# 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, APRIL 23, 1942. NUMBER 2465 : VOLUME 95

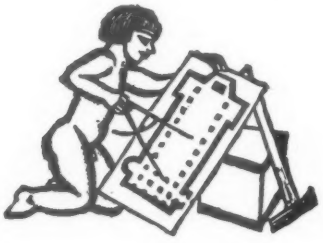
## PRINCIPAL CONTENTS



*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.*

*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 humble stone is o'er a builder's bed,
Tho' raised on high by fame, low lies his head ;
His rule and compass are now locked up in store.
Others may build, but he will build no more ;
His house of clay so frail, could hold no longer—
May he in heaven be tenant of a stronger."

*Epitaph to a Builder at Bullingham.*

# NEWS



## HOUSING AFTER THE WAR

The Central Housing Advisory Committee of the Ministry of Health, at a recent meeting to discuss post-war reconstruction, decided to set up a sub-committee on the design of houses and flats.

The members of the sub-committee are: Lord Dudley (chairman), Mrs. M. M. Dollar J.P. (London), Lady Sanderson (Women's Housing Advisory Council), Sir Harold Bellman, Sir George Burt, Mr. R. Coppock (National Federation of Building Trades Operatives), Mr. L. H. Keay (Liverpool), Alderman Sir Miles Mitchell (Manchester), Mr. J. W. Robertson-Scott, Mr. Louis de Soissons, F.R.I.B.A., Mr. J. A. F. Watson, Sir Seymour Williams and Dr. J. Greenwood Wilson (Cardiff).

The joint secretaries will be Mr. H. J. Ryan and Miss Judith Ledeboer.

Mr. Ernest Brown, Minister of Health, presided over the meeting. It is expected that at later meetings the Central Housing Advisory Committee will appoint sub-committees to consider other aspects of housing problems likely to arise after the war.

The Committee will keep in touch with the activities of the technical committees which are being set up in the Post-War Building Directorate of the Ministry of Works and Planning.

## BUILDERS AND THE PRIME MINISTER

Mr. Thomas Howarth, president of the National Federation of Building Trades Employers, has received the following message from the Prime Minister, to whom, in the name of the builders of Great Britain, he sent a telegram of goodwill at the luncheon to Lord Portal, Minister of Works and Planning: " The Prime Minister has received the telegram which you sent him on behalf of the builders of Great Britain, and wishes me to thank you for the kind message which you send him." The telegram from the builders read as follows: " Builders of Great Britain met to-day to do honour to your new Minister of Works and Planning, send you their cordial greetings. They are solidly behind you in your great work of leading the Empire to Victory."

## DEVON AND CORNWALL ARCHITECTURAL SOCIETY

At the annual general meeting of the above Society, the Officers of Council were elected as follows: President, Mr. A. Cunes, L.R.I.B.A. (Exeter); Vice-Presidents, Messrs. F. J. Taylor, F.R.I.B.A. (Plymouth) and Philip Tilden, F.R.I.B.A. (Sampford Courtenay); Past President, Mr. J. Challice, F.R.I.B.A. (Exeter), Hon. Treasurer, Mr. J. Bennett, F.R.I.B.A. (Exeter), Hon. Auditor, Mr. W. J. M. Thomasson, A.R.I.B.A. (Exeter), Hon. Secretary, Mr. O. Parker, L.R.I.B.A. (Exeter).

## A.A.S.T.A.

Forthcoming meetings. *April* 24. London Branch Meeting, Room 19, Livingstone Hall, 42, Broadway, Westminster, S.W.1, 6.30 p.m. Main Speaker: Miss Justin Blanco-White, A.R.I.B.A. Subject: " Prefabrication in Wartime." *April* 27. House Branch, Ministry of Works and Planning. " Two Chairmen," Queen Anne's Gate, S.W.1, 7 p.m. Speaker: Colin Penn, A.R.I.B.A. Subject: " The Building Industry: Do We Want Unified Control ? "

On page 277 of last week's issue Mrs. E. V. Penn should have been described as " Acting Secretary, A.A.S.T.A."

## R.I.B.A. ELECTION

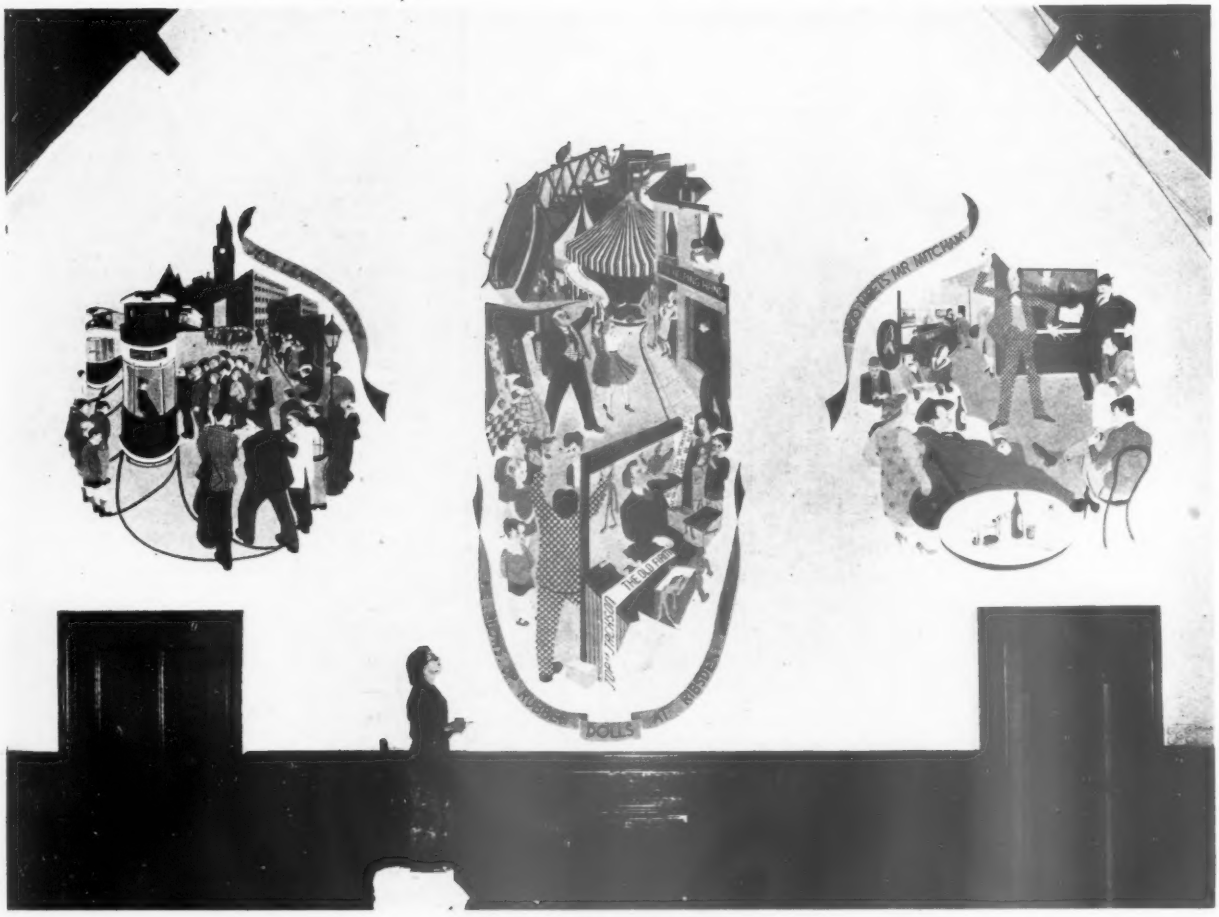
Miss Jane B. Drew is the first woman to become a Fellow of the R.I.B.A. since the war. She was elected to the Fellowship on April 14. In the history of the Institute only four other women have gained this distinction. The last to be elected was Miss E. K. D. Hughes, early in 1939, the others being: Miss Joyce Townsend (1935), Miss G. W. Leverkus, and Mrs. E. G. Harrison (both 1931).

## REGISTRATION

At the annual general meeting of the Architects' Registration Council of the United Kingdom, Mr. Sydney Tatchell and Mr. T. A. Darcy Braddell were re-elected chairman and vice-chairman respectively, for the period ending March, 1943.

*Constitution of the Council for the year ending March*, 1943.

*Sixteen members appointed by the Council of the Royal Institute of British Architects*: Messrs. Joseph Addison, M.C., F.R.I.B.A., T. A. Darcy Braddell, F.R.I.B.A., H. Chalton Bradshaw, C.B.E., M.ARCH., F.R.I.B.A., Professor L. B. Budden, M.A., F.R.I.B.A., Messrs. Romilly B. Craze, F.R.I.B.A., J. L. Denman, J.P., F.R.I.B.A., Henry M. Fletcher, M.A., F.R.I.B.A., Hubert Lidbetter, F.R.I.B.A., A. H. Moberly, M.A., F.R.I.B.A., S. C. Ramsey, F.R.I.B.A., A. L. Roberts, F.R.I.B.A., C. G. Stillman, F.R.I.B.A., Basil M. Sullivan, C.I.E., O.B.E., F.R.I.B.A., Sydney Tatchell, F.R.I.B.A., Michael Waterhouse, M.C., F.R.I.B.A., and C. S. White, F.R.I.B.A.




# *Adventures of Jess Oakroyd*

***The adventures of Jess Oakroyd and his pals, characters in J. B. Priestley's book,* The Good Companions, *have been depicted by Miss Olive M. Simpson in seven murals, which decorate Bradford's first British Restaurant. In the three shown above you see Oakroyd as he was at the start of the story, leaving a football match; helping Joby Jackson, the travelling showman, to blow up dolls at Ribsden Market; and Jollifant and the conjuror, Morton Mitcham, in a bar. Miss Simpson, seen in the photograph, is a young art teacher who was trained at the Regional College of Arts and Crafts, Bradford, at which Institution she is engaged part-time. Further illustrations and description of the Restaurant, designed by Mr. Harold Conolly, Bradford City Architect, appear on pages 291-292 of this issue.***

*Three members appointed by the Council of the Incorporated Association of Architects and Surveyors*: Major G. B. J. Athoe, F.I.A.A., M.INST.R.A., Mr. J. E. Swindlehurst, M.A., M.INST.C.E., Sir Robert I. Tasker, M.P., D.L., J.P., F.I.A.A., M.INST.R.A.

*Two members appointed by the Council of the Faculty of Architects and Surveyors*: Messrs. H. Langford Moyle, F.F.A.S., H. H. Murray, P.F.A.S., F.F.S.(ENG.).

*Four members appointed by the Council of the Architectural Association (London)*: Mr. D. L. Bridgwater, B.ARCH., A.R.I.B.A., Miss Jane Drew, F.R.I.B.A., A.A.DIPL., Messrs. Joseph Hill, F.R.I.B.A., F.I.ARB., M.I.STRUCT.E., E. B. O'Rorke, M.A., F.R.I.B.A., R.D.I.

*Two members appointed by the Council of the Association of Architects, Surveyors and Technical Assistants*: *Messrs. Erno Goldfinger, D.P.I.G., and F. Podesta Harrison.

*Three members appointed by the Councils of Provincial Associations*: Messrs. Norval R. Paxton, M.C., A.R.I.B.A., C. G. Soutar, F.R.I.B.A., *E. W. B. Scott, F,R.I.B.A.

*Ten members elected by "Unattached" Architects*: *Messrs. A. N. Anderson, M.INST.R.A., *Vincent Burr, F.I.A.A., L.R.I.B.A., M.INST.R.A., E. W. Chapman, M.INST.R.A., E. J. Elford, M.INST.C.E., Capt. Montague Evans, M.C., F.S.I., M.INST.R.A., Messrs. G. L. Head, M.INST.R.A., A. B. Houchin, W. O. Hudson, M.INST.R.A., W. Roseveare, M.INST.R.A., *H. E. G. Stripp, A.M.I.C.E., A.M.I.M. & CY.E.

*One member appointed by the Council of the Royal Society of Ulster Architects*: Mr. John Seeds, F.R.I.B.A.

*One member appointed by the President of the Board of Education*: Mr. Harry Bernard Wallis.

*One member appointed by the Minister of Health*: Mr. F. Slater.

*One member appointed by the Commissioners of Works*: Mr. P. K. Hanton, O.B.E., F.R.I.B.A.

*One member appointed by the Department of Health for Scotland*: Mr. John Wilson, O.B.E., F.R.I.B.A., F.R.S.E.

*One member appointed by the Governor of Northern Ireland*: Mr. Adrian Robinson, B.L.

*One member appointed by the Council of the Chartered Surveyors' Institution*: Mr. H. James King, F.S.I.

*One member appointed by the Council of the Institution of Structural Engineers*: Mr. Gower B. R. Pimm, M.INST.C.E., M.I.STRUCT.E.

*One member appointed by the Council of the Institution of Municipal and County Engineers*: Mr. Norman Scorgie, J.P., M.INST.C.E.

*One member appointed by the Council of the Society of Engineers*: Mr. W. L. Wood, M.S.E.

*One member appointed by the Council of the National Federation of Building Trades Employers*: *Mr. T. Howarth, O.B.E., J.P., F.I.O.B.

*One member appointed by the Council of the National Federation of Building Trades Operatives*: Mr. Richard Coppock.

* New appointments.

## UNITY IN THE ARCHITECTURAL PROFESSION

The resolution published in the ARCHITECTS' JOURNAL for March 12 has apparently given rise to some misunderstanding. We are informed that the words "individually agreed" refer to persons and not to individual societies.

## RETIREMENT

Mr. E. A. Willson, Chairman and Managing Director of Dawnays, Ltd., for the past twenty-three years, has now retired from the board of the company. He has been succeeded by Mr. Harry Thorne.

It is sixty-two years since Mr. Willson started work as an articled pupil to Mr. Dawnay, and

his long and wide experience epitomizes from its earliest beginnings the history of structural engineering as we understand it to-day.

Mr. Willson has, since he started the first works at Nine Elms in 1894, been continuously associated with the firm. He was a director when the first company, known as Archibald D. Dawnay & Sons, Ltd., was formed in 1897, and he now leaves behind the record of his energies in the firm of Dawnays, Ltd., with its works at Battersea, Cardiff, Swansea, Norwich and Welwyn Garden City, and a total personnel of over a thousand.

In the days of his apprenticeship it was the usual practice to design the individual made-to-measure cast iron and wrought iron structural members; afterwards to travel to the Midlands to see the metal poured. Eventually the use of cast and wrought iron was largely superseded by the introduction of rolled steel sections. These transitions, the standardizing of rolled sections in 1904, the widespread adoption of the steel-framed building, all came within the range of his experience. The framework of the first steel-framed building, that of the Bonnington Hotel, built under the L.C.C. Act, was designed by Mr. Willson in 1909.

He has been actively associated with every advance in the technique of steel-framed building, and development of improved methods in workshop practice. He has constantly advocated increases in the permissible working stresses and has seen their gradual acceptance. His progressive outlook is reflected in his outspoken belief in the necessity to-day for a standard quality of steel for general use, of higher tensile properties than the 28/33 tons laid down in B.S.S. No. 15, and he has consistently taken the widest view of research as vital to the technical progress of the industry.

Mr. Willson has always taken a leading part in advancing the interests of the structural engineering industry as a whole, and the unity and cohesion within the industry to-day is largely the result of his initiative and resource. He is president of the British Steelwork Association, having been re-nominated after his term of office in 1941 and for many years has been the vice-chairman of the British Constructional Steelwork Association. Despite the cessation of his active participation in the affairs of Dawnays, Ltd., the industry is assured of a continuation of his guidance in matters of general policy.

### BAN ON U.S. BUILDING

The United States War Production Board have decided to prohibit the building of non-essential houses, roads and commercial premises.

*Mr. E. A. Willson who has retired from the position of Managing Director of Dawnays.*

# EVIDENCE

EVIDENCE submitted by the Town and Country Planning Association to the Scott Committee has just been published.* The subject dealt with is the urban and rural pattern—the relation of town and country. Planning requirements of industry are discussed under two headings—the needs of industry and industrial mobility. Industry is said to need a full complement of public services and some elasticity in the supply of workers. Other requirements are dismissed in a single sentence, "The linkages between industries, chiefly in the matter of supplies of manufactured parts and materials, do not usually require close proximity; they involve interworks visits but these are possible without undue cost up to distances of 20, 30, or even 40 miles. Transport costs on materials are often a matter of relative unimportance." The memorandum then goes on to state: "it is very difficult to determine, by survey or otherwise, what proportion of industries are mobile—that is, capable of being carried on economically in a variety of different situations." The word mobility does not mean, as one might expect, movement which is actually taking place—the action and interaction that goes on without ceasing between one branch of industry and another. Instead it means *settlement*—which might perhaps have happened differently. Real mobility and the need to plan for it, for variety and choice, is dismissed with a wave of the hand under the alias, "linkage." Conclusions are negative. A less atomistic approach might produce more positive conclusions.

The fact is insufficiently stressed that industries which have ceased to be tied geographically tend to be tied to each other; to be part of a production sequence—the road their conveyor belt. It may not matter where they are sited (considered singly) but they like to be together. Surely this fact is obvious by now. Considerable saving might result from planning this relationship: further investigation is needed. Dispersal all over the country in towns of 50,000 would certainly make necessary a great multiplication of trunk roads. From the factory owner's point of view the cost of transport might not be prohibitive, but is there any advantage to be gained by stretching the industrial network to cover the whole countryside? Is there any reason to suppose that people not only like being in small units but *dislike* being part of a larger entity?

From the point of view of living, the memorandum recommends a population of 10,000—15,000. "The rapid spread of cultural education and the rise in the standard of living has undoubtedly lowered the size of urban unit which is socially attractive," but it adds, "in the present stage of social development and general culture it does seem that a population of 40,000 or so will produce a town and town

**Planning and the Countryside.* Edited by F. J. Osborn. Faber & Faber. Price 1/-

service more acceptable to the majority of typical workers in industry." The reason for this afterthought appears to be that the smaller towns do not in fact attract "a full proportion of people with energy and initiative." The more cultured people are, the more choosey they become; the less likely to be satisfied with "a complete set of cultural institutions." Socially, too, there are linkages.

The solution arrived at by natural processes is conurbation. Why not try to make it work? Standards suggested by the Town and Country Planning Association are towns of 50,000 inhabitants planned at an overall density of 6 dwellings per acre (12 houses to the acre on housing estates*) occupying 2,000 acres each (i.e., a circle of one mile radius), surrounded by agricultural belts bringing the total area up to 6,000 acres (i.e., a circle of about $1\frac{3}{4}$ miles radius). The area of the L.P.T.B. is 1,986 square miles and the population in 1938 was 9,645,000. In other words the area needed to house the existing population at the low density favoured by the T.C.P.A., in units similar to garden cities described by Ebenezer Howard is 1,184 square miles—an area less by 800 square miles than that which they occupy at present. These facts surely suggest that extreme measures of decentralization are not only difficult but unnecessary.

*The density of some L.C.C. clearance estates are given as a comparison. Tabard Gardens 120, Ossulton Estate 63.9, Clapham Park 50, dwellings per acre.

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# NOTES & TOPICS

LORD PORTAL SPEAKS

I don't know what anybody else feels about it but personally I was disappointed to find that Lord Portal's first public speech contained no reference at all to the fact that his Ministry is responsible for planning.

★

In fact two passages in the speech suggested a certain aversion for the subject. "None of us in pre-war days would have ever realized the extreme difficulty of adjusting the labour force to an immense building programme, when there is no reserve of labour. Complete success could only be secured by the perfect synchronization of every job in the country and *absolute* mobility of labour—neither of which is possible. So far as this generation is concerned we have never had, in the building industry, other than a heavy unemployment figure which, in fact, acted as a balancing factor in adjusting labour demands over the country."

★

Later, speaking of the grouping of contractors, he said: "It is not an easy technique, particularly for Englishmen who are first and last individualists. To be effective, to be able to compete with a large well-organized single firm, a group must be exceedingly well organized; there must be some head whose *absolute* direction is accepted by the others."

★

The wording suggests nostalgia for the bad old days combined with a reluctant belief in autocracy. What we need is *organized* co-operation—something half way between the two extremes

★

One is left with a confused impression that freedom-loving Englishmen do exactly what they like in large well organized firms—but that's beside the point.

★

OPEN GRID

Dispersal was the order of the day in the early stages of the war when ARP first became an important consideration in factory planning. Later it was discovered that the disadvantages outweighed the advantages, and that the same degree of safety could be achieved by less extreme measures. Camouflage experts hit on the idea of the open grid.

★

Town planning experts also favour dispersal, for other reasons—but the Cambridge conference showed that they, too, are beginning to be worried by the difficulties that crop up when one gets down to the business of deciding which industries are in fact suitable for dispersal. Mostly they appear to be linked together in a way that raises awkward problems when one tries to fit them into watertight compartments with relatively large spaces between—problems that are less acute but not so very different from those which arise when one tries to disperse a single factory.

★

If looks as if camouflage experts are a stage ahead of planners here, and have hit on an idea that might be given wider application.

★

LOOKING BACK

The first report of the Commissioner* for the special areas throws some light on the difficulties of co-ordination—the favourite cure-all of the decade. The Commissioner was told to assist economic reconstruction and given a fund of £2,000,000 to do it with, but was not allowed to subsidize any activity already coming within the purview of a government department or to direct industry. Operating on the

* Lord Portal, then Sir Wyndham Portal, Bart., was one of the three investigators who supplied information on which the report was based. He was responsible for Parts of South Wales.

fringe he was to secure the acceptance of a common policy of persuasion.

★

From the start he was fatally hampered by the fact that attracting industry meant very largely providing sites which meant laying down roads. The Ministry of Transport, unfortunately, considered it their job to provide for *existing* requirements.

★

No amount of co-ordination will turn a bunch of administrative departments into a central authority capable of attacking the kind of issues raised by planning. There's nothing wrong with the old administrative departments or the old powers. But we do need some new powers for our central planning authority. Powers which will make it unnecessary to remain permanently on the defensive.

POLICE

This town planning business is growing serious ; it's reassuring to find policemen on the scene, saying to everybody with their usual common sense and good nature "Move along there please! Keep moving!" Mr. Alker H. Tripp, with very little fuss, disperses quite a crowd of loiterers in his 27-page pamphlet, The Police and Town Planning.*

★

His main premise is "a city so planned that it unnecessarily kills and injures its citizens is obviously an ill-planned city." One wonders how many people would agree with this. I've heard it said that specialists have been asked to report on the possibilities of district heating in this country and have answered again and again—It just wouldn't pay. Answered so in spite of evidence piled high in the files of medical officers that the dirty air of our towns kills more people than cancer and tuberculosis.†

Mr. Tripp's particular pigeon is, of course, road traffic, which injures nearly a quarter of a million people every year. For anybody who wants to understand in outline the theory of traffic control his pamphlet is a gift —for those who want more there is always *Road Traffic and Its Control* waiting on the shelf to be followed shortly by *Town Planning and Road Traffic* still in the hands of the printers.

★

What strikes me most about the pamphlet is the light it throws on the part which a road traffic expert thinks road design and layout ought to play in relation to town planning. "Any town plan is on inspection found to be defined mainly in terms of road layout. The road layout becomes so to speak the skeleton of the body. If it is ill designed the whole town plan is permanently deformed because the new layouts, once built, are hopelessly rigid and a great opportunity has then been lost." That's looking at the picture one way on—how the road plan affects the town.

★

Now for the other point of view : the first principle of road design is that you must know *before* you design the road the purpose it is going to serve. "Shopping streets, business centres or residential roads must be respectively dedicated to shopping business or residence."

★

In Lord Reith's statement to Parliament on the Central Planning Authority he said : "Planning must work to national *policies*—to be determined for agriculture, industry and transport. *These have to be decided as it were outside planning* ("Move altogether please! Move along"!) But planning issues have to be taken into account in formulating economic policy.

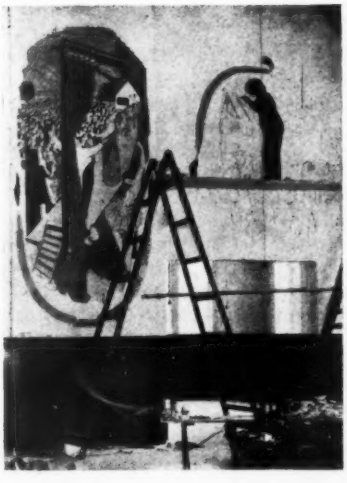
★

If policies were in the singular I would feel more content. A national policy for agriculture, industry, transport *and housing*, might be agreed on before planners got to work, and yet take planning issues into account. The job of the planning authority might be to interpret this policy geographically and then hand specialist work back to the appropriate departments for execution.

ASTRAGAL


# FIRST BRITISH RESTAURANT BRADFORD

"The Good Companions," Bradford's first British Restaurant, recently opened by the Lord Mayor (Alderman William Illingworth), was designed by Mr. H. Conolly, Bradford City Architect. The name of the Restaurant was chosen by the architect because the Bradford-born author, J. B. Priestley, in his novel *The Good Companions*, made Bruddersford, which we all know to be Bradford, the home of one of his principal characters, Jess Oakroyd, a joiner employed at a local mill. He also arranged with a member (Miss Olive M. Simpson) of the staff of the Regional College of Art, to execute seven panels illustrating the adventures of Jess Oakroyd. The headpiece shows Oakroyd at the start of the story, setting off "down South" with his bag of tools and little straw basket. Below, Miss Simpson at work on one of the panels.



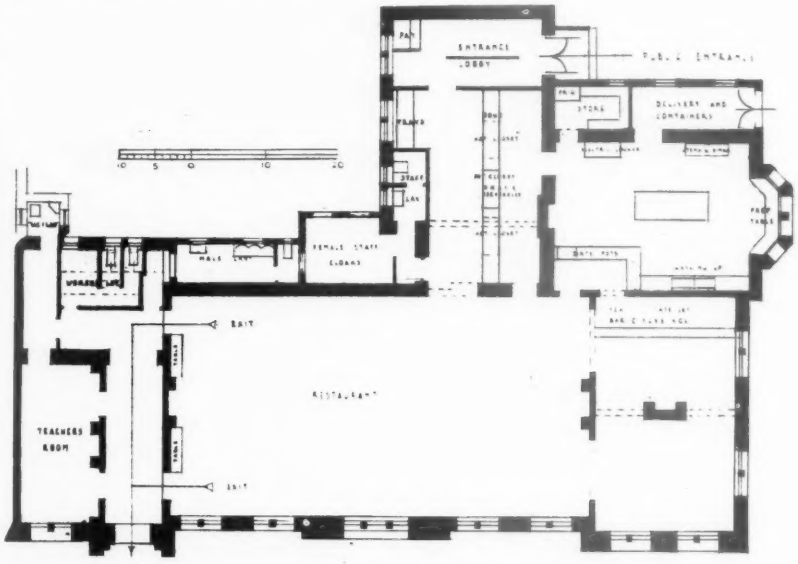
* Reprinted from the *Police Journal*.

† Neville Chamberlain as Minister of Health in the House of Commons, June 28, 1923, said :

"I should not be surprised if owing to the great attention which has been given to certain complaints some Hon. Members thought that the most fatal diseases were tuberculosis and cancer. . . .

"That is very far from being the case. Easily the first in their fatal effect are those diseases which are classed as respiratory diseases—pneumonia, bronchitis and diseases of that kind—and I am afraid that we must attribute the very high mortality which we suffer from these diseases to the congested conditions and polluted atmosphere which are to be found in our largest towns."

*The murals show : left, the* Good Companions *troupe at a supper party ; centre, pierrots in action at Sandy bay ; right, Oakroyd at the end of the story, displaying his tickets before he boards the ship that is to take him to Canada.*




The restaurant was planned in half of the Feversham Street elementary school and considerable alterations were necessary with some additional building before the plan could be changed for its purpose. Entering by a door from the playground off Leeds Road, a pay box is reached at the end of the corridor. The first two courses are served at the main counter ; sweets and tea at another and smaller counter. The reason for this is twofold. At some of the older British Restaurants, all courses are served at once, with the result that the sweet is cold by the time the diner has eaten the first course. It also helps circulation in getting people away from the main servery. Normally, cooking is not done on the premises, the food coming in insulated containers from a Central Kitchen Depot in the city. Facilities for cooking are, however, provided. Above, three of the murals executed by Miss Simpson.

## BRITISH RESTAURANT, BRADFORD

*DESIGNED BY H. CONOLLY*

# LETTERS

*COLIN PENN, A.R.I.B.A.*

*SIR IAN MACALISTER*
*(Secretary, R.I.B.A.)*

### *R.I.B.A. Election*

Sir,—May I support the plea of Messrs. Gordon Stephenson and F. R. S. Yorke that the R.I.B.A. election should be held this year. Conditions now are completely different from those existing at the time of the last election, and to enable the R.I.B.A. to perform the great tasks of education, co-ordination and inspiration with which it is faced, it is essential that there should be an opportunity for bringing into the leadership of the Institute those who have, since the war began, proved their ability.

Without underrating the abilities of present Council members, it is clear (*a*) that, owing to war-time changes in practice, etc., many of them must now be unable to serve as capably as they did ; and (*b*) that many were elected because of their success in dealing with pre-war problems that no longer exist. It is true that some members would be unable to vote because of service abroad but their opinions are unlikely to differ from those of men in the armed forces at home, all of whom would be able to vote.

The holding of elections is not the only step necessary to make use of the enormous opportunities that are before us. A broad and energetic campaign will be necessary, every possible ally must be drawn in, every ounce of effort must be used, if the architectural profession is to have a real share in the destruction of fascism. This will undoubtedly be done, but the holding of elections should be a first step that would make the rest of the road infinitely easier.

COLIN PENN, A.R.I.B.A.

London.

SIR,—Under the provisions of an Act of Parliament passed at the beginning of the war the Annual Election of the Council of the R.I.B.A. is suspended for the duration of the war.

It may be pointed out to members that, in spite of this suspension, the personnel of the Council does, in fact, change to a substantial extent every year. Nearly half the members of the Council are representatives of the Allied Societies and these only hold office for one or two years. The ex officio members of the Council are not subject to the annual election and their personnel has consequently changed since the last election in 1939.

IAN MACALISTER,
Secretary, R.I.B.A.

London.

# PRICES

## EIGHTH WARTIME LIST

*EXPLANATORY NOTES*

Few important changes have occurred since the last quarterly issue and prices generally can be considered fairly stable. Rates of Wages rose on February 1, and are as follows :—

| *LONDON DISTRICT* | *Craftsmen.* | *Labourers.* |
|---|---|---|
| Within 12 miles radius .. .. .. .. .. | 2s. 0½d. | 1s. 7¼d. |
| From 12-15 „ „ .. .. .. .. .. | 2s. 0d. | 1s. 7d. |

*GRADE CLASSIFICATIONS*

| | A | A¹ | A² | A³ | B | B¹ | B² | B³ | C |
|---|---|---|---|---|---|---|---|---|---|
| Craftsmen.. | 1s. 11d. | 1s. 10½d. | 1s. 10d. | 1s. 9½d. | 1s. 9d. | 1s. 8½d. | 1s. 8d. | 1s. 7½d. | 1s. 7d. |
| Labourers.. | 1s. 6½d. | 1s. 5¾d. | 1s. 5½d. | 1s. 5d. | 1s. 4¾d. | 1s. 4¼d. | 1s. 4d. | 1s. 3½d. | 1s. 3¼d. |

*F.S.I.*

# CURRENT MARKET PRICES OF MATERIALS

### BY DAVIS AND BELFIELD, Chartered Quantity Surveyors

**Prices vary according to quality and the quantity ordered.**

**Those given below are average market prices and include delivery in the London area, except where otherwise stated, but do not include overhead charges and profit for the General Contractor.**

## CONCRETOR

*Cements*

† All delivered in paper bags (20 to the ton) free and non-returnable.
* Paper bags charged at 7/– extra per ton non-returnable; jute sacks charged at 1/9 each and credited on return at 1/6.

| | | 6 Tons and over | In 80-ton freights F.A.S. Safe Wharf in River Thames, London Area. |
|---|---|---|---|
| *Portland ... ... | per ton | 49/6 | 47/– |
| *"417" Ultra rapid hardening ... ... | per ton | 69/6 | — |
| *Rapid hardening ... | per ton | 55/6 | 53/– |
| *Water repellent ... | per ton | 79/6 | — |
| Atlas White (1 barrel 376 lbs.) ... ... | | | per barrel — 6 ton upwards |
| *Colorcrete rapid hardening, buff and red | per ton | | 89/6 |
| *Colorcrete rapid hardening khaki ... | per ton | | 89/6 |
| †Colorcrete rapid hardening dark ... | per ton | | — |
| †Colorcrete non-rapid hardening ... | per ton from | | 175/– to 399/– |
| †Snowcrete ... ... ... ... | per ton | | 205/– |
| | 1–9 cwts. | 10–19 cwts. | 1 ton and upwards |
| *Ciment Fondu, delivered Central London area ... ... | per cwt. | 15/3 | 14/9 12/9 |

*Aggregate and Sands (Full Loads)*

| | | |
|---|---|---|
| 2" Unscreened ballast ... ... ... ... | per yard cube | 9/10 |
| ¾"(Down) Washed, crushed and graded shingle ... ... ... ... ... | per yard cube | 10/4 |
| ⅜" (Down) Ditto ... ... ... ... ... | per yard cube | 11/4 |
| 2" Broken brick ... ... ... ... ... | per yard cube | 12/6 |
| ¾" Ditto ... ... ... ... ... ... | per yard cube | 14/– |
| Washed pan breeze ... ... ... ... | per yard cube | 9/6 |
| Coke breeze 1" to dust ... ... ... | per yard cube | — |
| ⅛" Sharp washed sand ... ... ... | per yard cube | 13/9 |
| White Silver Sand for white cement (one ton lots) | per ton | — |

(For Sands for Bricklaying and Plastering *see* respective trades)

*Pavings*

| | | |
|---|---|---|
| Brick hardcore ... ... ... ... ... | per yard cube | 5/3 |
| Concrete ditto ... ... ... ... ... | per yard cube | — |
| Clean furnace clinker and boiler ashes ... | per yard cube | 4/6 |
| Coarse gravel for paths ... ... ... | per yard cube | 14/6 |
| Fine ditto ... ... ... ... ... | per yard cube | 17/6 |
| Clean granite chippings ... ... ... | per ton | 29/9 |

## CONCRETOR—(*continued*)

*Pavings—continued*

| | | |
|---|---|---|
| Red quarry tiles, 6" × 6" × ⅞" ... ... | per yard super | 7/2 |
| Ditto 6" × 6" × ⅝" ... ... | per yard super | 6/– |
| Buff ditto 6" × 6" × ⅞" ... ... | per yard super | 7/10 |
| Ditto 6" × 6" × ⅝" ... ... | per yard super | 6/7 |
| Hard red paving bricks, 2" ... ... | per 1,000 | 235/– |
| Ditto 1½" ... ... | per 1,000 | 190/– |

*Reinforcement*

| | | |
|---|---|---|
| Home trade maximum basis price for mild steel rods, ⅝" diameter and upwards, ex mills delivered to station or siding ... ... | per ton | £16 19 6 |
| Extras for :— | | |
| ⅜" and ½" diameter... ... ... ... ... | per ton | 10/– |
| 7/16" diameter ... ... ... ... ... | per ton | 15/– |
| ⅜" diameter ... ... ... ... ... ... | per ton | 20/– |
| 5/16" diameter ... ... ... ... ... | per ton | 30/– |
| ¼" diameter ... ... ... ... ... ... | per ton | 40/– |
| 3/16" diameter ... ... ... ... ... | per ton | 60/– |
| Lengths of 40 ft. to 45 ft. ... ... ... | per ton | 10/– |
| Lengths of 45 ft. to 50 ft. ... ... ... | per ton | 15/– |

*Sundries*

| | | |
|---|---|---|
| Retarding liquid, in 5-gallon drums (for exposing aggregate) | per gallon 21/– | Ex Warehouse, Southwark Bridge. Drums chargeable and credited, if returned. |
| Ditto (for obtaining a bond) | per gallon 13/1½ | |

## BRICKLAYER

*Common Bricks*

| | | |
|---|---|---|
| Rough stocks ... ... ... ... ... ... | per 1,000 | 69/6 |
| Third stocks ... ... ... ... ... ... | per 1,000 | 67/– |
| Mild stocks ... ... ... ... ... ... | per 1,000 | 74/6 |
| Sand limes ... ... ... ... ... ... | per 1,000 | — |
| ‡Phorpres pressed Flettons ... ... ... | per 1,000 | 51/9 |
| ‡Phorpres keyed Flettons ... ... ... | per 1,000 | 53/9 |
| Blue Staffordshire wirecuts ... ... ... | per 1,000 | 230/– |
| †Lingfield engineering wirecuts ... ... | per 1,000 | 80/– |
| Firebricks, best Stourbridge 2½" ... ... | per 1,000 | — |
| Firebricks, best Stourbridge 3" ... ... | per 1,000 | — |

*Facing and Engineering Bricks*

| | | |
|---|---|---|
| Sand Limes, No. 1 ... ... ... ... ... | per 1,000 | — |
| Sand Limes, No. 2 ... ... ... ... ... | per 1,000 | — |
| ‡Phorpres rustic Flettons ... ... ... ... | per 1,000 | 71/9 |

‡ At King's Cross. For delivery in W.C. district add 6/6 per 1,000.
† Price ex works, delivery extra.

## BRICKLAYER—(*continued*)

*Facing and Engineering Bricks—continued*

| | | |
|---|---|---|
| Midhurst Whites | per 1,000 | 110/– |
| Hard stocks, firsts | per 1,000 | 100/– |
| Hard stocks, seconds | per 1,000 | 93/– |
| Sand-faced, hand-made reds | per 1,000 from | 150/– |
| Sand-faced, machine-made reds | per 1,000 from | — |
| Red rubbers (9¾-in.) | per 1,000 | — |
| Uxbridge Flints (white) | per 1,000 | 80/– |
| Uxbridge Flints (creams, light greys, etc.) per 1,000 | from | 110/– |
| Dunbriks (concrete), standard greys, ex works | per 1,000 | 60/– |
| Dunbriks (concrete), in various colours, ex works | per 1,000 | 95/– |
| †Southwater engineering No. 1 (first quality red pressed) | per 1,000 | 125/– |
| †Southwater engineering No. 2 (second quality red pressed) | per 1,000 | 105/– |
| Blue pressed | per 1,000 | 250/– |

† Price ex works, delivery extra.

*Limes and Sand*

| | | 1-ton lots | 6-ton lots |
|---|---|---|---|
| Lime, greystone | per ton | 57/6 | — |
| Lime, chalk | per ton | 57/6 | — |
| Lime, blue Lias (including paper bags) | per ton | 67/– | — |
| Lime, hydrated (including paper bags) | per ton | 67/– | — |
| Washed pit sand | per yard cube | 12/– | |

(For cements, *see* "Concretor.")

Hire of jute sacks charged at 1/6 and credited at 1/6. If left, charged at 1/9.

*Sundries*

| | | |
|---|---|---|
| Wall ties, self coloured | per cwt. | — |
| Wall ties, galvanized | per cwt. | — |
| D.P.C. slates, size 18″ × 9″ | per 100 | 38/– |
| D.P.C. slates, size 14″ × 9″ | per 100 | 34/3 |
| D.P.C. slates, size 14″ × 4½″ | per 100 | 15/– |
| ‡Ledkore D.P.C. Grade A | per foot super | 6¾d. |
| ‡Ledkore D.P.C. Grade B | per foot super | 8½d. |
| ‡Ledkore D.P.C. Grade C | per foot super | 10½d. |

‡ Trade discount 5 per cent. and cash discount 5 per cent. Prices include delivery on minimum of £5 orders.

| | 9″×3″ | 9″×6″ | 9″×9″ | 12″×9″ | 14″×9″ |
|---|---|---|---|---|---|
| Earthenware airbricks: Red, blue, vitrified and buff terra cotta ... each | –/11 | 1/10 | 3/4 | — | — |

| | | 9″×3″ | 9″×6″ | 9″×9″ | 12″×6″ | 12″×9″ |
|---|---|---|---|---|---|---|
| Black cast iron, School Board pattern airbricks | per doz. | 3/9 | 7/7 | 15/1 | 15/1 | — |
| Galvanized ditto | per doz. | 7/7 | 15/1½ | 30/2½ | 30/2½ | — |
| Black hit and miss cast iron ventilators | per doz. | 18/– | 27/6 | 37/1 | 37/1 | — |
| Galvanized ditto | per doz. | 36/– | 57/2 | 74/3 | 74/3 | — |

| | | 1′ 0″ | 1′ 6″ | 2′ 0″ | 2′ 6″ | 3′ 6″ | 5′ 0″ |
|---|---|---|---|---|---|---|---|
| Buff terra cotta chimney pots | each | 3/3 | 3/11 | 5/8 | 7/6 | 17/6 | 29/3 |
| Fireclay | per ton | — | | | | | |

Wall reinforcement supplied in standard rolls containing 25 yards lin.

| | | |
|---|---|---|
| *2″ wide black japanned | per roll | 2/5 |
| *2″ wide galvanized | per roll | — |
| *2½″ wide black japanned | per roll | 3/– |
| *2½″ wide galvanized | per roll | — |

Greater widths pro rata 2½″ price carriage paid on orders of £5. Discounts for quantities.

* Prices subject to 5% advance.

*Partitions*

| | | 2″ | *2½″ | 3″ | 4″ |
|---|---|---|---|---|---|
| *Breeze | per yard super | 2/2 | 2/7 | 3/2 | 3/10 |
| *Clay tiles | per yard super | 2/8 | 2/11 | 3/6 | 3/10 |
| *Pumice | per yard super | 3/6 | 4/3 | 5/– | 5/6 |
| *Plaster | per yard super | 3/1 | 3/11 | 5/– | 5/9 |

*Gas Flue Blocks*

| | | Single Flues | Double Flues |
|---|---|---|---|
| *Straight blocks | each | 1/3 | 2/2 |
| *Building in set | per set of 3 | 2/11 | 5/4 |
| *Cover blocks | each | 1/7 | 3/4 |
| *Raking blocks 45° | each | 3/– | 4/3 |
| *Raking blocks 60° | each | 2/2 | 3/1 |
| *Offset blocks | each | 3/8 | 5/4 |
| *Closer blocks | each | 1/3 | 2/2 |
| *Closer flashing blocks | each | 1/1 | 1/10 |
| *Straight flashing blocks | each | 1/1 | 1/10 |
| *Terminal and cap | per set | 7/5 | 12/8 |
| *Middle terminal and cap | per set | 6/11 | 11/10 |
| *End terminal and cap | per set | 7/2 | 12/5 |
| *Corbel block | each | 5/4 | 3/6 |
| *Gathering block | each | — | 10/8 |

* Prices subject to 10% advance.

## DRAINLAYER

*Agricultural Pipes*

| | | 2″ | 3″ | 4″ | 6″ |
|---|---|---|---|---|---|
| Pipes in 12″ lengths | per 1,000 | 72/6 | 102/6 | 140/– | 250/– |

(Delivered in full loads Central London Area.)

*Salt Glazed Stoneware Pipes and Fittings*

| | | 4″ | 6″ | 9″ |
|---|---|---|---|---|
| Pipes (2′ lengths) | each | 1/8 | 2/6 | 4/6 |
| Bends, ordinary | each | 2/6 | 3/9 | 6/9 |
| Single Junction, 2′ long | each | 3/4 | 5/– | 9/– |
| Yard Gulley, without grating | each | 6/3 | 6/10½ | 11/3 |
| Ordinary round or square Grating, painted | each | –/7½ | 1/3 | 2/6 |
| Ordinary round or square Grating, galvanized | each | 1/0½ | 2/1 | 4/4½ |
| Extra for Inlets, horizontal | each | 1/6 | 1/6 | 1/6 |
| Extra for Inlets, vertical | each | 2/3 | 2/3 | 2/3 |
| Intercepting Trap with Stanford Stopper | each | 17/6 | 22/6 | 37/6 |
| Grease and mud interceptor with bucket for removing silt and grease for 6″, 9″ and 12″ drains, with iron grating, painted | each | 20/– | | |
| Ditto, with iron grating galvanized | each | 21/10½ | | |

The above prices to be varied by the following percentages for the different qualities given. All subject to 2½ per cent. cash discount.

| | British Standard | British Standard Tested |
|---|---|---|
| Orders for 2 tons and over | Plus 2½% | Plus 27½% |
| Orders under 2 tons, 100 pieces upwards | Plus 20% | Plus 45% |
| Orders under 2 tons, less than 100 pieces | Plus 30% | Plus 55% |

| | Best | Seconds |
|---|---|---|
| Orders for 2 tons and over | Less 5% | Subject to 15% off the price of best quality for all sizes |
| Orders under 2 tons, 100 pieces upwards | Plus 12½% | |
| Orders under 2 tons, less than 100 pieces | Plus 22½% | |

*Cast Iron Drain Pipes and Fittings*

Socket and Spigot Pipes:—

| Weight (per 9 ft.) | Size | 9 fts. | 6 fts. | 4 fts. each | 3 fts. each |
|---|---|---|---|---|---|
| 1 . 1 . 8 | 4″ per yard | 7/7 | 8/5 | 13/1 | 10/– |
| 1 . 1 . 20 | 4″ per yard | 7/11 | 8/7 | 13/4 | 10/4 |
| 2 . 0 . 6 | 6″ per yard | 11/5 | 13/5 | 21/5 | 17/2 |
| 4 . 0 . 2 | 9″ per yard | 21/– | 26/9 | 45/6 | 35/– |

| | | 2 fts. | 18 ins. | 12 ins. | 9 ins. |
|---|---|---|---|---|---|
| 1 . 1 . 8 | 4″ each | 8/2 | 6/11 | 6/1 | 5/7 |
| 1 . 1 . 20 | 4″ each | 8/3 | — | — | — |
| 2 . 0 . 6 | 6″ each | 12/10 | — | — | — |
| 4 . 0 . 2 | 9″ each | — | — | — | — |

Tonnage Allowances:—
Orders up to 2 tons nett.
Orders 2 to 4 tons less 2½%
Orders 4 tons or over less 5%

| | | 4″ | 6″ | 9″ |
|---|---|---|---|---|
| Bends | each | 7/1 | 14/8 | 45/2 |
| Single junctions | each | 12/5 | 25/5 | 78/– |
| Intercepting traps | each | 33/10 | 56/6 | 139/– |
| Gulleys ordinary trapped | each | 16/5 | — | — |
| Extra for inlet 4″ | each | 4/3 | — | — |
| Grease Gulley trap | each | 128/7 | — | — |
| H.M.O.W. large socket gulley trap with 9″ gulley top and heavy grating and one back inlet | each | 29/9 | 52/6 | — |

*Channels in Brown Glazed Ware*

| | | 4″ | 6″ | 9″ |
|---|---|---|---|---|
| Half round straight channels 24″ long | each | 1/3 | 1/10½ | 3/4½ |
| Half round straight channels 30″ long | each | — | — | 4/2¾ |
| Ditto, short lengths | each | 1/3 | 1/10½ | — |
| Half round ordinary channel bends | | 1/10½ | 2/9¾ | 5/0¾ |
| Ditto, short | each | 1/10½ | 2/9¾ | — |
| Ditto, long | each | 3/9 | 5/7½ | 10/1½ |
| Three-quarter round branch bends | each | 5/– | 7/6 | — |

| | | 6″×4″ | 9″×6″ |
|---|---|---|---|
| Half round taper channels 24″ long | each | 3/9 | 6/9 |
| Half round taper channel bends | each | 4/8½ | 8/5½ |

The above prices are subject to the same discounts as those given for "Best" quality salt glazed stoneware pipes.

*Manhole Covers, etc.*

| | | Black | Galvanized |
|---|---|---|---|
| 24″ × 18″ single seal for foot traffic. (Weight 0.0.3 in lots of 24) | each | 14/3 | 28/6 |
| 24″ × 18″ single seal for light car traffic. (Weight 2 cwts. in lots of 24) | each | 40/6 | 81/– |
| 24″ × 18″ Wood Block pattern. For road traffic. (Weight 3 cwts.) | each | Coated 67/6 | |

## DRAINLAYER—(*continued*)

*Manhole Covers, etc.*—(*continued*)

| | Fine Cast | Galv. |
|---|---|---|
| Cast iron steps, 13½″ long, 6″ wide, 9″ in wall, approximate weight 5½ lbs. each per dozen | 14/9 | 25/6 |
| Galvanized fresh air inlets with cast brass fronts (L.C.C. pattern) ... ... each | 4″ 6/9 | 6″ 26/6 |

## MASON

*Yorkstone*

Building quality Robin Hood and Woodkirk Blue Stone.

| | |
|---|---|
| Blocks scrappled, random sizes... ... per foot cube | 5/4¾ |
| Add for blocks to dimension sizes ... per foot cube | 7½d. (each dimension) |
| Templates with sawn beds, edges rough (up to 4 ft. super and not over 2′ 6″ long) ... per foot cube | 6/– |
| Templates with sawn beds, sawn one edge, per foot cube | 7/2½ |
| Templates with sawn beds, sawn two edges, per foot cube | 8/4¾ |
| Prices f.o.r. Yorkshire, railway rate to London Station per ton. (Minimum 4-ton loads.) | 29/1 |

*Artificial Stone*

| | |
|---|---|
| 6″ × 3″ Copings and sills ... ... per foot run | 1/10 |
| 6″ × 6″ Copings and sills ... ... per foot run | 2/10 |
| 9″ × 3″ Copings and sills ... ... per foot run | 2/2½ |
| 9″ × 6″ Copings and sills ... ... per foot run | 4/0½ |
| 12″ × 3″ Copings and sills ... ... per foot run | 2/10 |
| 12″ × 6″ Copings and sills ... ... per foot run | 4/7 |
| Cornices according to detail, per foot cube (from) | 8/3 |

## SLATER, TILER AND ROOFER

*Best Bangor Slates*

| | £ s. d. |
|---|---|
| 24″ × 12″ ... ... ... ... ... per 1,000 actual | 58 0 0 |
| 20″ × 10″ ... ... ... ... ... per 1,000 actual | 38 0 0 |

Prices include for delivery to site in lots of 1,000 and upwards.

*Tiles*

| | £ s. d. |
|---|---|
| Hand-made sandfaced 10½″ × 6½″ red roofing tiles per 1,000 | 7 10 0 |
| Machine-made sandfaced 10½″ × 6½″ red roofing tiles per 1,000 | 6 10 0 |
| Berkshire rustic pantiles... ... ... per 1,000 | 35 0 0 |

*Asbestos-cement*

| | |
|---|---|
| †6″ corrugated sheets, grey ... ... per yard super | 3/0¾ |
| †Standard 3″ corrugated sheets, grey ... per yard super | 2/9½ |
| Slates (*Manufacture temporarily suspended*) :— | |
| * 15¾″ × 7⅞″ grey ... ... ... per 1,000 | £6 15 9 |
| * 15¾″ × 15¾″ diagonal, grey ... per 1,000 | £13 11 6 |
| * 15¾″ × 15¾″ diagonal, russet or brindled per 1,000 | £21 19 6 |
| Pantiles (*Manufacture temporarily suspended*). | |
| * Large russet brown ... ... ... per 1,000 | — |

* Prices are for minimum two-ton loads, and are subject to 5% trade discount.

† Do., but 3¾% advance and 5% trade discount.

## JOINER

*Asbestos-cement and Asbestos Products*

| | |
|---|---|
| †5/32″ Semi-compressed flat building sheets, grey per yard super | 1/3½ |
| †3/16″ Ditto ... ... ... ... ... per yard super | 1/4 |
| †¼″ Ditto ... ... ... ... ... per yard super | 1/11 |

†Prices are for orders of two tons and over and are subject to 10% advance and 5% trade discount.

| | |
|---|---|
| *¼″ Asbestos wallboard (in sheets 8′ 0″ × 4′ 0″), per foot super | –/4⅝ |
| *3/16″ Ditto ... ... ... ... ... per foot super | –/3¾ |
| *3/16″ Asbestos wood (in sheets 8′ 0″ × 4′ 0″) per yard super | 2/4 |

*Prices are for orders of 2 tons and over and are nett.

The following asbestos prices are subject to 10 per cent. trade discount :—

| | |
|---|---|
| Asbestos-cement stipple glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″) ... per yard super | 8/– |
| Ditto, plain white glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″) per yard super | 9/6 |
| Marble glazed sheets (in sheets 8′ 0″ × 4′ 0″ and 4′ 0″ × 4′ 0″) ... per yard super | 8/– |
| ½″ Asbestos Insulating Board ... ... per foot super | –/8½ |

| | | 25–75 yards | 150–300 yards | Over 600 yards |
|---|---|---|---|---|
| ⅜″ Fireproof plaster board | per yard super | 2/5 | 2/1 | 1/9 |
| ¼″ Ditto ... ... | per yard super | 2/3 | 1/11 | 1/7 |
| Joint tape (approx. 250 feet run) | per roll | — | — | 1/6 |
| Joint filler ... ... ... ... | per lb. | — | — | –/4 |

*Sundries*

| | |
|---|---|
| Slaters or sarking felt ... ... ... per yard run | –/7½ |
| Roofing felt ... ... ... ... ... per yard run | –/10 |
| Bituminous hair felt ... ... ... ... per roll | 46/– |

All rolls 25 yards long by 32″ wide.

## JOINER—(*continued*)

*Sundries*—(*continued*)

| | |
|---|---|
| Building paper, 50″ wide (B.I. 80) ... ... per yard run | –/9 |
| ,, (K. 40) ... ... ... per yard run | –/5¼ |
| "Cabots" Quilt :—(Ex Works) Twenty roll lots delivered carr. free. | |
| Double ply ... ... per roll — per half-roll | — |

All rolls 28 yards long by 36″ wide. Special terms for quantities.

| | | | |
|---|---|---|---|
| Cut steel clasp nails | 1″ per cwt. 41/7 | 4″ per cwt. | 32/1 |
| ,, ,, floor brads | 2″ ,, 32/1 | 3″ ,, | 30/9 |
| Bright oval wire nails | 1″ ,, 45/10 | 4″ ,, | 33/1 |

| | |
|---|---|
| Galvanized wire staples with slice cut points ... ... ... ... 1″ × 12 gauge per cwt. | 52/– |
| Scotch glue ... ... ... ... ... ... per cwt. | — |

## STEEL AND IRONWORKER

*Steelwork*

| | £ s. d. |
|---|---|
| Basis price for rolled steel joists sections 5″ × 3″ to 16″ × 6″, in 10 ft. to 50 ft. lengths per ton | 15 10 6 |

## PLASTERER

*Plaster and Cement*

| | 1-ton loads |
|---|---|
| Sirapite (coarse) ... ... per ton | 88/6 |
| ,, (fine) ... ... per ton | 87/6 |
| Victorite No. 1 ... ... per ton | 110/– |
| ,, No. 2 or non-sweat per ton | 105/– |
| Thistle (browning) ... per ton | 88/6 |
| Thistle (haired) ... ... per ton | — |
| Pink plaster ... ... per ton | 83/6 |
| White plaster ... ... per ton | 93/– |
| Keene's pink ... ... per ton | 138/– |
| Keene's white ... ... per ton | — |
| Super Carbo ... ... per ton | — |
| Carbo-setting ... ... per ton | — |

| | 1 ton upwards £ s. d. |
|---|---|
| Cullamix No. 2 cream (rendering mixture) per ton from | 7 3 6 |
| ,, No. 3 cream ,, ,, per ton from | 7 3 6 |
| Snowcrete mixture ,, ,, per ton from | 6 18 6 |

*Sundries*

| | |
|---|---|
| Sharp washed sand ... ... ... ... per yard cube | 13/9 |
| Cow hair ... ... ... ... ... per cwt. | 46/– |
| Goat's hair ... ... ... ... ... per cwt. | 72/– |
| Expanded metal lathing, 9′ 0″ × 2′ 0″ ⅜″ mesh × 26 gauge ... ... ... per sheet | 2/9 |
| Wire Slate nails (galvanized) 1½″ × 15 gauge per cwt. | 67/7 |
| ,, ,, ,, (bright wire) ,, ,, per cwt. | — |

| | Less than 150 yds. | Less than 300 yds. | Over 300 yds. | Over 600 yds. |
|---|---|---|---|---|
| ⅜″ Plaster board per yard super | 2/– | 1/8 | 1/7 | 1/6 |
| 1¼″ Galvanized nails ... per cwt. | 56/7 | | | |
| Scrim cloth in 100-yard rolls per roll | 3/10 | | | |

*Wall Tiles*

The following prices are subject to 50 per cent. addition :

| | |
|---|---|
| Commercial quality. | |
| Ivory, white, etc., glazed 6″ × 6″ × ⅜″ ... per yard super | 10/1 |
| Angle beads (1½″ wide) ... ... ... per yard run | 1/2¾ |
| ,, ,, (1″ ,, ) ... ... ... per yard run | –/10 |
| Rounded edge tiles ... ... ... ... per yard run | 2/6½ |
| Coloured enamelled bright glazed, 6″ × 6″ × ⅜″ ... ... ... per yard super | 14/3 |
| Angle beads (1½″ wide) ... ... ... per yard run | 1/4¾ |
| ,, ,, (1″ ,, ) ... ... ... per yard run | –/11¼ |
| Rounded edge tiles ... ... ... ... per yard run | 2/7 |
| Eggshell gloss enamelled, 6″ × 6″ × ⅜″ ... per yard super | 15/– |
| Angle beads (1½″ wide) ... ... ... per yard run | 1/7¼ |
| ,, ,, (1″ ,, ) ... ... ... per yard run | 1/0¾ |
| Rounded edge tiles ... ... ... ... per yard run | 2/8¼ |
| Special rates for quantities | |

## PLUMBER

*Lead*

| | |
|---|---|
| 3½ lbs. and upwards milled sheet lead in quantities of 5 cwts. and upwards ... ... per cwt. | 35/6 |
| Add if cut to sizes ... ... ... ... per cwt. | 3/– |
| Lead ternary alloy, No. 2 quality extra over sheet lead ... ... ... ... per cwt. | 7/– |
| Allowance for old lead delivered to merchant per cwt. | 18/– |

## PLUMBER—(*continued*)

*Cast Iron Goods*

| | Percentage Adjustment on List No. 3100 A.B. 1/2/40 |
|---|---|
| Rainwater Goods (painted or unpainted) ... | *Plus* 12½% |
| Soil goods (coated or uncoated) ... ... | *Plus* 12½% |

*Mild Steel Rainwater Goods*

The following prices are subject to 2½ per cent. trade discount and 32½ per cent. advance.

24 gauge rainwater slip jointed pipes.

| | 2″ | 2½″ | 3″ | 3½″ | 4″ |
|---|---|---|---|---|---|
| Galvanized round pipes with ears ... ... per 6′ 0″ | 2/7½ | 3/1½ | 3/9 | 4/3 | 4/9 |
| Painted round pipes with ears per 6′ 0″ | 2/4½ | 2/9 | 3/1½ | 3/7½ | 4/– |
| Painted or galvanized short lengths with ears, extra each | –/6 | –/6 | –/6 | –/6 | –/6 |

| 18 Gauge gutters. | 3″ | 3½″ | 4″ | 4½″ | 5″ | 6″ |
|---|---|---|---|---|---|---|
| Galvanized half round gutters per 6′ 0″ | 2/– | 2/3 | 2/4½ | 2/9 | 3/– | 3/7½ |
| Painted half round gutters ... per 6′ 0″ | 1/6 | 1/9 | 2/– | 2/3 | 2/6 | 3/– |
| Painted or galvanized short lengths extra each | –/3 | –/3 | –/3 | –/3 | –/3 | –/3 |

*Asbestos-Cement Rainwater Goods*

The following prices are subject to 15 per cent. advance and 12½ per cent. trade discount.

Orders over £30 are subject to 17½ per cent. trade discount.

Rainwater pipes.

Prices are for 6′ 0″ lengths, and 10′ 0″ lengths in 2″, 2½″ and 3″ diameters. Short lengths up to 2′ 0″ are charged as one yard. From 2′ 0″ to 4′ 0″ charged as 1½ yards. From 4′ 0″ to 6′ 0″ charged as 2 yards. Over 6′ 0″ charged as 10′ 0″.

Round pipes.

| | |
|---|---|
| 2″ ... ... ... ... ... ... per yard run | 1/10 |
| 2½″ ... ... ... ... ... ... per yard run | 2/0¾ |
| 3″ ... ... ... ... ... ... per yard run | 2/5¾ |
| 3½″ ... ... ... ... ... ... per yard run | 2/11¼ |
| 4″ ... ... ... ... ... ... per yard run | 3/4¾ |
| 4½″ ... ... ... ... ... ... per yard run | 4/10¼ |
| 5″ ... ... ... ... ... ... per yard run | 5/9½ |
| 6″ ... ... ... ... ... ... per yard run | 7/1¾ |

Gutters.

Short lengths of gutter up to 2′ 0″ charged as 1 yard; from 2′ 0″ to 4′ 0″ as 1½ yards, and over 4′ 0″ as 2 yards.

| Half round gutters | 3″ | 4″ | 4½″ | 5″ | 6″ | 8″ |
|---|---|---|---|---|---|---|
| per yard run | 1/3¾ | 1/6¾ | 1/7¾ | 1/11 | 2/8 | 3/3½ |
| Ogee gutters per yard run | — | 1/11 | 2/0¾ | 2/5¾ | 3/0¼ | 3/11¼ |

## INTERNAL PLUMBER

| | |
|---|---|
| Lead pipe in coils, 5 cwts. and upwards ... per cwt. | 35/– |
| Lead soil pipe ... ... ... ... ... per cwt. | 38/– |
| Add if ribbon marked ... ... ... per cwt. | –/3 |
| Lead ternary alloy, No. 2 quality extra over lead pipe per cwt. | 7/– |
| Plumber's solder ... ... ... ... per cwt. | 136/– |
| Tinman's solder ... ... ... ... per cwt. | 191/– |

Drawn lead traps with brass screw eye, 6 lbs.

| | 1″ | 1¼″ | 1½″ | 2″ |
|---|---|---|---|---|
| S. trap ... ... ... each | 2/3 | 2/8 | 3/4 | 4/9 |
| P. trap ... ... ... each | 2/– | 2/2 | 2/3 | 3/2 |
| Extra for 3″ deep seal ... each | –/6 | –/6 | –/6 | –/6 |

*Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.*

| Tubes. | ¼″ | ⅜″ | ½″ | ¾″ | 1″ | 1¼″ | 1½″ | 2″ |
|---|---|---|---|---|---|---|---|---|
| Tubes 2 ft. long and over per ft. | –/5½ | –/6¾ | –/9¼ | 1/1 | 1/4½ | 1/10 | | |
| Pieces 12″ to 23¼″ long each | 1/1 | 1/5 | 1/11 | 2/8 | 3/4 | 4/9 | | |
| Bends ... ... each | –/11 | 1/2 | 1/7½ | 2/7½ | 3/2 | 5/2 | | |
| Fittings. | | | | | | | | |
| Elbows, square ... each | 1/1 | 1/3 | 1/6 | 2/2 | 2/7 | 4/3 | | |
| Elbows, round ... each | 1/2 | 1/5 | 1/8 | 2/4 | 2/10 | 4/8 | | |
| Tees ... ... ... each | 1/3 | 1/7 | 1/10 | 2/6 | 3/1 | 5/1 | | |
| Crosses ... ... each | 2/9 | 3/3 | 4/1 | 5/6 | 6/7 | 10/6 | | |
| Sockets, plain ... each | –/4 | –/5 | –/6 | –/8 | –/10½ | 1/3 | | |
| Sockets, diminished each | –/6 | –/7 | –/9 | 1/– | 1/4 | 2/– | | |
| Flanges ... ... each | 1/– | 1/2 | 1/4 | 1/9 | 2/– | 2/9 | | |
| Caps ... ... each | –/5 | –/6 | –/8 | 1/– | 1/3 | 2/– | | |
| Plugs ... ... each | –/4 | –/5 | –/6 | –/8 | –/10 | 1/3 | | |

## INTERNAL PLUMBER—(*continued*)

*Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc. (continued)*

Fittings and flanges and tubes ordered in long random lengths are subject to the following trade discounts:—

| | Tubes | Fittings | Flanges |
|---|---|---|---|
| "Light Weight" ... | 51½% | 47¼% | 43½% |
| "Heavy Weight" ... | 44% | 39¾% | 33½% |

## COPPERSMITH AND ZINC WORKER

*Copper*

| | |
|---|---|
| Hot rolled copper sheeting in 1 cwt. lots, all gauges to 24 wire gauge ... ... ... per lb. | –/11¾ |
| Light gauge copper tube, solid drawn ... ... per lb. | 1/3 |
| Copper tube, solid drawn screwing sizes ... per lb. | 1/2½ |
| Copper wire, 10 and 12 gauge ... ... ... per lb. | 1/1 |
| Copper nails, 1″ and up ... ... ... ... per lb. | 1/1½ |

## GLAZIER

*Sheet Glass cut to size (ordinary glazing quality)*

| | | In squares not exceeding 2 ft. | 4 ft. | 6 ft. | Over 6 ft. |
|---|---|---|---|---|---|
| 18 oz. clear sheet ... | per foot super | — | –/3½ | –/3⅝ | –/3⅞ |
| 24 oz. ditto ... | per foot super | — | –/4½ | –/4¾ | –/5¼ |
| 32 oz. ditto ... | per foot super | — | –/6⅞ | –/8 | –/9 |
| Obscured sheet glass net extra ... | | — | –/3 | –/3 | –/3 |
| ⅛″ figured rolled glass, white and cathedral | per foot super | –/7½ | | | |
| ⅛″ ditto, normal tints | per foot super | –/10½ | | | |

*British Polished Plate Glass cut to size*

| Ordinary ¼″ Substance In Plates not exceeding | | Glazing for Glazing Purposes | Selected Glazing Quality | Silvering Quality |
|---|---|---|---|---|
| 1 ft. super ... | per foot super | — | — | — |
| 2 ,, ... | per foot super | 2/– | 2/4 | 2/10 |
| 3 ,, ... | per foot super | 2/6 | 3/– | 3/9 |
| 20 ,, ... | per foot super | 3/6 | 4/– | 5/5 |
| 100 ,, ... | per foot super | 4/6 | 5/7 | 7/2 |

Plates exceeding 100 ft. super or 160 in. long or 100 in. wide at higher prices.

Special quotations should be obtained for other qualities and thicker substances.

*Wired Glass Cut to Sizes*

| | |
|---|---|
| ¼″ Rolled or rough cast ... ... ... per ft. super | 10½d. |
| ‡¼-in. Georgian rough cast ... ... ... per ft. super | 11d. |

| | In squares not exceeding 1 ft. | 2 ft. | 3 ft. | 4 ft. |
|---|---|---|---|---|
| ‡¼-in. Georgian polished plate per ft. super | 2/6 | 2/8 | 2/10 | 3/2 |
| | 8 ft. | 12 ft. | 20 ft. | 30 ft |
| ‡½-in. Georgian polished plate per ft. super | 3/8 | 3/10 | 4/2 | 4/6 |

Supplied in sizes up to 110 in. long and up to 36 in. wide.

‡ For cutting to allow for wires in adjacent pieces to be "lined up," add 4d. per foot super.

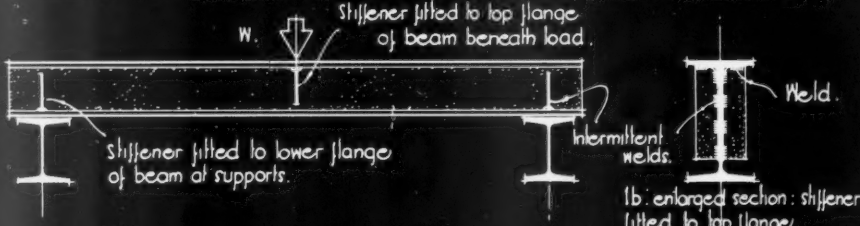
## PAINTER

| | |
|---|---|
| White ceiling distemper ... ... ... per cwt. | 16/6 |
| Washable distemper ... ... ... ... per cwt. | 60/– |
| Petrifying liquid ... ... ... ... per gallon | — |
| Ready mixed white lead paint (best) 5-cwt. lots, in 14 lb. tins ... ... ... ... per cwt. | 90/– |
| White enamel ... ... ... ... ... per gallon | 27/6 |
| Stiff white lead, genuine English stack process, 1-ton lots, in 1-cwt. kegs ... per cwt. | 67/– |
| Driers ... ... ... ... ... ... per cwt. | 52/– |
| Linseed oil raw (5-gallon drums) ... ... per gallon | — |
| ,, boiled ,, ,, ... ... per gallon | — |
| French polish ... ... ... ... ... per gallon | 12/6 |
| Knotting ... ... ... ... ... per gallon | 16/– |
| Oil stain... ... ... ... ... per gallon | 12/– |
| Varnish, oak ... ... ... ... ... per gallon | 15/– |
| ,, copal ... ... ... ... ... per gallon | 20/– |
| Varnish, flat ... ... ... ... ... per gallon | 24/– |
| Turpentine, genuine American, 5-gallon lots per gallon | 4/– |
| Creosote, 1-gallon lots... ... ... ... per gallon | 1/9 |
| Putty ... ... ... ... ... ... per cwt. | 22/9 |
| Size ... ... ... ... ... ... ... per firkin | 4/6 |
| Best quality English gold leaf, 23 carat ... per book | 3/2 |
| Extra thick, ditto ... ... ... ... per book | 4/– |

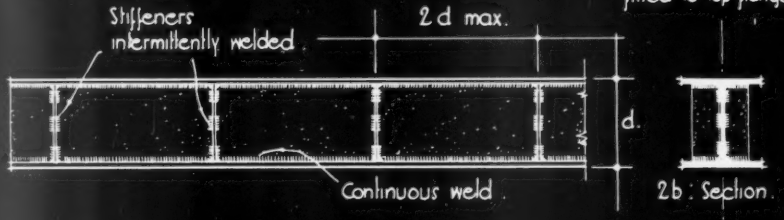
# THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

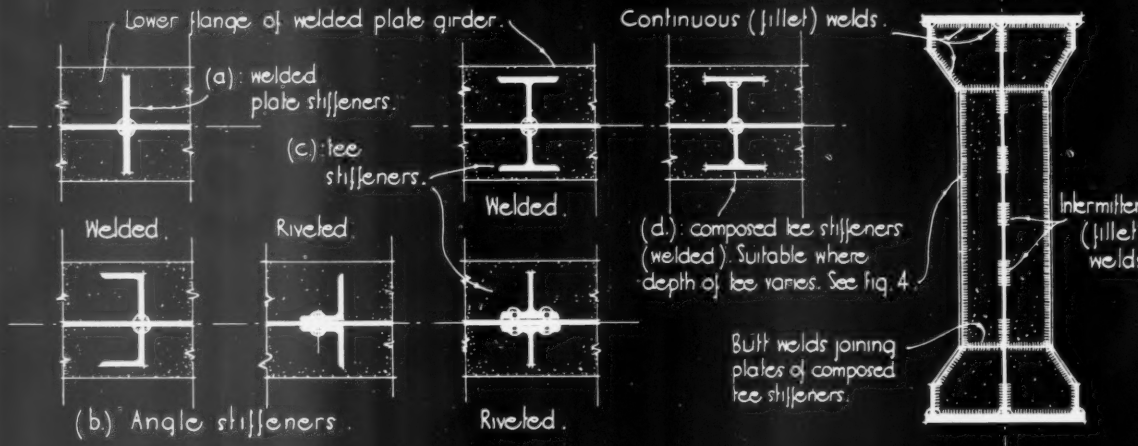
## DETAILED CONSIDERATIONS OF DESIGN IN WELDED STEEL, 2 : BEAMS (b) :

FIGURE 1a. ELEVATION SHOWING WELDED PLATE STIFFENERS TO R·S·J.




FIGURES 2 : (a), ELEVATION OF PLATE STIFFENERS TO WELDED PLATE GIRDER.




FIGURES 3 : SECTIONS THROUGH WELDED STIFFENERS OF VARIOUS SIZES SHOWING CORRESPONDING RIVETED CONSTRUCTION.

FIGURE 4 : A BEAM WHERE THE DEPTH OF STIFFENERS IS VARIED.

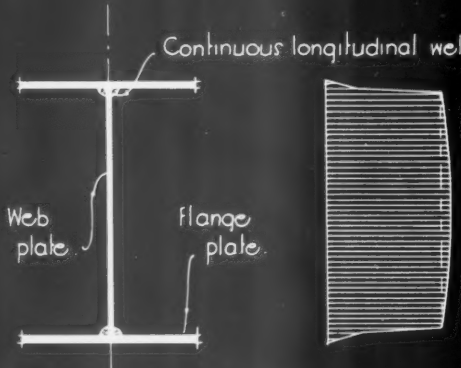



FIGURE 5 : TYPICAL SECTION & SHEAR STRESS DIAGRAM FOR A PLATE GIRDER.

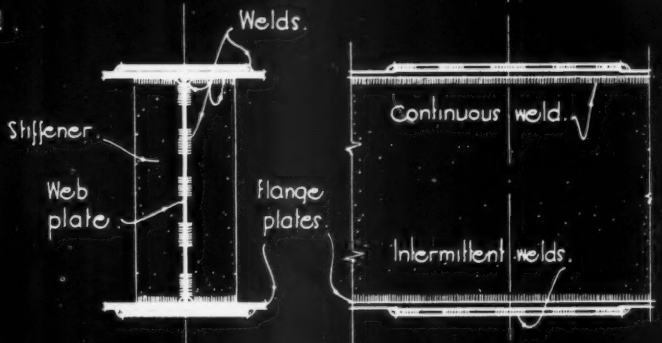



FIGURE 6 : SECTION & ELEVATION SHOWING WELDING TO COMPOUND PLATE GIRDERS.

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# INFORMATION SHEET

# • 860 •

# STRUCTURAL STEELWORK

**Subject :** Welding 29 : Detailed Considerations of Design in Welded Steel, 2 ; Beams (*b*).

**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 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 second of the section on detailed consideration of design in welded steel, and deals with beam stiffeners.

**Stiffeners :**

For ordinary joists and plated joists, stiffeners are required only for extremely heavy concentrated loads. Welded stiffeners of this kind may consist of simple plates fitted to at least one flange of the beam (to the top flange where the loads are applied, and to the bottom flange at the supports). See Figures 1a and b. Welded stiffeners are more efficient than riveted stiffeners, since they can be properly welded to the flanges.

Where sections are made up of plates or several rolled sections, it is customary to provide stiffeners at intervals of not more than twice the depth of the beam. See Figures 2a and b. These stiffeners are generally plates, somewhat narrower than the flange, and where there are heavy loads, angles and tees can be used. It should be noted that welded angles and tees have their flanges outward, and not inward as with corresponding riveted construction, thus providing greater stiffness. Figures 3a, b, c and d show sections through stiffeners of varying sizes together with the corresponding riveted construction. The design shown in Figure 3 (d) can be used for exceptionally wide flanges where the stiffener is wider near the flange than in the centre (see Figure 4).

The packing plate arranged between the stiffener and the web in riveted construction, is not required in welded beams, as these require no flange angles. All stiffeners should be welded to the flanges as well as to the web. Stiffeners for welded plate girders do not need the special cutting and fitting necessary for those of rolled sections.

**Shear :**

The longitudinal welds for plate girders have to transmit shear stresses. In Figure 5 a typical shear stress diagram is given for a plate girder, and the shear per inch run is calculated by means of the formula :

$$S = \frac{S \times F}{I}$$

where S = shear force ;
F = first moment about the neutral axis of the part separated by the weld ; and
I = the moment of inertia about the neutral axis.

The thickness of the weld can be found from the tables given on Sheet No. 7 of this series.

For a small shear force, intermittent welds will be sufficient between flange plates (see Figure 6), but a continuous weld is generally used for all web connections. It should also be noted that a thick, intermittent weld is more expensive than a thin, continuous weld which transmits the same forces.

**Previous Sheets :**

Previous Sheets of this series on structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 751, 755, 755, 759, 763, 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, 850, 842, 843, 845, 847, 848, 849, 850, 851, 852, 853, 855, 856, 857 and 859.

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# INFORMATION CENTRE, ISLINGTON

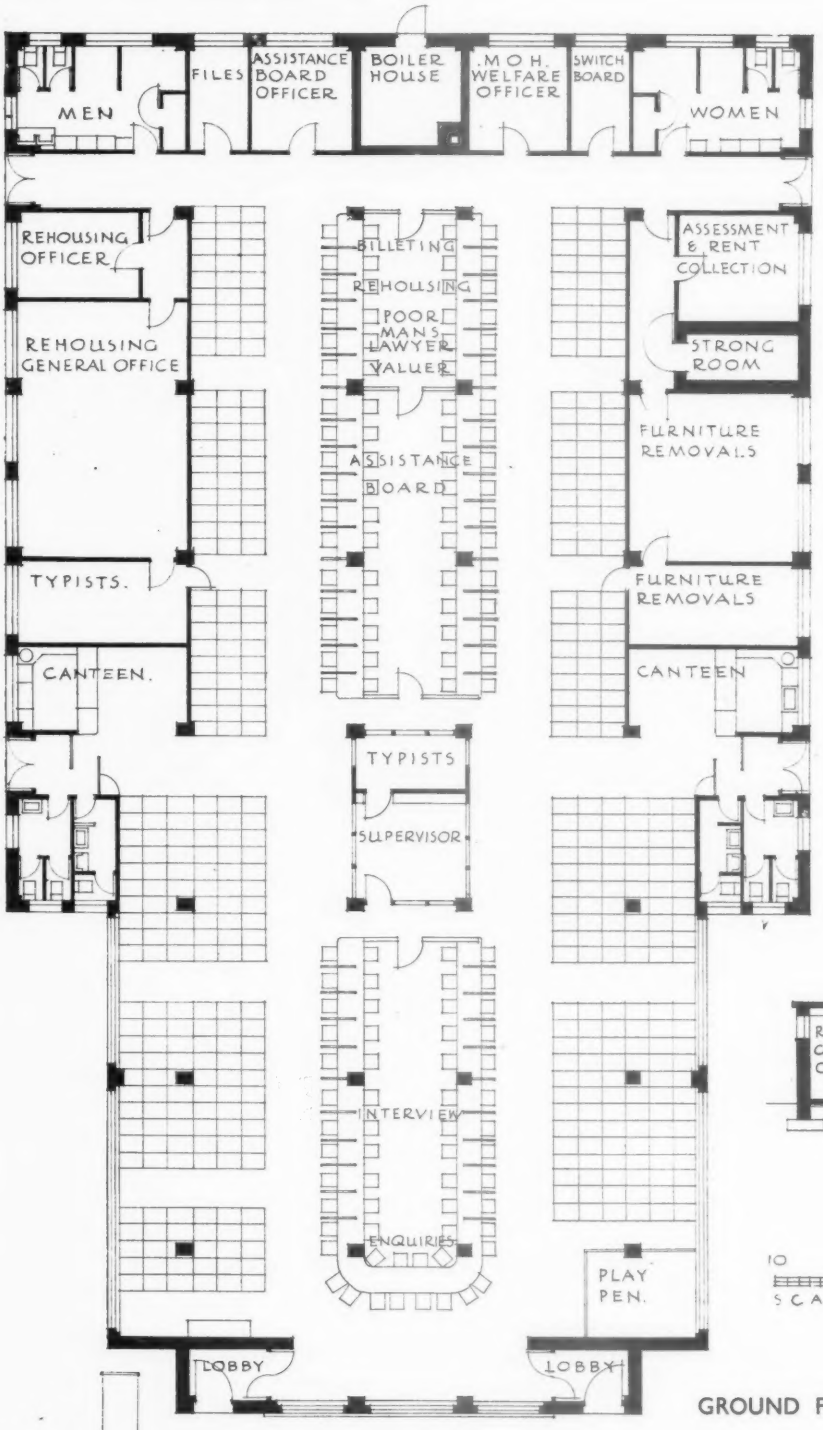
## *DESIGNED BY MATTHEWS AND SON*

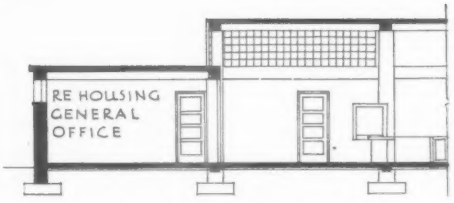
*A large site, with a frontage of 110 ft. and a depth of 150 ft., having become available, the Islington M.B.C. decided to centralise in an Administrative Centre and Information Bureau, the services provided for persons suffering as the result of air-raids into one building, both in the interest of administrative efficiency and to avoid persons requiring help having to visit a number of different offices to obtain assistance. The building was opened last month by Mr. H. Willink, Special Commissioner, London Defence Region.*


PLAN—The planning of a building suitable for this purpose presented certain special problems. It was desired to provide adequate accommodation to deal with a large number of inquiries as the result of a serious air raid, and also to deal with the limited number likely to result from a less serious raid. The large central reception hall is planned symmetrically on the longer axis, to enable either the whole or one-half of the seating and inquiry accommodation to be used. After reception and recording at the Inquiries counter immediately adjacent to the entrance, applicants will be directed to counters for interviews, and thence to departments where their special requirements are dealt with, either the Assistance Board, Rehousing Officer, Furnishing Officer, Poor Man's Valuer or the Poor Man's Lawyer, as may be necessary. Seating accommodation for 450 persons awaiting or receiving attention is provided. There are two small canteens, a play-pen for children, and lavatories for both sexes. All persons using the Bureau will pass in one direction only along the counters, and will leave the building by one of the four exits provided.

CONSTRUCTION AND EXTERNAL FINISHES—The building has been designed with maximum economy in steel and timber. The total covered area is 9,214 sq. ft. The total weight of steel

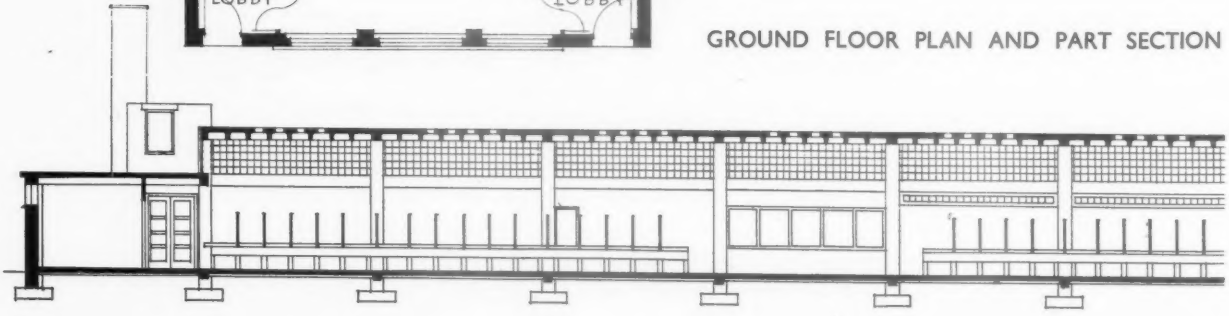
*Facing page: top, the central reception hall; bottom, the entrance lobby.*




PART SECTION

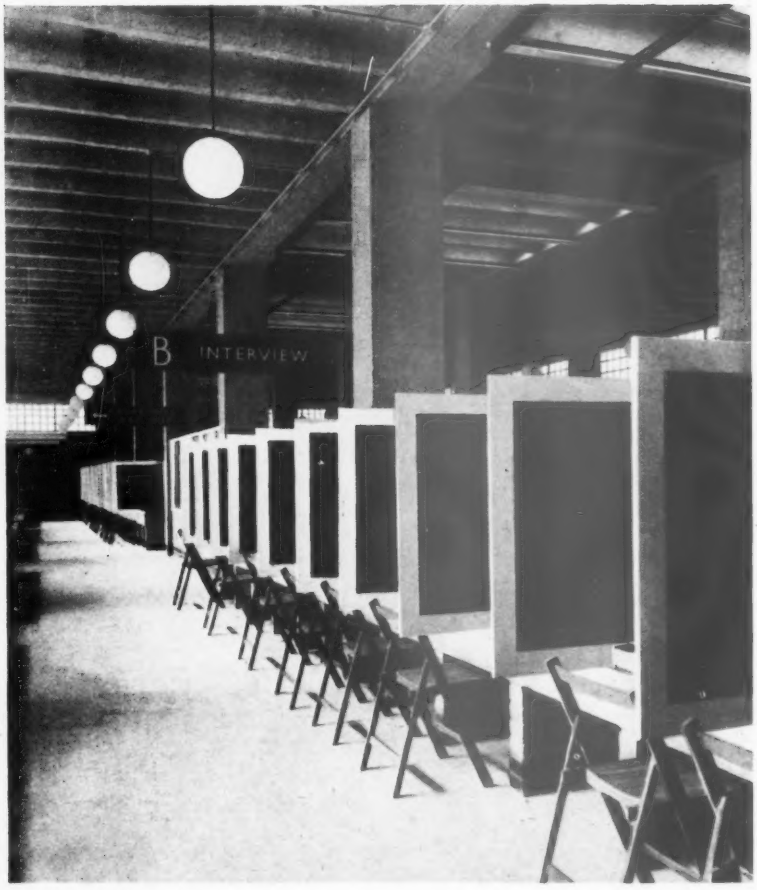

GROUND FLOOR PLAN AND PART SECTION



INFORMATION CENTRE, ISLINGTON. *DESIGNED BY*


reinforcement in beams, stanchions and roof is 6.8 lb. per sq. ft. The total timber used for shuttering is 1.26 standards, and for joinery two standards. The building is also designed to afford the same protection in the event of air raids taking place whilst it is in use as is required for public shelters. Main structure is a reinforced concrete frame designed for a superimposed load of 200 lb. per sq. ft. and a lateral load on the frame of 200 lb. per lineal ft. The external walls are built as panels between the columns 1 ft. 1½ in. thick, with Phorpres rustic Flettons externally and sand-lime bricks internally. The columns are supported by mass concrete foundations and were cast *in situ* in 4½ in. brick casings. The external walls are carried on reinforced concrete ground beams spanning between the columns, the beams being cast *in situ* with 4½ in. brickwork constructed with salvage bricks as formwork. The roof slab, which has a minimum thickness of 5 in., was cast *in situ* on metal trough shuttering, timber being used only for beam casings and the eaves projections. The roof is covered with two coats of bituminous emulsion with scrim for construction joints. A considerable

*MATTHEWS AND SON*




*Interview boxes.*

portion of the concrete had to be poured during severe frost, and an accelerator was used to produce a rapid set so that the work could proceed continuously without stoppage on account of the weather. As the site was partly on made-up ground, the ground slab was reinforced and laid floating with bitumen joints against the walls and between the bays. The external lights are constructed with heavy lenses in reinforced concrete frames so as to be blast-resisting. The internal divisions are 4½ in. brickwork built off the site concrete. Brick and concrete construction was used throughout so far as practicable, including counters in the central hall and to the canteens, which have pre-cast concrete tops covered with linoleum and carried on 4½ in. dwarf walls.

INTERNAL FINISHES—The floor to the central hall is finished in granolithic ; the floors in the offices and between the counters is covered with ¼ in. linoleum on a cement screed. The internal surfaces to walls and ceilings are finished with a silicate paint. In the central hall the walls are dove grey, ceiling pale terra cotta, curtains and linoleum terra cotta, linoleum to counter tops royal blue, and the doors royal blue in white frames. In the offices the walls are pale terra cotta, ceiling white, curtains and linoleum royal blue.

HEATING—The heating is by coke-fired accelerated low-pressure hot water system. There are vents to the external air behind the radiators on external walls. Small extract fans are provided in the lavatories and larger ones in the roof of the main hall, providing for 2½ air changes per hour.

General contractors were H. Fairweather & Co. ; for list of sub-contractors see page xviii.

INFORMATION CENTRE, ISLINGTON

*DESIGNED BY MATTHEWS AND SON*

# Town and Country Planning Association's CONFERENCE at Cambridge

[*BY A SPECIAL CORRESPONDENT*]

*At the last week-end in March the Town and Country Planning Association convened a conference in Cambridge. The conference was remarkable for the fact that besides the old guard of the Association (which was formerly known under the name of the Town Planning and Garden City Association) a number of outsiders, many of them young people, attended.*

THE following is the programme of the conference from which it will be seen that the subjects contained in the title, "Industry and Rural Life," were not strictly adhered to, but that town and country planning as a whole were dealt with.

I. "Agricultural Planning and Policy."
Chairman : Professor G. M. Trevelyan.
Speakers : Sir Daniel Hall.
Mr. L. F. Easterbrook.

II. "Requirements of Decentralized Industry."
Chairman : Sir P. Malcolm Stewart.
Speaker : Professor Sargant Florence.

III. "Social Life in Villages and Small Towns."
Chairman : Viscount Samuel (absent).
Speakers : Professor A. W. Ashby.
Dr. W. K. Slater.

IV. "Architecture and Amenities."
Chairman : Sir Montague Barlow.
Speaker : Professor Patrick Abercrombie.

V. "Rural Land Ownership and Planning."
Chairman : Major Harding Thompson.
Speakers : Dr. C. S. Orwin.
Lord Brocket.

VI. "Design and Development of New Towns."
Chairman : Mr. Eric Macfadyen.
Speakers : Mr. Thomas Sharp.
Mr. F. J. Osborn.

VII. Informal Discussion.
Opened by Mr. R. H. Mattocks.

The subjects discussed can be grouped as follows : I and V dealt with agricultural policy and land ownership ; II with the industrial aspect ; III with the social questions involved ; IV and VI with actual physical planning in its

negative (IV) and positive aspects. In the following these subjects will be reviewed in this order.

## 1. AGRICULTURAL PLANNING POLICY

Under the heading of " Agricultural Planning and Policy," Sir Daniel Hall gave a concise picture of the state of agriculture and its place in national economy. In examining the technics of agriculture, he found that at present there is a discrepancy between the potentialities of up-to-date machinery and methods and the size and distribution of farm lands. 1. The size of fields is too small for the use of mechanization in some cases. 2. The size of the farms is often not the right one for the rational employment of labour and technicians ; for instance, it is not a full-time job to manage five or six men on a 200-acre farm ; this uneconomic method seems to be the reason for underpaid farm labour and the financial stringency of the farmer as well as the uncompetitive prices of the produce. 3. The size of the estates and the diversity of ownership precludes the carrying out of large scale engineering works such as drainage and the reclamation of slobbage land from the sea. 4. The estates have artificial boundaries which in many cases do not coincide with rational and economic methods of farming. (To understand Sir Daniel's further arguments the reader must remember that the farm and the estate are two conceptions of an entirely different order : the farm is the technical unit of agriculture, while the estate is the economic unit of land tenure. These two coincide sometimes but by no means always.)

Sir Daniel finds the best solution of the problem in the nationalization of the land, i.e. the exchange of the title of land ownership for that of Land Stock guaranteed by the State. This solution has, of course, nothing in common with socialization or confiscation of the land ; it merely substitutes a gilt-edged security, guaranteed by the State, for one which is far from being " gilt-edged." It would only affect adversely such land ownership as has a potential speculative value based on possible public improvement. This is the only method by which the State as owner can recover its expenditure on restoring neglected and derelict land to cultivation, on permanent works (such as drainage), and the adaptation of the structure to modern methods of cultivation when, as the result of this husbandry, the increased earning capacity of the land is realized.

With regard to farming, the speaker's views are as follows : " It is not proposed that the State shall farm its land, but shall continue to let it to tenants to farm for their own profit."

With regard to the valuation of the land, for the purpose of exchange, Sir Daniel's view is that this could be done on the basis of Schedule A income tax returns, which would assure the owners the same revenue as was previously derived from the land. The social repercussions of this method would be that by approximating normal business methods the farmer and the farm-worker, as well as the community at large, would get a squarer deal.

After Sir Daniel Hall's clear and concise exposition of facts, Mr. L. F. Easterbrook's paper sounded rather woolly and out of date. Mr. Easterbrook is an accomplished speaker and used all the tricks of the trade. The usual arguments against a scientific approach were used : " Teutonic precision;" " the spirit of man to flourish," " robotish interlude in the history of mankind." This sort of badinage may be very amusing but it becomes rather tedious in a longish address. Nevertheless, there were some passages of interest, such as references to international co-operation. On the other hand, butts at imaginary bogies such as the reference to the suggestion that " factory fields " farming was advocated by the previous speaker, seemed beside the point as no such suggestion was put forward. Mr. Easterbrook agreed that a readjustment of fields and farms was necessary, but did not give any indication how this could be attained.

## 2. RURAL LAND OWNERSHIP AND PLANNING

The questions of land ownership from the social and legal angles were discussed under the title of " Rural Land Ownership and Planning," by Dr. Orwin and Lord Brocket.

Dr. Orwin took the line in favour of public ownership of land, similarly to Sir Daniel Hall, but arrived at his conclusion from a different line of approach. He pointed out that, " Even though we are constantly assured by those who are troubled by the national indifference to agriculture in the past hundred years that . . . the land is the nation's greatest asset, nothing is more remote from their minds than the idea that the nation should possess it." The " chance monopoly of land " constitutes a " speculative value " when land is required by the community for other than agricultural purposes, in which case the owners are in a position " to dictate the terms . . . and thereby have greatly enhanced their own material wealth." On the other hand, those properties which continue in the original purpose of food production have found that their value has diminished during the last two generations. Some landowners have got richer (profiting from the general prosperity of the nation) and some have got poorer. " But over all the land . . . there floats a speculative value, and it is the hope of every landowner that it may develop some day." And further " . . . how can the right (and the use of this term seems rather to beg the question) of the private owner to unearned increment be reconciled with the right of the public to determine the use to which land shall be put in the general interest ? " Dr. Orwin ended up with an answer to this question —" Whatever way the problem is regarded it seems impossible to be fair to the community so long as private property in land persists. Acquisition of the freehold of the land by the State at valuation based upon its *present* use must be accepted as a prerequisite of planning control."

Lord Brocket was supposed to put arguments against the nationalization of land. It was made clear by the chairman that Lord Brocket owned 1,300 acres of agricultural land in England and 60,000 acres in Scotland, of which he farmed 1,500 acres. He pointed out (which was not done by any other speaker) that the question of land ownership is a political one. Lord Brocket debunked the general belief that death duties struck landowners rather heavily, as these are at a much lower rate than duties on stocks and shares, for example. His Lordship could point out, from personal experience, that were his estate not a company (which it is) but simply his property, in the case of his death the duties would be much lower. This argument disposed of the idea that successive death duties will in time solve the question of land ownership by either breaking up the large estates or by substituting state ownership for private ownership. (How the idea arises that this latter would occur is not quite clear as death duties cannot be paid in kind.)

## 3. REQUIREMENTS OF DECENTRALIZED INDUSTRY

" Requirements of decentralized industry " was the title under which Professor Sargant Florence discussed the possibilities of diversifying industries there from larger agglomerations. It is accepted by the Town and Country Planning Association as an axiomatic truth that the " decentralization " of industries is of primordial importance if any planning should take place. This point of view is far from being shared by rationally thinking persons either in the economic field or amongst town planners. Professor Sargant Florence's point of view seems to be that if this " decentralization " is really desirable from the town planners' point of view the best the economist can do is to suggest the industries which can be decentralized.

The reader must be reminded of Professor Florence's classification of industries :

1. Extractive industries and others which are geographically fixed.

2. The "footloose" industries which can be moved under certain conditions. It is amongst these that industries to be " decentralized " can be found.
3. "Residentiary" industries which follow populations.

Amongst the footloose industries some are utterly unsuitable for being placed in small communities. 1. Those which are (and have to be) organized into large plants ; 2, those which are linked to other industries. The industries which are suitable for dispersal are small-plant industries (such as shoemaking) and industries which either use agricultural products or supply agricultural demands.

The guide to the selection of the industries most suitable to be located in rural areas are two-fold : (*a*) the question of employment ; (*b*) economic considerations

(*a*) If rural employment is statistically analysed it is found that :

1. There is a higher proportion of men employed against women.
2. The age groups are older than in industry in general.
3. The employment is more or less seasonal (summer).
4. The numbers employed are decreasing.

Therefore the industries to be selected should compensate agricultural employment.

Professor Florence prepared a provisional list of such possible industries.

1. Higher proportion of women to men : Boots and shoes ; rope, cord and twine ; hosiery ; rayon ; miscellaneous food processing.
2. Employment of younger generation : Aircraft ; glass ; carriages and carts.
3. Winter activities : Sugar refining ; rope cord and twine ; carriages and carts.
4. Growing numbers employed : Rayon ; miscellaneous food processing ; glass ; printing and publishing.

Of these some have large plants and are therefore unsuitable for dispersal into villages and very small towns. These are aircraft, glass, rayon and sugar refining.

(*b*) If we now turn our attention to economic statistics, Professor Sargant Florence suggests that the " location factor " will give us the guide.

" The ' location factor ' or quotient is found by dividing the local percentage of workers in a given industry by the local percentage of workers in all industry, e.g. if a particular area contains 40 per cent. of all those working in a particular industry, but only 30 per cent. of workers in all industry, the factor is $\frac{40}{30}=1.33$."

Industries with high " location factor " in rural districts are those suitable for being " decentralized."

The discussion of this paper was most lively. Amongst those who spoke were : Dr. Dudley Stamp, who pointed out the distinction between large towns, country towns (10,000 population) and villages (1,000 population). Industries, he said, are suitable for country towns but not for villages. Mr. Peter Scott (Wales Survey Board) confirmed some of Professor Florence's points, and emphasized that mechanization would revitalize agriculture while using the same amount of labour, that agriculture now attracts boys, the establishment of some industries in the country, for instance, printing and publishing, was due to lower wage rates in the country where trade union organization was not so advanced and consequently wages were lower. Mr. Marshall, of Coventry, pointed out the need for developing and improving existing cities rather than encroaching on agricultural land. Sir Malcolm Stewart said that economic factors must prevail in the location of industry, but if the transference of industry is contemplated from a social point of view, the removal of whole communities must be envisaged.

## 4. SOCIAL LIFE IN VILLAGES AND SMALL TOWNS

" Social Life in Villages and Small Towns " was the theme developed by Professor A. W. Ashby and Dr. W. K. Slater in their respective papers.

Professor Ashby insisted on the lack of information in existence about rural life. This information as far as it exists is patchy and does not permit comprehensive analysis. " On many things rural we prefer sentiment before information," said the speaker. He then went on to analyse the chief factors of economic and social character in rural life, and those of spatial planning which will determine the development of rural social life. Piped water supplies and electricity (at an economic rate) are the first basic requirements without which no planning can be thought of. " Any attempt to make the villages self-contained as regards the social life of the inhabitants of all ages and classes is to be deprecated, and in any case it would not succeed." Villages have to be linked (in this respect) to one another and to nearby towns. " Schools should be the first consideration in social development." Residential schools are necessary for secondary education in most cases, where children from far-away hamlets could spend the week, return home at the week-ends, and thus avoid endless daily travel. Further requirements are village halls, county libraries, cinemas (for villages of 500 and upwards), adult education, facilities for sports, etc. It is a social responsibility, not a charity, to provide these amenities in rural areas. In the discussion which followed Professor Ashby expressed the view that it was preferable that social activities should be investigated and encouraged by Trusts (such as the Carnegie Trust) rather than by the (in this respect) incompetent local " family."

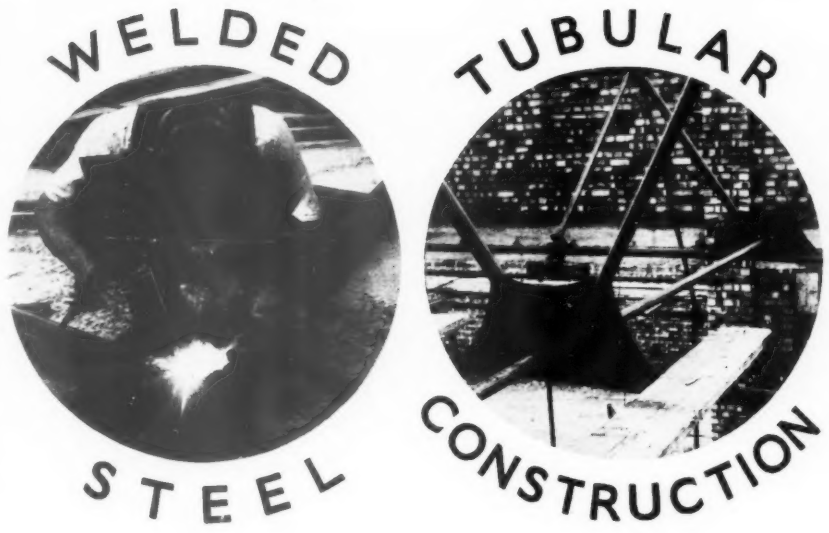
Dr. Slater drew a comparison of the dissimilitude of rural and urban life. He opted for the preservation of the rural way of life in villages and pointed out the dangers when there is contact with " urban culture." He was against the wholesale introduction of new industries into villages, the reason being that " where only a few settlers come to a village the community resists their intrusion until they are normally absorbed (it was not made clear what " normally " means), where the influx is numerous the rural community with its culture is submerged and destroyed. But nevertheless " it is impossible to keep the village from urban influence," therefore all precautions should be taken to preserve rural culture distinct from urban culture. We look forward to hear Dr. Slater's explanation as to how this can be done.

## 5. AMENITIES AND DESIGN AND DEVELOPMENT OF NEW TOWNS

" Architecture and Amenities " was, perhaps, the most disappointing of all the papers read. This may be ascribed to the fact that the personality of Professor Abercrombie and the fact that so much of post-war planning is concentrated in his hands made us expect perhaps too much. It dealt mainly with what may be termed " negative planning," and investigated the means and machinery of aesthetic control. It emerged quite clearly from the paper and the discussion that followed, that in a period of transition when new technics and new social conditions engender new architectural expression, arbitrary control, based on outworn aesthetic conceptions, may be of crippling effect.

" Design and Development of New Towns " was the other subject which could be classified into this category of discussion. " Design " was dealt with by Mr. Thomas Sharp, " Development " by Mr. F. J. Osborn.

Mr. Sharp discussed the aesthetic aspect of town planning. His emphasis was on architecture (he himself is not an architect) which is, obviously, the ultimate expression of urban beauty. The creation of urban and rural beauty is as basic as traffic, health services, etc. Conveniences should be taken for granted as long as they are functioning properly. Beauty is not something tacked on, but is part and parcel of town planning. Villages should be architecturally composed not romantically suburbanized. Mr. Osborn and other garden city enthusiasts jibe at beauty in town planning. Mr. Sharp pointed out that open space was not in itself a virtue. As in the past the organization of a limited amount of space was the medium of the town




THAT tubular scaffolding superseded the older traditional methods was in large measure due to the ingenious coupling devices incorporated ; rigidity of structure was effected by the turn of a single set-screw, whereas with the older method rope lashing demanded much skill on the part of the scaffolder and the slipping, slackening, fraying or cutting of the rope was an ever-present danger. In scaffolding practice it was frequently necessary to sheet the structure in order to render it wind and weatherproof either temporarily or permanently and to do this effectively was not a simple operation owing to the projections that occurred at the angles where the tubes were connected together. This disability was not insuperable; indeed where tarpaulins were employed for the sheeting, as was quite often the case, the structure was satisfactorily enclosed without very much difficulty. Nevertheless, it was a "snag," a disadvantage to be overcome if possible, and alternative methods of connecting and jointing the tubes were experimented with. After long experience by trial and error electric welding proved to be the ideal solution to the problem ; it eliminated all projections so that the whole scaffolding framework could be simply sheathed even with such rigid sheeting materials as corrugated iron or asbestos, and resulted in a structure of exceptional strength and rigidity.

The electric welding of tubular scaffolding sections led to further experiment and development. Welded tubular steel roof trusses were designed and tested, and standard trusses, ranging from 15 ft. up to 60 ft. spans, are now being fabricated and employed ; sectional wall frames, door frames, standard sections for domestic or hip roof assembly and a useful range of prefabricated standard tubular sections for such a variety of structures as bridges, pylons, gantrys and water towers have been made, submitted to all necessary tests, and are now being used by architects, engineers and building contractors in many parts of the country.

Welded tubular steel construction has these advantages : (1) Speed in erection. (2) Economy in steel—the hollow circle is a most economical section using the least material for the greatest resistance to stress. (3) Lightness of structure but great strength ; it is notable that the joints, usually the weakest parts in a structure, are the strongest parts. (4) Complete factory prefabrication or site welding—an alternative choice of importance and great convenience. (5) The circular section and welded joints are most simply protected against corrosion.

**Thus, we have summarised briefly the principles of welded tubular construction. In following issues of "The Architects' Journal" the system will be described and analysed in a series of informative data sheets which have been planned as follows :**

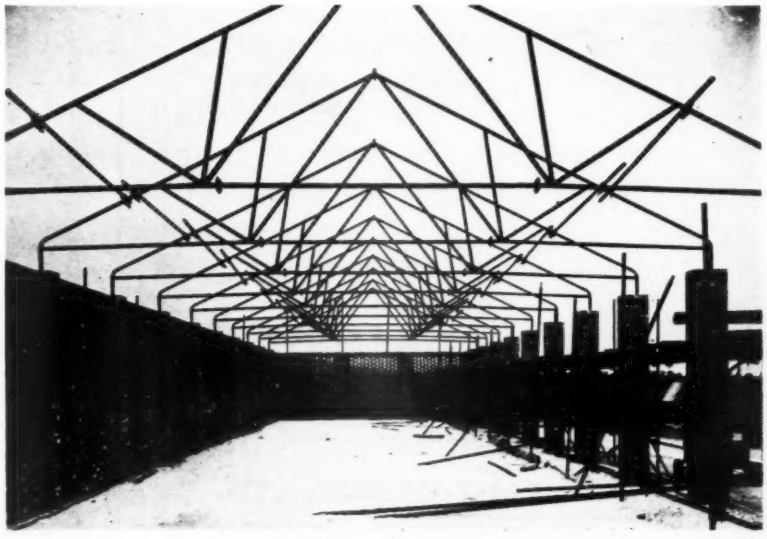
**(1) An analysis of the various sections that comprise the system, with detail drawings of some of the principal sections.**

**(2) War-time construction—showing how the system meets to-day's demands and restrictions, with photographs and typical details of light frame construction roofed and walled with such materials as asbestos, plasterboard, insulating boards, etc.**

**(3) Factory fabrication and/or site welding—showing the importance and convenience of this alternative and what it might mean in economy of time, labour and cost.**

**(4) Permanent and post-war construction—being a series of typical details showing how the system is used with brick construction and with concrete construction.**

**As the completion of this series will be spread over a period of approximately twelve months, readers of the JOURNAL who might like to have the complete set of informative data sheets in advance of their publication are asked to send to us, on their business notepaper, requests to this effect. Scaffolding (Great Britain) Limited, 77, Easton Street, High Wycombe, Buckinghamshire.**



*Timber drying sheds in course of construction. 30 ft. span welded tubular roof trusses are being used. Architects : B. W. Turnbull and Fraser.*

planner. The "city wall," the conscious break between town and country should be the aim. Compact planning in town and village alike are the means to obtain a satisfactory solution to these aims. Half-country, half-town of the garden city type could not be a satisfactory environment for human beings.

Mr. Osborn gave a long exposé of how to establish a garden city. It seemed strange to finish up these discussions on this particular note, as the implication of practically all the papers seemed to expose the absurdity of the establishment of this particular, out-of-date brand of town planning. It may be a good move from the point of view of garden city propaganda to conclude, whatever the findings may be: "Now let's discard all that and get down to the real job and BUILD A GARDEN CITY." This is the way that tooth paste, motor cars, radio cabinets and the like are advertised, but it is hardly convincing when the question is the mode of life of a nation.

The last meeting of the conference was an "Informal discussion." This was most significant as it gave an opportunity for the younger sections of the conference to expose their views. It showed their healthy and vigorous comprehension of facts. Some of them were students, due to be called up, some of them young soldiers. They expressed their deep disappointment at the lack of reality in all these discussions and the underlying desire of the older generation to come back to normal, i.e. to 1939. For these young people 1939 is not the ideal they want to fight for. They do not want a master plan imposed from above. It should be realized at last that only such a solution which has its roots deep in the wishes and consciousness of the people can succeed in carrying the nation with it.

## WAR DAMAGE REPAIRS

The War Damage Commission has issued in the *London Gazette* notices which affect the following areas:

The County Borough of South Shields, with the exception of the Harton Ward.

The Borough of Altrincham. An area comprised by the hereditaments known as Nos. 5, 7, 9, 11, 13, 15 and 17, Davenport Road, and Nos. 16 to 26 (inclusive), Dale Square.

The Borough of Basingstoke. An area comprised by the hereditaments known as No. 1, Church Square (including outbuildings and premises abutting on Church Street), Nos. 2, 3 and 4, Church Square; Nos. 65 and 67, Church Street; and Nos. 6 and 7, Church Lane.

Plans of the Altrincham and Basingstoke areas may be inspected at the local Town Halls.

The notices are issued under Section 7 (2) of the War Damage Act, 1941, whereby provision is made for securing that the making of payments by the Commission in respect of war damage shall have regard to the public interest. The publication of the notices in the *Gazette* is, therefore, of great importance to all those with interests in war damaged property, and particularly to those professionally concerned with work on such properties, since upon them must, in practice, fall the responsibility, on behalf of their clients, for seeing that the requirements of the Act are complied with.

The effect of the notices is that any person proposing to execute works for the repair of war damage, other than temporary works, in the South Shields area, where the total ultimate cost will be more than £100, or in the named Altrincham and Basingstoke areas any such work at all, must first inform the Commission. That body in its turn will consult the appropriate Local and Planning Authorities to ascertain whether the carrying out of the proposed works would conform with their intentions regarding re-planning and other public interests. The condition laid down regarding notification will be strictly enforced, and the incurring of a larger expenditure in South Shields than that named, or the carrying out of any work at all in the two Altrincham and Basingstoke areas, without prior notification to the Commission will render the person doing such works liable to forfeit the right to repayment by the Commission. If, therefore, there is a doubt whether the figure named will be exceeded, the proposed work should be notified to the Commission.

Power is given to the Commission in such cases to impose requirements as to the nature of works, the materials to be used, and the time for their execution, and it may change a cost of works payment into a value (or total loss) payment in those cases where restoration of a building would be contrary to the public interest. In the case of buildings which have been totally destroyed the Commission is already empowered by the Act, without the previous publication of notices in the *Gazette*, to attach conditions to the payments made, in order that the public interest may be observed.

In this notice a "hereditament" means either a hereditament as appearing in the rating valuation list, or in the case of a hereditament which is exempt from rating and does not appear in that list, the hereditament so exempted, provided that where there is more than one occupation of a single building, the hereditament shall be the building.

The powers conferred upon the Commission by the Act are exercisable only in direct relation to war damage, and the action which it has now notified is not to be confused with any steps which may be taken with regard to "reconstruction areas" as recommended in the Uthwatt Report, or with any measures decided upon by the authorities responsible for short or long-term planning.

## BUILDINGS ILLUSTRATED

Information Centre, Islington (pages 297-300). General contractors were H. Fairweather & Co. Principal sub-contractors are as follows: Hope's Heating and Lighting, Ltd., heating and ventilating; T. H. Smerdon, Ltd., electrical work; British Reinforced Concrete Co., Ltd., reinforced concrete; Lenscrete, Ltd., reinforced concrete lights; Grant and West, Ltd., roof covering; Mander Bros., decorative materials; and T. R. Roberts, Ltd., black-out curtains and linoleum.