permanent staff appointments:—
SENIOR ASSISTANT ARCHITECTS:
(a) Grade VII (£710—£785 per annum).
Applicants must be Associate members of the R.I.B.A or hold equivalent qualifications and have had considerable experience in design, construction and contract administration preferably with a large local authority. For appointment (a) experience in education building is desirable. Appointments superannuable, subject to satisfactory medical examination and to one months notice in writing on either side.
Housing accommodation provided if necessary at an economic rent.
Applications stating age, training, qualifications, experience, present appointment and salary with names of two referees (including present employer) by 15th April, to
J. NELSON MEREDITH, F.R.I.B.A.
Council House, College Green,
Bristol, 1.

RURAL DISTRICT COUNCIL OF
MARSHLAND.
RURAL DISTRICT COUNCIL OF
MARSHLAND.
RURAL DISTRICT COUNCIL OF
WISBECH.
APPOINTMENT OF ARCHITECT TO THE
COUNCILS.
The Councils invite applications from qualified Architects for the above-mentioned appointment at a salary in accordance with the recommendations of the Joint Negotiating Committee for Chief Officers of Local Authorities, commencing at 2800 per annum and rising, subject to satisfactory service, by annual increments of £50 to £950 per annum.
Further particulars and Form of Application can be obtained from the undersigned, to whom it is returnable by Monday, the 20th April, 1953.
RONALD E. DIXON.
Council Offices, Alexandra Road,
Wisbech, Cambs.
28th March, 1953.

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Application I, to whom April, 1953. Councils.

HEMEL HEMPSTEAD DEVELOPMENT
CORPORATION.

PPOINTMENT OF ASSISTANT ARCHITECT.
Salary scale £485 by £25 to £610. Conditions
of service similar to Local Government Charter
with opportunity of entering or continuing in
local Government Superamunation Scheme. Flat
may be available. Intermediate R.I.B.A.
sesential. Preference given to candidates with
inge scale Housing experience.
Application forms from this office (please quote
vacancy No. 32) to be completed and returned
to the undersigned by 24th April, 1953.

W. O. HART,
Westbrook Hay,
Hemel Hempstead, Herts.

8507

westbrook Hay,
Hemel Heuntstead, Herts.

DERBYSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
Applications are invited from QUANTITY
S(RYEVORS for appointments on A.P.T. Grade
I'll (2710 by £25 to 2785 per annum). Applicants
must have passed the final examination of the
Royal Institute of Chartered Surveyors
Quantities) and have had 5 years' experience.
It is essential that applicants have a thorough
knowledge of the preparation of estimates, taking
off quantities for all trades, measuring up and
final accounts. final accounts.

final accounts.

The appointments are subject to the terms of the National Joint Council's scheme of Conditions of Service, the provisions of the Local Government Superanquation Act, 1937, and the successful applicants will be required to pass a medical

applicants will be required to be obtained from this examination.
Applications, on forms to be obtained from this office, must be received by 25th April, 1955.
F. HAMER CROSSLEY.
Dipl. Arch. (L'pool), F.R.I.BA.,
County Architect.

Dipl. Arch. (L'pool), F.R.I.BA., County Offices,
8. Mary's Gate, Derby.

8. Mary's Gate, Derby.

8. Mary's Gate, Derby.

8506

CLERK OF WORKS required in about May,
193, for Research Station project comprising arm buildings, temporary laboratories, canteen, acking shed, glasshouses and staff housing, having shed, glasshouses and staff housing. Dirigo of Contract approximately 18 months, applicants must be thoroughly experienced in C/W daties, supervision, inspection, levels, records. Apply, stating age, training, experience, references, salary, to the Secretary, National Vegetable Research Station, Wellesbourne, Warwick, as soon as possible.

8502

NORTH-EAST METROPOLITAN REGIONAL BOSTIAL BOARD requires a DRAUGHTSMAN. Salary: £360×220 and £25 to £545 p.a., plus London weighting of £20 to £35 p.a. Candidates should be up to Intermediate standard of R.I.B.A., able to produce detailed drawings, and carry out surveys and levelling. Applications, stating age, qualifications, experience, and the names and addresses of two referees, must reach Secretary, Prtland Place, W.1, within 14 days.

8500

FERMANAGH COUNTY EDUCATION
COMMITTEE.
NORTHERN IRELAND.
ARCHITECT'S DEPARTMENT.
Applications are invited for following posts:—
(a) One ASSISTANT ARCHITECT. Salary scale: £655×£25-£955×£15-£970 per annum.
(b) One ARCHITECTURAL ASSISTANT.
Salary scale: £400×£20-£600 p.a.
Both appointments are established, pensionable, and subject to the provisions of the Local Government (Superannuation) Act (Northern Ireland), 1950, commencing salary determined within scales by age, experience, and qualifications.
Qualifications required:—
(a) Registered Architect, A.R.I.B.A. and/or University degree or diploma in Architecture.
(b) Pass to Inter. Exam. of R.I.B.A., and minimum of 4 years' experience in Architect's office.
Form of application and conditions of appointment may be obtained from the undersigned, with whom completed applications must be lodged not later than Tuesday, 21st April, 1953.
Preference will be given to suitably qualified ex-Service applicants if the Committee is satisfied that such applicants can, or within a reasonable time will be able to, fill the post efficiently.
J. MALONE.
Chief Education Office, Enniskillen,
Northern Ireland.
26th March, 1953.

SOUTH-EASTERN REGIONAL HOSPITAL
BOARD, SCOTLAND

26th March. 1953.

SOUTH-EASTERN REGIONAL HOSPITAL
BOARD, SCOTLAND
Applications are invited for the following
established posts in the Regional Architect's
Department in connection with large projects.
ARCHITECTURAL ASSISTANTS—Salary Scale
2440 by £25 (1) by £20 (8) to £25.
The Regional Board may at their discretion fix
the starting salary of Officers above the minimum
of the scale.
Applications giving details of age, qualifications,
experience, along with the names and addresses
of two referees, should be sent to the Regional
Architect, 6, Cambridge Street, Edinburgh, 1, on
or before the 18th April, 1953.

8514

DERBYSHIRE COUNTY COUNCIL.
PRIMARY AND SECONDARY SCHOOL
FURNITURE.
The County Architect is looking for furniture of good contemporary design, particularly that designed by members of the Council of Industrial Design. He will be pleased to receive catalogues and illustrations from manufacturers who are producing this kind of furniture.
F. HAMER CROSSLEY,
Dipl. Arch. (L'pool), F.R.I.B.A.
County Architect.
Dethyshire County Council,
County Offices.
St. Mary's Gate, Derby.
8521

HOUSES ARE

NATIONAL COAL BOARD
SOUTH WESTERN DIVISION.
Applications are invited for the post of SENIOR ARCHITECT in the Divisional Architect's Brauch at Divisional Headquarters at present located in Cardiff.

The post is covered by a salary range of £1,100 by £35 to £1,345 thence to a maximum of £1,450 per annum, and is also superannuable and terminable by three months' notice on either side.
Applicants must be Registered Architects and corporate members of the Royal Institute of British Architects and will be responsible to the Divisional Chief Architect for the administration of large contracts. They should be thoroughly experienced in the design and construction of contemporary industrial buildings, with ability to control technical staff.

Applications, stating age, education, qualifications, experience, professional training, present post and salary, and the names of two professional referees, should be sent to the Divisional Establishment Officer, National Coal Board, South Western Division, Cambrian Buildings, Mount Stuart Square, Cardiff, to reach him not later than Monday, 20th April, 1953.

BOROUGH OF WIDNES.

BOROUGH OF WIDNES.

BOROUGH OF WIDNES.

BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT, at a salary in accordance with A.P.T. Grade IV/V of the National Scale of Salaries, commencing at the minimum of Grade IV and rising to Grade V when the occupant becomes registered Architect.

Applicants must be student R.I.B.A., and have worked in an Architectural office for at least two years subsequent to having passed the Intermediate Examination.

The appointment will be subject to the National Scheme of Conditions of Service as adopted by the Council, and to the Local Government Superannuation Act, October, 1937, and to the successful candidate passing a medical examination.

Applications, stating full particulars of age, experience and qualifications, etc., together with names and addresses of two referees, to be sent to the Borough Architect, Brendan House, Widnes Road, Widnes, not later than Tuesday, 21st April, 1953.

Canvassing directly or indirectly will disqualify.

Canvassing directly or indirectly will disqualify.

FRANK HOWARTH,

Town Clerk.

Town Hall, Widnes.

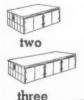
31st March, 1953.

NOTTINGHAMSHIRE COUNTY COUNCIL.
COUNTY PLANNING DEPARTMENT.
APPOINTMENT OF PLANNING ASSISTANT.
Applications are invited for appointment as
Planning Assistant (Development Plan Section).
Salary £595—£545 p.a. Experience in preparation

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96ft, 3in, × 16ft, 4in, 6ft, 3in, £145 - 0 - 0
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of Development Plans and the qualification of Corporate Member of the Town Planning Institute are required. Additional qualification in engineering, surveying or architecture an advantage.

Further particulars obtainable from the County Director of Planning, Shire Hall, Nottingham, to whom applications must be sent by 23rd April, 1953. Canvassing disqualifies.

K. TWEEDALE MEABY.

Clerk of the County Council.

8515

### **Tenders for Contracts**

6 lines or under, 14s. od., each additional line, 2s.

BOROUGH OF DAGENHAM.
ERECTION OF DWELLINGS, MANOR ROAD ESTATE, DAGENHAM.
Tenders are invited for the erection of 30 houses and 36 3-storey flats. Bills of Quantities and form of Tender may be obtained from the Borough Engineer and Surveyor, on payment of a deposit of 42 2s., which will be refunded on receipt of a bona fide tender. Plans and General Conditions of Contract may be inspected during normal office hours.

Sealed Tenders, endorsed "66 dwellings, Manor Road Estate," and bearing no external indication of the identity of the senders, to be delivered to the undersigned by noon, 27th April, 1953.

KEITH LAUDER,

Town Clerk.

Civic Centre, Dagenham.

Civic Centre, Dagenham.

COUNTY BOROUGH OF READING.
TO BUILDERS AND CONTRACTORS.
TO BUILDERS AND CONTRACTORS.
The Corporation of Reading invite tenders for the erection of eight police houses on the Bath Road Estate. One pair of houses to be erected in Virginia Way and three pairs of houses are to be erected in Hatford Road. Tenders may be submitted for one, three or four pair or pairs of houses.
The General Conditions of Contract and Drawings may be inspected at the office of the Borcugh Architect. Town Hall, Reading, and the Bills of Quantities, Form of Tender and endorsed envelope may be obtained on application to him accompanied by a cheque for two guineas (made payable to the Reading Corporation) which will be refunded upon receipt of a bona fide tender not subsequently withdrawn.
Tenders must be delivered to the undersigned not later than Friday, the 24th April, 1953.
No tender will be considered unless enclosed in the endorsed envelope provided which must be sealed and bear no indication of the sender's identity.
The Corporation do not bind themselves to

be sealed and year to make the identity.

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

G. F. DARLOW,

Town Clerk.

Town Hall, Reading.
April, 1953.

COUNTY BOROUGH OF GREAT YARMOUTH.
ERECTION OF 10 POLICE HOUSES AND
2 OLD PEOPLE'S BUNGALOWS.
The Corporation invite tenders for the erection of 10 Police Houses and 2 Old People's Bungalows at four sites within the County Borough of Great Yarmouth.
Bills of Quantities, Conditions of Contract, etc., will be available on and after 7th April, 1953, on application to the Borough Engineer's Architects' Office, 3a. Queen Street, Great Yarmouth, where plans may be inspected.
Tenders in plain, sealed envelopes, endorsed Tender for Police Houses and Old People's Bungalows,' must be received by me not later than Monday. 27th April, 1953.
The Corporation do not bind themselves to accept the lowest or any tender.

FARRA CONWAY.
FARRA CONWAY.

Town Hall, Great Yarmouth. 26th March, 1953.

Architectural Appointments Vacant

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

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

A RCHITECTURAL ASSISTANT required: either fully qualified or approaching final examination. Mixed practice, mainly commercial and industrial. Watson, Johnson Stokes, Victoria Square, Birmingham, 2.

A RCHITECTURAL ASSISTANTS (SENIOR and JUNIOR) required for general commercial practice. Office experience essential. Full particulars to: Healing & Overbury, Chartered Architects, Rodney Lodge, Cheltenham.

RCHITECTURAL ASSISTANT required, with A varied experience of housing and industrial buildings. Intermediate standard. North-West Kent area. Salary 2450 p.a. Full particulars in writing to Box 8504.

A RCHITECTURAL ASSISTANT, Intermediate standard, with at least one year's office ex-perience, required in West End office. Reply, stating age, experience, and salary required. Box 8505.

UNIOR ARCHITECTURAL ASSISTANT wanted in country practice in North Essex. Write, stating salary required, experience, etc. Box 8499.

EXPERIENCED ASSISTANT, with first-class constructional ability required. Write, stating experience, salary required to Louis de Soissons, A.R.A., & Partners, Midland Bank Chambers, Welwyn Garden City, Herts. 8497

ONDON TRANSPORT require temporary

LONDON TRANSPORT require temporary staff for Architect's office:—
Commencing salary, within ranges indicated, according to qualifications and experience. The appointments although temporary have reasonably long term prospects and are subject to medical examination.

ASSISTANT ARCHITECTS (F/EV 232):
Applicants should be chartered or Registered Architects of good standard of professional training and experience. Duties include control under Senior Assistant Architect of small unit of Architectural Assistants and draughtsmen engaged in preparation of schemes and working drawings for road transport premises. Salary range £759 to £819 with prospects of advancement to £894.

range £759 to £819 with prospects of advancement to £894.

ARCHITECTURAL ASSISTANTS (F/EV 233):
Applicants must have a good background of architectural training and office experience. Duties include preparation of schemes and working drawings for road transport premises under the supervision of an Assistant Architect. Salary range £599 to £699 with prospects of advancement to £739. Applications quoting the vacancy number within 14 days to Staff Officer, London Transport, 55 Broadway, S.W.I. For acknowledgment enclose addressed envelope.

SCHERRER & HICKS, of 19, Cavendish Square, London, W.J., require ARCHITECTURAL ASSISTANTS, of post-Intermediate standard, with office experience. Write, stating experience and salary required.

A SSISTANT. Minimum R.I.B.A. Infer. and office experience. Interesting work, good prospects. Salary according to ability. Apply in writing: R. A. Boxall, A.R.I.B.A., 92, London Road, Chelmsford.

ARCHITECTURAL ASSISTANT, age 23-21.
At least 3 years' Drawing Office experience, preferably in connection with industrial and commercial buildings, required by City firm of Building Surveyors. Saiary £400—£600. Apply BOX 8457.

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above address.

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ASSISTANT required; Intermediate standard,
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according to experience. Apply in writing giving
full details to E. William Palmer & Partners,
8, The Town, Enfield, Middlesex.

OLIALIFIED GENERAL ARCHITECTURAL
ASSISTANT required. Salary by arrangement. Write, stating age and experience to
Gerald Shenstone & Partners, F/A.K.I.B.A., 8,
Bloomsbury Way, W.C.1.

## Architectural Appointments Wanted

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office. Box 685.

A RCHITECTURAL ASSISTANT (25), R.I.B.A. Intermediate standard, with 7 years' varied office experience, seeks post in office with accent on contemporary design. Box 683.

ENIOR ASSISTANT, keen, conscientious, 7 years' experience, requires position in small or medium size practice in Kent or London.

BOX 009.

A RCHITECTURAL STUDENT, (19), 2½ years full-time R.I.B.A. course, requires temporary full-time or part-time experience in Architects office before going to University.

Other Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, & The engagement of persons answering the advertisements must be made through a Logi Office of the Ministry of Labour or a Schedule Employment Agency if the applicant is a may anged 18-44 inclusive or a woman aged 18-5 inclusive unless he or she or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952

SENIOR REPRESENTATIVE required, London area, possessing first-class connections with Architects, and preferably having knowledge of flooring. State full particulars, including salar, to Semtex, Ltd., Semtex House, The Broadwas, Welsh Harp, London, N.W.9.

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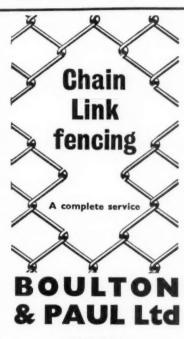
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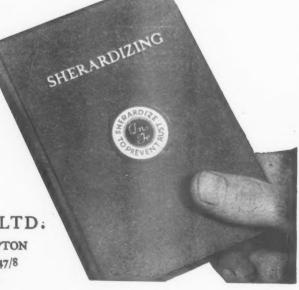
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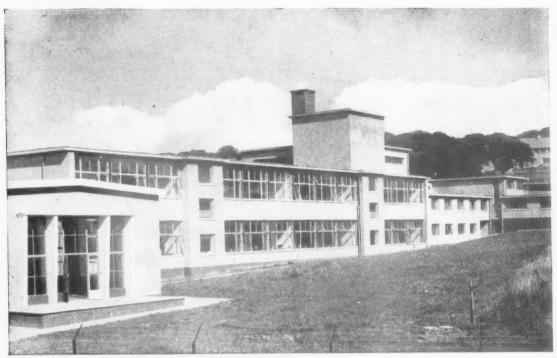
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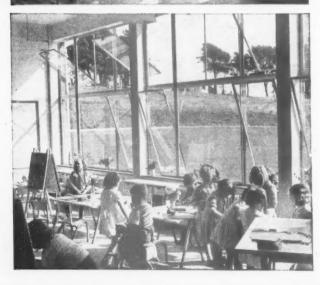
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