Alphabetical Index to Advertisers

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AnD WEDGE METHOD

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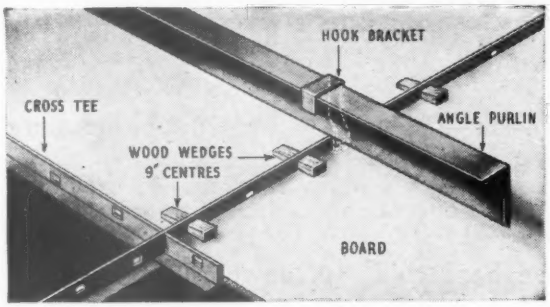
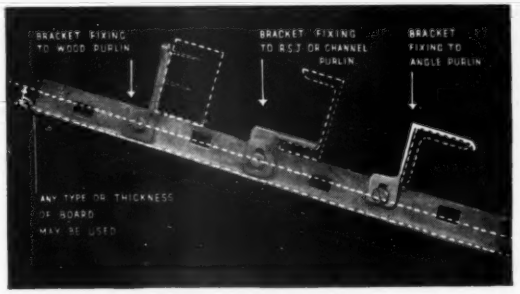
The Wallboard is secured to sherardised, pressed steel, slotted T-section by wedges. To the right are shown the methods of attaching the support to various forms of purlin.

Escalator Tunnel at St. John's Wood Underground Station. Architect: S. A. Heaps.





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AN/40

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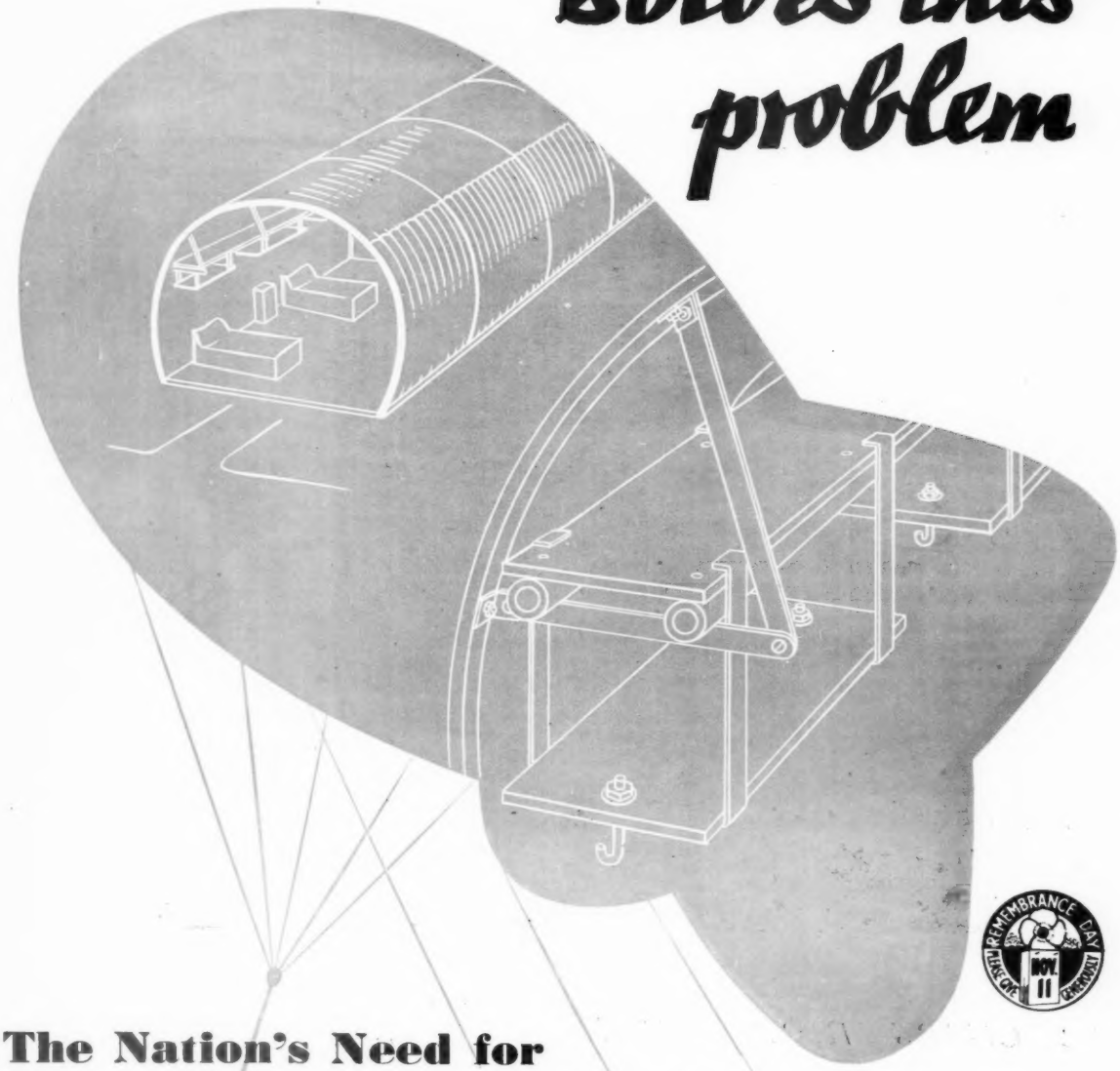

REMEMBRANCE DAY NOV. 11

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The above sketch shows:
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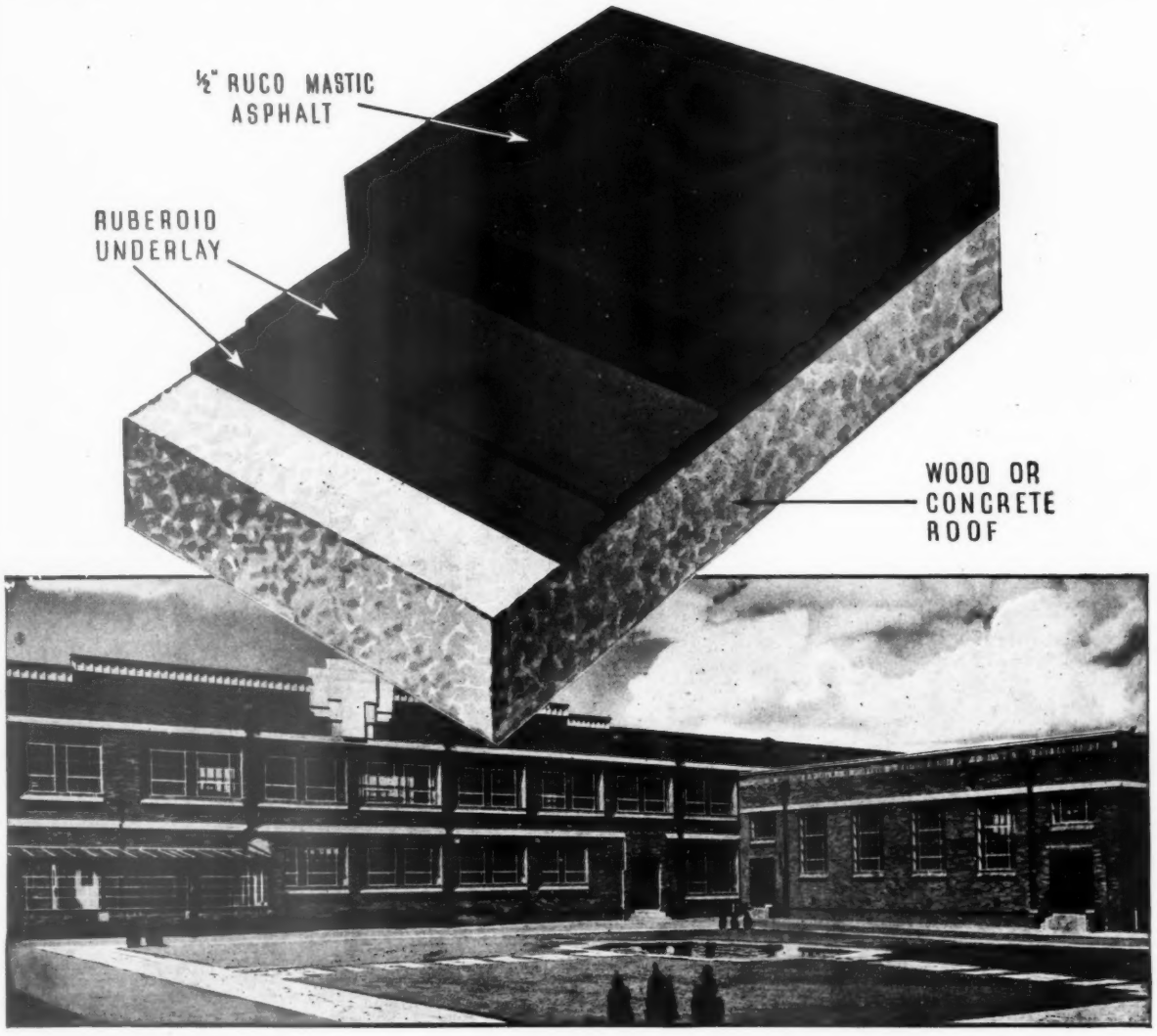

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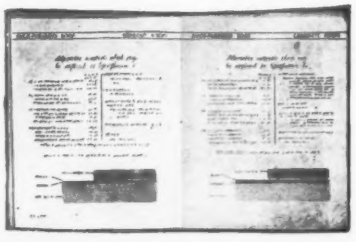

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Architects and Engineers are invited to write for a copy of this Ruberoid Publication No. 326 entitled "Standard Specifications for Ruberoid Roofs."

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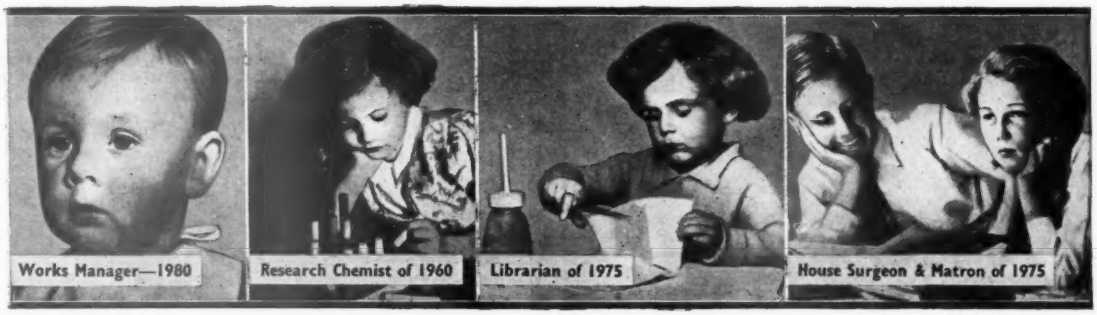

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THE ARCHITECTS' JOURNAL

THE ARCHITECTS' JOURNAL
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The Editor will be glad to receive MS. articles and also illustrations of current architecture in this country and abroad with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

THURSDAY, OCTOBER 22, 1942. NUMBER 2491 : VOLUME 96

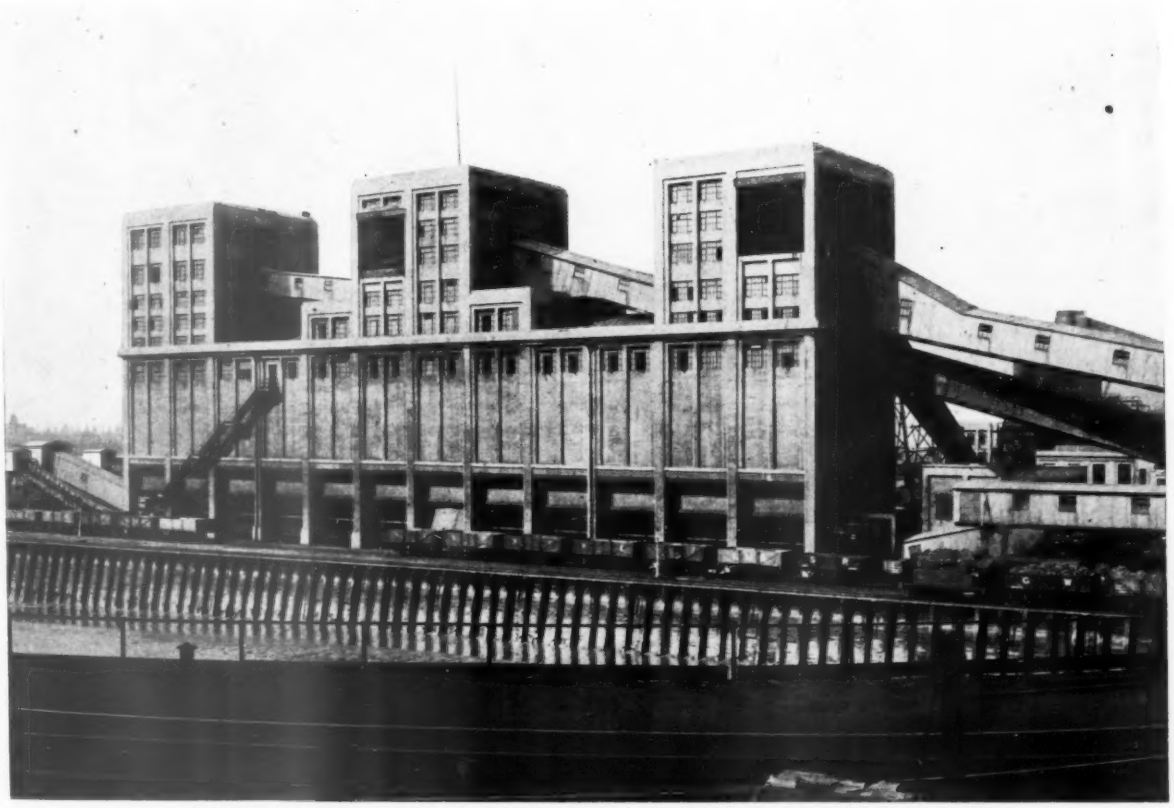
PRINCIPAL CONTENTS

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this JOURNAL *should not be taken as an indication that they are necessarily available for export.*

Owing to the paper shortage the JOURNAL, *in common with all other papers, is now only supplied to newsagents on a "firm order" basis. This means that newsagents are now unable to supply the* JOURNAL *except to a client's definite order.*

Overwhelming evidence of the resistance to fire and the great structural strength of reinforced concrete has been provided during five years of aerial attack on cities. Whilst it may not be necessary to design against aerial attack in the future, it is only common sense to select for war-time and post-war construction the material which has been conclusively proved to possess the greatest structural advantages.

REINFORCED CONCRETE AND PUBLIC UTILITIES—GAS



Reinforced concrete coke storage bunkers—the modern method of coke handling

THROUGHOUT the months of intensive air-raids, gas undertakings have played a decisive part in the national effort by providing, almost without interruption, one of the most important public utility services. Reinforced concrete structures housing essential machinery have contributed largely to the maintenance of this service. The cessation of hostilities will be followed by the increasing demands of the peace-time programme of reconstruction. To meet this call many gas undertakings will extend their plant. Because reinforced concrete construction has a high resistance to corrosive action, is low in first cost, and requires a minimum of maintenance, it will again be chosen as the most suitable medium for office buildings, wharves, hoppers, water towers and purifiers, and other essential structures.

THE REINFORCED CONCRETE ASSOCIATION

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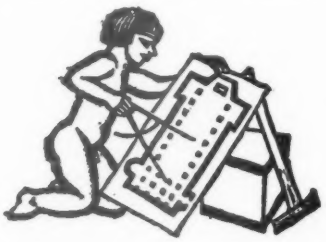
Telephone: Whitehall 9936.

In common with every other periodical and newspaper in the country, this JOURNAL *is rationed to a small proportion of its peace-time requirements of paper. This means that it is no longer a free agent printing as many pages as it thinks fit and selling to as many readers as wish to buy it. Instead a balance has to be struck between circulation and number of pages. A batch of new readers may mean that a page has to be struck off, and conversely a page added may mean that a number of readers have to go short of their copy. Thus in everyone's interest, including the reader's, it is important that the utmost economy of paper should be practised, and unless a reader is a subscriber he cannot be sure of getting a copy of the* JOURNAL. *We are sorry for this but it is a necessity imposed by the war on all newspapers. The subscription is £1 3s. 10d. per annum.*



from AN ARCHITECT'S *Commonplace Book*

"This was the great mistake of nineteenth-century Gothicisers. They tried to revive a style which depended on sentiment as if it depended on rules, and they looked for these rules in the buildings themselves. The absurd attempt of Batty Langley was made all through the Revival. There was, indeed, a short period—*the period of Fonthill*—when it seemed as if Gothic forms could be adapted to the spirit of Romanticism. But even then a certain amount of archæology was considered respectable; and under the Camden Society the craving for an exact reproduction of mediæval forms became involved with the belief that these forms had symbolical and moral value, or at least were the expression of a noble state of society. The true Gothic Revivalist could not modify these moral forms to suit a corrupt society; so instead of saying, 'You must adapt Gothic to modern life,' he said, 'You must change modern life to produce true Gothic.' The best spirits of the Revival—Pugin, Ruskin, William Morris—turned from the reform of art to the reform of society, from the advocacy of dead decorative forms to that of undying principles of social order."

From the Gothic Revival, *by Kenneth Clark.*

Though every news item is news to someone, it doesn't follow that all news has the same value for everyone. The stars are used to draw attention to the paragraphs which ought to interest every reader of the Journal.

★ *means spare a second for this it will probably be worth it.*

★★ *means important news, for reasons which may or may not be obvious.*

Any paragraph marked with more than two stars is very hot news indeed.

N E W S

The War Damage Commission announces that Mr. John M. Theobald, P.P.S.I., M.I. Struct. E., has been APPOINTED WAR DAMAGE DEPUTY COMMISSIONER *for the London, North East, Region, in the place of the late Sir Edwin Cooper, R.A.*

★★

The exhibition at the Building Centre, which opened on Monday last, shows the articles of domestic furniture which are now covered by UTILITY DESIGNS AND SPECIFICATIONS. *The designs, specifications and working drawings are also on display. It was stated at the opening ceremony that, on and after November 1, the manufacture of domestic furniture will be prohibited except for the production of these utility articles by selected firms which will be licensed by the Board of Trade for this purpose. Firms will be allowed, however, until December 31, to complete the manufacture of pre-utility furniture which was in process on November 1.*

The utility designs and specifications have been produced by the Advisory Committee, under the chairmanship of Mr. Charles Tennyson, C.M.G., which was appointed by the President of the Board of Trade on July 8 last. These specifications provide the maximum economy of raw materials and labour consistent with sound construction and agreeable design, and they have been specially adapted to the kinds of raw materials which can most easily be made available.

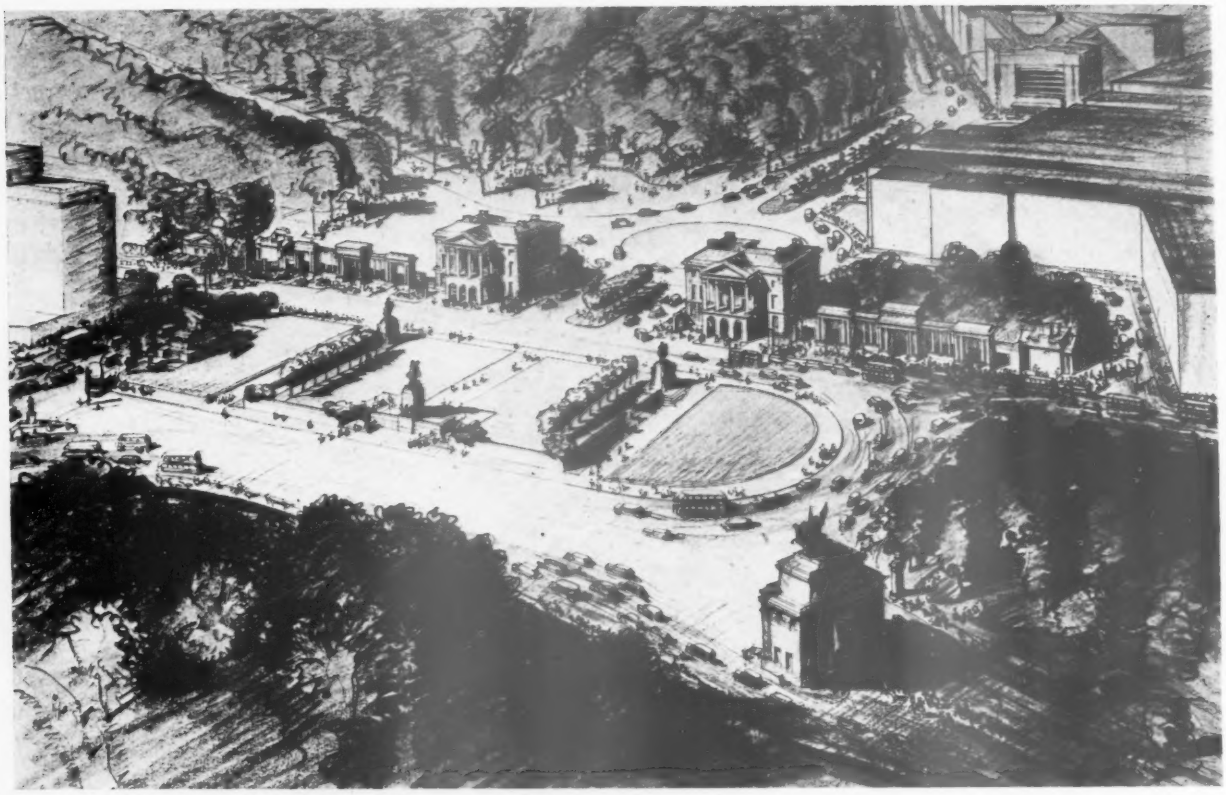
The following designers assisted the committee in their work: L. J. Barnes, N.R.D., Edwin L. Clinch, N.R.D., Walter J. Cornell, N.R.D., H. J. Cutler, N.R.D., John Grey, F.R.I.B.A., N.R.D., Kenneth Holmes, J. C. Macneill, N.R.D., Brian O'Rorke, M.A., F.R.I.B.A., N.R.D., Victor Ruben, N.R.D., Grey Wornum, F.R.I.B.A., N.R.D.

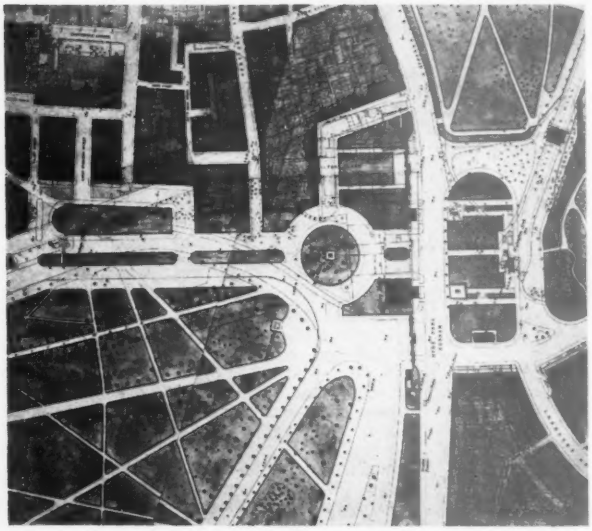
Utility furniture will be sold at fixed maximum retail prices. It is not yet possible to state exactly what these prices will be, but they will be substantially below those being charged at present. A further announcement on this subject will be made shortly.

London has no skyscrapers, not because BRITISH ARCHITECTS COULDN'T DESIGN ONE, *but because London is built on swampy ground and skyscrapers need solid foundations.*

"The British care little about size. They take more pride in age and tradition than in having the 'biggest.' They will point out historic buildings which were built almost a thousand years ago. Those buildings mean as much to the British as Mount Vernon or Lincoln's birthplace do to us."—From a booklet prepared by the U.S. War Department for American soldiers in England.

In 1930 Housesteads Camp with ¾ mile of HADRIAN'S WALL *and a mile-castle was presented*





R. A. Plan for London

Hyde Park Corner as the Royal Academy would replan it. In order perhaps to justify two Apsley houses and two Decimus Burton screens, London's new ring road has been taken up Park Lane, an arrangement which excludes not only Hyde Park itself but also Kensington Palace, the Albert Hall and the South Kensington Museums from inner London and leaves Paddington Station in a rather isolated position. The perspective shows a pleasant open space planned to form the central feature of this important road junction; a number of people are strolling about in it enjoying the sunshine. It would be interesting to know how they are supposed to have got there. (Perspective by J. D. M. Harvey.)

to the National Trust and four years later covenants were given over the adjacent farm. To-day the Trust announce that they have been able to buy, partly as an investment, Hotbank Farm with a further 2¾ miles of the Wall. Hotbank Farm immediately adjoins Housesteads and covers over 900 acres and carries rights over a further area. It is bounded on the south by Hadrian's Wall and the views at Crag Lough or Peel or Hotbank Crags cover a wide area of wild and romantic beauty. After the war the Trust will hope gradually to bring the new section of the wall with its turrets and mile-castles into a state worthy of such a great historical monument.

★

Next month a scheme of SUNDAY WORKING FOR BUILDERS *will come into operation on urgent Government construction works. This action is to be taken in view of the limited hours of daylight during the winter months, and the urgent necessity for maintaining production in the building and civil engineering industries at the highest possible level. The decision has been made by MOWP after consultation with representatives of the national organisations of building and civil engineering Employers and Operatives.* The following Sundays are to be worked: *England and Wales.*—November 8 and 22, December 6 and 20, January 3, 17, 31, February 14.

Scotland.—November 8 and 22, December 6 and 20, January 10 and 24, February 7 and 21.

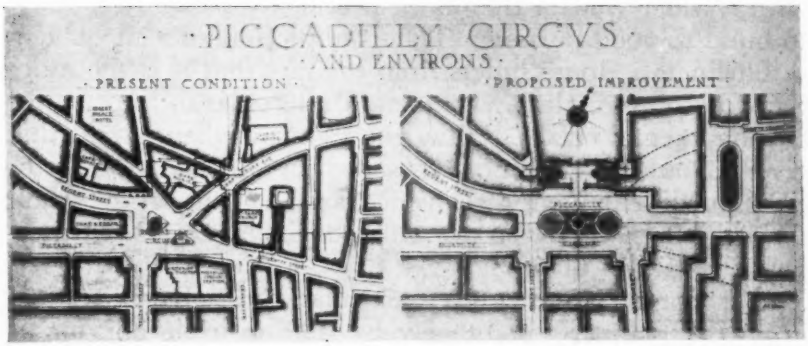
On the Saturdays preceding these Sundays, work should cease at midday, but on other Saturdays 8 hours should be worked. Subject to the emergencies of the war situation, there will be two days' holiday at Christmas or New Year. There will be no Sunday work after February 14 in England and Wales and after February 21 in Scotland, except under the permanent regulations governing Sunday working laid down by MOWP.

★★

Is it not essential to the interests of the Country that co-ordination of the whole of the GOVERNMENT'S BUILDING PROGRAMME SHOULD COME UNDER ONE AUTHORITY *at the earliest possible date? This is one of the seventeen questions directed to the Government by the Federation of Greater London Master Builders. The whole of the questions appear on page xxiv.*

If you are going to DECENTRALISE YOUR INDUSTRIES, *this ought to be done in large groups which will form decent-sized communities. It is a mistake to spot industry indiscriminately about the country. It must be done on a proper plan, with a grouping of industry. These opinions were given by Professor Patrick Abercrombie, F.R.I.B.A., in reading a paper before The Scottish Branch of the T.C.P.A.*

Other points from his paper were: To what extent can industry be decentralized? There are certain areas available; free, empty areas. There are areas where industry should be prohibited—National parks, etc. Then there are permissive areas where industry would have to make out a good case before being permitted to settle. It is far better to get industry to go where you want rather than use force, and the best form of persuasive planning is to have industrial estates, where they get all the facilities they want. If trading estates are laid out in connection with satellite and colony development, and the industrialist knows that housing will be provided as well, you will have a prospect of realizing these things without resort to force. These new communities should be most carefully located. National planning will be necessary to find out where they should go. There is scope for a Government Ministry of National Planning to examine this problem now. Our aim in planning must be a well-balanced community, not a housing or industrial dump.



R.A. PLAN FOR LONDON

THE JOURNAL for this week is devoted to a review of the Royal Academy plan for London, now on view at Burlington House. The official account of the scheme published by the Town Planning Committee of the Royal Academy, most of which is reprinted on page 264, gives an interesting account of how the plan took shape. It is based on the Bressey Report, frankly a road engineer's scheme. This, however, has been modified in certain respects. The report explains that these revisions have been made with the purpose of creating better working and living conditions, providing more open space in the heart of London, and improving communications. These are certainly considerations which ought to have been borne in mind when the Bressey Report was modified but the drawings themselves show no trace of having been influenced by them. To anyone who has first examined the drawings the Report comes as something of a shock.

The drawings show key points in the plan of London rearranged to make possible the design of imposing elevations in connection with all the major road junctions. The Report in one of its franker passages states:—

> Besides traffic, the Committee realize the great importance of many fundamental matters, such as the use of land, the distribution of industry and markets, and the healthy and convenient housing of the people. But their principal concern is with good architectural planning and design: they desire to set a high standard for the treatment of centres of major architectural importance, while indicating the general lines on which schemes of redevelopment should proceed. The plans which they have prepared make this purpose plain; and it is their earnest hope that London will now decide to take a great step forward in promoting clear and harmonious civic design, and thus exert a beneficent influence on the planning of other cities and towns both at home and abroad.

Mr. Austen Hall has explained the position even more clearly. In an interview with the *Sunday Times* he is reported to have said:

> "This is an attempt to bring the architect into planning in its earliest stages. The traditional method is for the engineer to build his road and then leave the architect to make what he can of it. But by then it is usually too late for the architect to do anything effectively."

Now this is a curious statement for the secretary of a town planning committee to make; it completely ignores the fact that the persons principally responsible for a town plan should be town planners and that both engineers and architects need to be given their terms of reference by somebody

with a wider view of the problem than their own if they are to build to good purpose. The exhibition at present on view at Burlington House suffers from the fact that it is too much the work of specialists whose main interest is in the creation of monumental effects. How good some of them are at this, given favourable conditions, is shown by Mr. Harvey's sketch for the redevelopment of Covent Garden. But on the whole the exhibition merely proves that engineering plus architecture is not town planning.

This is not an attack on a particular style of architecture. From the planner's point of view style is irrelevant, for he is not an artist concerned with how buildings look but a practical sociologist or, as Mr. Clough Williams Ellis would say, a social surveyor, concerned with how people live. When a stage is reached where it becomes necessary to give formal expression to a system he has worked out, his job ends and that of the architect begins.

Nor is it intended to imply that buildings on a grand scale are not wanted anywhere in a capital city; or that grand buildings and monumental layouts are a kind of fraud on The People perpetuated by the idle rich. The experience of Russia proves just the opposite. The masses love the monumental.

The trouble with the Royal Academy Scheme is not that the architecture is bad, but that it is uncalled for. It has not been evoked by town planning considerations and is unrelated to the needs of human beings living in a twentieth century capital city. If tens of millions of pounds were in fact spent on carrying these buildings into practice we should all suffer still from exactly the same discomforts as have made town centres repulsive for the last fifty years.

This being so it has not been thought necessary to criticise the monumental works now on view at Burlington House from an architectural point of view. Most of them occur in places where no developments of this kind should be tolerated and there is not much more to be said on the subject. To quote Mr. Tripp, whose book on traffic is reviewed on page 271, "The assumption that 'great roads demand buildings on a grand scale' is unsound because if the roads are properly designed there will be no one to see these buildings except persons boxed up in fast-moving vehicles who can get no adequate impression of any building whatever." No reasonable person having thought over this statement can doubt the sense of it. It means that in future monumental works must be sited away from traffic routes. Classical street planning, which creates its effects by combining the two, must go, because the arrangement is one which no longer works. One or two piazzas dotted about the R.A. plan show the beginning of a new idea, but unfortunately it is negatived by the scheme as a whole. On these grounds no space has been spared in this issue for architectural criticism, though we hope later on to have something to say. The plan, however, is criticised on page 266 by Mr. N. Aslan who has studied London's road system from the R.A. point of view.

The Architects' Journal
War Address: 45, The Avenue, Cheam, Surrey
Telephone: Vigilant 0087-9

NOTES & TOPICS

ACADEMY PLAN

There are several points of view from which one might approach the subject of the R.A. plan. The committee calls its scheme one "for the architectural redevelopment of London," which invites one to consider the scheme simply as architecture on a grand scale. But the fact remains that the drawings taken together are the work of a town planning committee and each design is presented as part of a town plan. I propose to tackle first things first, and to criticize them as such.

★

One would prefer to laugh the matter off, but unfortunately the plan is public property, and the general public seem prepared to believe that this is town planning, and drop the subject. The Press has received the exhibition with polite enthusiasm, but the complete lack of criticism shows how little interest it has really aroused.

★

The main criticism of the scheme is that it's nothing more than a street plan. Whereas the main object of 20th century town planning *is to get rid of streets*. What is wanted are roads for traffic and buildings set in open spaces for human beings.

★

The point of view of the traffic expert has been clearly stated by Mr. Tripp* in his latest book and

* See page 271.

quite apart from the fact that the arrangement encourages street accidents, comfortable buildings can't be provided in such a position.

★

To begin with, a large number are bound to face the wrong way and to get no sunshine. They are also certain to be badly lit. Mr. Tripp suggests that the standard width of a main road should be 66 ft., and of a minor road 40 ft. The usual height of a town building is 80—100 ft., and anybody who takes the trouble to sit down with a pencil and a piece of paper can work out for himself the extent to which the lighting conditions could be improved by increasing the height of buildings still further, if their spacing could only be worked out on a rational basis. So long as it's dictated by street widths, however, this can't be done. There's no way out of the present impasse of buildings that are neither high nor low, and are far too close.

★

The problem of light is essentially the same as that of open space. Where lighting conditions are adequate there'll be enough space for most purposes, except perhaps in residential districts. The R.A. report talks a lot about open space, but the plans do not show much apart from roundabouts and strips of garden lining traffic routes, which are useful certainly to prevent collisions and insulate buildings from noise, but have corresponding disadvantages as pleasure gardens.

★

Another argument against streets, of course, is that they magnify noise. "Modern buildings," writes Mr. Bagenal, "must protect against noise as well as against rain and cold. Structural insulation after years of investigation has yielded many secrets, but remains technically difficult and expensive. It is cheaper on unconfined sites to conquer noise by segregation and separation."

★

That's the crux of the planning problem—the recreation of unconfined sites. Precincts solve the problem from the traffic expert's point of view, but the planner wants more.

★

The Academy approaches planning from a diametrically opposite point of view. To quote from its own report: "The shape of the buildings that front the streets gives visible form to the pattern, and the one must be designed in relation to the other. This three dimensional planning is of particular importance at road junctions as not only is it there that buildings *are most prominent*, but also safe and easy movement is greatly facilitated if the shape and arrangement of surrounding buildings are planned as a unit."

★

In other words we must have frontages on æsthetic grounds. Compare this with Mr. Tripp's statement: "The assumption that great roads demand buildings on a grand scale is unsound, because if the roads are properly designed there will be no one to see these buildings except persons boxed up in fast-moving vehicles who can get no adequate impressions of any building whatsoever."

★

The joke of the week is that Mr. Tripp is on the Town Planning Committee of the Royal Academy, and has been on it for the past nine months.

ASTRAGAL

Utility furniture now on exhibition at the Building Centre: a dining room suite.

R.A. PLAN *for* LONDON

The Royal Academy scheme for the redevelopment of London, illustrated on pages 264-270 of this issue, is now on view at Burlington House. Here are some press opinions of the scheme.

OBSERVER

Osbert Lancaster

At Burlington House those with strong nerves may see what the Royal Academy intends to do to London. Adequately to discuss the merits or demerits of the Bressey plan, already the subject of much controversy, which forms the basis of the present exhibition, is beyond the scope of an art critic. So one must confine oneself to the consideration of the architectural pipe-dreams to which several of the planners have given concrete form in a series of daintily hand-tinted elevations. As far as one can judge the London of the future is to be a city enlivened by almost constant civic processions; not only are "Processional Ways" to cut across every familiar vista, but even the Thames, one gathers, will be crowded with State barges. The age-old problem of the south bank is apparently to be solved by the erection of several reproductions of the Stockholm Town Hall, and Piccadilly Circus will furnish a rare treat for lovers of Sir Reginald Blomfield's genius. On the whole, the new London, it seems, will be not unlike what the new Nuremberg might have been had the Führer enjoyed the inestimable advantage of the advice and guidance of the late Sir Aston Webb.

SUNDAY TIMES

In the meantime a Royal Academy Committee of 15 architects has been hard at work for three years on the revision of the Bressey Plan—which was primarily an engineer's scheme—in the light of their specialised knowledge and experience. The result of their work is the Royal Academy Plan which will be on view this week.

It is permissible, however, to say that the project—which, as Sir Edwin said, represents a pooling of architectural ideas—is a boldly imaginative development of the "ring-road" system proposed by Sir Charles Bressey to cope with London traffic problems, and its realisation would be a revolutionary step towards transforming the capital from a city of occasional beauties and haphazard ugliness into a city of planned and ordered dignity and efficiency.

"This," as Mr. Austen Hall put it, "is an attempt to bring the architect into planning in its earliest stages. The traditional method is for the engineer to build his road and then leave the architect to make what he can of it. But by then it is usually too late for the architect to do anything effective."

ROYAL ACADEMY PLANNING COMMITTEE. Chairman: Sir Edwin L. Lutyens, *O.M., K.C.I.E., P.R.A.* Vice-Chairman: Sir Charles H. Bressey, *C.B., C.B.E.* Members: P. Abercrombie, *F.R.I.B.A., Professor of Town Planning, University College, London*; Maj. Roland Adams; Miss J. F. Adburgham, *Member of Council, T.P.I.*; W. Godfrey Allen, *F.R.I.B.A., Surveyor, St. Paul's Cathedral*; W. H. Ansell, *P.R.I.B.A.*; H. C. Bradshaw, *F.R.I.B.A., Secretary, Royal Fine Art Commission*; Arthur J. Davis, *R.A., F.R.I.B.A.*; Louis de Soissons, *A.R.A., F.R.I.B.A.*; Viscount Esher, *Chairman, S.P.A.B.*; W. Curtis Green, *R.A., F.R.I.B.A.*; Austen Hall, *F.R.I.B.A., Hon. Secretary*; E. Vincent Harris, *O.B.E., R.A., F.R.I.B.A.*; Philip D. Hepworth, *F.R.I.B.A.*; F. R. Hiorns, *F.R.I.B.A., Late Chief Architect, L.C.C.*; C. H. James, *A.R.A., F.R.I.B.A.*; Rt. Hon. Lord Keynes, *C.B.*; W. R. M. Lamb, *C.V.O., Secretary, R.A.*; Edward Maufe, *A.R.A., V.-P.R.I.B.A.*; A. E. Richardson, *A.R.A., F.R.I.B.A., Professor of Architecture, University College,*; A. T. Scott, *F.R.I.B.A.*; Sir Giles Gilbert Scott, *R.A., F.R.I.B.A.*; H. Alker Tripp, *C.B.E., J.P., Assistant Commissioner of Police, New Scotland Yard*; and F. R. Yerbury, *Director, Building Centre.*

THE PEOPLE

Man of the People

Your correspondent looks forward with intense curiosity and, on the whole, great hopefulness to the period of post-war reconstruction. He would much rather hear of projects which may be *too* ambitious than of others which are clearly too timorous.

It is, perhaps, unlikely that we shall ever live to see the grand and spacious and nobly planned London which our leading architects have envisaged in the exhibition at Burlington House.

But heaven forbid that we should be content with any patchwork restoration of ancient dinginess and inconvenience!

THE TIMES

Since the age of the building of the squares and of Nash's streets and crescents London has grown on the whole uglier and less orderly. Now men's minds are perhaps less averse from the imposition of a controlled central design—if only there is some assurance that it is competently conceived and applied. Hostile action has destroyed large areas, and there is a wide feeling that it would be a sin against the Londoner's heritage to allow promiscuous private rebuilding. There seems a hope that a chance missed in Wren's day may be taken now.

This hope is evidently shared by the members of the committee over which Sir Edwin Lutyens has presided, with Sir Charles Bressey as his vice-chairman. But if the plan of 1938 (which, incidentally, was concerned with a much wider area) was Bressey and Lutyens, that enshrined in the present exhibition and in the interim report soon to be issued is Lutyens and Bressey. The first emphasis is on architecture; the first aim is to lay out lines which shall allow noble new buildings to arise and noble old buildings to survive and to be seen.

Many of the most interesting sections of the scheme are connected with those parts of inner London most closely bound up with our history or day-to-day life. It is proposed, for example, to divert traffic from the immediate neighbourhood of Westminster Abbey; the areas of Charing Cross and of Piccadilly Circus are to be reconstructed; and, above all, out of the ruin which now chiefly surrounds St. Paul's, a worthy setting is to be devised for that noble cathedral. It is not to be expected that all these suggestions can be put forward without encountering many prejudices and challenging many preconceptions. In particular, those riverside features which depend upon the adoption of a Thames barrage scheme and the consequent reduction of the effects of the tide, such as the boat-houses which look so charming in a view of St. Paul's as it might appear from the river, will arouse qualms in many Londoners of diverse tastes and interests. But critics should condemn, if at all, only after careful reflection. These suggestions are offered out of love for "the flower of cities all," and that they are offered under the auspices of the Royal Academy is both a credit to that society and a guarantee that there is nothing hasty or unconsidered about them.

MANCHESTER GUARDIAN

Professor Reilly

If this exhibition at first sight does not seem to rise in every respect to the opportunity it is probably due not so much to the pre-steel eighteenth-century manner in which the buildings shown are conceived as to a very proper desire of their designers to preserve the particular characteris ics of London and to the restraining influence in this direction of the great architect who is chairman of the group as well as president of the Academy.

The group has taken the Bressey-Lutyens Report of 1938 for dealing with the traffic requirements of the town as a basis of its work. That report was much criticized when it appeared as a scheme for making London an easier place to escape from rather than a better place in which to work and live. It is to complete the Bressey Report in this latter respect that the present work is directed. It must not, however, be imagined that the Academy scheme for Central London is a Haussmann-like one, with its main lines super-imposed on the town regardless of what is to the left or to the right. The original Bressey scheme was, indeed, rather like that. This scheme does pay attention to the character of the various districts.

The great circular road, which was incomplete in the Bressey Report, on the south side of the river is now taken round the whole of Central London on both sides of the river and connects all the terminal stations (most of which are pushed back half a mile or so along their railways) with a high-speed traffic-way as well as an underground railway. This high-speed way is divided into two raised sections, with a low-level ordinary roadway in between for slow traffic. One fears that the result would be a double wall round the centre of the town, however many gateways there are through it. One knows the damage London is suffering to-day from raised railway embankments crossing the town and deadening and destroying whole districts. This raised speed-way, even if it is sunk to the ground level where it crosses the park, as it appears to be, or is bottled up entirely where it crosses the Tower Bridge, will be like the walls of an old city. Those who are outside will remain outsiders, and among the outsiders in this case will be the South Kensington Museums and the National Theatre. Inside the wall, however, is the British Museum, with a fine space cleared in front of it, and there is a grand new arrangement of streets round the National Gallery and Trafalgar Square, with Charing Cross Station swept away, but with its bridge left for wheeled traffic. If the high-speed traffic had been sunk all this could have been the same and the feeling of being within or without the walls would not be there.

Clearly there is much food for thought and discussion in this exhibition, and if the younger school of architects will be a little shocked, as indeed they should be, with the type of building shown, perhaps most of all with those in the suburbs, where there was less excuse for going back two hundred years, they will learn a lot from the careful site-planning and from the attempts made to adjust an old city to modern traffic. Perhaps they will learn that in certain sections of the town such traffic must be kept out entirely.

DAILY EXPRESS

Sir Edwin and his helpers reverted to Christopher Wren's dream of London—a chequerboard of broad avenues, linking a series of great open spaces.

DAILY EXPRESS

William Hickey

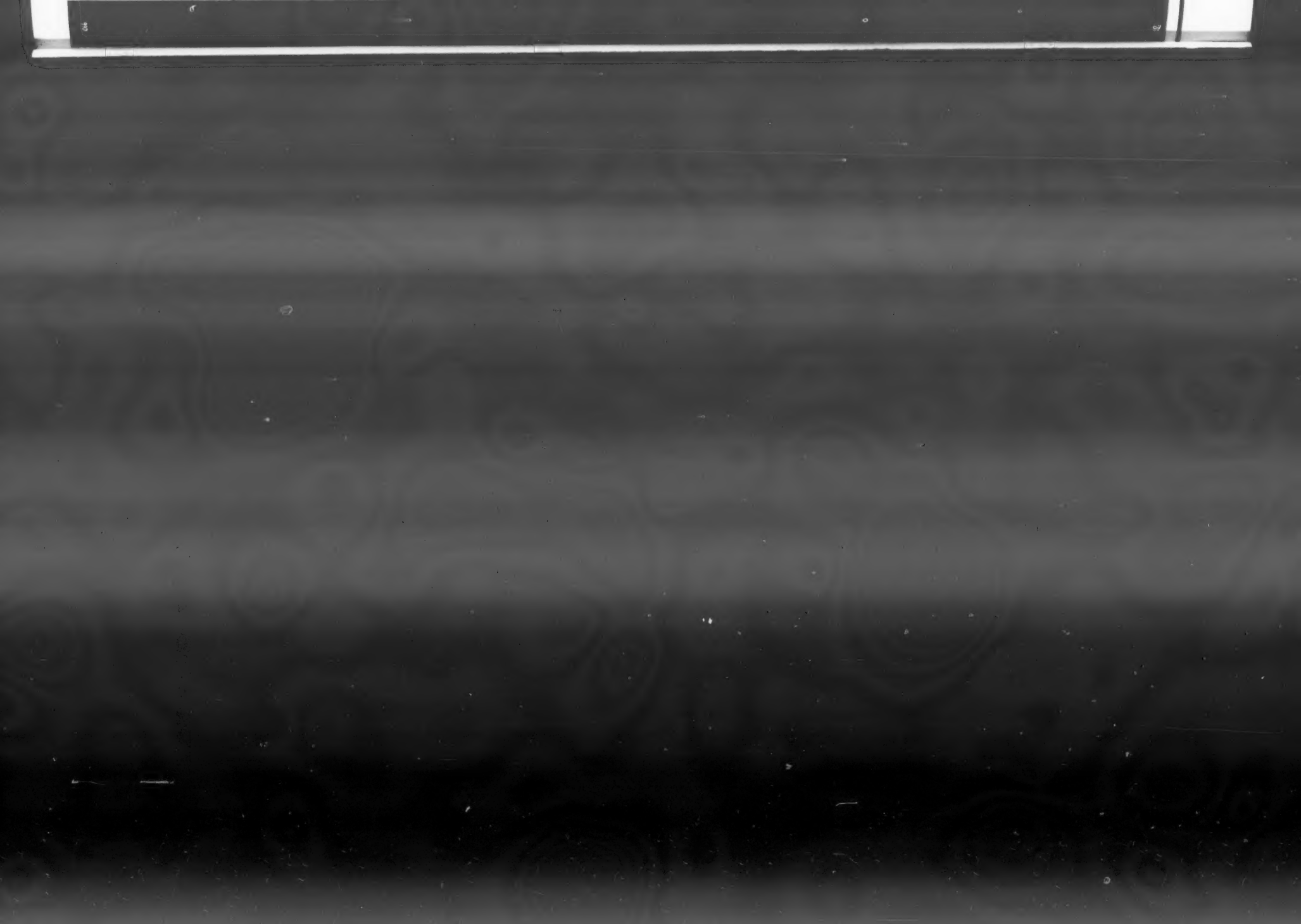
The plans for the post-war City of London shown at the Royal Academy are, fortunately, only tentative suggestions.

We all agree that there should be far more open space than there was—vistas of St. Paul's, boulevards and so on. But there is no reason at all why the new buildings should be—as in sketches published yesterday—in an Italian Renaissance style.

All the history of architecture, in its living periods, disproves the theory that adjacent buildings must "match" exactly. So long as their height is suitably restricted, the new buildings around St. Paul's will show it up far more effectively, and look better themselves, if they are unashamedly of this century.

NEWS CHRONICLE

Above all, the new London will be a city where the people who live in it will come first. They are pictured everywhere enjoying them-



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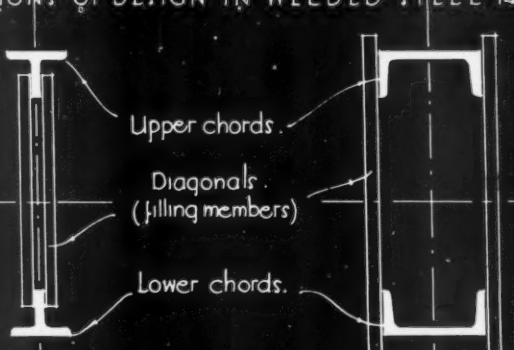
DETAILED CONSIDERATIONS OF DESIGN IN WELDED STEEL 14 : LATTICE GIRDERS (a)

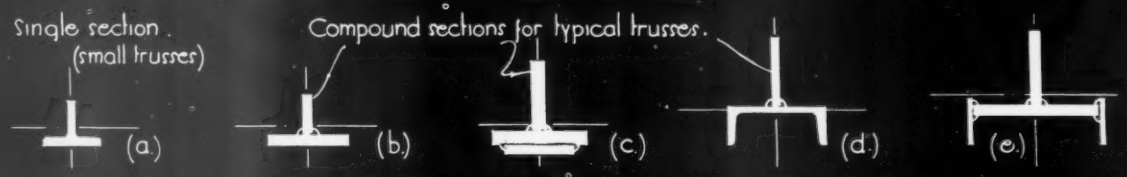
FIGURES 1 & 2 : ILLUSTRATING MAIN CLASSIFICATION OF LATTICE GIRDERS.



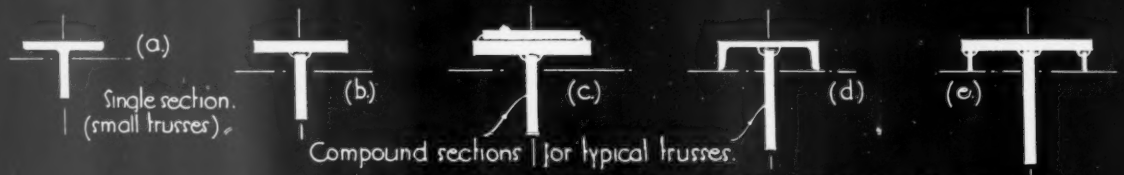
(a.) Single flange for chord-to-chord connecting members.

(b.) Double flanges for chord-to-chord connecting members.

For details, see Sheet 15.



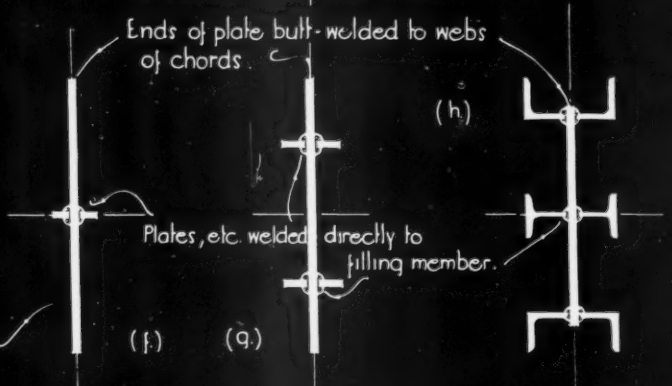
FIGURES 3 : TYPICAL EXAMPLES OF SECTIONS FOR LOWER CHORDS OF TRUSSES.



FIGURES 4 : TYPICAL EXAMPLES OF SECTIONS FOR UPPER CHORDS OF TRUSSES

A : Paired sections for fillet welding to webs of chords.

FIGURES 5 : TYPICAL EXAMPLES OF SECTIONS FOR FILLING MEMBERS.



B : Compound sections for heavy construction.

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INFORMATION SHEET : STEEL FRAME CONSTRUCTION 85 : WELDING 41

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INFORMATION SHEET

• 882 •

STRUCTURAL STEELWORK

Subject : Welding 41 : Detailed Considerations of Design in Welded Steel 14 : Lattice Girders (*a*).

General :

This series of Sheets on welded steel construction is a continuation of a preceding group dealing with riveted and bolted construction, and is intended to serve a similar purpose, namely, to indicate the way in which economical design as affected by general planning considerations may be obtained.

Both the principles of design, and the general and detailed application of welded steelwork are analysed in relation to the normal structural requirements of buildings. The economies in cover and dead weight, resulting from the use of lighter and smaller steel members and connections, are taken into consideration in the preliminary arrangement of the building components in order to obtain maximum economy in the design of the steel framing.

This Sheet is the fourteenth of the section on detailed considerations of design in welded steel, and is the first of two Sheets dealing with useful sections for chords and diagonals of lattice girders and trusses.

Classification :

Lattice girders can be classified under two headings :—

(1) See Figure 1. Girders in which the chords consist of Tee or similar sections, and the filling members are all connected to the web of the Tee.

(2) See Figure 2. Girders in which the chords have two vertical flanges or webs, to which filling members can be attached.

The second type usually allows greater latitude and is simpler when the stresses in the members are large. For small or medium trusses the first type is, however, more economical.

This Sheet deals with the method shown in Figure 1 (sections having one web only), while Sheet No. 42 will deal with sections of the second type.

Choice of Section :

All sections have to fulfil the following conditions :—

(*a*) They have to provide facilities for direct connection between the different members.

(*b*) They must have sufficient lateral stiffness to prevent damage during transport.

(*c*) They must have sufficient area to take the stresses.

(*d*) In the compression members, the material should be massed as far as possible from the centre of gravity.

The web of the section must be long enough to comply with the first condition, but the centre of gravity should be located as close to the flange as possible.

The second condition is easily fulfilled if the width of the flange is not less than $\frac{1}{120}$th of the length. This applies to the pieces as they are transported.

Lower Chord :

Figure 3 gives sections that can be used for the lower chord. For a very small truss a single angle would be sufficient, but as the use of a single angle would introduce eccentricity it is not recommended for any major construction. There is no point in using two angles as in riveted construction—where they are needed for fastening gusset plates, as the latter are not needed in welded structures. Two angles, back to back, are invariably inferior to a Tee section, as the centre of gravity is farther away from the flange and extra labour would be involved in fabricating a section from two angles.

A Tee section, as shown in Figure 3*a*, can be used for small trusses, but for medium-sized girders it is better to use compound sections (Figure 3*b*) which are easier to detail. An additional flange plate (Figure 3*c*) can be arranged where the forces in the different panels vary. The combination of a plate and a channel (Figure 3*d*) is particularly suitable for lower chords, since a section of this type possesses a lower centre of gravity. Figure 3*e*, made up from plates, would only be used for heavy structures.

Upper Chord :

The corresponding sections for upper chords are shown in Figure 4. Again the T section is suitable for small trusses, while in medium and heavy construction this would be replaced by a compound section. If a channel and a plate are combined with the flanges turned downwards, as in Figure 4*d*, the advantage of moving the centre of gravity close to the flange is lost. As the upper chord is usually larger than the lower, the section is nevertheless suitable as it possesses considerable lateral stiffness.

Filling Members :

Sections for filling members are shown in Figure 5—*a*, *b* and *c* being equal and unequal angles, and channels respectively, placed in exactly the same way as in riveted construction, but being fastened directly to the web of the chords instead of to gusset plates.

Figures 5*d* and 5*e* show types of sections with cross webs, which are slotted over the chords, and these are particularly useful for heavily stressed verticals as they take up less space and the detailing of the nodes is simpler. For heavy construction compound cross sections must be introduced, in which one plate is in the same plane as the webs of the chords and is butt-welded to them. The plates at right angles are welded directly to the webs. Three of the many possible sections are given in Figures 5*f*, 5*g* and 5*h*.

Previous Sheets :

Previous Sheets of this series on structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 751, 755, 759, 763, 765, 769, 770, 772, 773, 774, 775, 776, 777, 780, 783, 785, 789, 790, 793, 796, 798, 799, 800, 801, 802, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 816, 819, 821, 822, 823, 824, 826, 827, 828, 830, 832, 836, 837, 838, 839, 840, 842, 843, 845, 847, 848, 849, 850, 851, 852, 853, 855, 856, 857, 859, 860, 862, 863, 865 revised, 867, 869, 870, 871, 874, 875, 877 and 880.

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selves—strolling in green squares and gardens, drinking tea on flowered terraces, shopping in roofed-over, closed streets, sheltering in arcades and colonnades, gossiping in wide, airy avenues.

Places where people can rest, walk, meet and talk in quiet and safety are dotted all over the city.

Even in the heart of London there are shown blocks of flats around big central gardens, and terraces of two-storey houses, each with its own garden.

Houses in the East End are made as beautiful and the gardens as pretty as those in the West End. All housing groups are within 10 minutes' walk of large open spaces with playgrounds for adults as well as children.

EVENING STANDARD

The Bressey road scheme is the basis of a 100 years' development plan, staggering in its boldness.

Sir Charles Bressey and Mr. Austen Hall, hon. secretary of the committee, pointed out to me the chief transformation. A huge map of London, six yards wide by about four high, shows the Ring Road connecting the railway termini, some of them taken up bodily and moved a mile or two ; some of the old ones, like Cannon Street, are abolished altogether.

Waterloo, for example, is divorced from the new bridge and transplanted up-river to the Surrey end of Vauxhall Bridge, near the Nine Elms depot. The new road connects it with a new London Bridge station (at Bricklayers' Arms, in Bermondsey), a new Fenchurch Street, a new Liverpool Street (where Bishopsgate goods station now is), a joint Euston-King's Cross-St. Pancras station, Marylebone, and so back to Victoria and Waterloo again, with an offshoot to Paddington.

No underground station is left within this circle. There is a City Loopway road from the Tower to Finsbury Circus, Smithfield, Farringdon Road, and so eastwards along a new embankment, by way of a much cleaner Upper and Lower Thames Streets back to the Tower.

"You see," said Sir Charles, "things have happened round St. Paul's. Ludgate Hill is built over with fine shops and offices, and the western approach to the Cathedral is a wide new thoroughfare giving a vista of the west end of the Cathedral from a point in New Bridge Street. From the south side of the Cathedral a boulevard runs right down to the riverside."

"If you have a fine church," said Mr. Hall, "you must run your fine roads up to it."

I advise you to visit this exhibition. You will be surprised to see what a fine city it could be if these plans were carried out.

EVENING NEWS

However dreamlike may be the scheme, revealed to-day, of the 16 famous architects who have pooled their ideas to create a new and more spacious London, a tour of this possible capital-to-be is a fascinating, heartening experience.

Fortunately, I had Sir Edwin Lutyens as my guide, and his enthusiasm, his dry comments, seemed to bring the City Beautiful to life.

In this new city modern traffic needs and leisure have been given precedence over picturesque antiquity and tradition.

They have not gone into the cost, which must be fabulous, or the technical difficulties, which must be immense. And they emphasise that it is put forward more with the idea of stimulating the imagination of those who will be responsible for the rebuilding than of laying down any rigid solution.

Clearance for this new London has been ruthless ; many modern buildings, as well as the older ones, have gone to make way for it. Only historic churches and buildings of real architectural value have, in the main, been preserved.

Perhaps some of us will be spared to see these wonders of the future.

LETTERS

A. Calveley Cotton, A.R.I.B.A.

George C. Oldham, L.R.I.B.A.

R. Perry,
Executive Officer, Committee for the Industrial and Scientific Provision of Housing.

Unity in the Profession

Sir,—The reports of the committees concerned with post-war planning and reconstruction indicate that very large building programmes are contemplated, which, if private practice is allowed, would require a strong and efficient architectural organization. The building of the present weak state of the profession into such an organization will take a considerable time.

I suggest that, before the profession concerns itself with anything else, it should ensure that it is capable of carrying out its duties to society and to its own members, especially those in the Services. It is difficult to believe that the profession, which has been ignored during the large building programme of this war, will be suddenly restored to its rightful sphere without a very hard fight for self-preservation.

A. CALVELEY COTTON

Bath.

Sir,—Your correspondent "F.R.I.B.A." remains unrepentant. This can only be due to the evil effects of that fog of anonymity in which he continues to hide himself. Since I cannot reach him in private may I crave a little of your valuable space in which to get at him in public ?

He still judges an architect (and presumably architecture) by examination standards. He himself is careful not to answer awkward questions. I ask him again therefore : does he consider his Fellowship or his Associateship the greater proof of his own architectural ability ?

F.R.I.B.A.'s story of the parent who would not allow his son into the water until he could swim, surely helps Mr. Bradford's and my case rather than his own. For just as a man who has never entered the water cannot be described as a swimmer, neither should a man who has built nothing (like many an Associate of the R.I.B.A.) be described as an architect.

I am aware that the Royal Institute has already canvassed for Licentiates but in telling me this F.R.I.B.A. should have added that only those known to have reached the required standard have been approached, while at the same time the Royal Institute has rejected, and will continue to reject, applications from all registered architects who do not satisfy the standard required.

GEORGE C. OLDHAM.

Poole.

Mass Production and Prefabrication

Sir,—The juxtaposition in your issue for October 8 of Mr. Gloag's letter on mass production technique and the article on prefabrication in America is timely and stimulating.

It indicates clearly that the time has come for a systematic study of how to apply the machine to the provision of shelter and further, that this study is basically divided into two parts.

1. The application of mass production technique to the parts of houses built more or less by the traditional technique, *i.e.*, a site assembly by traditional organisation to architectural plans of traditional form.

2. The development of entirely novel techniques which are not up to the present allowed for either in the orthodox organisation of the building industry or in the training or calculations of architects. This is particularly emphasised by your remarks on Gunnison's second approach to the problem.

It must be realised that there is no case for prefabrication until Gunnison's approach and its converse, which he considered to be wrong, after scientific analysis, be pursued to physical experiments under a considerable multiplicity of systems.

The only reason for considering prefabrication at all is that the provision of shelter has lagged behind the provision of man's other necessities, amenities and luxuries and it is obvious that in this field there has been no intensive and scientifically pursued attempt to use the machine.

In this and every other field of mechanised production, even though technical problems be satisfactorily solved, there is no guarantee whatever that the social and economic problems involved can be equally satisfactorily dealt with. It is therefore essential, if the extensive application of the machine to building is not to cause the social chaos which it has in some fields, that the technical and other problems involved in prefabrication be tackled simultaneously and conjointly and that, parallel and conjoined with this investigation, there should be an equally intensive enquiry into the application of modern industrial and mass production technique to the traditional building industry.

R. PERRY,
Executive Officer. Committee for the Industrial and Scientific Provision of Housing.

London.

THE R.A. PLAN

FOR LONDON

THE Royal Academy Plan for London, now on exhibition at Burlington House, is illustrated on the following pages. It is understood to be the result of three years' research work undertaken by members of the R.A. Town Planning Committee whose names are given on page 262; the Committee, however, wish it to be clearly understood that these plans are still in a tentative and provisional stage. A slightly abbreviated version of its official report is reproduced on page 264 and the photographs are accompanied by a criticism specially written for the JOURNAL *by Mr. N. Aslan, whose greatly superior street plan for London, prepared by him when a student at the Town Planning Department of London University, preceded the Bressey plan by two years and was published in the* JOURNAL *two weeks ago. Sir Edwin Lutyens, Chairman of the R.A. Planning Committee, is reported as saying that the Academy plan might cost £24,000,000 to execute, but he has made it clear that the authors of the scheme have not allowed themselves to be influenced by practical or financial considerations. This being so, it is difficult to understand why so many of the defects of existing London have been reproduced. For instance, opportunities have been missed of distinguishing between major and minor roads and suppressing superfluous junctions (drawings 10-11, page 270); new buildings have been planned round 8-10 storey light wells and given not one but* four *frontages facing streets. Badly needed open spaces have been provided in inaccessible positions (page 258) and imposing architecture has been concentrated at points where it is inconvenient to stop and admire it, and where the dignity of the setting is in any case ruined by streams of motor traffic. The plan has been well received by the popular press, some of whose comments are reproduced on page 261. We don't wish to cry down the enterprise shown by the R.A. in embarking on town-planning propaganda, nor would it be just to make detailed architectural criticisms of designs which are put forward rather as intriguing suggestions than as practical proposals. It does however seem peculiarly unfortunate that a committee composed of such men as Lord Keynes, Mr. H. Alker Tripp, Professor Abercrombie, Lord Esher, Sir Charles Bressey and the President of the R.I.B.A. should be using the name of the Royal Academy to encourage the belief in the public mind that planning is still only an affair of Avenues, Places, Axes and Boulevards. And if the conditions of the exhibition make this false emphasis inevitable, it is ten times more unfortunate that the principles of landscape planning, the greatest contribution England has made to the European academic tradition, should have been totally ignored, as though the R.A. had never heard of, or was determined not to be aware of, a system of design largely developed by its own august early members, and celebrated through all the countries of Europe. Instead we have a rule-of-thumb Beaux Arts convention, which consists largely of an irrational abuse of the idea of symmetry, and results in such æsthetic infantilisms as the duplication—for no other purpose than symmetry—of that far-from-artistically successful building, the County Fire Office in Piccadilly Circus. It is to be hoped that the forthcoming R.I.B.A. town planning exhibition at the National Gallery will do something to put right the misconceptions the Royal Academy exhibition is likely to breed as to the true function of architects and the real traditions of English visual planning. It should be added that the critique which follows has been written by a town planner, Mr. N. Aslan, chosen specially to represent a point of view similar to the Royal Academy's. His views are not this* Journal's *and should be read in conjunction with the review of Mr. Tripp's book on page 271.*

OFFICIAL REPORT

The Royal Academy Planning Committee was formed in January, 1940, by the President of the Royal Academy, to consider and plan a scheme for the architectural redevelopment of London. The Committee set to work on the basis of the proposals of the Highway Development Survey, 1937 (better known as the Bressey-Lutyens Report) for dealing with the traffic requirements of London, and was primarily concerned with the architectural aspects of the new routes and of the adjacent sites affected by them. As its work proceeded, the destruction caused by air raids presented additional opportunities in the form of vacant sites and larger areas where obsolete or decaying property obviously calls for rebuilding. But the raids have only brought an incidental incentive to a general improvement in the planning of London which many others besides the members of the Committee have long felt to be overdue.

The Committee wish it to be clearly understood that their plans are still in a tentative and provisional stage: they are continually under review.

They are put forward more with the idea of stimulating the imagination of those who will be responsible for the work of reconstruction than of laying down any fixed or rigid solution.

Unity and Harmony in Design

Before any plans are put into execution, consideration must be given to the prescription of building lines and the design of street junctions, roundabouts and vistas. The increase in the volume and speed of traffic urgently requires the widening of streets, the improvement of the street pattern, and the opening of new routes. The shape of the buildings that front the streets gives visible form to the pattern, and the one must be designed in relation to the other. This three-dimension planning is of particular importance at road junctions, as not only is it there that buildings are most prominent, but also safe and easy movement is greatly facilitated if the shape and arrangement of the space and the surrounding buildings are planned as a unit. Such essential matters as scale and skyline, ordered siting, alignment of streets and balanced frontages must not be left to mere chance or the choice of individuals. To take an obvious defect, the skyline of London, from lack of architectural control, is at many points chaotic and unworthy. All sorts of excrescences for tanks, lift machinery and other necessaries appear to have been added after the designs were made. Such additions should be placed within the roofs, or the regulation of height should be adjusted to allow the raising of outer walls in order to conceal them; and pipes and safety staircases usually obtruding outside should be arranged within the building. Back and side elevations should be no less carefully considered than street fronts. The distant as well as the near view ought always to be taken into account, with special regard for the aspect from the river and parks. Approaches to public buildings and monuments, railway stations, bridges and any works of special architectural interest must be carefully studied.

Height of Buildings

The Building Acts, Local Regulations and Bye-Laws are complicated and lengthy; they should be greatly simplified and made clear, practical and as brief as possible. An important point needing revision is that in exercising control over the height of buildings the authority should take account of the angles of light measured from the opposite side of the street the imposition of a standard eight for buildings is not in the best interests of architecture. The decision here should primarily depend on zoning, greater height being allowed in certain areas according to the general design of a street as part of a well-planned scheme.

Railways

On the more practical side of their scheme, the Committee look forward to a greater co-ordination and simplification of the railway services. The stations and their appendages

in London have been the subject of constant discussion since 1860; but the magnitude of the task in construction and cost, and perhaps the claims of competing interests, have prevented the adoption of any major scheme of improvement. Main line terminal stations might well be arranged on a ring road, with an underground ring of electric connecting lines; this circular route would be by way of Paddington, Marylebone, Euston, Bishopsgate Goods Station, Fenchurch Street Goods Station, Tower Bridge, Bricklayer's Arms, Vauxhall and Victoria. Within the circle no railways should appear above ground. If trains could be brought into London by electricity instead of steam, and could cross the river underground, both the nuisance of railway smoke and the wasteful and unsightly encumbrance of viaducts would be removed.

Canals

Further development of the canal system would not only increase a valuable means of transport, but would give opportunities for interesting treatment of open spaces at the waterside.

The River

The river, as some of our best architects have been aware, and have shown when and where they could, provides magnificent scope for architectural planning and design. First, embankments and gardens should be carried along both sides of the river; then, the shabbiness and confusion which degrade the south side could give place to a worthy architectural scheme, which would immensely enhance the beauty of the capital, and would in time repay its cost by increasing the site values.

It is assumed that in any plan for the redevelopment of London there will be no wharves above Tower Bridge. This important traffic crossing should not be liable to constant interruption by the passage of shipping, especially if it is to be part of the ring road connecting all the terminal stations.

Tower Hill

The importance attached by the British people to the historical and actual significance of Westminster is shown by its central buildings and their general arrangement: another centre of vital interest awaits suitable development at Tower Hill. Here the age-long association with merchant seamen and sea trading, to which London owes much of her greatness, obtains some expression through All Hallows Church, the Custom House, Trinity House and the Head Building of the Port of London Authority. But by adding other buildings connected with the mercantile marine, and developing the river front, an organic scheme might be devised, in proper relation to the ancient and noble Tower, which would worthily represent our City's pride in her close connection with the Merchant Navy.

Thames Barrage

Without expressing an opinion on the technical problems of a Thames Barrage, the Committee consider that the effect of such a scheme for a permanent high water level of the river would be of great advantage to the amenities of London.

Central Airport

The rapid development of aviation during the war will have a decisive effect on the design and location of airports in the future. This effect cannot be anticipated now with any degree of certainty, but a central airport for London is clearly desirable. The present opportunity to reserve a suitable site, if not taken now, is not likely to recur for many years.

Markets

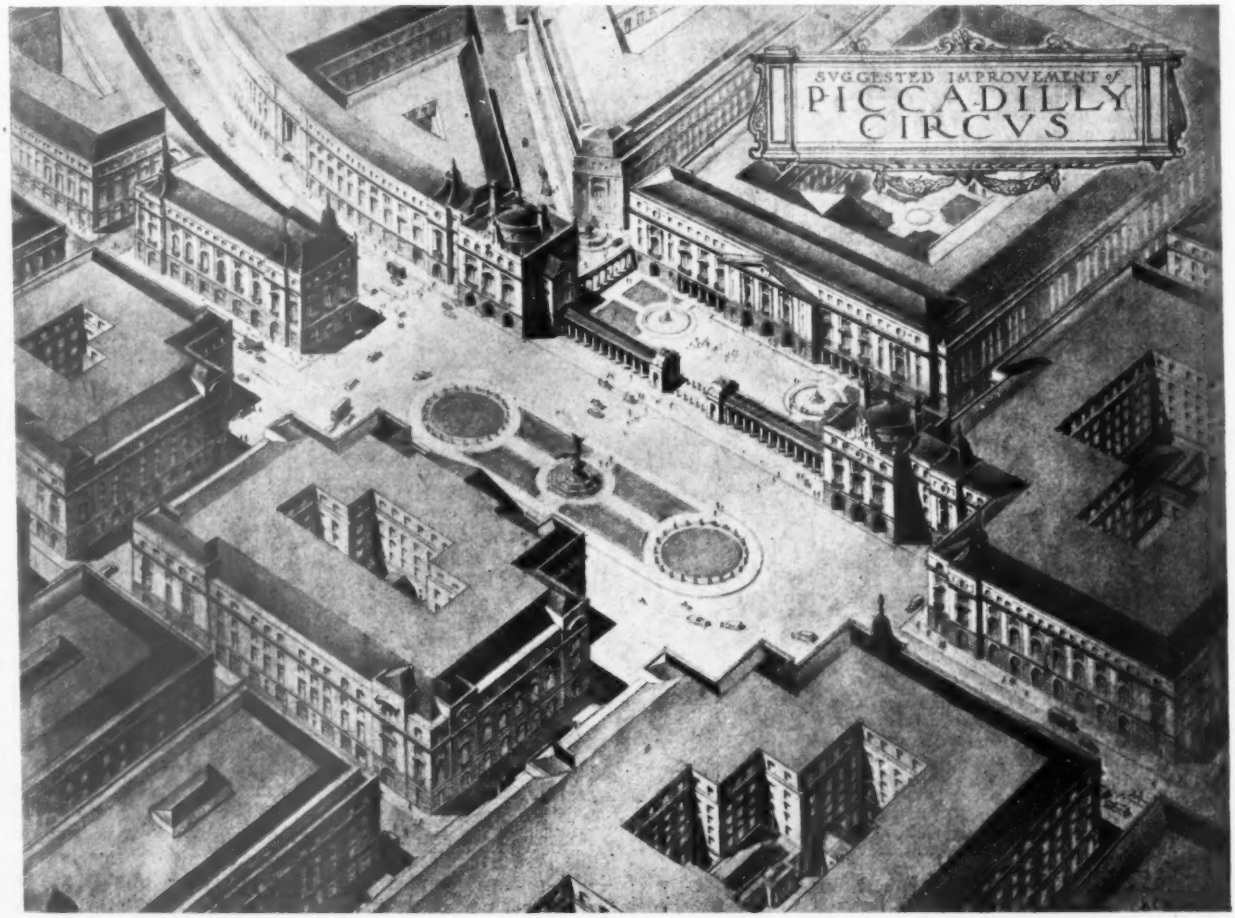
The Committee recognize the difficulties inherent in any proposal to remove the old-established "overt" markets of London, the professional status and prestige of which are closely linked with historic localities and the peculiar interest and customs implanted in each. It is none the less obvious, however, that Billingsgate Fish Market, for instance, is inconveniently placed for its modern dependence on railway transport. Other important markets are so placed as to be a hindrance to the flow of modern traffic and the proper development of central London. There is no reason why, with goodwill and the credit of serving the community as a whole, they should not retain and even increase their prosperity in new positions on the ring road.

Industry and Housing

Any marked improvement in the convenience and amenities of London will largely depend on the removal of misplaced industry and warehousing, especially from the central area, and this should be accompanied by a corresponding adjustment of "industrial" housing. The Committee, on their part, would insist that, when the location of each of these has been determined, full consideration should be given to convenience, hygiene and amenity in the buildings and their surroundings; and that, as to the housing, adequate provision should be made for recreation, education, and exercise in the open air.

St. Paul's Cathedral

The rebuilding around St. Paul's is of the first importance. Wren's Cathedral is our central national monument. The City Corporation, realizing the harm that has been done in the past by lofty buildings obscuring some of the finest views of the Cathedral,



Piccadilly Circus. The east side development is to be repeated on the west; a piazzo for pedestrians is formed on the north side. *See lay-out plans on page 259.* ***(Perspective by A. C. Webb).***

recently imposed a self-denying ordinance limiting the height of all new buildings in this area; and now a great opportunity has arisen for giving St. Paul's a worthy setting. Alternative plans are shown by the Committee for the surroundings of this great monument, and for opening up the finest views of it, notably that from the river.

City Churches

The Committee have considered the future of the City Churches, and hope that, in view of their intrinsic merits and historic associations, those which have not been substantially destroyed will be rebuilt. Where the tower alone remains, it should be repaired, and the rest of the site should be laid out as a garden.

Open Spaces

One of London's great attractions is its large number of squares and open spaces. This remark, unfortunately, applies principally to the west side; and the Committee most strongly urge that not only squares of ordinary size, but large open spaces with playgrounds for children and adults, be laid out and suitably planted to serve all districts. In general, public parks and gardens should be so arranged that all sections of the people of London shall be within ten minutes' walk (or half a mile) of such places of rest and recreation. Many existing gardens can be usefully enlarged or re-shaped by good planning, with much benefit to the neighbourhood. Gardens in squares from which the railings have been removed should be replanned to suit the new conditions: trees and grass only should be grown in them, except where hedges, shrubs and flowers can be properly laid out and tended.

In the new London, with a better provision of open spaces and well-sited and designed buildings, there should be many opportunities for sculptors to show their skill in collaboration with architects.

Car Parks

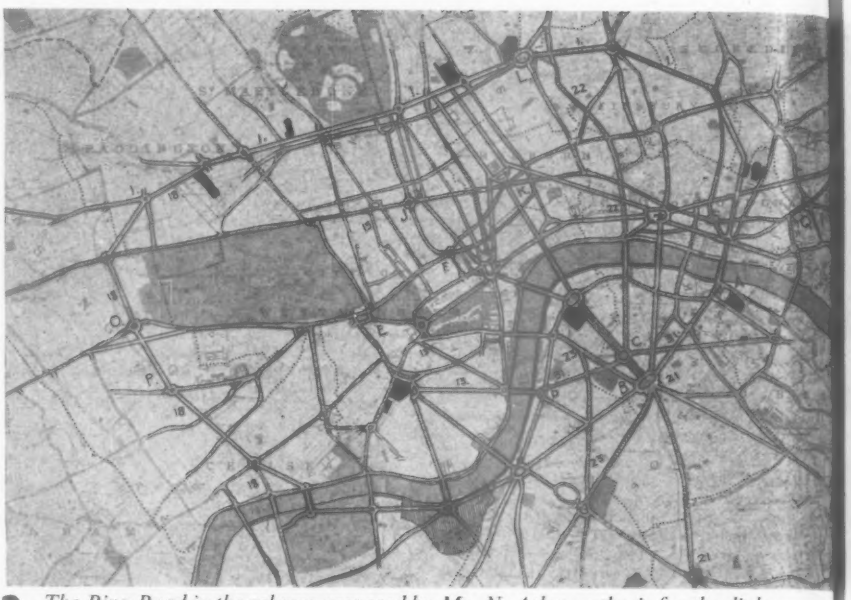
Good order and appearance would be promoted in traffic routes if accommodation were provided for standing vehicles in spaces adjoining the thoroughfares. Building owners should be required to provide parking spaces within the areas of the larger business buildings.

Pedestrians

The Committee are of the opinion that better provision ought to be made for the convenience and comfort of pedestrians in this mechanical age. The walking habit, so valuable for health, is made difficult by modern motor traffic, and there is a scarcity of places where people can meet and talk in quiet and safety. Many more streets and spaces should be closed to motor traffic and reserved for the walking public. More small side-streets could be closed at their junction with main routes, by carrying pavements through and making them shopping streets free from wheeled traffic. Such shopping centres would tend to simplify the traffic problem while adding greatly to the civic amenities of London. Pedestrians would benefit by a more extended use of colonnades, or arcading like that in the Piazza of Covent Garden or the Rue de Rivoli, Paris.

General Aim

London is a great and noble city which still, in spite of much confusion and disfigurement, retains many outward signs of its citizens' love of order, proportion and seemliness in their work and lives. The Committee have no desire to change its essential character, developed through centuries of high ambition and achievement, or to impose a monotonous regularity which would be obviously alien to its nature. But they wish it to profit by the notable examples of good planning and building which already exist, and so give clearer expression to the leading motives of its vast and various activities. They feel sure of the support of enlightened public opinion in insisting on the adoption of general principles for the reconstruction of large areas of London, and in claiming for the aesthetic aspect a foremost place in the problem.



2 *The Ring Road in the scheme prepared by Mr. N. Aslan as thesis for the diploma in Town Planning and Civic Architecture at the University of London in 1936.*

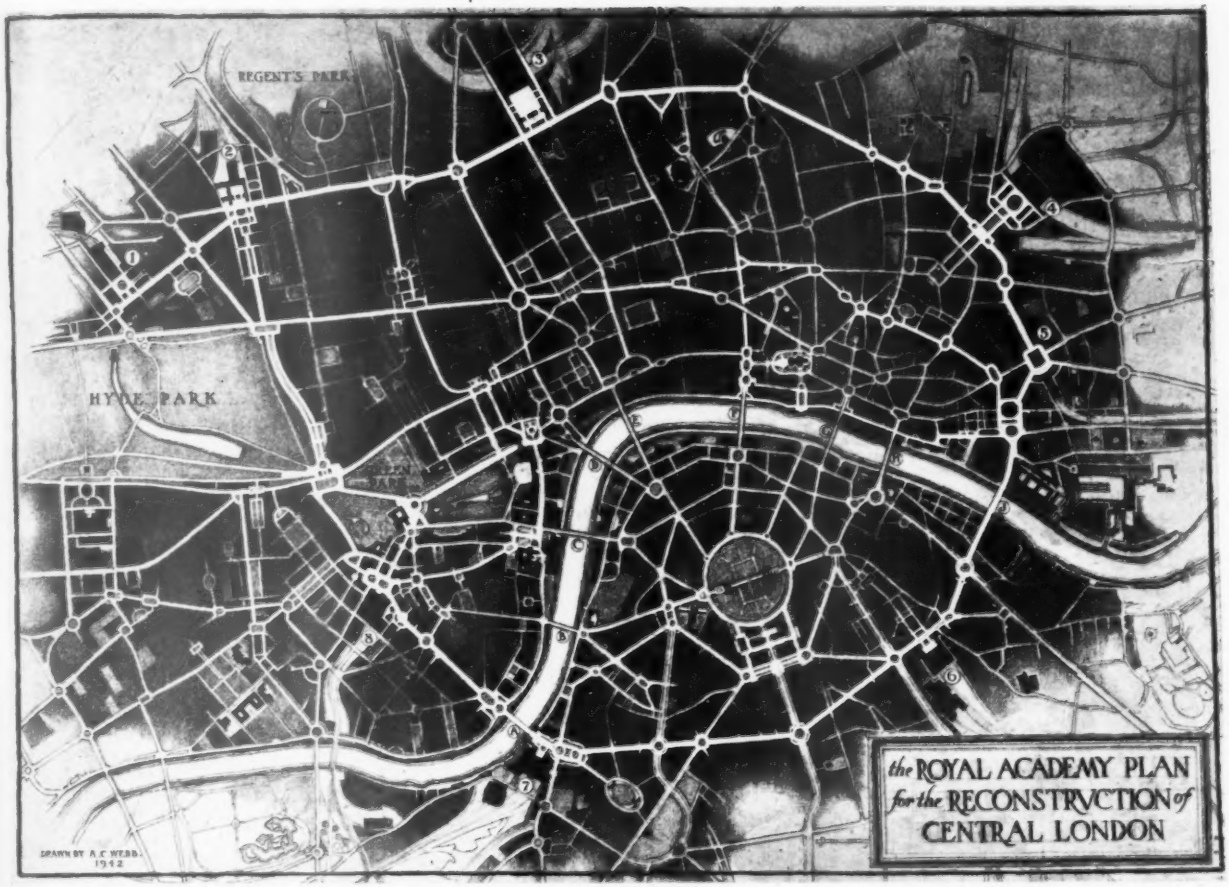
3 *The Ring Road in the scheme prepared by Sir Charles Bressey in 1938. This scheme forms part of the Report correctly known as the Greater London Highway Development Survey.*

CRITIQUE

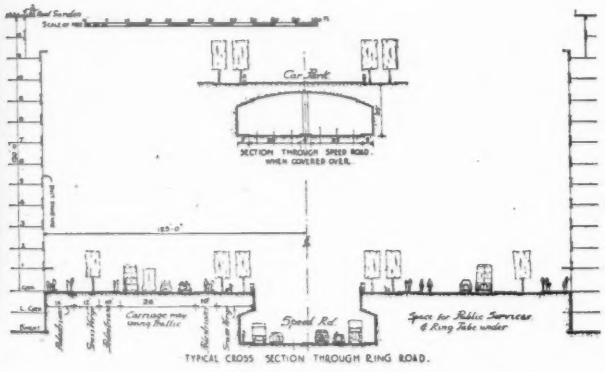
[By N. ASLAN]

GENERAL

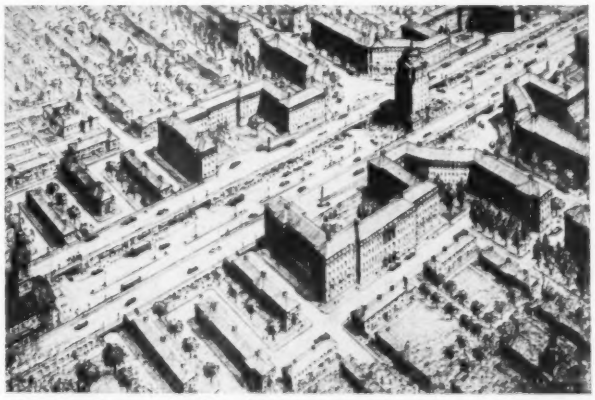
It is gratifying to see that the Royal Academy Planning committee have tackled the subject of the replanning London with boldness and initiative and have adopted a long term policy. Here and there the scheme has followed strictly on the recommendations of the Bressey Report, but in other places drastic replanning has been carried out. Although the scheme deserves praise for its enterprise and boldness of presentation, there are certain points which call for criticism.



4 *The R.A. general plan showing Ring Road and positions of main railway stations. This plan should be compared with the Aslan and Bressey schemes on the facing page.*



5 *Typical cross section through N. Aslan's Ring Road. In contrast with the R.A. Ring Road it provides for local traffic at ground level while through traffic uses a speed track sunk between the carriage-ways.*



6 *Housing and office buildings on the south side showing the R.A. Ring Road with separation of fast and slow traffic. The main slow traffic is on the ground level; two raised tracks on each side of the road carry the fast traffic.* (*Perspective by P. D. Hepworth.*)

THE RING ROAD

The dominant feature of the scheme is the Ring Road round the central area (**4** and **6**), which is an excellent idea, and which is badly needed. It follows a route passing Tower Bridge, Gardiner's Corner, Great Eastern Street, City, Pentonville, Euston, and Marylebone Roads, Marble Arch, Hyde Park Corner, Victoria, Vauxhall and eastward to Tower Bridge Road. The principal idea of the Ring Road is to connect the radial trunk roads, to discharge and to receive traffic to and from the network of roads in the central area, and to link all the main railway termini. It is, however, very surprising to find that most of the main line termini, namely, Waterloo, London Bridge, Fenchurch Street, Liverpool Street, Broad Street, King's Cross, St. Pancras and Euston Stations, have been moved to meet the Ring Road, instead of the Ring Road being designed to meet the requirements of all these existing stations, whilst Paddington Station has been left out completely. This seems rather a drastic step to take, when a Ring Road could have been designed to connect these stations, which would have been a more logical and practical arrangement. For

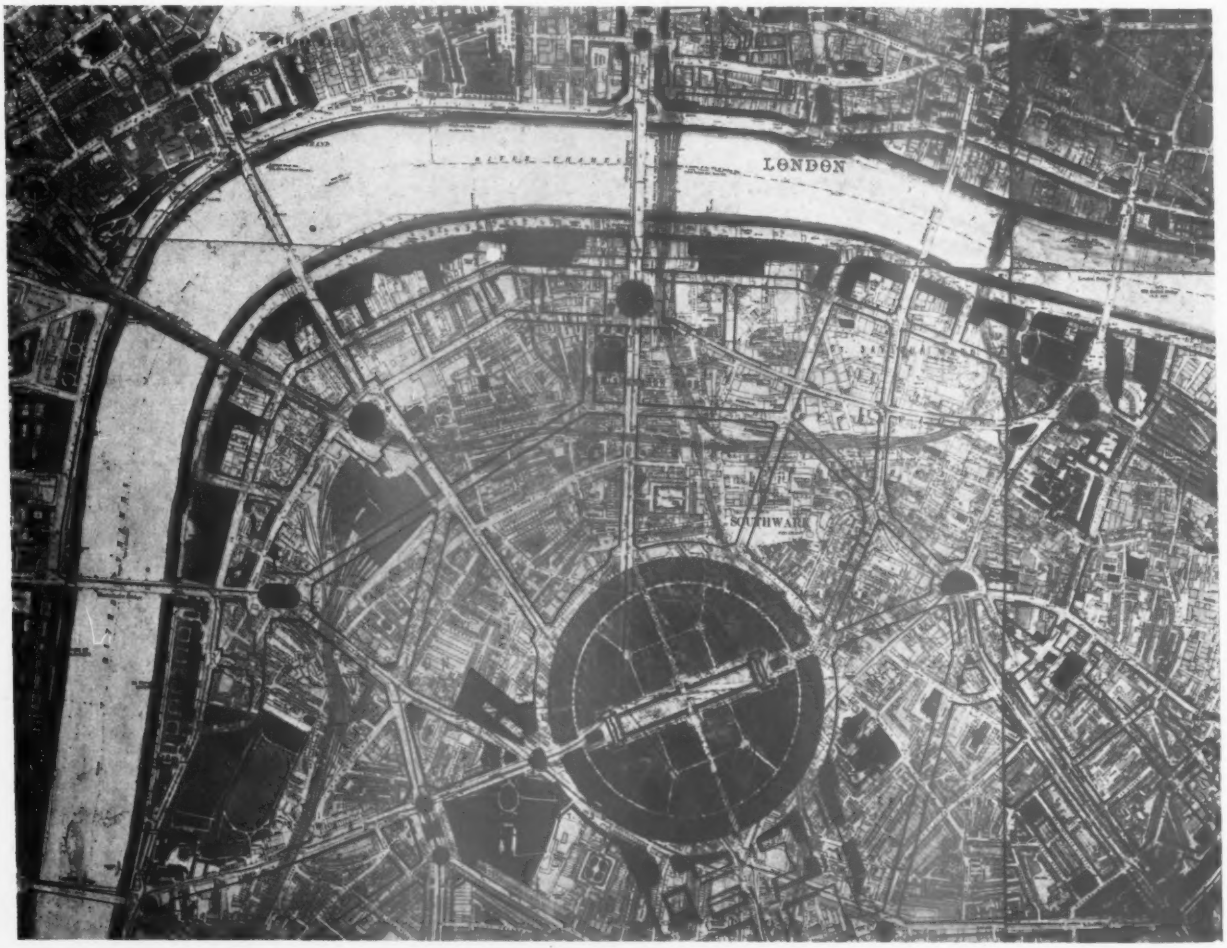
example, a ring passing through London Bridge, Liverpool Street and Broad Street Stations, City and Pentonville Road, King's Cross and St. Pancras Stations, Euston, Marylebone and Paddington Stations, Notting Hill Gate, Kensington High Street, Chelsea, and across to Battersea, Vauxhall, Elms Lane, Elephant and Castle and back to London Bridge, would connect practically all the main stations, and would include more of the central area than the R.A. Scheme (**2**).

The advantages of such a route, compared with that adopted by the Royal Academy, may be summarized as follows: (1) London Bridge could be the extreme eastern point of the Ring, which would allow large ships to arrive at warehouses situated near the City and, incidentally, the Ring Road would separate the warehouse and industrial zone from the commercial zone. (2) Euston and Marylebone Roads, which are already loaded to capacity, would not form part of the main Ring Road; the latter would run further north—through back property—and parallel to the existing roads, leaving Euston and Marylebone Roads to cope with the local requirements. (3) Paddington Station. The Great Western terminus would be connected with the Ring, west of the junction of Harrow Road terminus in Edgware Road. (4) The highly congested areas of Marble Arch, Hyde Park Corner and Victoria would be by-passed and relieved of the through traffic, which would prefer to use the Ring instead of being made part of the new thoroughfare. (5) Park Lane, Belgravia, South Kensington, with its academic institutes, and last, but not least, Hyde Park, which has always been associated with the heart of London, would be drawn into the central area instead of being excluded as in the R.A. Scheme.

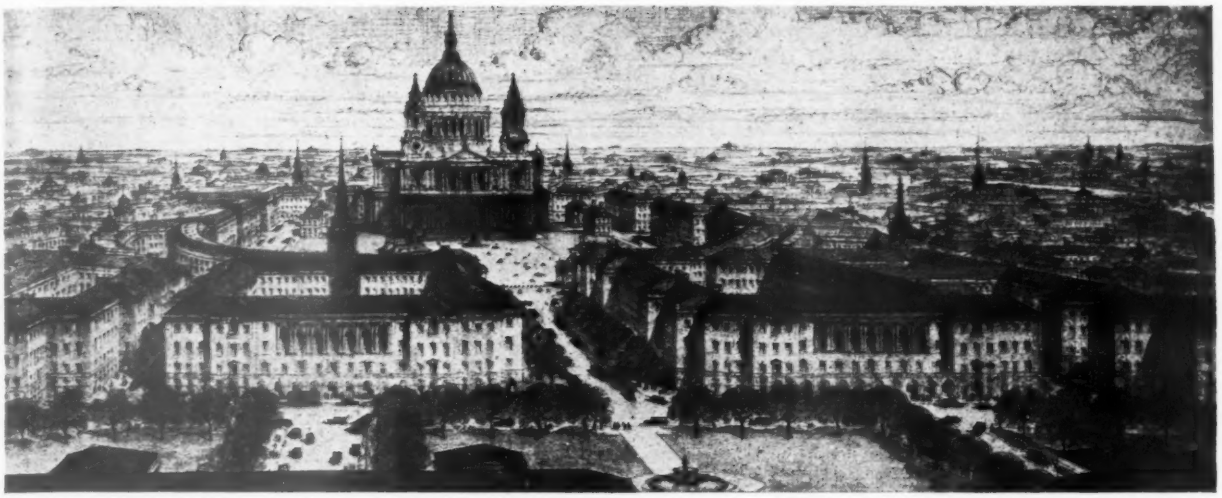
Incidentally, it seems inadvisable to connect King's Cross, St. Pancras and Euston into one central station, as it would cause too great a concentration of traffic at a single point on the Ring. King's Cross and St. Pancras Stations could easily be combined to form the terminus from N. and N.E., while Euston could be rebuilt to act as Midland and Scottish terminus.

DETAILS OF RING ROAD

The Ring Road has two lanes for fast traffic on raised tracks over the sides of the road, level with first floor of adjacent buildings; in the centre and on the ground level, is the road for slow moving traffic. The outer tracks are raised to bridge over roads discharging into the Ring. Surely an easier way to solve the fast traffic problem could be devised without building these elevated tracks or viaducts for, beside being an eyesore on the horizon of all roads running into the Ring, they would carry noise and dust to the upper parts of the adjacent buildings. An alternative is shown in Fig. **5**. It has two carriageways with grass verges on both sides. These are separated by speedways which are sunk 25 feet under the ring road level and screened with trees. The speedways are normally opened at the top for natural light and ventilation. When it comes to



7 *Part of the general plan. This section shows the development on the south side of the river with the Elephant and Castle in the centre.*



8 *The City, showing St. Paul's in an open space with a new western approach road and vistas opened on the south, north-east and north sides of the Cathedral.* (*Perspective by P. D. Hepworth.*)

crossings or roundabouts it is covered over, becoming a tunnel. It is also covered over at certain places to be used as a car park. It would make it possible to drive all round the central area of London without a single level crossing.

It is a poor excuse that a sunk speedway would interfere with existing sewers. It would be a disaster if re-planned London were to be built on the foundations of the old sewers. Surely such drastic replanning as is contemplated by the Royal Academy, which even includes a ring tube, is not going to be in the old sewers. The whole idea of a long-term policy of development is to enable permanent reconstruction to be made gradually over a period, say, 100 years. Would it not be worth while to follow the same improvement policy underground as on the surface? Or is the subject of sewers going to be left for future generations to deal with?

THE SOUTH SIDE

Elephant and Castle (**7**). This part of London has been drastically replanned and practically all the existing features have gone; outstanding obliterations are, The Elephant and Castle—completely obliterated—London Bridge Station—removed to the south-east—Waterloo—removed to Vauxhall—and St. George's Circus—zoned for a swimming pool in the centre of a great circular open space.

This is truly a planner's dream. Redevelopment on such a scale, however, raises the question whether it would not be cheaper to build an entirely new City. Has full advantage been taken of this wholesale re-planning? It would seem not. A community plan has been created which bears no relation whatever to anything that existed before and, furthermore, the plan has not been made an integral part of London—north of the Thames. It is a very healthy sign to find that such large-scale planning is being thought about, but it is a pity to ignore features of London which are centuries old and which give the town much of its character.

ST. PAUL'S CATHEDRAL

A generous "place" has been designed around the Cathedral (**8**) together with approach roads. These approaches are unfortunately short and do not link up with any of the important points in the Central Area. With some effort long vistas to St. Paul's could have been planned which would have been in keeping with the large-scale development around the City and the West End. For instance, vistas from Aldwych, Elephant and Castle, Mile End Road and the British Museum could have been opened up.

TRAFALGAR SQUARE

Although the roundabout at Trafalgar Square, Charing Cross and Westminster City Hall, may solve the traffic problem individually, it would seem somewhat confusing to motorists to travel round three circuses so close

9 *Part of the plan showing the lay-out of the area surrounding St. Paul's Cathedral.*

together. The same criticism applies to the development north of Tower Bridge. The layout generally is choked with individualism and lacks simplicity, the key to good town planning.

WATERLOO BRIDGE

This is the newest and the widest of London's bridges and occupies a very central position. It seems a pity to have missed the opportunity of constructing a new road connecting it to the British Museum, which practically lies on the same axis. The vista is terminated at present by an insignificant building on the north side of the Strand.

VICTORIA

The processional way from Victoria (**10**) to Buckingham Palace seems to be out of proportion to the general scope of the plan.

AIRPORT

A position for an airport south of Elephant and Castle at ground level has been suggested in more than one sketch plan. Surely this will restrict the development all round the adjacent area in a way that cannot be afforded in this part of London.

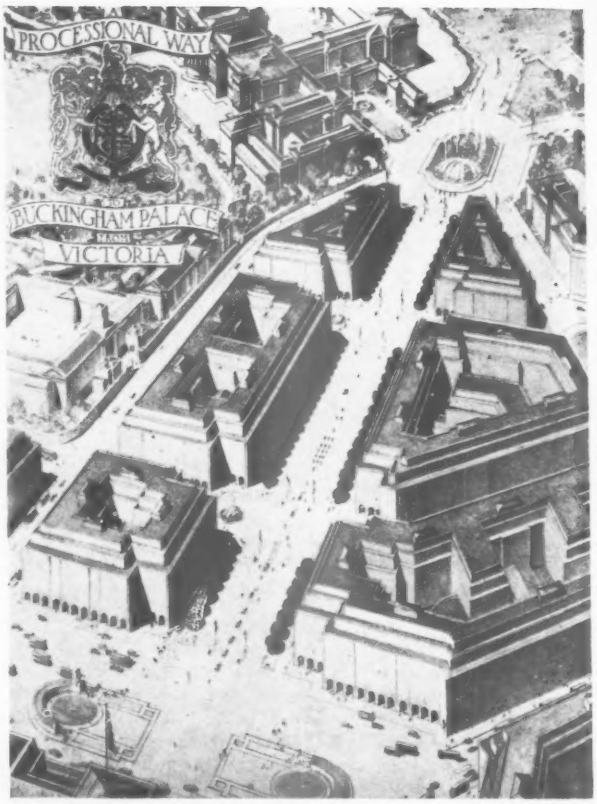
SUMMARY

A general glance at the plan showing the redevelopment of the whole Central Area (**4**) leaves one with the impression that many of the parts have been designed independently of each other so that the whole lacks coherence. For example, the Elephant and Castle scheme and the improvement of the West End and City have been planned without any inter-relationship; furthermore, no balance exists between the lavishly planned south bank area, the new and many street developments in the West End and City, and the scarcely improved Mayfair.

It is encouraging to see that the principle of straight roads has been adopted thereby providing a permanent road plan as a basis for redevelopment. Unfortunately, the roads are too numerous, too short and generally of equal importance without any of them being important enough; this results in many small and irregular shaped islands for building sites.

It is an indisputable fact that road planning is one of the major components of town planning, and hence a good road plan will go far in making a good town plan; but, roads planned from an architectural point of view will not make a functional town plan unless they are planned from an engineering and traffic aspect as well.

A large number of roundabouts and of minor streets are shown which appear unnecessary, disturbing to motorists and others, and unlikely to be of assistance in solving traffic problems. The roundabouts are not amenities in themselves, so their number should be reduced to a minimum.



10 *Bird's-eye view of the processional way from Victoria Station to Buckingham Palace. (Perspective by A. C. Webb.)*

11 *Lay-out plan of the processional way from Victoria Station to Buckingham Palace. (All the plans in the exhibition were drawn by Mrs. Martin Buckmaster.)*

PATENT WELDED TUBULAR CONSTRUCTION

Data Sheet No. 7

LIGHT FRAME CONSTRUCTION

The form of light tubular frame construction detailed in this sheet has been designed specifically to fulfil wartime requirements — lightness of structure, simple and rapid assembly, and economy in steel. The particular example dealt with, designed as a store building, provides a floor area of 100 ft. by 30 ft. and has three sets of double doors and six 4 ft. by 4 ft. standard metal casements. The framework of the building is constructed throughout in prefabricated tubular sections, each sectional wall frame (see Fig. 17 overleaf) being supplied complete with doors and window casements. The double doors, being constructed of angle-iron, are self-weathering and are covered with corrugated iron sheeting. To simplify transport and site assembly each column and half-truss is supplied in one welded unit; after erection of the columns and composite trusses the wall and door frames are assembled, and in order to effect rigidity the roof purlins are then engaged and fixed in position before the final fixings and adjustments of the complete structure are carried out. In

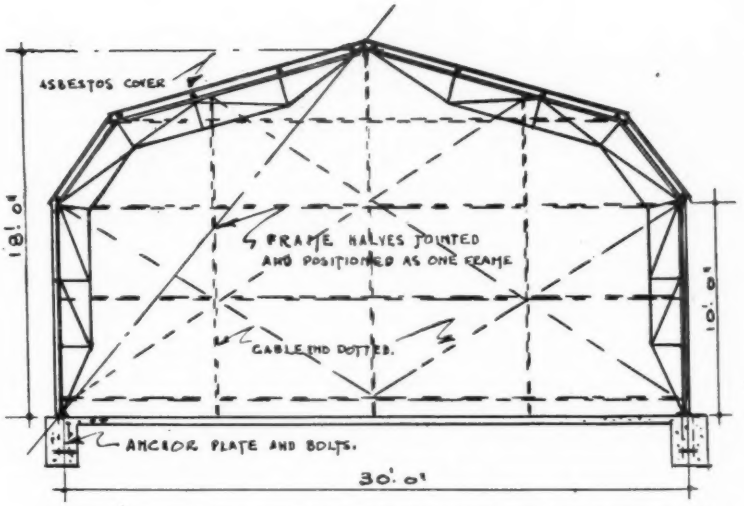


Fig. 15. Light tubular construction incorporating composite roof truss and tubular columns.

Fig. 15 the dotted lines represent the gable-end frame, which is also supplied in prefabricated sectional units. Asbestos sheeting is used as an external covering for the walls and roof, and a notable feature of this form of construction is the extremely simple method of fixing the external sheeting. The steel tonnage employed is 5.5 and estimate for delivery and erection (complete with all external sheeting but excluding glazing, gutters and foundations) may be had on application.

This form of construction is extremely flexible and adaptable, the tubular section, being uniform in all directions, allowing connections to be made from any side and at any angle. Further advantages of the tube, as compared with other steel sections, lies in its stiffness (*a*) in taking compressions, and (*b*) during transport.

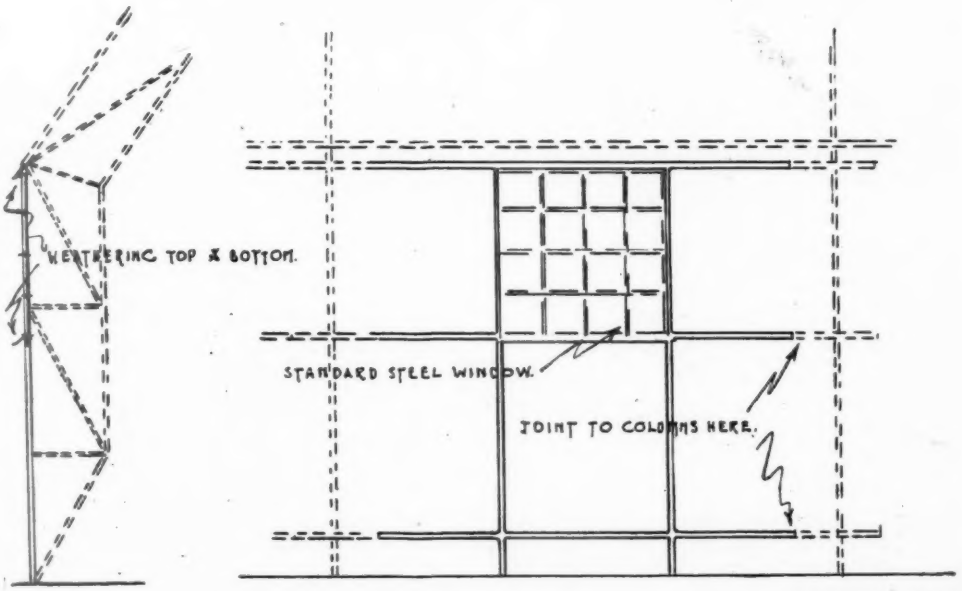


Fig. 16. Tubular column and detail of sectional wall frame incorporating standard metal casement.

(Continued overleaf)

PATENT WELDED TUBULAR CONSTRUCTION—Data Sheet No. 7

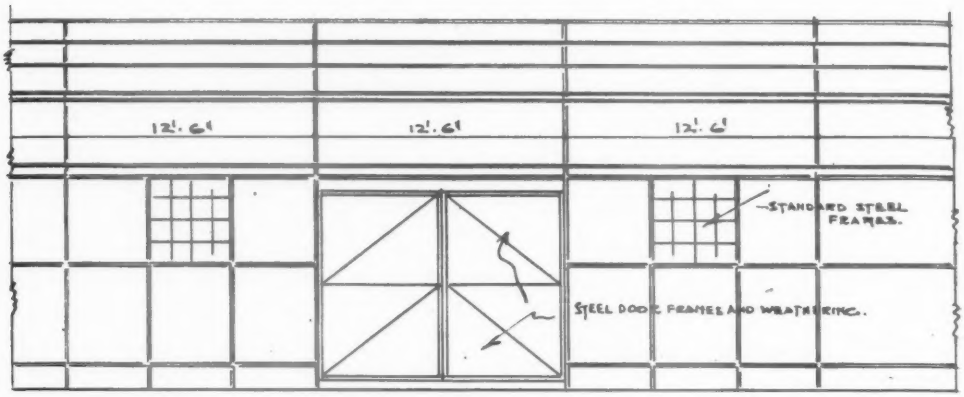


Fig. 17. Part elevation shewing sectional wall framing, standard metal casements and tubular framed double doors.

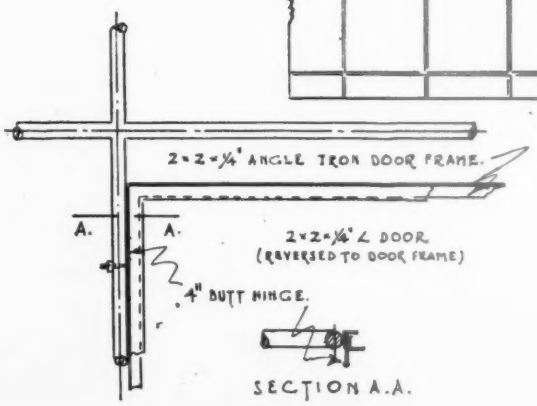


Fig. 18. Detail of door frame construction.

NOTE.—These data sheets are appearing weekly in THE ARCHITECTS' JOURNAL—*they are now available in complete Folder form and application for these Folders should be addressed to Scaffolding [Great Britain] Limited, 77, Easton Street, High Wycombe, Buckinghamshire.*

LITERATURE

TOWN PLANNING AND ROAD TRAFFIC

Town Planning and Road Traffic. By Alker Tripp, C.B.E., with a foreword by Professor Patrick Abercrombie. London: Edward Arnold & Co. Price 10s.

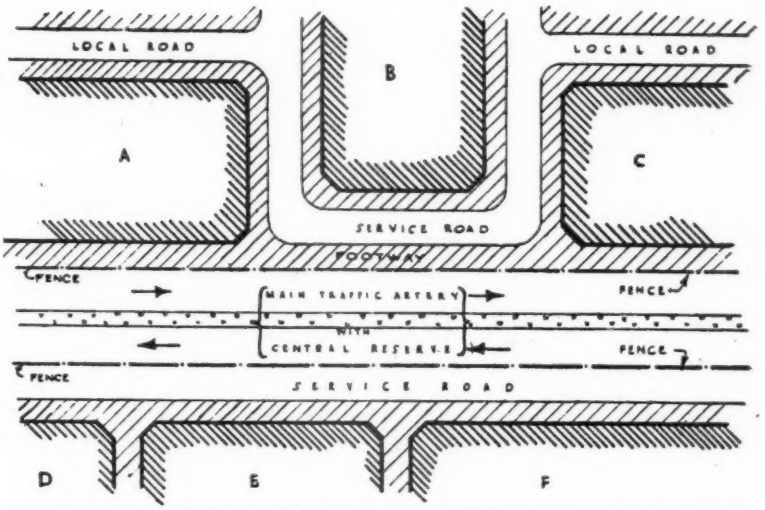
There is more about road traffic in this book than about town planning. Road Traffic for Town Planners might perhaps have been a more appropriate title. The author has in fact reduced the control of road traffic—previously a matter of muddled administration and Belisha beacons—to an exact science and set down the principles of it; further he does not attempt to go. This gives the illustrations an oddly unfinished look, but the loss is a small one compared with the gain of having a book on roads, written with the detachment and accuracy of a specialist.

The book is a small one—113 pages only—but thanks to Mr. Tripp's clarity of thought and facility of expression, a great deal of information has been compressed into this space without causing the reader to suffer. The following summary of what is perhaps the roads' most tedious problem, is a good example of the author's style. "The cyclist has vehicle speed without vehicle stability and has the same vulnerability as a pedestrian without a footway. This, indeed, is the most intractable problem of all."

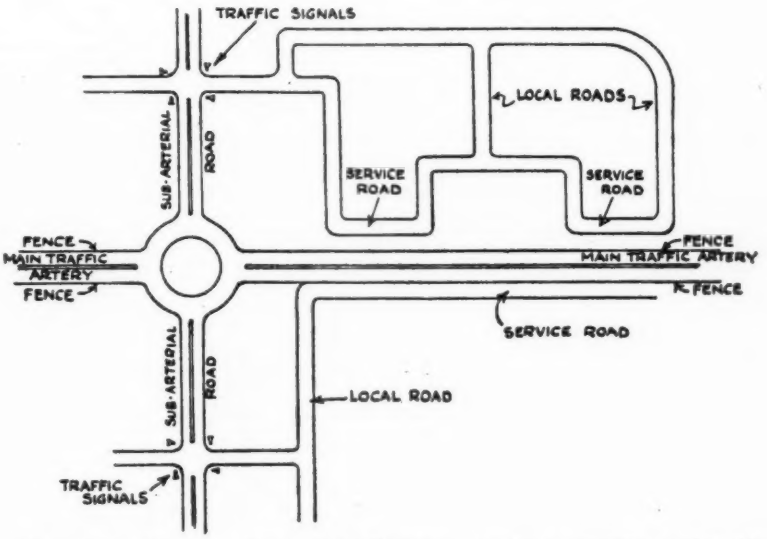
The author's theories, which he has worked out in considerable detail, cannot be properly understood without reading his book but, in outline, his policy is: To simplify the road system so that only three types of road remain (1) Arterial or long-distance roads; (ii) sub-arterial or feeder roads; (iii) local or access roads. To regard the needs of traffic as absolute on class (i) and class (ii) roads. And to subordinate traffic entirely to the needs of frontagers, local population and pedestrians on the others. In his opinion this involves forbidding frontages along both arterial and sub-arterial roads, excluding pedestrians from the carriageway altogether, and drastically limiting the number of points at which access is allowed to motor vehicles. For instance, in the case of class (i) roads, side roads would enter the main road only at roundabouts. On the other hand, it implies planning local roads to obstruct and discourage through traffic. "Here," he says, "the main idea is to let people work and live in an atmosphere like that of the Inns of Court in London instead of amid a hurly-burly of traffic noise and traffic danger." And, again, "This is the place for planned architectural work and this is where frontages should be. Here people cannot only do their business but can linger in safety and appreciate the quality and beauty of gracious buildings. Fine settings for such buildings can also here be provided, to the great advantage of the whole community." These networks of minor roads which are from the point of view merely pockets in the road system, but are from another point of view reservations where human beings can live a safe and pleasant life, he has named *precincts*.

Many of these ideas are not essentially new: ring roads, bye-passes and autostrasse have not only been discussed before, but built. Mr. Tripp's contribution has been to work these elements into a coherent system and fill in details previously ignored. "Roads and road layouts," as he says, "cannot with complete success be projected by people who think mainly in terms of physical survey, construction, architecture, finance—or even town planning; it is necessary to think and think accurately in terms of traffic control." This is what Mr. Tripp does and it leads him to some startling conclusions.

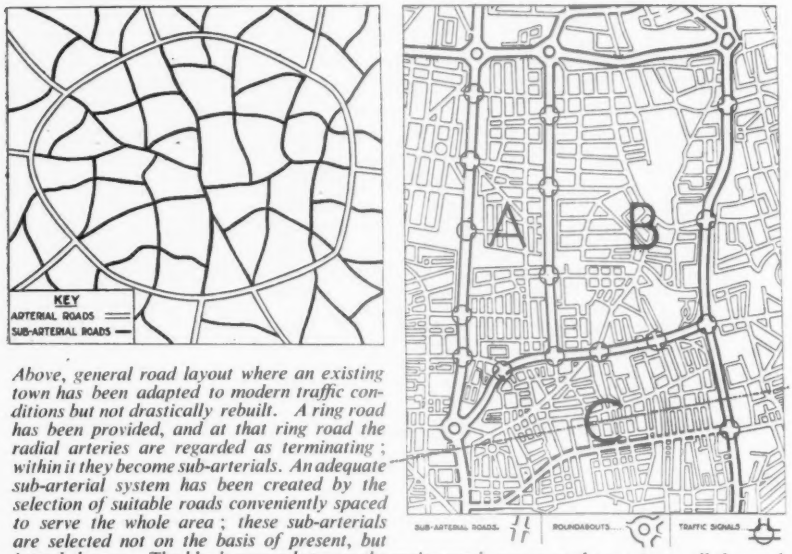
The extent of the break with tradition that they imply can be seen from the following sentences. "On the main traffic arteries where it has hitherto been assumed that there must be fine frontages, the traffic specialist must



An arrangement which, though admissible, is better avoided. When new arteries are created in towns by setting back the existing building lines, the old prejudice in favour of frontages will die hard, even though the carriageways of a properly planned main traffic artery will be shut off completely from frontages, service roads and pedestrians. Buildings can, if desired, be erected facing the artery as at A-F, but the only access to them will be by way of service roads linked up, not with the artery, but with other local roads. Linkage with the main artery will be by way of the nearest roundabout only, as shown in the drawing below.



Linkage of service roads with a main traffic artery. No direct connection is admissible, as the artery must run unbroken from roundabout to roundabout, without other junctions of any kind. Linkage is effected with a sub-arterial road, whence the main artery is in turn reached. From Town Planning and Road Traffic.



Above, general road layout where an existing town has been adapted to modern traffic conditions but not drastically rebuilt. A ring road has been provided, and at that ring road the radial arteries are regarded as terminating; within it they become sub-arterials. An adequate sub-arterial system has been created by the selection of suitable roads conveniently spaced to serve the whole area; these sub-arterials are selected not on the basis of present, but intended, user. The blank spaces between the major roads represent the precincts, all the roads within which are merely local, to be kept clear of all through traffic. In addition, the entire town will be encompassed by a circular by-pass (not shown in the diagram), thus enabling through traffic from whatever quarter to keep clear of the town altogether. Right: Separation of existing residential, shopping or business areas from the lethal main traffic streams. The ideal of planning is that people should be able to lead their daily lives without any contact at all with the through-traffic routes, save when they use the latter for purposes of transport. Daily life is lived in the precincts (three separate precincts, A, B, and C, are shown in the diagram); it is there that shops and places of amusement should be located, not on the main roads. Where precincts are separated by a main artery (on which traffic is controlled by roundabouts) pedestrians and vehicles pass from one precinct to the other by means of subways; where, however, precincts border sub-arterial roads controlled by traffic signals, crossing is effected under the protection of the signals. The main traffic routes are thus treated much as if they were railways. Every opportunity should be taken of converting shopping and amusement centres into precincts, and —as a gradual process—of "turning round" the buildings on main roads so that their frontages are towards the precincts. In the diagram, the upper part had been replanned on safety lines; in the extreme lower part (below the dotted line) the present unplanned condition is retained for purposes of contrast. Road-ends need not be closed up with bricks and mortar, a row of posts will suffice for the present. Where pedestrians are permitted to arteries or sub-arteries, the footways will be guard-railed throughout and sporadic crossing entirely *prevented.* From *Town Planning and Road Traffic.*

ask for 'backages' instead. Buildings should not only turn their backs upon the traffic arteries but should be securely walled away from them."

Though he is uncompromising on matters of principle, and advocates a complete break with the past where new development or extensive redevelopment is possible, Mr. Tripp has given the public no grounds for dismissing his ideas as unpractical. On the contrary, the book contains a number of diagrams showing how existing road systems could be made relatively safe and efficient by a few minor alterations. This makes it all the more difficult to understand why contemporary planners show so little sign of being influenced by his writing. The present book is in the main an expansion of certain passages in a larger work published four years ago.

A.H.T.B.

BOOK RECEIVED

Irish Heritage: The Landscape: The People and Their Work. By E. Estyn Evans, M.A., D.SC., F.S.A., M.R.I.A. Contents: The Real Ireland; How Ireland Took Shape; The Landscape; The Beginnings; The Work of Man; Crops and Animals; Woodlands; Fields, Fences and Gates; Village and Booley; The Irish Peasant House; The Interior of the House; Fireside and Food; Farm Buildings; Seedtime; Harvest, Carts and Roads; Spades; Wood, Skin, Straw and Rush Work; The Bay; The Seashore; Festivals and Fairs; The Country Town; Some Customs and Beliefs. Publishers: W. Tempest, Dundalk. Price 8s. 6d. net.

R. C. A.

During the past year the Professional and Technical (P. & T.) membership of the Railway Clerks Association (R.C.A.) has more than doubled. The reason, doubtless, is that the R.C.A. has recently become active in investigating the possibilities of a National Agreement with the Railway Companies on behalf of its P. & T. members, for whom to-day no such general Agreement exists. Four Drafting Sub-Committees, each consisting exclusively of P. & T. members, are now in being to the end of encompassing the special requirements of each of the several principal groups of P. & T. Staff in the service of the Railways.

A meeting of the Architect members of the Drafting Sub-Committee for Architects, Quantity Surveyors, and Rates and Taxes Staff was held on August 9, 1942, at 44, Cartwright Gardens, London, W.C.1., to consider the claims to be made on behalf of Architects under the proposed P. & T. National Agreement between the Railway Companies and the R.C.A. Those present were: Messrs. A. Cranston, G.W.R., B. Ferguson, L.N.E.R., M. MacTaggart (Chairman), L.M. & S.R. and R. W. Owen, S.R.

It was decided that the present is not a ripe moment for architects to enter upon any Agreement as regards salaries, and that, therefore, the terms of any proposed Agreement on behalf of architects should be confined to conditions of service. It was decided, however, to bring to the notice of the R.C.A. the general lines of the framework to which any possible future agreement affecting architects' salaries would best be related and draw special attention to the unsatisfactory and patchwork results which must ensue unless, at the same time, the current system of superannuation can be considerably remodelled.

Conditions of service were then discussed and the following items were agreed upon:—

Copyright.—In accordance with Section 5 (1) B of the Copyright Act, 1911, which admits of agreement to the contrary, agreement to the contrary is to be entered upon to the extent that each member of the Staff is to retain the unconditional Press Copyright in his or her work, both architectural and literary.

Rubber Stamp.—Rubber Stamps, as now applied to all issued drawings, provide spaces for the names of those who have done the drawing, tracing, colouring, checking. A similar space is to be provided for those who have done the designing. Where no such stamp is used, designers are to have the right to sign their drawings.

Rule Book.—The Companies' Rule Book—a document that is implicitly insulting to any self-respecting professional man besides being contrary to the spirit of any possible Agreement on behalf of Architects—is to be replaced by an approved form of contract. New entrants to be provided with copy thereof not less than forty-eight hours prior to engagement.

Designation.—All who are Registered Architects are to be designated and employed as such, *e.g.*, Chief Architect, Deputy Architect, Assistant Architect. The term Architectural Assistant is to apply only to unregistered persons.

Separate Department.—The "Architect's Section" of to-day is to become a separate department entitled "Chief Architect's Department." (Not the least purpose of this condition is that of enabling architects more readily to pursue their own work and ways without interference from the Companies' so-called Staff or Establishment Personnel—namely, non-professional non-technical people who cannot, apparently, get beyond the idea that the creative life of the architect is to be most fitly measured, not in terms of skill, but in terms of time and hack routine).

Membership of Incorporated Society.—Resignation from membership of an Incorporated Society (such as the R.I.B.A.) is not to be permitted except on giving in writing to the Company concerned not less than one month's notice of the impending resignation.

Hours of Work (not to apply during War).—Five-day week of thirty-five hours. National and Bank Holidays to remain unaffected.

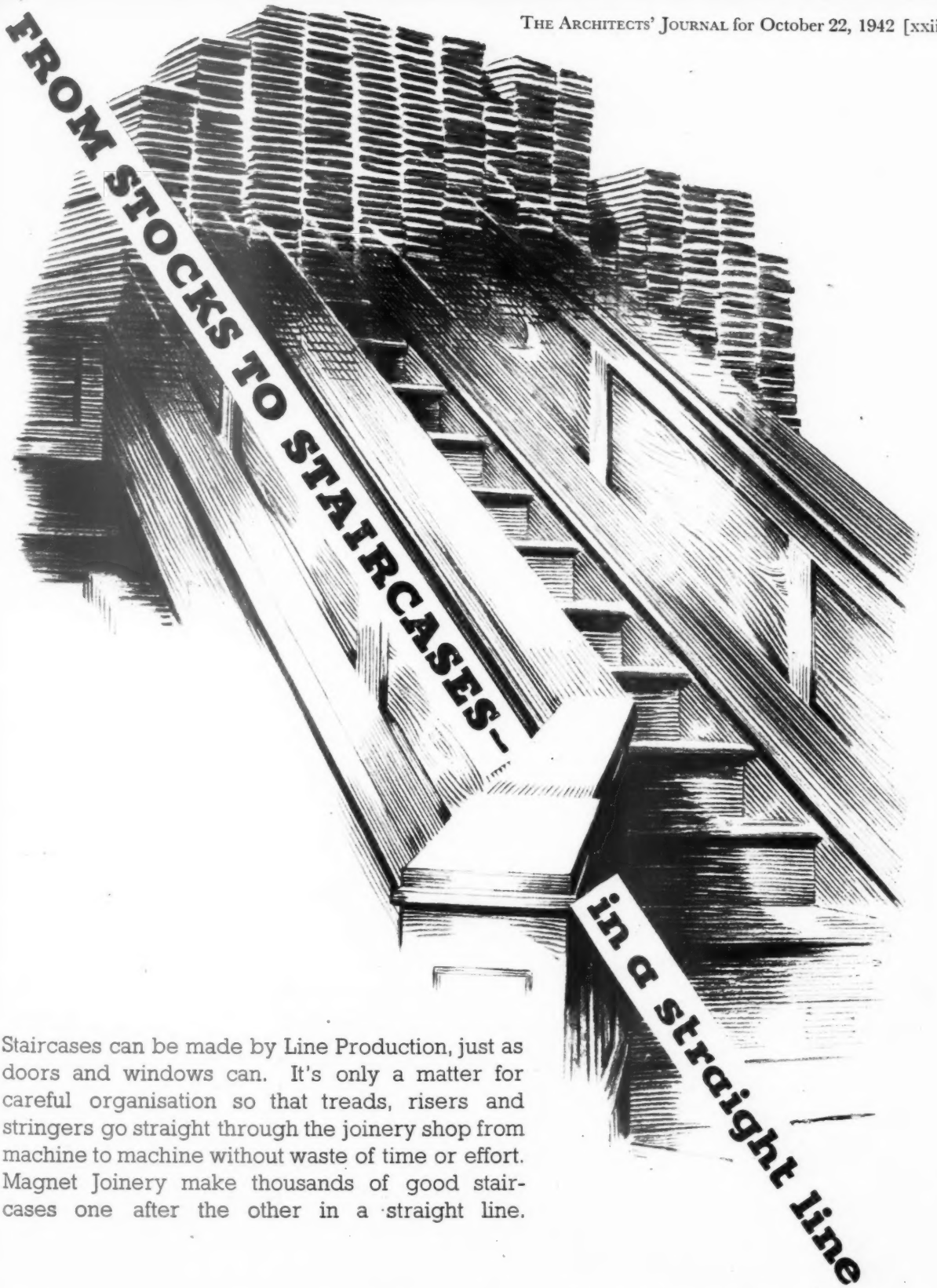
Overtime (not to apply during War).—Overtime to be limited to seventy hours during any one year. Time occupied in travelling on Company's Service beyond normal working hours not to be reckoned as overtime.

Optional Leave (not to apply during War).—Overtime to be compensated *in principle* by optional leave. Assuming a five-day week of thirty-five hours, optional leave to be limited to 10 days (70 hours) in any one year. Time absent on optional leave to be deducted from pay at normal rate or overtime rate, whichever is the lower. All the usual privileges are to apply.

Annual Leave (not to apply during War).—Assuming a five-day week, annual leave to be the same for all—namely, twenty working days. The maximum flexibility is to apply, the whole amount to be available at one time or parts to be available at different times—one day at a time if desired. Staff who have to consider school holidays to be given priority of choice of time. Leave in first year of service to be *pro rata.*

Expenses on Company's Service.—Expenses allowance when travelling on Company's Service is to be the same for all.

Travelling on Company's Service.—Class of travel to be the same for all.



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Staff Committees.—R.I.B.A. to be consulted. The Companies are to recognize the right of the Staffs of Chief Architects' Departments to a reasonable share in deciding from time to time what shape and course their own working organization is to take.

LONDON BUILDERS DISSATISFIED

The Federation of Greater London Master Builders, being dissatisfied with the present position appertaining to the industry, direct the following questions to His Majesty's Government.*

1. Is it not essential to the interests of the country that co-ordination of the whole of the Government's building programme should come under one authority at the earliest possible date ?
2. The Government having stated that industry must be kept fluid, is it their intention that the industry shall consist of a few firms only ? Can it be denied that the industry has been exploited during the war, and why has not this exploitation been discouraged by the Government ?
3. Is it not a fact that if the Excess Profits Duty was not on the 100 per cent. level, those few selected firms would be very diffident to give fixed prices for tenders on the basis of forced labour ?
4. The Builders' Emergency Organization was formed "to mobilize federated and unfederated firms, particularly medium and small, to building work vital to the national effort." Why has the organization since it was taken over by the Ministry of Works and Planning been practically ignored ? Is it not a fact that the volume of work placed through it, especially in London, is negligible ? Have not all practical tests that have been made upon it in London worked successfully ? Why have contracts which are within the promised limit of £25,000 been placed without consulting the organization ?
5. Was the Builders' Emergency Organization as representing the majority in the industry consulted when compiling the register of firms qualifying to tender for the present building programme ?
6. Could not many contracts which have been placed as single units have been divided into a number of smaller contracts, giving greater scope for the medium and smaller builder ?
7. Does the Special Joint Building Committee, sitting to advise the Minister of Works and Planning on allocation of contracts, fairly represent the industry, and can it appreciate the troubles and difficulties of the vast majority.
8. Is the value of the small builder, say, the firm employing up to 20 operatives, realized ? Is it not a fact that the whole of the work he has been carrying out during the war, which is principally maintenance of essential public services, is of as great a priority as any work that has been or may be undertaken of a large specific nature ?
9. Why is there no clear understanding between the Ministry of Works and Planning and the Ministry of Health as to the immediate future ? How is the country's housing difficulty going to be met if the war suddenly collapses ? Why are virtually hundreds of properties which are urgently required for habitation, still left to decay through the licensing restrictions ?
10. In view of the large increase in population in recent months in London and the lack of accommodation, why are operatives engaged on war damage repair, etc., being transferred to provincial cities for the purpose of carrying out similar work ?
11. Why are the large firms allowed contracts in London which in the main are jobbing work ? Such contracts are capable of being carried out by medium and smaller builders within the locality.
12. Is it not time that the £100 limit under Defence Regulation 56A was revised to prevent the down-grading of all firms in the industry rather than an up-grading ?
13. Is the Ministry of Works and Planning not of opinion in light of experience that it would have been more satisfactory to have dealt with labour on the basis of units rather than at present by spasmodic transfer of all and sundry operatives which in the main appear to be coming from the small firm ? Should not equitable transference have taken place having regard to size, number of operatives, etc. ?
14. Why is the Ministry of Works and Planning unable to influence the Ministry of Labour to adopt fair and equitable methods in transference to essential work, it being a fact that the matter is dealt with haphazardly by National Service Officers ?
15. Is it not a fact that the Government Bonus Scheme has many anomalies which create expensive practice and work diversely against increased and speedy production ? Can it be in the interest of the country that an operative under this scheme can earn more in bonus in a week than his basic wage ?
16. Why was the present method of transfer of operatives to essential work made at ministerial level and the industry not consulted in the matter ?
17. Why are substantial firms in an area refused the opportunity of contracts in their own vicinity and the work given to imported firms ?

* See also page 259.

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South West and South Wales (7 *and* 8 *South*) : Gloucester Wiltshire, Somerset, Devon, Cornwall, Monmouth, Glamorgan, Carmarthen, Pembroke, Cardigan, Radnor, F. W. E. Vanstone, 23, Richmond Hill, Bristol, 8. Tel. : Bristol 38457.

Midlands and N. Midlands (9 *and* 3) : Worcester, Warwick, Stafford, Shropshire, Hereford, Lincoln, Leicester, Nottingham, Rutland, Soke of Peterborough, Northampton and Derby, O. W. Gilmore, Somerset House, Temple Street, Birmingham. Tel. : Midland 6561.

North and North East (1 *and* 2) : Northumberland, Durham, North, East and West Riding of Yorkshire, J. V. Nimmo, 40, Wetherby Road, Leeds. Tel. : Leeds 66892.

North West and North Wales (10 *and* 8 *North*) : Cheshire, Lancashire, Westmorland, Cumberland, Anglesey, Caernarvon, Denbigh, Flint, Merioneth, Montgomery, W. W. Browne, 72-76, Newton Street, Manchester. Tel. : Manchester Central 2191.

Scotland : All Scotland, A. A. McLintock, Dunedin House, 102, George Street, Edinburgh. Tel. : Edinburgh 34681.

DIARY

Wednesday, October 28

Central Council of Civic Societies. At Royal Society of Arts, John Adam Street, W.C.2, 2.30 p.m. Address by Mr. Henry Strauss, M.P., Parliamentary Secretary MOWP.

Thursday, October 29.

A.A.S.T.A. Reading Branch, at the Abbey Gateway, The Forbury, Reading, at 7.0 p.m. International film show—technical sound films from three nations : Prefabrication (U.S.A.), The Builders (Britain), New Moscow (U.S.S.R.).

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal." War Address: 45 The Avenue, Cheam, Surrey, and should reach there by first post on Monday morning for inclusion in the following week's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal." War Address: 45 The Avenue, Cheam, Surrey.

Public and Official Announcements

Six lines or under, 8s.; each additional line, 1s.

The Incorporated Association of Architects and Surveyors maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Address: **75 Eaton Place, London, S.W.1. Tel.: Sloane 5615** 991

Architectural Appointments Vacant

Advertisements from Architects requiring Assistants or Draughtsmen, and from Assistants and Draughtsmen seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice. Other "Appointments Vacant" and "Wanted" will be found under later headings, and are subject to the charges given under each heading.

Wherever possible prospective employers are urged to give in their advertisement full information about the duty and responsibilities involved, the location of the office, and the salary offered. The inclusion of the Advertiser's name in lieu of a box number is welcomed.

WANTED.—Experienced junior architectural assistant for architect's office in London suburb. Box No. 23.

Architectural Appointments Wanted

REGISTERED ARCHITECT requires employment on work subject to Essential Works Order or other scheme of National importance. Experienced in surveying and levelling, designing and planning and supervision of all building construction.—Box 4.

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ARCHITECT'S ASSISTANT, widely experienced, free two days a week, London area. Would undertake usual office duties. Jones, 17, Lichfield Road, Kew Gardens. Tel. Rich. 1737. 6

ARCHITECT'S ASSISTANT (24) (B.Arch., A.R.I.B.A.), experienced in preparing Sketches, Working Drawings, Details, etc., also supervision and sound construction. Would prefer aircraft design. Box 7.

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Classified Advertisements continued on page xxviii.

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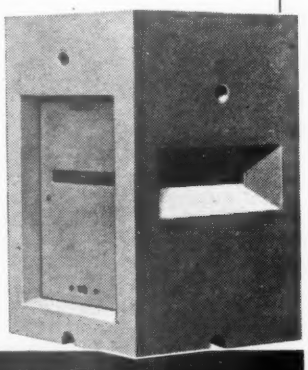

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