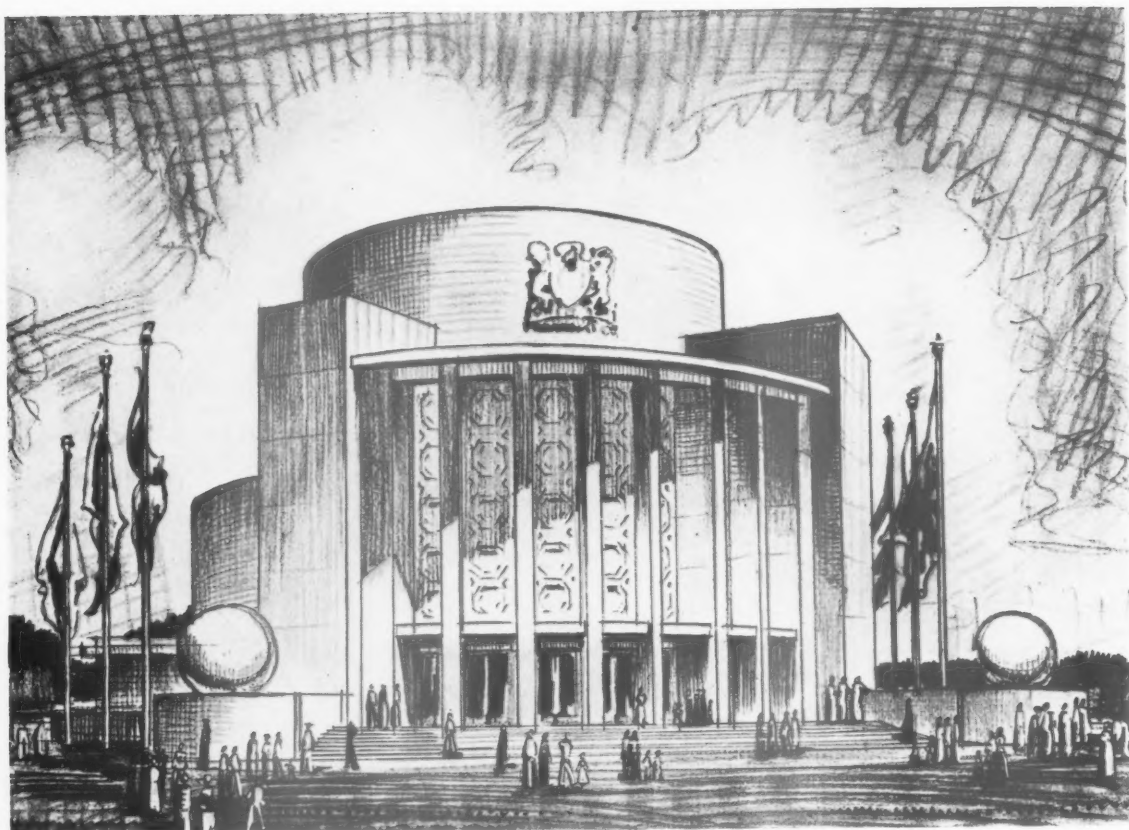


FIRE BRIGADE HEADQUARTERS ON THE ALBERT EMBANKMENT



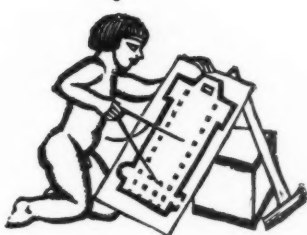
*R*APID progress is being made with the construction of the new headquarters of the London Fire Brigade, on a site, near Lambeth Bridge, lying between the Albert Embankment and the Southern Railway. Above is a general view of the main front. The building will be opened early next year.

Mr. E. P. Wheeler, F.R.I.B.A., the Chief Architect to the L.C.C., is responsible for the planning and design of the new headquarters, the Assistant Architect in charge of the work being Mr. G. Weald, L.R.I.B.A.



EMPIRE EXHIBITION, JOHANNESBURG

A perspective of the United Kingdom Government Pavilion for the Empire Exhibition which is to be held at Johannesburg in September. The architect is Mr. Howard Robertson.



TWELVE MONTHS AFTER

JUST over twelve months ago—on August 2, 1935, to be precise—the Royal Assent was given to the Housing Act, 1935. That Act was one of the last to be signed by His late Majesty King George V and was one of the most important pieces of housing legislation to be placed on the Statute Book during his twenty-five years' reign. Unlike previous Housing Acts, the new measure contained specific provisions for the abatement and prevention of overcrowding, and laid down an overcrowding standard—one room, two persons; two rooms, three persons; three rooms, five persons, etc.—subject to sex separation and a standard of capacity. Briefly, this Act made overcrowding a penal offence.

Once the Act became law, no time was lost by the Minister of Health in setting its machinery in motion. The first step in the campaign to abolish overcrowding was the carrying out of a survey by every housing authority in England and Wales to ascertain the extent of overcrowding in their area and the places where it existed. Section 1 (1) of the Act laid down the following:

It shall be the duty of every local authority before such dates as may be fixed by the Minister as respects their districts, to cause an inspection thereof to be made with a view to ascertaining what dwelling-houses therein are overcrowded, and to prepare and to submit to the Minister a report showing the result of the inspection and the number of new houses required in order to abate overcrowding in their district, and, unless they are satisfied that the required number of new houses will be otherwise provided, to prepare and submit to the Minister proposals for the provision thereof.

In November last the Minister fixed the dates for the submission of the information called for under the above section of the Act. He informed local authorities that the survey must be concluded by April 1; that the results should be submitted to him by June 1; and that their housing proposals to remedy the overcrowding revealed should reach him by August 1. London was, however, an exception to this rule. Under Section 21 of the Act the metropolitan borough councils were asked to submit the results of their surveys to the L.C.C. for consideration and for transmission by that Council to the Minister. The date fixed for the completion of the survey by the metropolitan borough councils was April 1, and the date fixed for the submission by the L.C.C. to the Minister of the report on the survey and for the submission of housing proposals was August 1.

So much for the procedure. But what of the results? On Friday last the Minister of Health issued his report* on the overcrowding survey in England and Wales. This is a social document of first importance and makes available a wealth of information about the size and housing accommodation of working-class families in England and Wales. The report records

that, at the time it was written, 1,472 local authorities in England and Wales—out of a total of 1,536—had submitted returns. The salient fact brought to light is that out of 8,924,523 dwellings inspected, no fewer than 341,554 (or 3·8 per cent.) were overcrowded within the meaning of the Act. The definition of a dwelling-house is given as "any premises used as a separate dwelling by members of the working-classes or of a type suitable for such use."

The distribution of these overcrowded families among dwellings of different size is clearly set out in the report. For example, it is recorded that 35,537 families up to, in a small number of cases, 10 units in size live each in one room only, 3,740 of which (one of them containing a family of nine units) do not exceed 90 sq. ft. in floor area. (An adult counts as one unit; a child between one and ten as a half unit.) At the other end of the scale over 89,000 working-class families of only two adults occupy dwellings with six rooms or more. The report shows clearly that, in spite of the extreme cases just quoted, the working-class family of average size is housed well above the statutory minimum standard, and that 46 per cent. of all working-class families are shown to be so well housed that the number of persons in each family could be doubled without causing overcrowding. Other calculations show that the average number of units in a working-class family is 3·2 for all families, 3·1 for uncrowded families, and 5·6 for overcrowded families.

Where does overcrowding exist? Maps and tables published in the report show the position in individual areas. It is, for the most part, worst in the East End of London and on the North-East Coast; London, Northumberland and Durham together contain two out of five overcrowded families, though they contain less than one in six of the whole population. If we leave out London, the country south of a line drawn from the Severn to the Wash contains 8,000 fewer overcrowded families than Northumberland and Durham alone. Shoreditch and Stepney are the most overcrowded of the London boroughs, and Woolwich is the least.

Thus, we see that the primary object of the survey was to provide information to facilitate the abatement of overcrowding. Although this has been done, it is not yet possible to say exactly how many new houses will be required to deal with the situation revealed by the survey as, naturally, much of the present overcrowding can, and no doubt will, be abated by rearranging the existing accommodation. It can be calculated tentatively that the number of new houses required may be expected not to be more than about 200,000. Most people will agree with the Minister of Health that the task of abatement within a comparatively short time should therefore be well within the compass of the great majority of local authorities, without any danger of interference with the present slum clearance campaign.

* *Report on the Overcrowding Survey in England and Wales.* Issued by the Ministry of Health. London: H.M. Stationery Office. Price 8s.



The Architects' Journal
 Westminster, S.W.1
 Telephones: Whitehall
 9 2 1 2 - 7
 Telegrams
 Buildable
 P a r l
 London

N O T E S & T O P I C S

SURVEY: ENGLAND AND WALES—

THE extent of overcrowding in England and Wales is shown in a report issued last Friday by the Ministry of Health. The report brings together the results of the survey conducted by local authorities throughout the country and marks the first stage in the Government's campaign to abolish the slums.

The volume records that 1,472 local authorities, out of a total of 1,536, have submitted reports on the results of their surveys of overcrowding, according to the standard laid down in the Housing Act, 1935. Approximately 8,924,500 dwellings were inspected and, of these, 341,550—or 3·8 per cent.—were found to be overcrowded.

Other figures of extreme importance are included in the report, which leads the Ministry to the conclusion that some 200,000 houses are needed to abate overcrowding, although the Minister states that "this figure is not put forward as any sort of reliable estimate, but solely to obtain an idea of the building problem involved in abating overcrowding."

We seem, therefore, to be in exactly the same position as before. Last year the census volume on housing put the number required in the decennium 1931-41, in order that the population of 1941 should be housed on a scale similar to that of 1931, at 771,000, with the allowance of an additional 200,000 to keep supply and demand playing off nicely against each other.

In 1934 there were three important estimates. The National Housing Committee said that we needed 200,000 houses a year for ten years to overcome the (then) present shortage and overcrowding, to allow for expansion of population, for obsolescence and replacement and for slum

clearance. The Council for Research on Housing Construction put the total at 250,000 a year for ten years, and the *Economist* gave upper and lower estimates of 325,000 and 165,000 a year for twenty years.

In 1933, Mr. Philip Massey, in the survey conducted on behalf of this JOURNAL, put the housing needs of Britain at 1,400,000 houses; in 1933 also there was a slum clearance programme said to call for 240,000 houses a year for ten years under all heads, and, in 1931, the need, not counting expansion and replacements, was put at 150,000 a year for ten years. Where are we now?

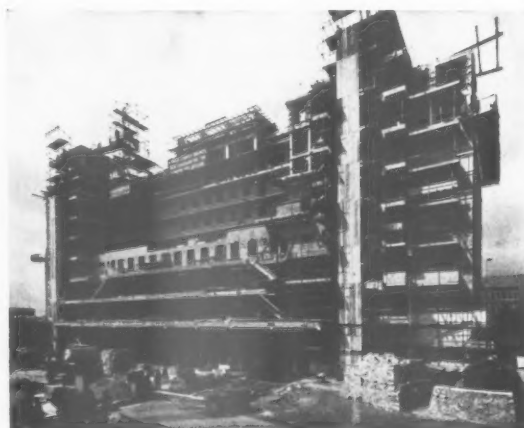
—AND SCOTLAND

According to the survey of overcrowding in Scotland, carried out under the Housing (Scotland) Act, 1935, which was published a couple of months ago, the total number of houses surveyed was approximately 1,025,000 houses, of which 241,000—or 23·5 per cent.—were found to be overcrowded. Thus, overcrowding in Scotland is seven times as bad as in England. Yet the Scottish report records that some 150,000 houses are needed to abate overcrowding. Odd, but true.

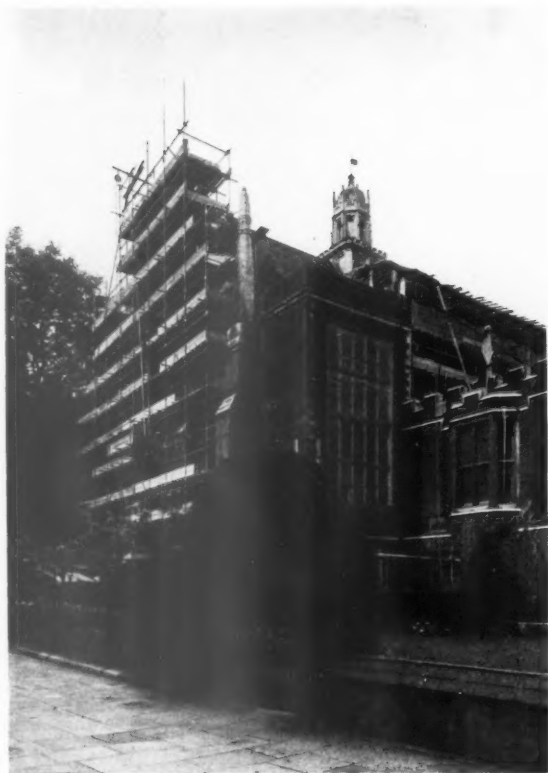
KING GEORGE V MEMORIAL

There is a good deal of comment behind the scenes because the public is being asked to subscribe to the King George Memorial Fund without being informed as to the probable cost for the acquisition of all the properties on the Abingdon Street site and for the erection of the proposed statue of King George V. The official answer given on behalf of the Government is that the sum must necessarily be a large one but, in view of the negotiations which will take place, it is obviously undesirable to mention precise figures.

The picture of the site, as cleared, which has recently been on exhibition at the Mansion House, shows a distant vista of the Cenotaph and the Abbot's Jewel Tower. A hint, however, was given by the Government just before Parliament went into recess, that this scheme may be modified. Mr. Hudson, representing the First Commissioner of Works, stated that it depended on the amount



The rear elevation of the headquarters for the London Fire Brigade, now in course of construction on a site facing the Albert Embankment. Another view is given on page 167.



Reconstruction : a view in the Temple, E.C.

of money received whether the complete schemes at Westminster could be carried out. "There is no reason to anticipate at this stage that the proportion of the money available for the purpose will be inadequate, but, should this prove to be the case, it will be possible for the Committee to consider whether it will proceed with a less complete but still dignified scheme at the same place."

DECENCY AGAIN

The administrators of the King George Memorial Fund have apparently become a little worried by the possibility of architectural monstrosities for which they will have to pay. So they have asked the Royal Fine Arts Commission to lend a hand and approve a standardized gateway to be put up at the entrance of all playing fields.

What will the result be like? I don't know, but at least it should be a good deal better than some of the tortured spikes of wrought iron that so often succeed in repelling the visitor even when they're open.

ARCHITECTS' REGISTRATION COUNCIL

Keeping to its original promise to spend half its income on education, the Architects' Registration Council has just made its second award of maintenance scholarships in architecture, which entail grants for students whose means appear to the Council to be insufficient to enable them to pursue their studies.

This year, four students receive sums varying from £50 to £138 to complete the architectural training. It is

interesting to note that, since the scholarships were first awarded last year, the recipients include the sons of a miner, a railway signalman, and an upholsterer's cutter.

So here is at least one direction in which our six and eightpences are being put to the best possible use.

CORONATION MATERIALS

So many rumours were rushing round last year about the thousands of pounds that were alleged to have been spent on Japanese-made Union Jacks (and the incidental profits made by the retailers) that it is almost a relief to hear that Empire timber is to be used for the innumerable grandstands which will line the coronation route.

And, incidentally, I wonder how many enterprising foreign potters will cash in with coronation mugs and similar whatnots. And, talking about the coronation, there is still no news about the new coinage to be issued some time next year, or, for that matter, about the new stamp designs.

COMPETITIONS

Two more open competitions are announced this week; the Newcastle-under-Lyme Corporation is offering three premiums totalling £600 for designs for new shops and offices; and the Leeds Corporation £650 for the first three designs in its competition for proposed central public baths to be erected on a site in New York Road, at a cost of £130,000.

Last week, it will be recalled, the Newport (Mon.) Corporation invited designs for its new civic buildings, which will include a town hall, municipal offices, law courts and police station. The Corporation offers £1,700 for the first four schemes.

Thus, we now have nine open competitions, the grand total of the premiums being some £6,500. A nice little sum indeed. And the result of another competition is expected in a day or two—the competition for working-class flats in Birmingham.

It would seem that local authorities are gradually beginning to realize that open competitions are, in the long run, worth the slight extra cost and delay.

MORE THIEVERY

A note of mine on the theft of a lead gutter from a North London factory has produced another story from a friendly correspondent. Only this time it was a w.c. flush pipe which was cut off just below the cistern; discovery of the crime following immediately upon the administration of an unwanted shower bath to an unwary employee.

The missing pipe was finally discovered wrapped round the waist of a workman who seemed to be looking rather plumper than usual.

There is, I know, a fairly steady demand for lead in any form, but I should hardly have thought that the profits were large enough to make stealing such heavy stuff worth while.

ASTRAGAL

NEWS

POINTS FROM
THIS ISSUE

- "Out of 8,924,523 dwellings inspected in connection with the overcrowding survey, no fewer than 341,554 were overcrowded within the meaning of the Act" .. 169
- "Empire timber is to be used for the grandstands which will line the coronation route" .. 171
- "There is more respect for architects on the Continent than in England" 172
- Conditions of two new open competitions are now available .. 174
- "At the moment, 300 bridges are scheduled under the Ancient Monuments Acts, which does not mean, of course, that they may not be touched, but that before they are the Office of Works must be asked for its observations" .. 186

WESTMINSTER HOUSE SITE

The future use of Westminster House, Parliament Square, was discussed at a recent meeting of the Middlesex County Council. Sir Howard Button stated that it was expected that the building would be completely occupied by members of the staff of the County Council in a week's time. After the Council vacation further representations would be made to Parliament as to the ultimate use of the site.

COUNCIL OPPOSES FLATS
SCHEME

The Hornsey Borough Council has informed the Islington Borough Council that it is opposed to the Islington Council's scheme for building flats in Hornsey Lane, Highgate. Hornsey Lane is a boundary road and the properties are mainly large houses. The Islington Council proposes to acquire some of them and build blocks of flats on the sites.

APPOINTMENT

Mr. Stuart Bentley, A.R.I.B.A., has been appointed architect to the Corporation of Southampton. Mr. Bentley is at present Senior Architectural Assistant to Mr. L. H. Keay, O.B.E., M.A.R.C.H., F.R.I.B.A., Director of Housing for Liverpool. Previously he was Senior Architectural Assistant to Mr. Herbert J. Rowse, F.R.I.B.A., and to Sir Arnold Thornely, F.R.I.B.A.

OFFICIAL OPENINGS

The new Brighton swimming pool at Black Rock was opened last week. Built at a cost of £40,000, it has a private shingle beach and sun-bathing terrace, and a restaurant.

THE
ARCHITECTS'
DIARY

Thursday, August 6

ROYAL ACADEMY, Burlington House, Piccadilly, W.1. Summer Exhibition. Until August 8.

ROYAL SCOTTISH ACADEMY. At Edinburgh. Until September 6.

Monday, August 10

R.I.B.A., 66, Portland Place, W.1. Exhibition of the designs submitted in the recent competition for a new Parliament House, Salisbury, Southern Rhodesia. Until August 20 inclusive. (Monday to Friday between the hours of 10 a.m. and 5 p.m. and Saturday 10 a.m. to 1 p.m.)

Tuesday, August 11

LONDON SOCIETY. Visit to Coram's Fields (the Foundling site), 93 Guildford Street, W.C.1. 3 p.m.

Saturday, August 15

LONDON SOCIETY. Visit to Kensington Palace. 2.30 p.m.

The new bathing pool at Morecambe was opened last week by Sir Josiah Stamp.

CENTRAL MIDDLESEX HOSPITAL
EXTENSION

The Middlesex County Council last week agreed to spend £200,545 on the extension of the Central Middlesex Hospital.

NEW CATHEDRAL FOR
JOHANNESBURG

A new cathedral and a Bishop's Palace are to be built in Johannesburg at a cost of £150,000. The cathedral will provide accommodation for 3,000 persons.

HANTS AND ISLE OF WIGHT
ARCHITECTURAL ASSOCIATION

An exhibition of the R.I.B.A. students' prize drawings, works by members of the Hampshire and Isle of Wight Architectural Associations, and by students of Hampshire Municipal Schools of Art was held recently at the Municipal College, Bournemouth. The exhibition was opened by Mr. R. A. Duncan, A.R.I.B.A.

Mr. Duncan said that for the past eight years he had been hon. secretary of the exhibition committee of the R.I.B.A., and had found that the majority of countries appreciated the value of the exhibition as propaganda and as a means of educating the public, but that there was more respect for architects on the Continent than in England. Architectural exhibitions must have a public appeal, although primary interest was naturally a personal one amongst architects.

The architect must not be blamed for this "mining camp" civilization, for although building was, in most countries, the second or third largest industry, the architect only controlled 20 per cent. of the money spent on construction, and only 12 per cent. of that spent on actual housing, so that he had comparatively little share, as a servant of the public, in producing a better background for life.

The only way to alter such a state of affairs was to bring it to the notice of the public. There must be more general

knowledge of what the words "architect" and "architecture" meant.

ARCHITECTS' REGISTRATION
COUNCIL

The Architects' Registration Council of the United Kingdom set up by the Architects (Registration) Act, 1931, has recently made the second award of its Maintenance Scholarships in Architecture.

Under the Act it is provided that at least half the total amount of the fees received in each calendar year by the Council under the Act shall be devoted, in such manner and on such conditions as the Council may determine, to the provision of scholarships and maintenance grants for the assistance of students in architecture whose means appear to the Council to be insufficient to enable them to pursue their studies.

In this second year of the Maintenance Scholarship scheme, it has been found possible to assist no fewer than four students by grants varying from £50 to £138. This figure represents the amounts which the scholars were able to satisfy the committee that they needed in order to complete their architectural training.

In addition, the grants made last year to four students were renewed. One other student has now completed his training. These grants varied from £40 to £147 in value.

The grants are awarded in the first instance for one year only, but are renewable from year to year upon reports of satisfactory progress until the students have completed their architectural training. All the students are going to attend the leading architectural schools throughout the country.

The system of selection has again proved completely successful, as it has been found that those candidates have been chosen whom it was the intention of the Act to help.

The scheme for the scholarships presupposes that each scholarship will be required for a maximum period of five years, and it has been arranged to offer new grants annually up to £350 in value apart from the continuation of any scholarships which may be in existence.

IMPORT DUTIES ADVISORY
COMMITTEE

The Import Duties Advisory Committee gives notice that it has been requested by the President of the Board of Trade to examine the present position of the iron and steel industry in the light of all the data now available, and in so far as is practicable to report, with due regard to the national interest, on the general lines of its future development.

Any representations in regard to this matter should be submitted, as fully as possible in writing in the first instance, to the Secretary, Import Duties Advisory Committee, Caxton House (West Block), Tothill Street, Westminster, London, S.W.1.

EXHIBITION OF NINETEENTH-
CENTURY FRENCH PAINTING

The Anglo-French Art and Travel Society, in consultation with a number of experts in the subject, is arranging to hold this autumn a comprehensive loan exhibition of French nineteenth-century art. The Exhibition, which will be on view at the New

Burlington Galleries, 5 Burlington Gardens, W.1, from October 1 to 31, will comprise a representative collection of masterpieces lent by museums and collectors in Europe and America. The exhibition will include examples of the work of Cézanne, Corot, Courbet, Daumier, Degas, Delacroix, Gauguin, Van Gogh, Ingres, Lautrec, Manet, Monet, Pissarro, Renoir, Henri Rousseau, Seurat and Sisley.

A number of lectures will be given during the Exhibition by authorities on French painting, amongst them several French experts. Special arrangements will be made for educational facilities for students.

EXHIBITION

An exhibition of Cotswold art and craftsmanship is now being held in the Church Room, Church Street, Campden, Gloucestershire. The exhibition includes examples of furniture and joinery, textiles, pottery, wrought-iron, silversmithing, jewellery, printing and bookbinding, oil paintings, water-colours, drawings, miniatures, etchings, woodcuts, plaster work, sculpture, stained glass, heraldry, calligraphy and architecture and building. The exhibition will remain open until August 31.

ANNOUNCEMENTS

Mr. E. Maxwell Fry, B.A.R.C.H., A.R.I.B.A., has entered into partnership with Professor Walter Gropius. They will practise under the style of Walter Gropius and Maxwell Fry at 171 Victoria Street, S.W.1. Telephone Nos.: Victoria 0605-0606.

Mr. G. A. Jellicoe, F.R.I.B.A., is taking into partnership Mr. Russell Page, A.I.L.A., and Mr. Richard Wilson, A.R.I.B.A., and the firm will in future be known as G. A. Jellicoe and Partners. The address remains 38 John Street, Bedford Row, W.C.1. Holborn 9821-2.

OBITUARY

We regret to record the death of Mr. Arthur Peel, A.R.I.B.A., who has been employed as architectural assistant in the Bootle Borough Engineer's office for the last six years.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

Working-class Houses

Sir W. Davison asked the Minister of Health whether it was still the policy of His Majesty's Government to encourage private persons to undertake housing schemes for persons of the working-classes, especially schemes for the provision of houses and flats to let; and whether every encouragement would be given by the Government to facilitate the carrying out of such schemes by private enterprise.

Mr. Shakespeare said that the Government looked to private enterprise as the chief source of supply of dwellings to meet the general needs of the working-class population, and hoped to see an increasing proportion of small houses and flats for letting among the dwellings provided by private enterprise. The Government was certainly ready to encourage the activities of private enterprise in this direction.



RECOLLECTIONS

UNITED STATES

1893 — 1920

BY FRANK LLOYD WRIGHT

This is the last of the series of recollections by Mr. Frank Lloyd Wright of the state of architectural development in the U.S.A. at the end of the nineteenth century, and of the influences and observations which brought about his efforts to introduce a more rational approach to architectural design.

THEORETICALLY, no planting was to be done about the houses without co-operating with the architect. But, of course, it was done more often than not. But no sculpture, no painting was let in unless co-operating with the architect, although—more often than not—pictures were “hung.” This made trouble. For no decoration as such was to be seen anywhere. Sculpture and painting were to be likewise of the building itself. But in the Midway Gardens, built in Chicago in 1913, I tried to complete the synthesis: planting, furnishings, music, painting, and sculpture all to be one. But I found musicians, painters and sculptors were unable to rise, at that time, to any such synthesis. Only in a grudging and dim way did most of them even understand it as an idea. So I made the designs for all to harmonize with the architecture myself and brought the result so well together that the first instance of complete unity of all these in character and style was there first seen in our country. Crude as any sketch is crude, incomplete as to execution, but in effect sufficiently complete to show the immense importance of any such attempt on any architect's part, and show, indeed, that only so does architecture completely live. A new ideal of ornamentation had by now arrived that wiped out all ornament unless it, too, was an integral feature of the whole. True ornament became more desirable than ever, but it had to “mean

something”—in other words, *be* something organic in character. Decorators hunting a job would visit the owners and, learning the name of the architects lift their hats, turn on their heels, leaving with the curt and sarcastic “Good Day,” meaning really what the slang “Good Night” of the period meant. This matter of integral ornament is the rock upon which a later generation of young architects splits, and wisely decides to let it alone.

The owners of the early houses were, of course, all subjected to curiosity, sometimes to admiration but were submitted most often to the ridicule of the “middle of the road egotist.” To that ubiquitous egotist there was something about the owner, too, now, when he had a house like that, “the rope-tie around the monkey's neck.”

MATERIALS

Well, I had to face the fact that a different choice of materials would mean a different building altogether. Concrete was just coming into use and Unity Temple became the first concrete-monolith in the world—that is to say, the first building complete as monolithic architecture when the wooden forms in which it was cast were taken away. No critic has yet seen it as it is, for what it is, except to realize that here, at least, was *something*. They might not like the Temple, but they were “impressed” by it. The Larkin building at Buffalo had just been built—a consciously important challenge to the empty ornamentality of the old order. The phrases I myself used concerning it in the issue of the *Architectural Record* of March, 1908—(I think it was) devoted to my work—put it on record as such. The words may have escaped the Swiss “discoverer”—he was young at the time.*

PLASTERED HOUSES

Plastered houses were then new. Casement windows were new. So many things were new. Nearly everything was new, but the law of gravitation and the idiosyncrasy of the client.

And simple as the buildings seemed, and seem to this day because all had character and the countenance of principle, only the countenance of their simplicity has ever taken effect and that countenance is now being variously exaggerated for the sake of the effect of a style. The innate simplicity that enabled them and enables them to multiply in infinite variety has not been practised. I have built 187 buildings, planned and detailed about 37 more that have not been built. And they do not classify

* “Here again most of the critic's architecture has been left out. Therefore the work may have the same claim to consideration as a work of art, as an ocean liner, a locomotive, or a battleship.”

as a style. Nevertheless, all have "style."

A NEW COUNTENANCE

Not much yet exists in our country—no, nor in any country—outside plans and models to exemplify steel and glass at its best in the light of this new sense of building. But a new countenance—it is the countenance of principle—has already appeared around the world. A new architectural language is being brokenly, variously, and sometimes falsely spoken by youths with rat-like perspicacity and with breadth of view perhaps, but with too little of the depth of knowledge that can only come from experience. Unfortunately, academic training and current criticism, however wide the superficial view, have no penetration to this inner world. The old academic order, meantime, is bulging with its own impotence. Society is cracking under the strain of the sterility that education far beyond capacity and exaggerated capitalism have left as academic heritage to its own youth. General cultural sterility, the cause of the unrest of this uncreative moment that stalls the world, might be fructified by this ideal of an organic architecture and led from shallow, troubled, muddy water into deeper, clearer pools of thought; deeper, fresher pools into which youth may plunge to come out refreshed with new creative energy. The United States especially needs these deeper satisfactions; needs a more worthy human age for that tomorrow that is always today because of yesterday. Meantime we must see the shallow criticism of the period only smother in more eclectisms the priceless initiative needed to realize that more worthy ego.

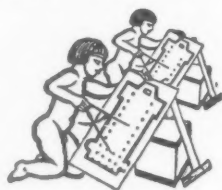
THE FUTURE

Inevitably this deeper sense of building as integral product of the spirit of man is to construct the physical body of our machine age. But that in itself will not be enough. Unless this construction were to enable a broader, finer sense of life as something to be lived to the full resources of time, place and man to give us an architecture that is inspiring environment at the same time that it is a true expression of that life itself, the ideal will again have failed. So, architecture must now construct anew the whole social pattern of our time as a new order of the human spirit.

Being lightly called "modernistic"—what, then, is the lip service, what are the pretentious gestures, the superficial association of ideas or the attempted academic rationalizing of this work? Why is the true content or motivating inner thought of modern architecture as organic architecture, so confused

and hypocritical in its manifestations? Why is there so little modest, earnest effort to profit honestly by co-operation in these researches and—understanding such proofs as we have—honestly use them, such as they are, and go ahead with them for growth instead of exploiting them for a living or a name; the self-seeking of some transient fame? "Publicity" is the only fame such shallow ambition may know now, and, like all such ambitions, only "advertising" that will be dead with yesterday's newspapers.

COMPETITION



NEWS

CENTRAL PUBLIC BATHS, LEEDS

Architects of British nationality are invited to submit designs in the competition for central baths, Leeds. The assessor is Mr. Kenneth M. B. Cross, F.R.I.B.A., and the following premiums are offered: £350, £200 and £100. The latest date for submission of designs is October 29. Conditions of the competition and instructions with a plan of the site can be obtained on application to Mr. Thos. Thornton, Town Clerk, at Room 57, Civic Hall, Leeds, 1. (Deposit £1 1s.)

SHOPS AND OFFICES, NEWCASTLE-UNDER-LYME

The Newcastle-under-Lyme Borough Council invites architects of British nationality to submit in competition designs for new shops and offices to be erected on a site in High Street, Newcastle-under-Lyme. The assessor is Mr. Harry S. Fairhurst, F.R.I.B.A., of Manchester; and the following premiums are offered: £300, £200 and £100. Conditions of the competition may be obtained from the Town Clerk, Town Clerk's Office, Newcastle-under-Lyme. (Deposit £2 2s.) The latest date for submission of designs is October 31.

THE LLANDUDNO COMPETITION

Mr. G. A. Humphreys, F.R.I.B.A., Chairman of the Building Committee of the Llandudno and District Hospital, writes: "In the review of the conditions of the competition for extensions at the Llandudno and District Hospital, published in your issue for July 23, the reviewer stated that 'the cost, £42,250 for 67 beds, including the abundant special departments asked for, is not large; about £266 per bed,' whereas it works out at £630 per bed, with a 10 per cent. margin."

Competitions Open

AUGUST 21.—Sending-in Day. Municipal offices and assembly hall, Dartford, for the Dartford T.C. (Open to architects practising in the United Kingdom.) Assessor: P. D. Hepworth, F.R.I.B.A. Premiums: 200, 100 and 50 guineas.

The last day for questions was June 29. Conditions of the competition may be obtained on application to J. James Hurlley, Town Clerk, Town Clerk's Office, Dartford. (Deposit £1 1s.)

OCTOBER 26.—Sending-in Day. Layout and individual design of a group of camp buildings for a holiday camp, in timber, for the Timber Development Association. Assessors: E. Guy Dawber, R.A., F.S.A., F.R.I.B.A., G. A. Jellicoe, F.R.I.B.A., G. Langley Taylor, F.R.I.B.A., and John Gloag. Premiums: £150, £50, £25 and three special mention awards of £10 each. Conditions may be obtained on application to The Timber Development Association, 69-73, Cannon Street, London, E.C.4.

OCTOBER 31.—Sending-in Day. Council offices, Farnham, for the Farnham U.D.C. (Open to architects practising in the United Kingdom.) Assessor: E. Vincent Harris, A.R.A., F.R.I.B.A. Premiums: £250, £150 and £100. The last day for questions is August 31. Conditions of the competition may be obtained on application to A. A. Minns, Clerk of the Council, Council Offices, Farnham, Surrey. (Deposit £1 1s.)

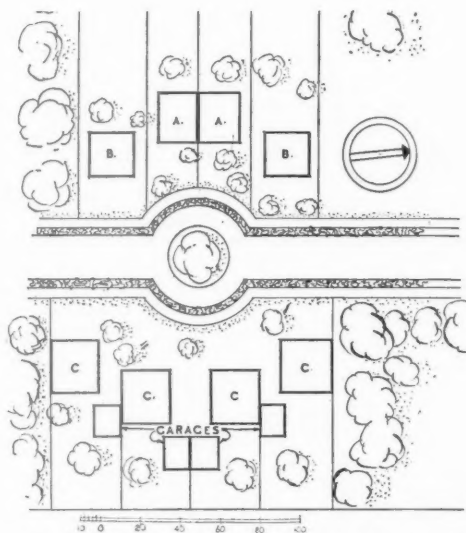
OCTOBER 31.—Sending-in Day. New hospital at Llandudno, for the Committee of the Llandudno and District Hospital. (Open to registered architects of British nationality.) Assessor: R. Norman Mackellar, F.R.I.B.A. Premiums: £250, £150 and £75. The last day for questions is August 28. Conditions of the competition may be obtained on application to the Honorary Secretary, New Hospital Scheme, Town Hall, Llandudno. (Deposit £1 1s.)

SEPTEMBER 14.—Sending-in Day. Town hall and municipal buildings, Barking, for the Barking Corporation. (Open to architects practising in the United Kingdom.) Assessor: H. V. Lanchester, F.R.I.B.A. Premiums: £500, £250 and a further £200 to be awarded as recommended by the Assessor. The last day for questions was May 1. Conditions of the competition may be obtained on application to S. A. Jewers, Town Clerk, Town Hall, Barking. (Deposit £2 2s.)

NOVEMBER 30.—Sending-in Day. New civic buildings, which include a town hall, municipal offices, law courts and police station, Newport (Mon.), for the Newport Corporation. (Open to architects of British nationality.) Assessors: E. Berry Webber, A.R.I.B.A., and C. F. Ward, F.R.I.B.A. Premiums: £750, £500, £300 and £200. The last day for questions is September 1. The conditions are obtainable from O. Treharne Morgan, Town Clerk, Town Hall, Newport (Mon.). (Deposit £2 2s.)

FEBRUARY 28, 1937.—Sending-in Day. Extension of St. Andrew's Cathedral, George Street, Sydney, for the Authority in the Diocese of Sydney of the Church of England. (Open to architects who are British subjects, and members of the Royal Australian Institute of Architects, the R.I.B.A., or the Allied and Associated Societies.) Assessors: His Grace the Archbishop of Sydney, Sir Giles Gilbert Scott, R.A., F.R.I.B.A., and Bertrand J. Waterhouse, F.R.I.B.A. Premiums: £500, £300 and £200. The last day for submitting designs (which must be forwarded direct to Sydney) is February 28, 1937. The last day for questions is August 11.

HOUSES AT HAYWARDS HEATH, SUSSEX



GENERAL PROBLEM—Eight speculative houses, built in three types—A, B and C.

SELLING PRICE—From £950-£1,200.

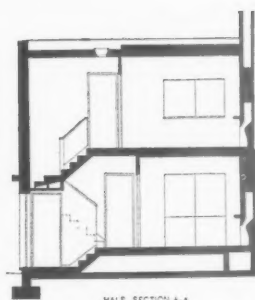
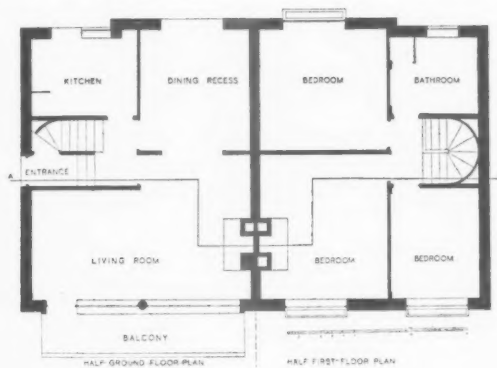
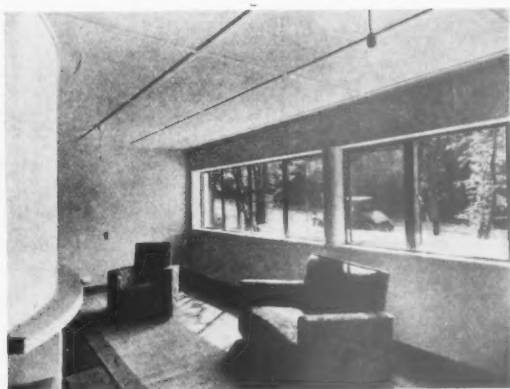
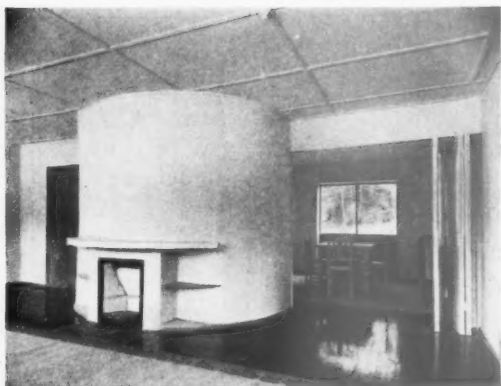
SITE—In Sunnywood Drive, Haywards Heath, Sussex, on land valued at £6 per ft. frontage. The woodland in which the houses are built dictated their comparatively narrow frontages, from 30 ft. to 35 ft.

The photographs show: above, reading from left to right, one house, type B, two semi-detached houses, type A, and one house, type C; right, houses, type C.

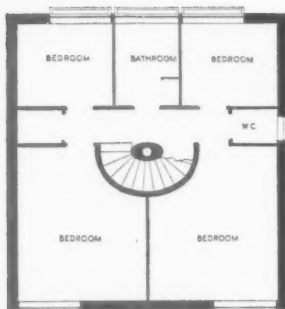
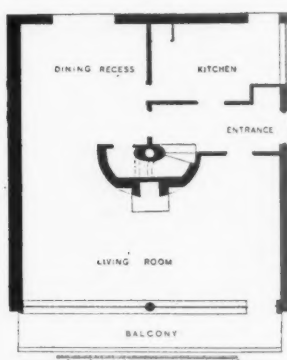
DESIGNED BY TECTON



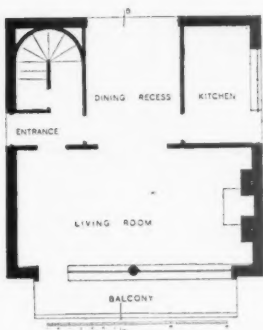
EIGHT HOUSES AT HAYWARDS HEATH,



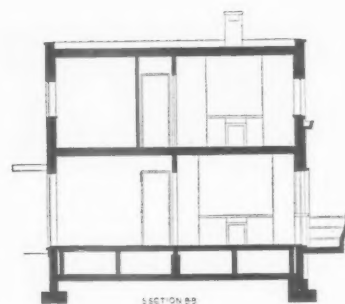
TYPE A: HALF
GROUND AND
FIRST FLOOR
PLANS, AND
SECTION A-A



TYPE C: GROUND AND FIRST FLOOR PLANS



TYPE B: GROUND AND FIRST FLOOR PLANS AND SECTION B-B



PLAN—Each house is entered from the side instead of the front, as is the almost universal practice in normal speculative work, the whole width of the front on the ground floor being occupied by a long living-room.

The photographs show: two views in the living-room in house type C. On the facing page is a photograph of an entrance door to a type C house.

SUSSEX: DESIGNED BY TECTON



HOUSES AT HAYWARDS HEATH, SUSSEX

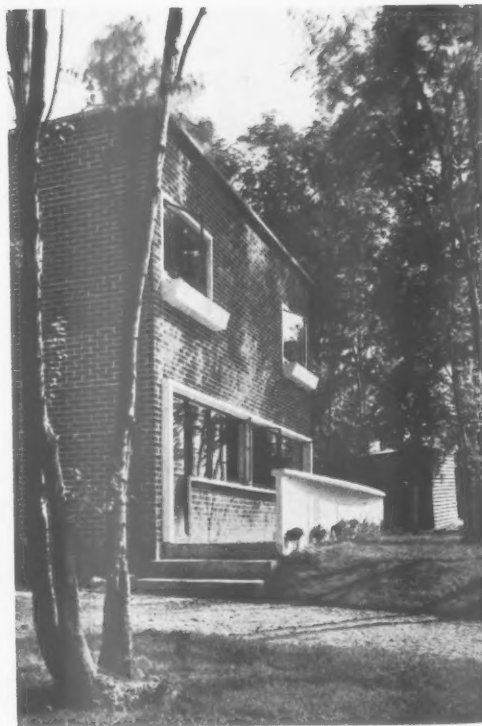
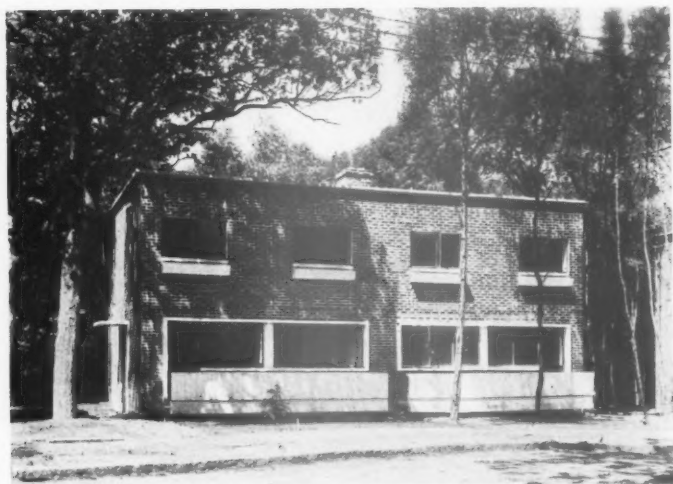


CONSTRUCTION—Brick cavity walls, 11 ins. thick; breeze partitions; timber floors and joists; reinforced concrete balconies, porches and flower-boxes; and metal windows. The large houses, type C, have a reinforced concrete chimney and pre-cast concrete steps.

PRICE PER FT. CUBE—Approximately 1s.

The photographs show: top, two views of houses, type B; below, two houses, type A; right, houses, type C.

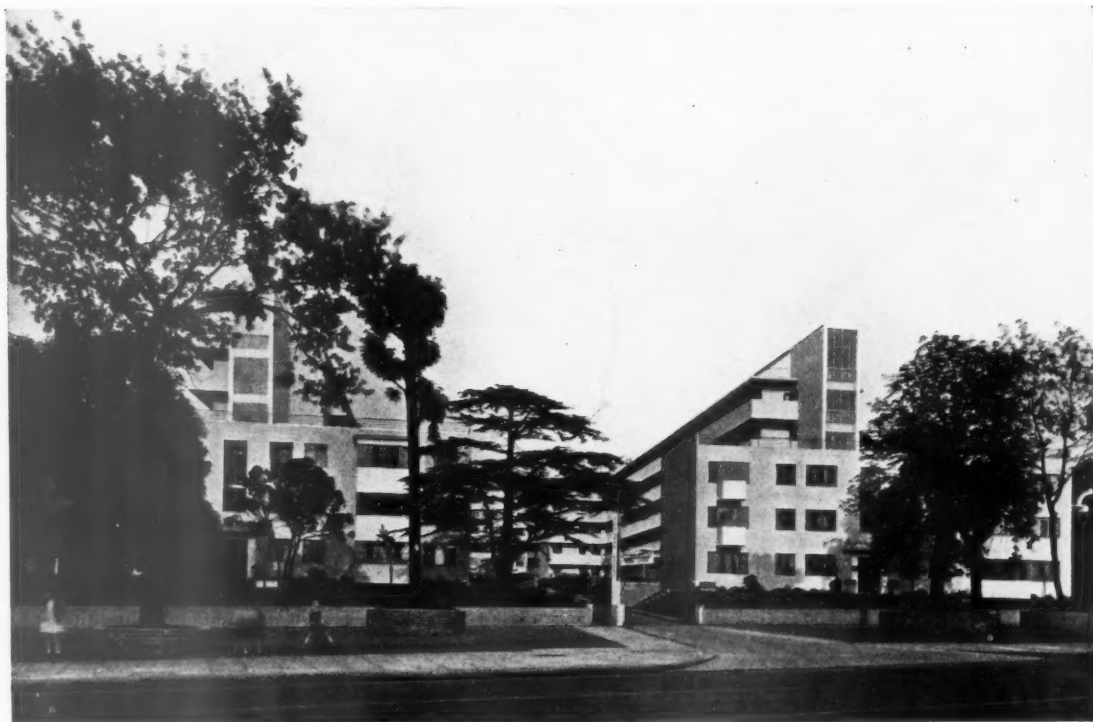
For list of general and sub-contractors see page 192.



D E S I G N E D

B Y T E C T O N

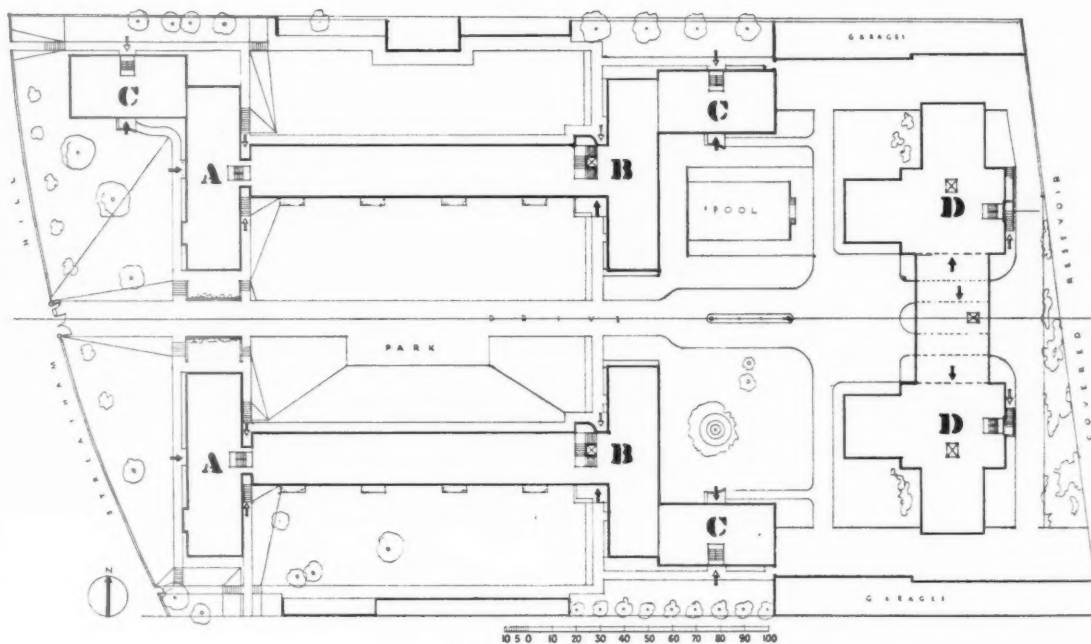
PULLMAN COURT, STREATHAM, S.W.



DESIGNED BY
FREDERICK
GIBBERD

GENERAL PROBLEM—218 flats of three types: one-room, two-room, and three-room. The scheme includes roof gardens, a swimming pool, and garages.

RENTS—One-room, £68; two-room, £80-90; three-room, £105-£130. The photograph is of the Streatham Hill front.



LAYOUT PLAN

PULLMAN COURT, STREATHAM, S.W.:



SITE—An area of about $2\frac{3}{4}$ acres, with a frontage to Streatham Hill, on the west side, of 258 ft. The site slopes gently up from the west side to the edge of a covered reservoir which forms a large space on the east.

CONSTRUCTION—Reinforced concrete frame and panel wall, 4 ins. thick, lined with 1 in. of cork for insulation. Floors are of hollow tiles of a total thickness of $5\frac{1}{2}$ ins.; balcony and gallery floor slabs are in reinforced concrete. Columns and beams have been standardized within economic limits and arranged wherever

possible so that beams are not visible in the rooms. In one of the blocks, for example, all the beams are 5 ins. wide, the width of a double partition plus air space. The blocks marked C and D on the layout plan were intended to have a reinforced concrete spine with weight-carrying reinforced concrete external walls erected by climbing shuttering. This system did not meet with the requirements of the London County Council, so framed structures were used throughout.

The photograph is of a three-storey block facing Streatham Hill.

DESIGNED BY FREDERICK GIBBERD



ELEVATIONAL TREATMENT—The walls are painted in different bright colours, the colours and tones changing with change of plane. Browns and pinks are used chiefly on the blocks nearest the road, and greys and blues on the rear blocks. A permanent steel cradle rail, at roof level, makes it possible to repaint the walls without scaffolding.

The photographs show : top, the south front of the north block ; left, the south and east fronts of the north block ; right, an entrance door and balconies on the Streatham Hill front.



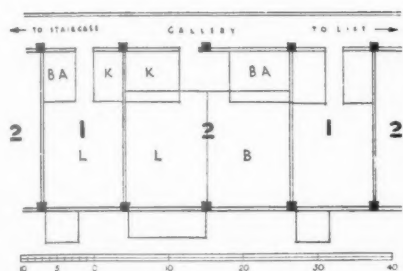
PULLMAN COURT, STREATHAM, S.W.:



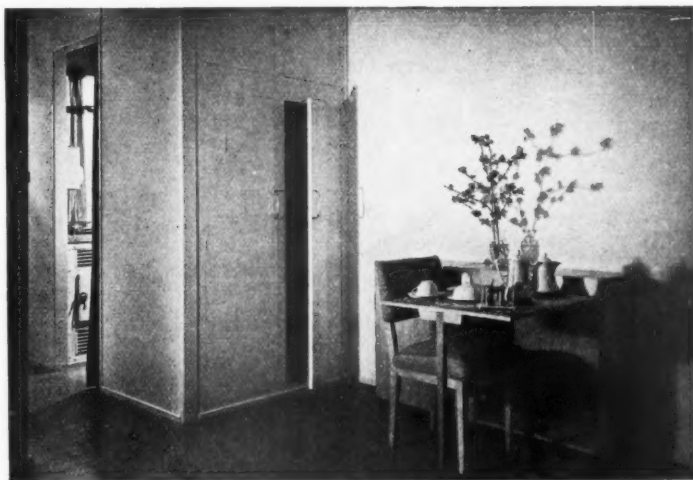
LAYOUT—The flats are built in blocks of three heights. Three-storey blocks face Streatham Hill and are set well back from the road to preserve an existing belt of trees and to avoid too serious traffic noises. Behind them, at right angles, on either side of a central drive, run two blocks, limited to five storeys to give a good angle of light. Beyond these, closing the main axis, is a seven-storey block. The photographs show: top, the seven-storey, east block; left, the north front of the north block; right, the covered car entrance in the east block.



DESIGNED BY FREDERICK GIBBERD

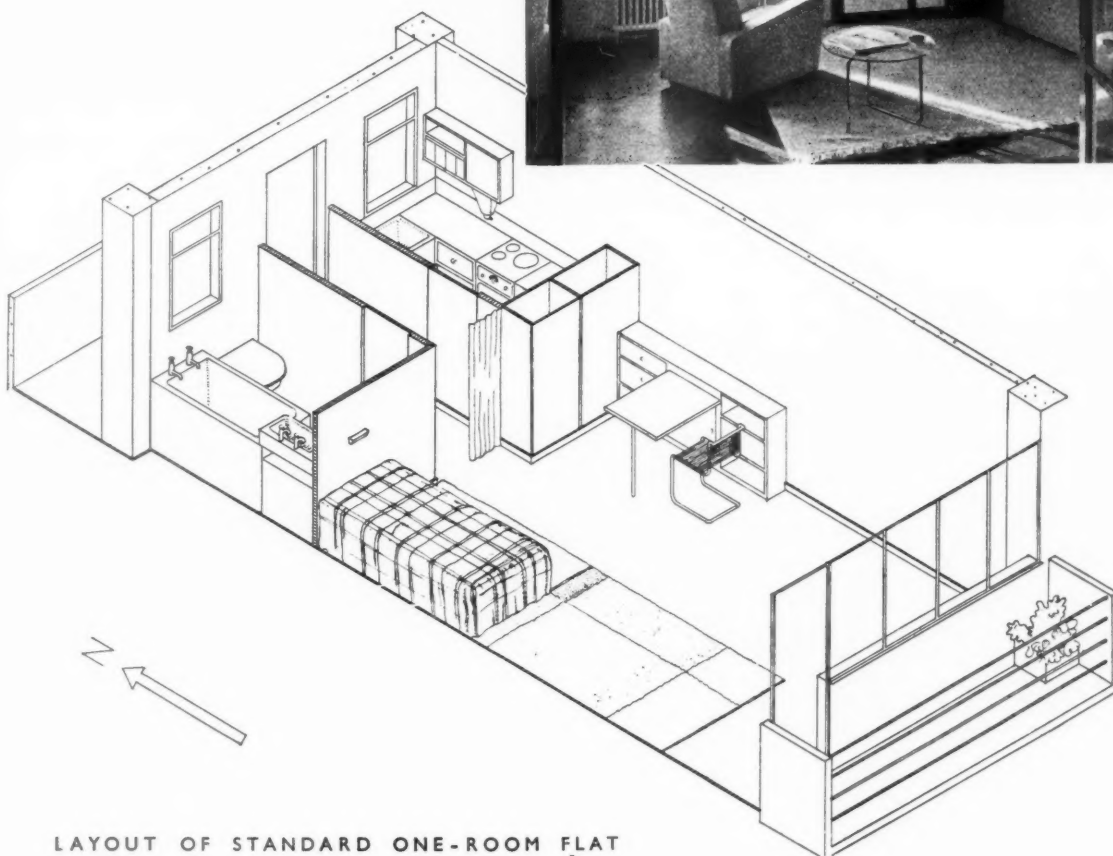
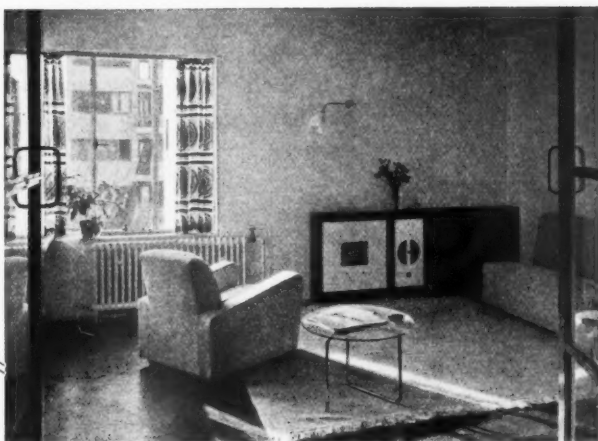


TYPICAL PLAN; ONE- AND TWO-ROOM FLATS



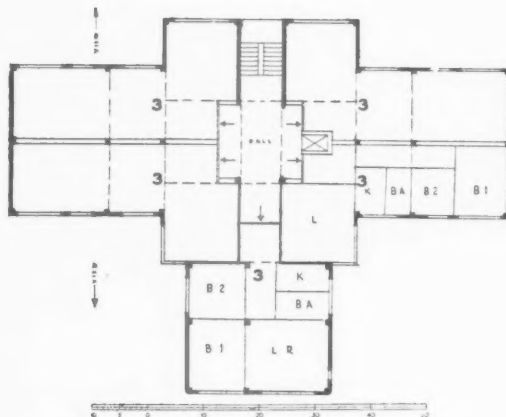
PLAN—The flats are planned with three types of access : by external galleries, as in the blocks marked B in the lay-out plan ; by grouping round a lift hall, as in block D ; and by entrances on either side of a staircase, as in blocks C. These types were experimented with to discover which one the public preferred and which was the most economical to build and maintain.

The photographs show : top, the dining corner in a one-room flat ; right, living room in a three-room flat.



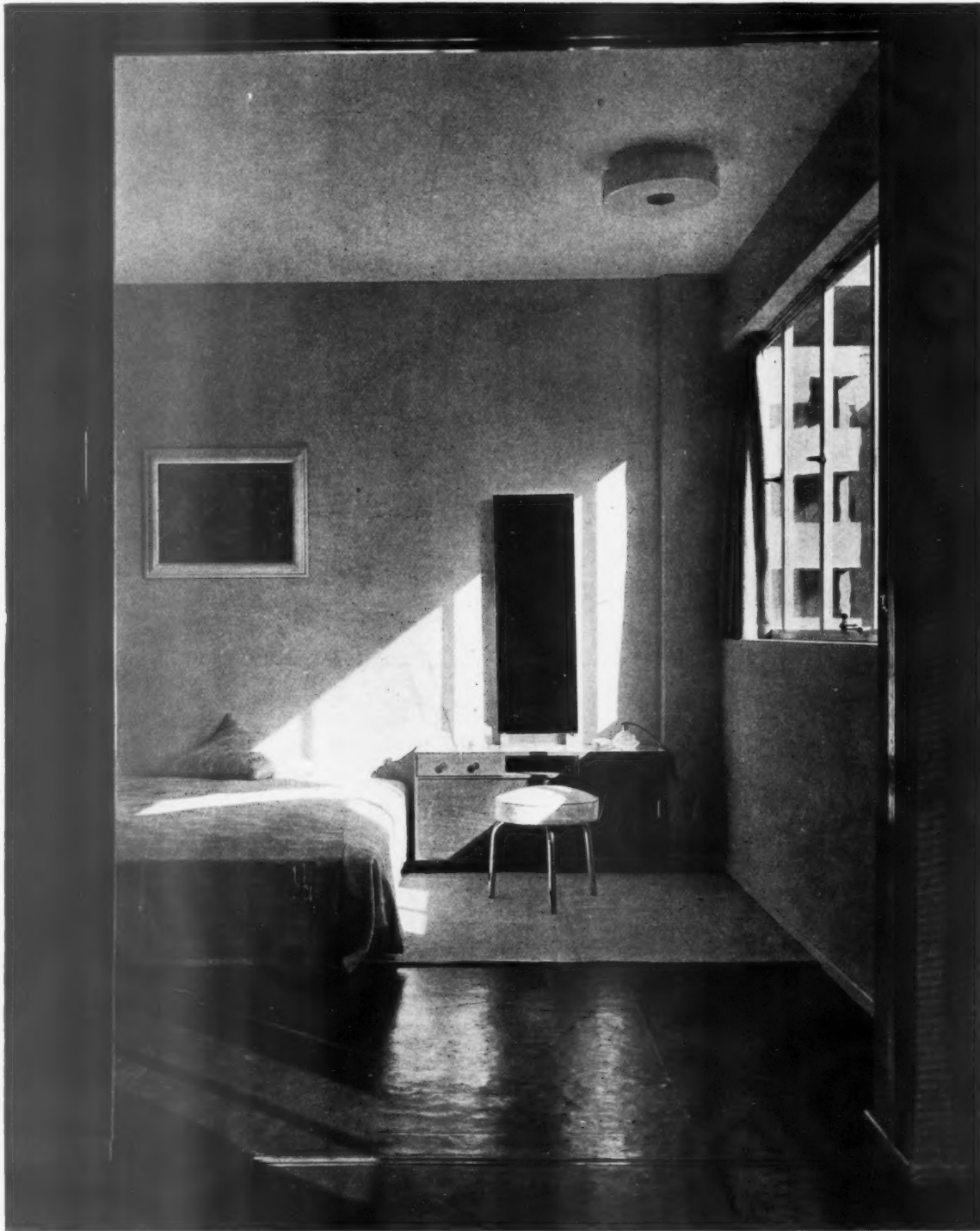
LAYOUT OF STANDARD ONE-ROOM FLAT

PULLMAN COURT, STREATHAM, S.W.:



INTERIOR FINISHES—A built-in electric fire is a standard fitting in all the flats. Bathrooms also are standardized throughout the scheme, the only difference in flats of different price being in the finishes. The door frames are of sheet steel, and are made complete with sole plate and butt hinge welded on, drilled and tapped ready to receive the striking plate or ball catch. The windows also are of steel, with a specially designed jamb and cill section having an overlapping flange to bed the frame tight against the wall face. All the furniture has been designed by the architect. The photographs show: top, the sleeping end of a one-room flat; left, a typical bathroom, all of which are standardized. The plan is of the three-room flats in the east block.

DESIGNED BY FREDERICK GIBBERD



SERVICES—Central heating and hot water are supplied from a central plant beneath the seven-storey block. The height of this makes a tall detached flue unnecessary, and its position means that the prevailing wind carries the smoke away from the flats. Plumbing is on the one-pipe system.

The photograph shows: looking from the living-room of one of the two-room flats through the sliding doors into the bedroom.

For list of general and sub-contractors see page 192.



Monnow Bridge, Monmouth. From "The Ancient Bridges of Wales and Western England."

L I T E R A T U R E

BRIDGES OF THE WEST

BY E. H. W. ATKINSON

The Ancient Bridges of Wales and Western England. By E. Jervoise, A.M.I.N.S.T.C.E. London: The Architectural Press. Price 6s. 6d.

MR. JERVOISE has completed a remarkable task. Ten years ago the Society for the Protection of Ancient Buildings asked him to make a survey of the ancient bridges of England and Wales. This volume, the last of four—the others have dealt in turn with southern, northern and mid and eastern England—shows his task complete. He inspected 5,000 bridges. His remarkably full notes upon them, and the manuscripts of the four books, are to pass into the care of the Society of Antiquaries.

Road widening schemes threatened many ancient bridges at the time when the survey was begun. They still threaten. Mr. Jervoise's survey, whose authority is indubitable, should be in the hands of every highway authority. There still exist at least 150 bridges of mediæval construction, he has found, although most of them have been widened or partly rebuilt. The nationalization of the roads, which seems to have begun, will certainly not reduce the need for the informed vigilance that Mr. Jervoise's survey can enable.

The material of the present volume is among the most interesting with which

he has had to deal. Wales has a very precious heritage of bridges, and Mr. Jervoise has been able to identify over 70 per cent. of the bridges mentioned by Lhwyd in his early eighteenth-century *Parochialia*, itself no mean achievement of practical archæology.

There is a good deal of history hanging round the bridges of the Welsh marches and thereabouts. The most notable evidence of it remaining is at Monmouth where the Monnow bridge remains as the only example in the country of a bridge having a fortified tower on the bridge itself. At Shrewsbury the Welsh bridge is recorded as having "at the other End towards Wales a mighty strong Towre to prohibit Enemies to enter into the Bridge."

It is a fascinating, if "facty" book, and well illustrated, though a map or set of maps would be a reasonable addition. One detects few slips, although the first chapter, with Dunkinfield for Dukinfield and Bidstone for Bidston, has two. But the whole is a most valuable work. The number of seventeenth- and eighteenth-century bridges still in existence is very large, as Mr. Jervoise records.

Bridges as well as roads are covered by the road nationalization plan. By a happy chance the Society for the Protection of Ancient Buildings has got in first so far as the care of ancient bridges is concerned.

A most valuable by-product of the survey made for the Society by Mr. E. Jervoise in the last ten years has been a list of ancient bridges which was sent to the Office of Works, which forthwith scheduled a good many of them and reserved consideration of many others. In all, at the moment, 300 bridges are scheduled under the Ancient Monuments Acts, which does not mean, of course, that they may not be touched, but that before they are the Office of Works must be asked for its observations.

A to Z

Lettering: A Handbook of Modern Alphabets. By Percy J. Smith. London: A. & C. Black. Price 10s. 6d.

Among the modern alphabets illustrated, the clean-limbed sans-serif of Eric Gill, so familiar to readers of *THE ARCHITECTS' JOURNAL*, stands out, an aristocrat among patricians and plain plebians. Yet how little does it; how congenial is the job! A good deal of space is devoted to scripts intended for "writing" with pen or brush. The description of the technique and implements of this craft constitutes the most valuable portion of this book; there are also useful notes on stencilled and incised lettering. Mr. Smith knows his job from A to Z. In the more ornate styles some of the designs from abroad wear their originality with an air of distinction.

H. F.

Publication Received

Perspective. By Frank Medworth, London: Chapman and Hall. Price 15s.

WORKING DETAILS : 467

WINDOWS

• HOUSE IN FROGNAL, HAMPSTEAD •

E. MAXWELL FRY



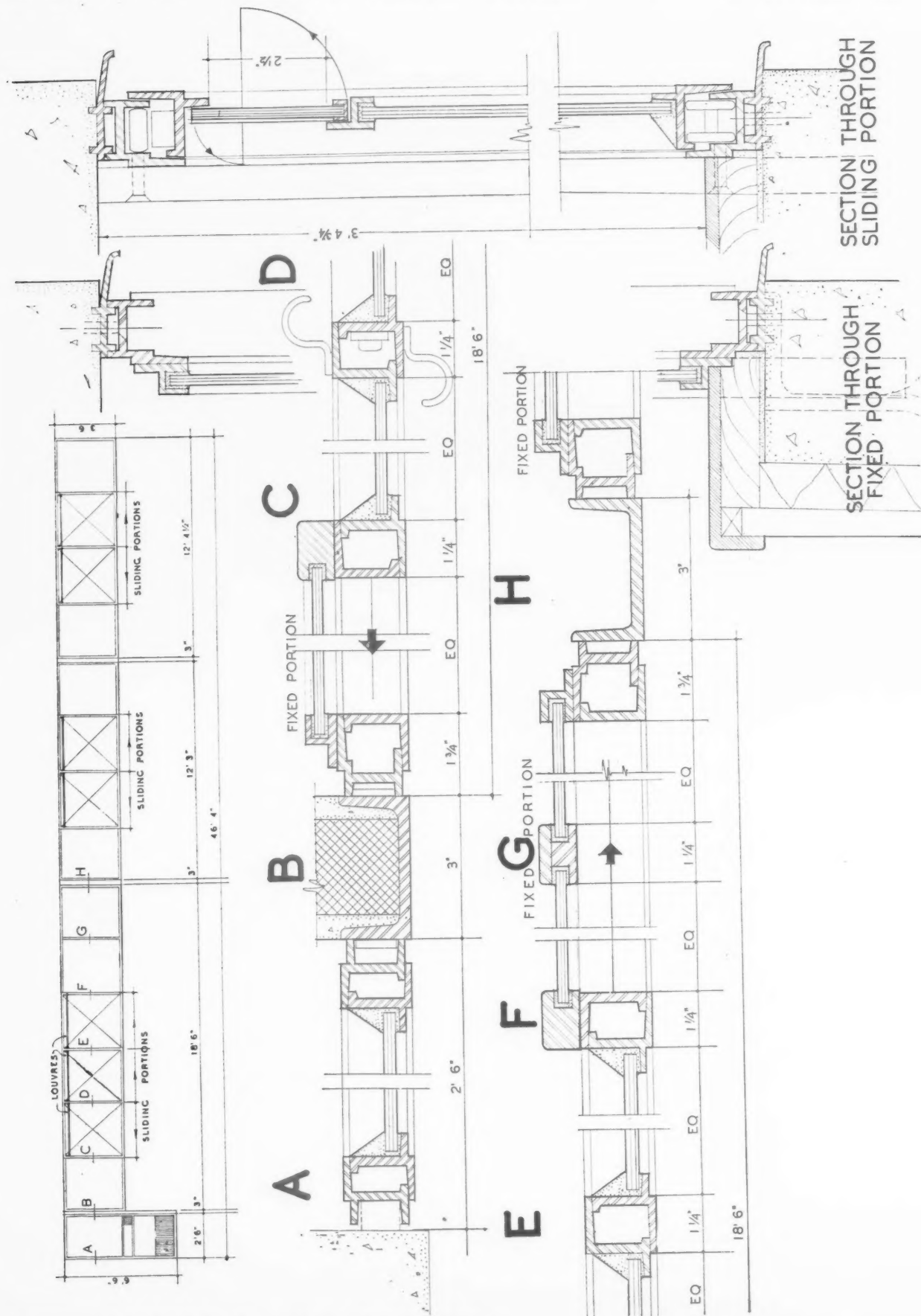
The windows illustrated above are arranged with alternate fixed and sliding units. At the top are arranged louvres for night ventilation without risk of draughts : when fully open these louvres will slide past the fixed frame without breakage. Elevations and sectional details are shown overleaf.

W O R K I N G D E T A I L S : 468

WINDOWS

HOUSE IN FROGNAL, HAMPSTEAD

E. MAXWELL FRY



WORKING DETAILS : 469

CANOPY

• ARLINGTON HOUSE, ST. JAMES'S, S.W.

• MICHAEL ROSENAUER



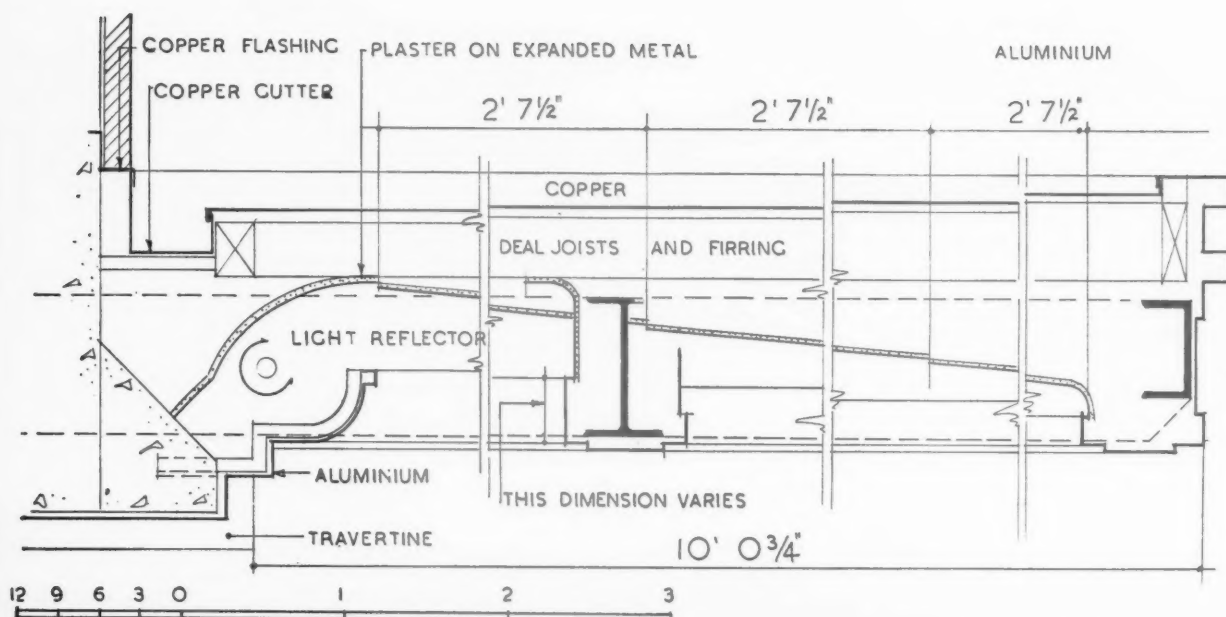
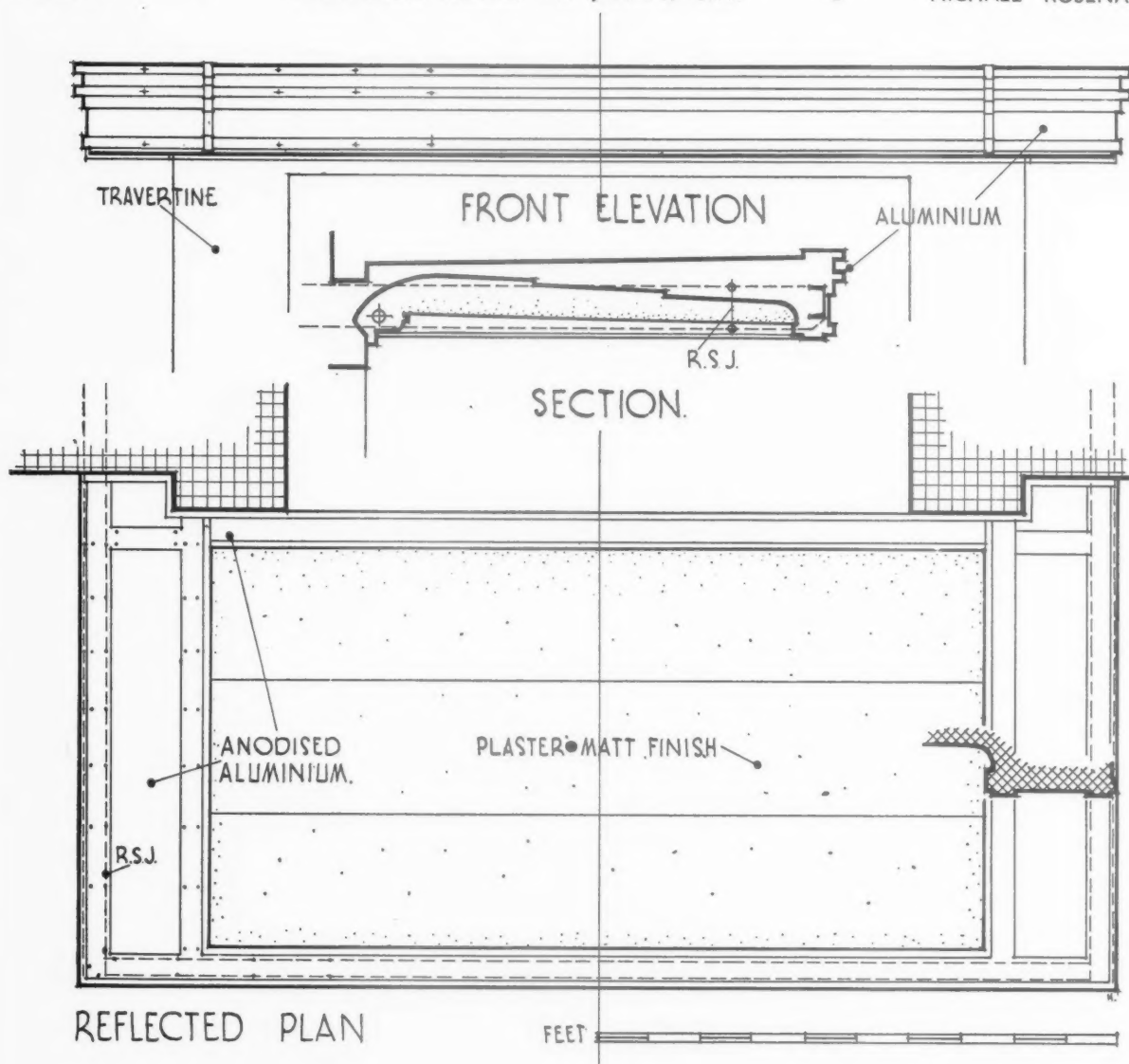
The entrance canopy illustrated above has a matt plaster soffit lit by a single line of tubular lamps concealed in a trough. Construction is simple, the sheet copper roof being carried on battens and deal joists which, in turn, rest on R.S.J.'s. A plan and sections are illustrated overleaf.

WORKING DETAILS : 470

CANOPY

• ARLINGTON HOUSE, ST. JAMES'S, S.W. •

MICHAEL ROSENAUER



Plan and sections of the canopy illustrated overleaf.

LAW REPORT

HOUSING ACT—FUNCTION OF THE MINISTER OF HEALTH

Horn v. Minister of Health.—Court of Appeal. Before Lords Justices Greer, Slesser and Scott.

THIS was an appeal by the Minister of Health from an order of Mr. Justice Swift, sitting in the King's Bench Division, quashing a compulsory purchase order under Section 64 of the Housing Act, 1925, made by the Sunderland Corporation on August 14, 1935.

The Solicitor-General, Sir T. O'Connor, K.C., and Mr. Valentine Holmes appeared for the Minister, and Mr. R. M. Montgomery, K.C., and Mr. H. A. Hill for the respondent.

The Solicitor-General stated that the order in question was the Sunderland (Durham Road) Housing Order, 1935, as confirmed by the Sunderland (Durham Road) Housing Confirmation Order, 1936, and it provided for the compulsory purchase of Springwell Farm. This property consisted of 102 acres of land near Sunderland belonging to Mr. Allen Horn, the present respondent. Part of the area was required for housing purposes and part of it for the extension of a public park. In the court below, Mr. Horn, who was the applicant, gave notice of objection on October 11, 1935, and on December 5 a public local inquiry was held. A week later a deputation, consisting of the mayor, town clerk and other officials of the Corporation, paid a visit to the Minister to discuss their general policy under the Housing Act. An affidavit had been made by the town clerk stating that at that meeting the order in question was not discussed. The next thing that happened was that the Minister, on January 11 last, confirmed the order.

The contention of Mr. Horn before Mr. Justice Swift was that it was a breach by the Minister of his duty, as a quasi-judicial

officer, to discuss any housing matter with representatives of the Corporation while the order in question was sub judice, and he accordingly asked that the order as confirmed by the Minister should be quashed.

After hearing both the arguments, Mr. Justice Swift came to the conclusion that there was no ground for saying that anyone concerned in the matter had acted in bad faith. That had not been alleged, but he thought there was an irregularity going to the root of the matter and he therefore quashed the order.

The Solicitor-General contended that on the facts of the case Mr. Justice Swift arrived at a wrong conclusion, as in the evidence before him it was conclusive that there had been no irregularity of any description.

After hearing Mr. Montgomery, the court allowed the appeal.

Lord Justice Greer, in his judgment, said he had no doubt that if at the interview at the Ministry any representation had been made by the deputation behind the back of Mr. Horn to persuade the Minister to confirm the compulsory purchase order, there would have been ample jurisdiction in that court to say that what was done was contrary to natural justice and to the Minister's powers. But he was convinced that nothing of the kind happened. There were a number of affidavits by those who were present at the interview in question, which clearly showed that not only was the order not discussed, but that no reference of any kind was made to it. The evidence pointed clearly to the fact that the interview was not concerned with the provision of houses, but with the question of slum clearance under the Housing Act, 1935. On this matter it was clearly part of the duties of the Corporation and the Minister to consult together as to action on the subject. Under those circumstances how could it be said that there was anything wrong in the action of either the

Corporation or the Minister. The appeal would therefore be allowed.

Lords Justices Slesser and Scott concurred.

HOUSING

Sir Kingsley Wood, the Minister of Health, addressed, recently, under the auspices of the Essex Rural Community Council, a meeting at Chelmsford of members and officers of local authorities on housing problems in the rural districts.

Sir Kingsley Wood said he did not pretend that the task of reconciling the claims of public health with those of rural beauty was altogether an easy one, but he deprecated the suggestion that the champions of health were Philistines or that those of beauty were sentimentalists. We should certainly rid ourselves of the notion that health and beauty in the countryside were doomed to perpetual opposition. There was a danger of looking at rural housing through urban spectacles, and it was important to appreciate and meet the countryman's own point of view on his housing problems. The primary concern of public housing policy must, of course, be the health of the tenants, and it was sometimes difficult to realize that a cottage which was outwardly picturesque and attractive was not necessarily a healthy home. In the rural areas there was still a large number of houses which were unfit for habitation and which could not, except perhaps at a wholly disproportionate cost, be made fit for habitation. There were, however, ample facilities which should be fully utilized to ensure that cottages which could be made fit should not be destroyed, and it was desirable where such a course was really practicable, to recondition an existing country cottage rather than demolish it. He had to confess considerable disappointment that greater advantage had not been



Dolau-Hirion Bridge, River Towy. From "The Ancient Bridges of Wales and Western England," reviewed on page 186.

taken of the Housing Rural Workers Acts. The Essex County Council was, he was glad to say, third among the Counties of England in order of achievement under those Acts. As to new building in the rural areas, it was just as important to create buildings of architectural merit as to refrain from destroying them. The beauty of the English countryside depended largely upon the use in new buildings of local materials, and on a design which was in harmony with the character of the older buildings.

Returns made to the Department of Health for Scotland by local authorities show that during the quarter ended June 30 last substantial progress continues to be made in Scotland with the improvement and reconstruction of dwellings for rural workers under the Housing (Rural Workers) Acts. During that period 1,096 applications were made for assistance by way of grant and local authorities approved 872 applications as compared with 640 in the previous quarter. At June 30, 2,863 dwellings were in course of reconstruction and 608 were completed during the quarter. Since the Act of 1926 was passed, 21,505 dwellings have been improved or reconstructed in Scotland with the assistance of grants amounting to £1,849,543. Provision is made in the Act for loans as well as grants, but to date only £22,222 have been advanced on loan in respect of 255 dwellings. Loans without grants have been made for three dwellings.

During June, 2,417 houses were contracted for by Scottish local authorities. This is the highest number recorded this year, as is also the figure of 18,106 for houses under construction by local authorities. The output of completed houses has dropped from 1,592 in May to 1,395 in June, while the number of houses that had been contracted for prior to June 30 but had not been begun at that date has risen from 6,098 at May 31 to 6,982.

Manufacturers' Items

So wide has become the appeal of coloured cement exteriors and interiors for almost every type of structure that any new publication issued which treats with the subject is welcomed by the designer and craftsman alike. The Cement Marketing Company, Ltd., who were largely responsible for popularising this form of decorative treatment through the introduction of Snowcrete and Cullamix, have recently issued a revised edition of their book, *Colour and Texture in Cement Rendering*.

It includes general specifications with full details for the preparation of the backings and the application of base and finishing coats, and by descriptive matter and illustrations, gives full instructions for producing the scraped texture, wood float finish, sand-faced texture, produced by the use of a sponge, stipple finish, white and coloured roughcast, and English cottage texture.

An inset printed on tinted paper calls special attention to the points to consider when selecting renderings for industrial areas. It is stated that experience has shown that for external renderings which are to be exposed to dirt-polluted atmospheres, coarse finishes such as the scraped texture or roughcast weather far more pleasantly than

the wood float or other evenly textured surfaces, and that under the same conditions, renderings of light colour such as pure white, ivory white or light cream are to be preferred to the darker shades such as yellows, reds, greens, etc.

When a sand-faced texture is desired, the final operation, it is stated, should be by means of a sponge or by scraping the surface with a straightedge to obviate float marks being left which, in time, catch the dirt, and are unsightly.

A most useful offer of service is extended to architects and builders. Details of prospective work with particulars as to local conditions may be submitted to the Cement Marketing Company Ltd.'s Technical Department, who will give an opinion as to the best colour scheme and texture to adopt and will arrange for an expert plasterer, fully conversant with the use of the Company's materials, to give advice on the site when the rendering work is about to be commenced.

Copies of the booklet are obtainable, free of charge, on application to the firm.

Considered from the point of view of size, a cable socket may appear to be a relatively unimportant accessory, but since it usually forms the connecting link between a conductor and a piece of electrical apparatus, its efficiency is as important as that of any other part of a circuit. Consequently the design of cable sockets deserves very careful consideration.

Although the new range of Henley cable sockets is not revolutionary in design, close attention to detail has made possible the attainment of an extremely high standard of efficiency.

The palm, which is drilled to take a suitable size of bolt, is of ample section and contact area for the current for which it is designed. The large, flat parallel faces of the palm enable two or more cable sockets to be bolted together in a straight line—a very useful feature which most engineers will readily appreciate. The metal at the junction of the palm and the barrel portion is carefully distributed to give maximum conductivity and mechanical strength without any possibility of overheating. The conductor bore is bell-mouthed at the top to facilitate the entry of the conductor. Moreover, the bottom of the bore is flat (instead of having the usual conical shape end) so that the conductor can go right home and make contact with the whole of the internal surface of the bore. The sweating operations are simplified as the socket is pot-tinned over.

In order to cater for all general requirements, Henley cable sockets have been standardized in three patterns: a straight pattern, a right-angle pattern, and an 18 degrees angle pattern, in which the barrel portion of the socket inclines at an angle of 18 degrees from the palm. The range of sizes available in each type is indicated by the following details of minimum and maximum sizes.

Corrigenda

We regret that in the advertisement of Messrs. Henry Hope and Sons on page xxx of our last issue, the name of the architects for the National Bank of Scotland, which was illustrated in the advertisement, was incorrectly given. The architects are

Messrs. Thomas P. Marwick and Son, F.A.R.I.B.A. Messrs. Henry Hope ask us to express their profound apologies for their error.

THE BUILDINGS ILLUSTRATED

HOUSES AT HAYWARDS HEATH (pages 175-178). The general contractors were J. L. Kier & Co., and the principal sub-contractors and suppliers included: Ruberoid Co., Ltd., roofing felt; Rexalite, dampcourses; Ascot Gas Water Heaters, Ltd., gas water heaters; Cooper, Bell & Co., electric wiring; Faithfull, plumbing; Shanks & Co., sanitary fittings; Vehag, door furniture; Coopers, casements; Burnhill, joinery; Mid-Sussex Supply Co., water supply.

PULLMAN COURT, STREATHAM HILL (pages 179 to 185). The general contractors were Rice and Sons, Ltd., and the principal craftsmen, sub-contractors and suppliers included: Helical Bar and Engineering Co., Ltd., engineers; Albion Iron Co. (London, 1918), Ltd., sanitary fittings; Anderson, Angell & Co., Ltd., electrical installation; Bell Bros. (Manchester, 1927), Ltd., water purification plant for swimming pool; Best and Lloyd, Ltd., electric light fittings; British Vitrolite Co., Ltd., vitrolite panelling; Walter Cowen, Ltd., plumbing; County of London Electric Supply Co., Ltd., lighting, heating and power installations; Cellulin Flooring Co., flooring; C. and T. Painters, Ltd., external and internal decoration; W. H. Gaze and Sons, Ltd., layout of grounds; Griffiths Bros. & Co. (London), Ltd., Ferrodor high gloss paint; Kandyia, Ltd., wardrobe and cupboard fittings; James Latham, Ltd., doors; Marryat and Scott, Ltd., lifts; Norris Warming Co., Ltd., heating and hot water installation; Osgood & Co., tiling; Pyrene Co., Ltd., fire appliances; Pilkington Bros., Ltd., mirrors; Ragusa Asphalt Paving Co., Ltd., roofing; W. H. Screeton, SFP colour finishes on all external and internal concrete surfaces; South Metropolitan Gas Co., Ltd., gas services; Williams and Williams, Ltd., metal casements; T. and R. Williamson, Ltd., distemper; Joseph Sankey and Sons, Ltd., pressed steel door frames, and metal trim; A. Goldstein & Co., Ltd., glazing; Masonite, Ltd., Presdwood; A. H. Herbert & Co., Ltd., bricks; Cement Marketing Co., Ltd., Blue Circle cement; Kerson Manufacturing Co., Ltd., electric switches; S. Berger and Sons, Ltd., ironmongery, door furniture; F. Braby & Co., Ltd., dust chutes; G. C. Harris, bronze sliding door gear; Hedin, Ltd., electric fires; Hatcham Rubber Co., Ltd., flooring; Ivo Co., Ltd., draught stabilizer; F. Knight & Co., Ltd., light fittings; Kandem Electrical Co., Ltd., light fittings; Morgan Brown & Co., Ltd., "Morbrow" refuse bins and sanitary fittings; MacAndrews and Forbes, Ltd., "Maftex" insulating board; Moler Products, Ltd., flue; Nash and Hull, Ltd., letter chutes; Nuway Manufacturing Co., Ltd., rubber mats; T. W. Palmer & Co., staircase railing; Rayoid, Ltd., w.c. seats; Sika-François, Ltd., waterproofing; Trussed Concrete Steel Co., Ltd., Hy-rib; Tannoy Products (Guy R. Fountain), Ltd., wireless relay installation; J. W. Gray & Son, Ltd., flagstaffs; Lockerbie Wilkinson, cycle racks.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICT (15 miles radius)

BECONTREE. Factory. The L.C.C. has sold a site in Oxlow Lane, Becontree, to Essex Crackers, Ltd., for the erection of a factory.

CAMBERWELL. Community Centre. The National Council of Social Service is to erect a community centre on the Comber estate, Camberwell.

FINSBURY. Rehousing. The L.C.C. is to clear areas in Bakers Row, Finsbury, and in Peartree Street, Lambeth, and provide rehousing at a cost of £79,500.

HACKNEY. Flats. The L.C.C. is to erect 840 flats in Pembury Road, Hackney, at a cost of £439,000.

HACKNEY. Extensions. The L.C.C. is to alter and enlarge the Hackney Institution at a cost of £34,700.

ISLINGTON. Flats. The L.C.C. is to build 30 flats in North Avenue, Islington, at a cost of £31,500.

KENTISH TOWN. Extensions. The L.C.C. is to improve and enlarge the St. Margaret's Hospital, Kentish Town, at a cost of £14,400.

LAMBETH. Maternity Block. The L.C.C. is to erect a new maternity block at the Lambeth Hospital, at a cost of £55,700.

MARYLEBONE. Alterations, etc. Plans passed by the B.C.: Layout, 46-52 Circus Road, for Mr. H. W. Binns; alterations, 100 Baker Street, for Messrs. J. Stanley Beard and Bennett; showrooms and offices, Oxford Mansions, Market Place, for Messrs. Robert Angell and Curtis; service flats, 42 Great Cumberland Place, for Mr. J. E. Watts; flats and shops, St. John's Wood Road, for Messrs. Connell, Ward and Lucas; showrooms, etc., 131-151 Great Titchfield Street, for Messrs. Waite and Waite; artisan dwellings, Harrow Street, Hereford Street and Daventry Street, for Messrs. Montagu Evans and Son; flats, Garden Road, for Mr. R. Sargeant; block of flats, 76-82 Albert Road, for Mr. R. J. H. Minty.

MILE END. Additions. The L.C.C. is to erect a new ward block at the Mile End Hospital, at a cost of £74,000.

NEW CROSS. Extensions. The L.C.C. is to extend the isolation accommodation at the South-Eastern Institution, New Cross, at a cost of £116,000.

PECKHAM. Dwellings. The L.C.C. is to develop 4½ acres at Peckham Rye for the erection of five blocks of dwellings, at a cost of £125,000.

PLUMSTEAD. Nurses' Home. The L.C.C. is to erect a nurses' home at the St. Nicholas Hospital, Plumstead, at a cost of £60,000.

STEPNEY. Dwellings. The L.C.C. is to erect dwellings for 350 persons in Garford Street, Stepney, at a cost of £42,000.

SOUTHERN COUNTIES

BRIGHTON. Houses and Flats. The Corporation is to erect houses and flats on the East Moulsecomb estate, at a cost of £58,900.

BRIGHTON. Houses, etc. Plans passed by the Corporation: Alterations and additions, 16 Market Street, for Mr. Joseph Jelley; alterations, St. James Restaurant, Steine Street, for Messrs. Edlins, Ltd.; six houses, Peacock Lane, for Mr. Samuel Owen; four houses, Overhill Drive, for Mr. F. J. Wellman; extensions, Tudor Close Hotel, Dean Court Road, for Rottingdean Hotel Co., Ltd.; four houses, Church Close, for Mr. S. J. Kesteven; alterations and additions, 3-4 Preston Street, for Mr. Mark Hauser; 24 flats, Bonchurch Road, for Mr. George Ayling; alterations and additions, 24 Old Steine, for Aqua House Estate Co.; four houses, Friar Crescent, for Mr. C. W. Comber.

DORKING. Adaptation. Preliminary proposals, estimated to cost £20,000, for the adaptation of the Dorking Institution for public health purposes, has been approved by the Surrey Public Assistance Committee.

EASTBOURNE. Extensions. The Corporation is considering plans by the borough engineer for

extensions at the town hall, at a cost of £54,000.

EASTBOURNE. Houses. The Corporation is seeking sanction to borrow £14,890 for the erection of 34 houses in Lottridge Drive.

LEATHERHEAD. Cinema. The U.D.C. has provisionally approved plans submitted by the Leatherhead Property Trust for a cinema proposed to be erected in Church Street.

SOUTH WESTERN COUNTIES

BRISTOL. Extensions. The Corporation has approved a scheme prepared by Mr. G. C. Lawrence, architect, for extensions at Southmead Hospital, at a cost of £133,042.

BRISTOL. Houses. The Corporation proposes to erect 1,350 houses to abate overcrowding.

CHELTENHAM. Houses. The Corporation is to arrange for the erection of a further 150 houses on the Whaddon Farm estate.

CHELTENHAM. Garages. Plans passed by the Corporation: Garages and flat, Suffolk Square, for Cirencester Benefit Society; additions, racecourse, Prestury, for Cheltenham Steeplechase Co., Ltd.; shop and house, Upper Dowdeswell, for Mr. Adams; six houses, Little Herberts Lane, for Mrs. M. M. Cauden.

CHELTENHAM. Cinema. Mr. J. Owen Bond, architect, has prepared plans for the erection of a cinema in High Street, Cheltenham.

HEREFORD. Church. The Baptist trustees are negotiating with the Hereford Corporation for a site on the Hinton Court estate for the erection of a church.

HEREFORD. Cinema, etc. Plans passed by the Corporation: Cinema, café and shops, Commercial Road, for Messrs. Kemp and Tasker, architects, on behalf of Oxford and Berks Cinemas, Ltd.; rebuilding, Merton Hotel, Commercial Road, for Messrs. Arnold Perrett & Co., Ltd.; council school, Hinton Court, for Messrs. W. W. Robinson and Son; hall extension, Moorfield Street, for Messrs. Griffith and Jones; workshops, Bluecoat School, for Mr. G. C. Rowe; houses, Ledbury Road and Bodenham Road, for Messrs. Rogers and Davies, Ltd.; 10 houses, Ross Road, for Messrs. C. Jewell and Son; extensions, Liberal Club, Widemarsh Street, for Mr. H. Skyrme; eight cottages, Wellington Place, for Mr. A. C. Lane; four houses, Greyfriars Avenue, for Mrs. Williams; alterations and additions, Ship Inn, Ross Road, for Hereford and Tredegar Brewery Co., Ltd.; shop and house, Upper Ledbury Road, for Messrs. Bettington and Son.

HEREFORD. Extensions. The Hereford County Education Committee has prepared plans for extensions at the School of Art, Castle Green, Hereford.

PAIGNTON. Houses, etc. Plans passed by the U.D.C.: Six houses, Redburn Road, for Mr. A. Chippindale; two houses, Broadlands Road, for Mr. F. Norman; two bungalows, Hillside Road, for Messrs. W. H. Mead and Sons; two bungalows, Marlton Road, for Mr. C. M. Baker; four houses, King's Ash Road, for Mr. W. H. Webber; two bungalows, Luscombe Crescent, for Messrs. Lewis and Back; eight bungalows, South Park estate, for Messrs. Lewis and Wills; two bungalows, King's Ash Road, for Mr. G. W. Cornelius.

PAIGNTON. Houses. Messrs. Eastley & Co. are to erect 97 houses on an estate at Ailescombe Road, Paignton.

EASTERN COUNTIES

GORLESTON. Houses, etc. Plans passed: Two houses, Addison Road, for Messrs. R. H. Carter and Son, Ltd.; two houses, Colomb Road, for Messrs. H. R. Middleton & Co., Ltd.; alterations and additions, The Grange, for Gorleston Hospital Committee; six bungalows, Stanley Avenue, for Mr. W. West; two houses, Lowestoft Road, for Messrs. Williams and Millichamp; two houses, Burgh Road, for Mr. L. Cooper; shop and house, Beccles Road, for

Mr. H. T. Fryer; two bungalows, Burgh Road, for Messrs. H. Bedwell and Son.

YARMOUTH. Houses. The Corporation is to prepare a scheme for the erection of 50 houses to relieve overcrowding.

MIDLAND COUNTIES

BIRMINGHAM. Offices. The Corporation is to proceed with the erection of administrative offices on the civic centre site to a cost of £259,550. The architect is Mr. T. Cecil Howitt.

BIRMINGHAM. Welfare Centres. The Corporation is to erect welfare centres at Alum Rock, on the Kettlehouse estate and in Dart Street.

BIRMINGHAM. Cinema, etc. The Corporation has leased a site at the corner of Broad Street and Cumberland Street to Odeon Theatres, Ltd., for the erection, at a cost of £35,000, of a private cinema, shops and offices.

BIRMINGHAM. Factory. The Corporation has leased land at Coventry Road, Hay Mills, for the erection of factory premises to Messrs. David Harcourt, Ltd.

BIRMINGHAM. Houses. The Corporation is to erect from 1,000 to 1,500 houses to abate overcrowding.

BIRMINGHAM. Fire Station. The Corporation is to erect a fire station at Erdington at a cost of £20,800 from plans prepared by Mr. T. Wynne Thomas, who secured first premium in the recent competition.

BIRMINGHAM. Houses. The First National Housing Trust, Ltd., are to erect 3,392 houses on the Pheasey Farm estate, in the area of the Birmingham Corporation and the Aldridge U.D.C.

BIRMINGHAM. Housing. The Corporation is purchasing 130 acres at Tyburn and 20 acres at Selly Oak for housing schemes.

BIRMINGHAM. Extensions. The Corporation is to extend the Marston Green Homes, at a cost of £13,800.

COVENTRY. Houses. The Corporation is to erect 112 houses on the Radford area at a cost of £43,790.

COVENTRY. Houses. The Corporation is to erect 200 houses to abate overcrowding on the Pinley estate.

HANLEY. Alterations, etc. Plans passed: Alterations, Bird-in-the-Hand P.H., Etruria Vale, for Messrs. Ind, Coope and Allsopp, Ltd.; 10 houses, off Hollies Street, for Messrs. Tideswell Bros.; alterations, City Arcade for Bon Marché, Ltd.; 19 houses, Hunter Street, for Messrs. Salt and Trice; two shops and extensions at five shops, Broad Street, for Mr. F. Petter; two houses, Etruria Vale Road, for Mr. J. Whittaker; six houses, Bucknall High Street, for Mr. J. Beresford; two houses, Leek Road, for Mr. R. J. Cooper; 14 houses, Lomas Street, for Mr. J. H. Edwards.

STOKE-ON-TRENT. Alterations, etc. Plans passed by Corporation: Alterations, Wheatsheaf Hotel, Campbell Place, for Messrs. Bass, Ratcliffe and Gretton, Ltd.; 12 houses, Hunters Croft, for Mr. W. C. Beech; extensions, Salopian works, Victoria Road, for Messrs. Morley, Fox & Co., Ltd.; four houses, Holly Bush Farm estate, for Mr. B. J. Brittle; alterations and additions, Queen's Pottery, Sutherland Road, for Messrs. Smith and Barnett, Ltd.; 28 houses off Belgrave Road for Messrs. Holloway & Co.; house off Trentham Road for Mr. C. Kinson; alterations, Old House at Home P.H., Hartshill, for Parkers (Burslem Brewery), Ltd.; two houses, Kingsfield Oval, for Messrs. Kent and Grant; two houses, Highfield Avenue, for Messrs. Ball and Sons; two houses, Robinson Road, for Mr. J. E. Robinson; two houses, Caverswell Road, for Messrs. Corbishley and Bartlett; 20 houses, off Stone Road, for Mr. W. Ball; golf club house, Greenfield Road, Meir, for Mr. A. V. Shenton.

WALSALL. Abattoir. The Corporation now recommends the preparation of a scheme for the provision of a central abattoir at Birchills.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for

labourers. The rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I	II				I	II				I	II
			s.	d.	s.	d.		s.	d.	s.	d.		s.	d.
A ₁	ABERDARE	S. Wales & M.	1	5 1/2	1	1 1/2	A ₁	1	5 1/2	1	1 1/2	A	1	6 1/2
A ₁	Aberdeen	Scotland	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A ₁	Abergavenny	S. Wales & M.	1	6	1	1 1/2	A ₁	1	6	1	2	A	1	6 1/2
A ₁	Abingdon	S. Counties	1	5	1	0 1/2	A ₁	1	5	1	1 1/2	A ₁	1	6 1/2
A ₁	Accrington	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A ₁	Addlestone	S. Counties	1	5	1	1 1/2	A ₁	1	5	1	1 1/2	A	1	6 1/2
A ₁	Adlington	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Aldridge	Scotland	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
C	Aldeburgh	E. Counties	1	2 1/2	1	1 1/2	B	1	2 1/2	1	1 1/2	A	1	6 1/2
A	Altrincham	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
B ₁	Appley	N.W. Counties	1	3	1	1 1/2	A ₁	1	3	1	1 1/2	A	1	6 1/2
A	Ashton-under-Lyne	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
B ₁	Aylesbury	S. Counties	1	4	1	0	A ₁	1	4	1	0	A	1	6 1/2
B ₁	BANBURY	S. Counties	1	4	1	0	A	1	4	1	0	A	1	6 1/2
B ₁	Bangor	N.W. Counties	1	4	1	0	A	1	4	1	0	A	1	6 1/2
A ₁	Barnard Castle	N.E. Coast	1	5	1	0 1/2	A	1	5	1	0 1/2	A	1	6 1/2
A ₁	Barnsley	Yorkshire	1	6 1/2	1	2	A	1	6 1/2	1	2	A	1	6 1/2
A ₁	Barnstaple	S.W. Counties	1	4 1/2	1	0 1/2	A ₁	1	4 1/2	1	0 1/2	A	1	6 1/2
A	Barrow	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Barry	S. Wales & M.	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
B ₁	Basingstoke	S.W. Counties	1	4 1/2	1	0	A ₁	1	4 1/2	1	0	A	1	6 1/2
A ₁	Bath	S.W. Counties	1	5 1/2	1	1 1/2	A ₁	1	5 1/2	1	1 1/2	A	1	6 1/2
A	Batley	Yorkshire	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Bedford	E. Counties	1	5 1/2	1	1 1/2	A ₁	1	5 1/2	1	1 1/2	A	1	6 1/2
A ₁	Berwick-on-Tweed	N.E. Coast	1	5 1/2	1	1 1/2	A ₁	1	5 1/2	1	1 1/2	A	1	6 1/2
A ₁	Bewdley	Mid. Counties	1	5 1/2	1	1 1/2	A	1	5 1/2	1	1 1/2	A	1	6 1/2
B ₁	Bicester	S. Counties	1	3	1	1 1/2	A	1	3	1	1 1/2	A	1	6 1/2
A	Birkenhead	N.W. Counties	1	7 1/2	1	2 1/2	A	1	7 1/2	1	2 1/2	A	1	6 1/2
A	Birmingham	Mid. Counties	1	6 1/2	1	2	A	1	6 1/2	1	2	A	1	6 1/2
A ₁	Bishop Auckland	N.E. Coast	1	6	1	1 1/2	A	1	6	1	1 1/2	A	1	6 1/2
A	Blackburn	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Blackpool	N.W. Counties	1	6 1/2	1	2	B ₁	1	6 1/2	1	2	A	1	6 1/2
A	Blyth	N.E. Coast	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
B ₁	Bognor	S. Counties	1	4	1	0	B ₁	1	4	1	0	A	1	6 1/2
A	Bolton	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A ₁	Boston	Mid. Counties	1	5	1	0 1/2	A ₁	1	5	1	0 1/2	A	1	6 1/2
A ₁	Bournemouth	S. Counties	1	5 1/2	1	1 1/2	A ₁	1	5 1/2	1	1 1/2	A	1	6 1/2
B ₁	Bovey Tracey	S.W. Counties	1	3 1/2	1	1 1/2	A	1	3 1/2	1	1 1/2	A	1	6 1/2
A	Bradford	Yorkshire	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A ₁	Brentwood	E. Counties	1	6	1	1 1/2	A ₁	1	6	1	1 1/2	A	1	6 1/2
A	Bridgend	S. Wales & M.	1	6 1/2	1	2	A	1	6 1/2	1	2	A	1	6 1/2
B	Bridgewater	S.W. Counties	1	4 1/2	1	0 1/2	A	1	4 1/2	1	0 1/2	A	1	6 1/2
A ₁	Bridlington	Yorkshire	1	6 1/2	1	1 1/2	A ₁	1	6 1/2	1	1 1/2	A	1	6 1/2
A	Brighouse	Yorkshire	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A ₁	Brighton	S. Counties	1	5 1/2	1	1 1/2	B ₁	1	5 1/2	1	1 1/2	A	1	6 1/2
A	Bristol	S.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
B	Brixham	S.W. Counties	1	3 1/2	1	1 1/2	A ₁	1	3 1/2	1	1 1/2	A	1	6 1/2
A	Bromsgrove	Mid. Counties	1	5 1/2	1	1 1/2	A ₁	1	5 1/2	1	1 1/2	A	1	6 1/2
B	Bromyard	Mid. Counties	1	3	1	1 1/2	A ₁	1	3	1	1 1/2	A	1	6 1/2
A	Burnley	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Burslem	Mid. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Burton-on-Trent	Mid. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Bury	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Buxton	N.W. Counties	1	6 1/2	1	1 1/2	A ₁	1	6 1/2	1	1 1/2	A	1	6 1/2
A ₁	CAMBRIDGE	E. Counties	1	6	1	1 1/2	A	1	6	1	1 1/2	A	1	6 1/2
B ₁	Canterbury	S. Counties	1	4	1	0	A ₁	1	4	1	0	A	1	6 1/2
A	Cardiff	S. Wales & M.	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Carlisle	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
B	Carmarthen	S. Wales & M.	1	4 1/2	1	0 1/2	A ₁	1	4 1/2	1	0 1/2	A	1	6 1/2
B	Carnarvon	N.W. Counties	1	4 1/2	1	0 1/2	A ₁	1	4 1/2	1	0 1/2	A	1	6 1/2
A	Carnforth	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Casleford	Yorkshire	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A ₁	Chatham	S. Counties	1	5	1	0 1/2	A ₁	1	5	1	0 1/2	A	1	6 1/2
A ₁	Chelmsford	E. Counties	1	5	1	0 1/2	A ₁	1	5	1	0 1/2	A	1	6 1/2
A ₁	Cheltenham	S.W. Counties	1	5	1	0 1/2	A ₁	1	5	1	0 1/2	A	1	6 1/2
A	Chester	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Chesterfield	Mid. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
B ₁	Chichester	S. Counties	1	4	1	0	A ₁	1	4	1	0	A	1	6 1/2
A	Chorley	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
B ₁	Cirencester	S. Counties	1	4	1	0	A ₁	1	4	1	0	A	1	6 1/2
A	Clietheroe	N.W. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Clydebank	Scotland	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A ₁	Coalville	Mid. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A ₁	Colchester	E. Counties	1	5 1/2	1	1 1/2	A ₁	1	5 1/2	1	1 1/2	A	1	6 1/2
A ₁	Colne	N.W. Counties	1	6	1	1 1/2	A ₁	1	6	1	1 1/2	A	1	6 1/2
A ₁	Colwyn Bay	N.W. Counties	1	5 1/2	1	1 1/2	A ₁	1	5 1/2	1	1 1/2	A	1	6 1/2
A ₁	Consett	N.E. Coast	1	6 1/2	1	1 1/2	A ₁	1	6 1/2	1	1 1/2	A	1	6 1/2
A ₁	Conway	N.W. Counties	1	6 1/2	1	1 1/2	A ₁	1	6 1/2	1	1 1/2	A	1	6 1/2
A	Covey	Mid. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Crewe	N.W. Counties	1	5 1/2	1	1 1/2	A ₁	1	5 1/2	1	1 1/2	A	1	6 1/2
A	Cumberland	N.W. Counties	1	5	1	0 1/2	A ₁	1	5	1	0 1/2	A	1	6 1/2
A	DARLINGTON	N.E. Coast	1	6 1/2	1	2	A	1	6 1/2	1	2	A	1	6 1/2
A	Darwen	N.W. Counties	1	6 1/2	1	2	A	1	6 1/2	1	2	A	1	6 1/2
B	Deal	S. Counties	1	4	1	0	A ₁	1	4	1	0	A	1	6 1/2
A ₁	Denbigh	N.W. Counties	1	5	1	0 1/2	A ₁	1	5	1	0 1/2	A	1	6 1/2
A	Derby	Mid. Counties	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
A	Dewsbury	Yorkshire	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
B	Didcot	S. Counties	1	4 1/2	1	0 1/2	A ₁	1	4 1/2	1	0 1/2	A	1	6 1/2
A ₁	Doncaster	Yorkshire	1	6 1/2	1	2	A ₁	1	6 1/2	1	2	A	1	6 1/2
B ₁	Dorchester	S.W. Counties	1	4	1	0	A ₁	1	4	1	0	A	1	6 1/2
A	Driffield	Yorkshire	1	5	1	0 1/2	A ₁	1	5	1	0 1/2	A	1	6 1/2
A ₁														

PAINTER		ℓ	s.	d.
White lead in 1 cwt. casks	" "	cwt.	2	8
Linseed oil	" "	gall.	2	3
Boiled oil	" "	"	2	9
Turpentine	" "	"	4	1
Patent knotting	" "	"	14	0
Distemper washable	" "	cwt.	2	6
ordinary	" "	"	2	0
Whitening	" "	"	4	0
Size, double	" "	firkin	3	0
Color varnish	" "	gall.	13	0
Flat varnish	" "	"	14	0
Outside varnish	" "	"	16	0
White enamel	" "	"	15	0
Ready mixed paint	" "	"	13	6
Brunswick black	" "	"	7	6

. d.
1911

7
10
6
8
4
0
4

9
6
1
4
9
3
2
9
1
3
0
0

. d.
6 6
0 6
0 0
7 6

11
0 0

. d.
8 6
2 0
7 6
3 3
3 3
4
4
. d.

6
9

1 0
1 0
1 6
2 9
1 2
1 3
5 6

. d.
2 0
2 9
1 3

1 5
1 7
1 2
1 9
1 11
2 9
4
6
11
3
3 6
4 6
17 6
2 6
8

. d.
6
7
1 2
7
2
4

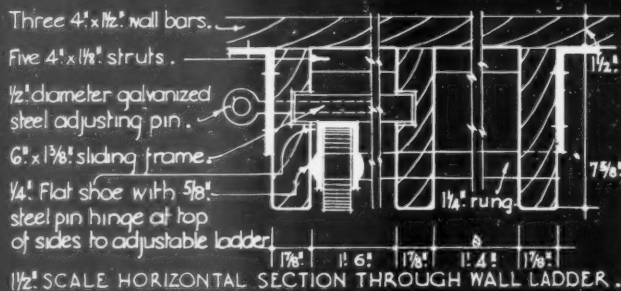
. d.
6
9
1 1

3 3
3 6
3 0
5 6
1 11
4 6
1 2
2 0
2 9

TH

IN
SIR

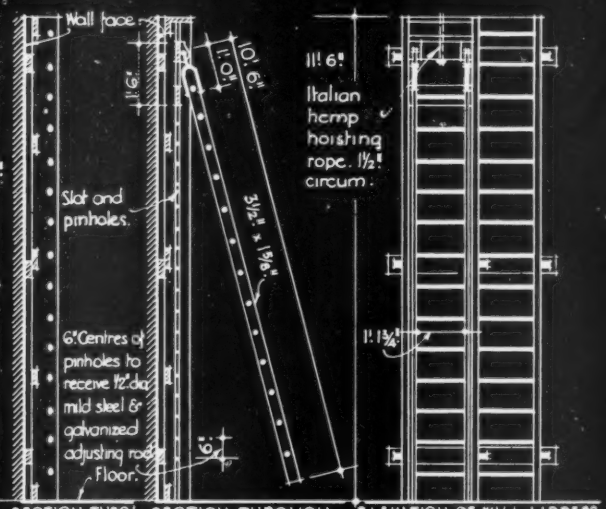
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION



1 1/2" SCALE HORIZONTAL SECTION THROUGH WALL LADDER.

WALL LADDER APPARATUS:

Apparatus consists of one fixed ladder of 15 rungs and one adjustable ladder of 13 rungs.
Rungs should be tough selected English Ash running through sides and be wedged and pinned with wooden pins.
Sides of adjustable ladder to be of Pitch Pine and fitted with a 1 1/4" x 3/16" Mild Steel shoe and fixed by a 3/8" diameter steel pin riveted over to form a hinge. Ladder to be screwed to a Sliding Frame of 6" x 1 3/8" rails and stiles morticed and tenoned together. Uprights to be tied with four battens dovetailed and screwed and top or cover board dovetailed in. Bored holes numbered with 3/4" numerals from the floor upwards.



SECTION THROUGH FIXED LADDER. SECTION THROUGH ADJUSTABLE LADDER. ELEVATION OF WALL LADDERS. ADJUSTABLE - FIXED. SCALE OF ABOVE SECTIONS AND ELEVATION 4 FEET TO 1 INCH.

SUSPENDED VERTICAL WINDOW LADDER:

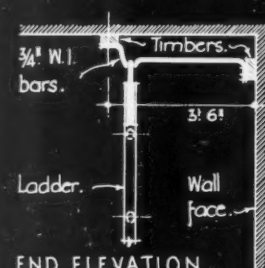
Ladders should be six openings wide and full height of room less suspension track.

They are suspended from 3/4" W.I. bars cemented into the walls or bolted to timbers on walls and ceiling.

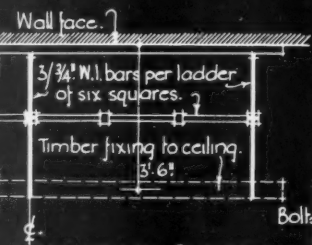
Framing to be morticed, tenoned, glued & wedged, with a 2" screw to each tenon.

All corners to be rounded.

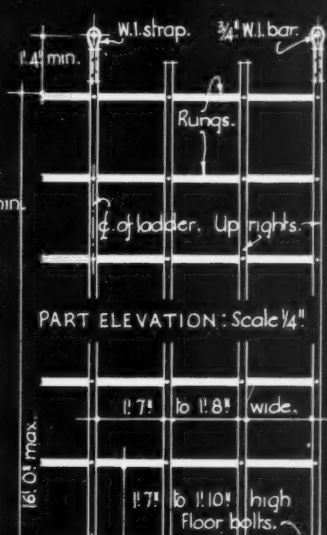
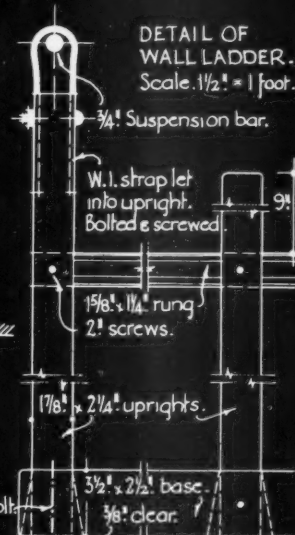
Oval bars to be in one length, screwed at uprights, wedged, glued, morticed and tenoned to the outer frame.



END ELEVATION.



HALF PLAN. Scale 1/4" = 1'



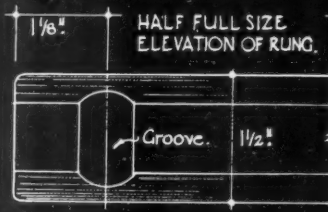
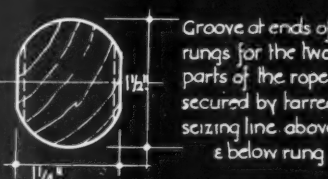
ROPE LADDERS.

The 14 rungs to each ladder should be tough selected English Ash free from all defects and spaced at 12" centres.

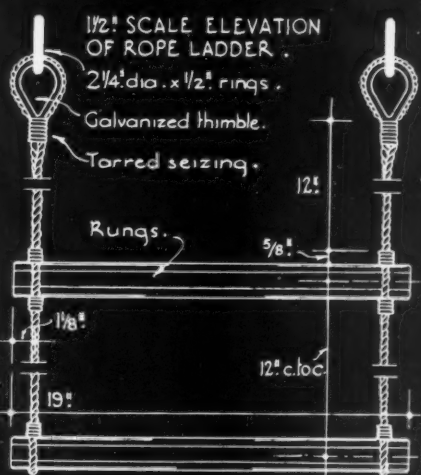
Each rope to be continuous, ends long spliced at lower end of ladder and be fitted with a G.I. Thimble carrying a 2 1/4" dia. x 1/2" iron ring, with the two parts secured by tarred seizing where shown.

Ladders to swing 2" clear of floor and to be suspended 2 feet apart.

HALF FULL SIZE SECTION OF RUNG.



3" SCALE SIDE ELEVATION OF RUNG.



Data from Board of Education Physical Training Series No. 14, by permission of the Controller, H. M. Stationery Office.

INFORMATION SHEET: GYMNASIUMS: 4: DETAILS OF ADJUSTABLE, WINDOW AND ROPE LADDERS.

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC 1. Elected 2. Payne

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 388 •

GYMNASIUMS—IV

Vertical Window Ladder

The ladder should be six openings (i.e., six squares) wide and extend from floor to ceiling (allowance being made for suspension), but if the ceiling is more than 16 feet above the floor the ladder must be limited to 16 feet in height.

The ladder is suspended from bracket type sliding bars of $\frac{3}{4}$ -inch diameter wrought iron. These should be either cemented into the wall or bolted to timbers of suitable dimensions (generally 12 feet long and 4 inches by $2\frac{1}{2}$ inches on the ceiling and 6 inches by 2 inches on the wall). Care must be taken to ensure that the ceiling is sufficiently strong to carry the outer timber to which the sliding bars are fixed. Not less than three sliding bars should be provided for a ladder six squares wide, one for each of the outer uprights and one for the centre upright. In cases where the ceiling is more than 16 feet above the floor, the sliding bars must be securely stayed upwards and sideways by $\frac{3}{4}$ -inch diameter wrought iron stays. Steel wire guy ropes should not be used as the vibration of the apparatus in use is apt to loosen the strainers and cause insecurity or bring the apparatus out of alignment.

Wrought iron straps must be let into each of the two uprights and the centre upright, being securely bolted and screwed to them.

If the straps are fitted with wheels, an effective stopping mechanism must be provided to ensure that the apparatus remains firmly in position (i.e., about 3 feet 6 inches from the wall face) during exercises. Wheels, however, need not necessarily be used except in the case of heavy or oversize window ladders, and when they are not provided, the straps should fall into suitably shaped depressions in the ends of the sliding bars remote from the wall so that the bottom of the ladder when in use hangs clear of the floor by about $\frac{3}{4}$ -inch.

At the bottom ends of each of the three uprights a push bolt is fitted to shoot into a plate let flush in the floor. Suitable stops and arrangements for fastening the ladder should be provided at the wall when the ladder is not in use.

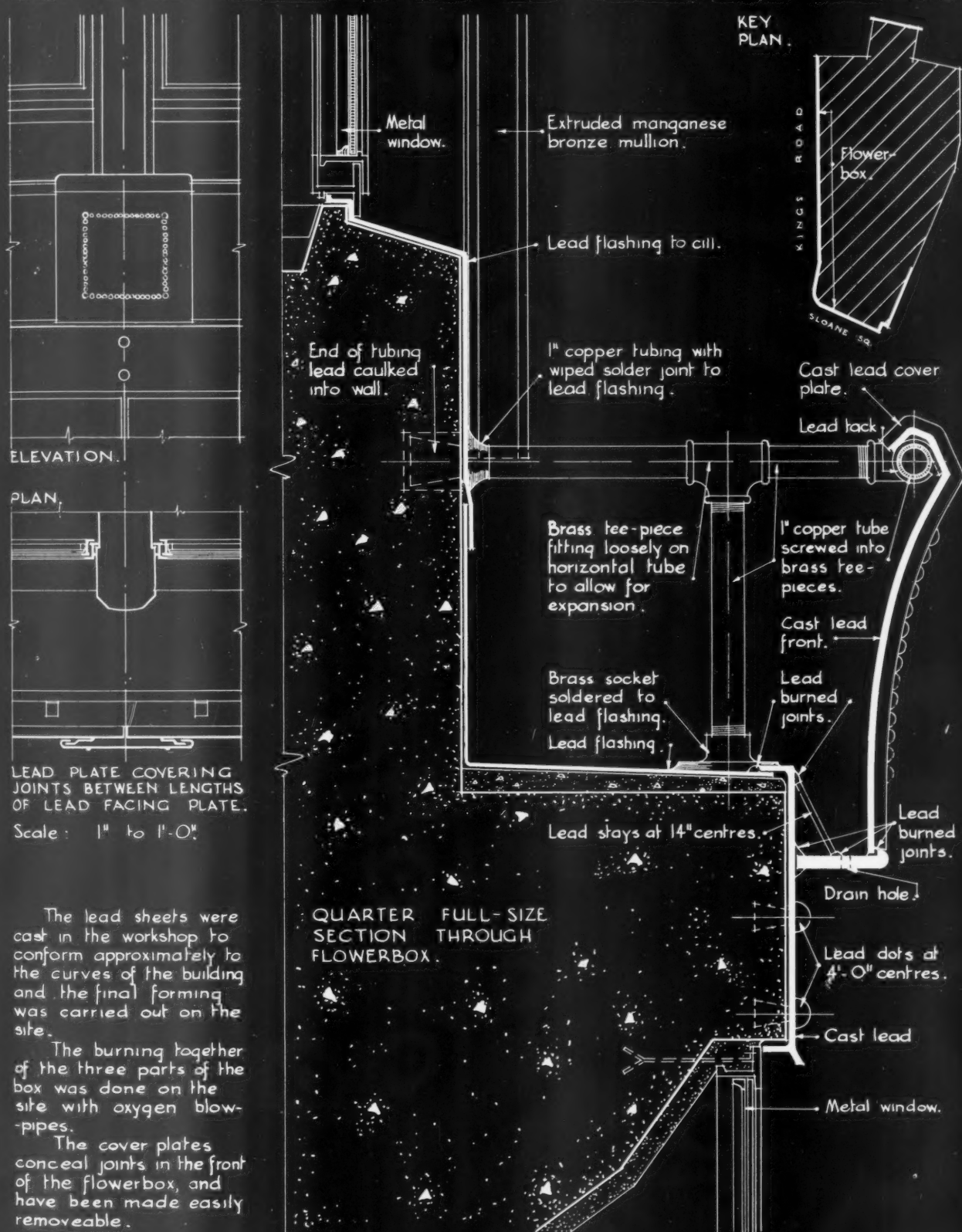
The uprights should be morticed through, glued and wedged into the bottom cross rail, and a 2-inch iron screw fitted through each tenon, and the whole of the framing should have well-rounded corners. The oval bars should be in one piece, passing right through the intermediate uprights and should be of the same sectional dimensions as those for wall bars. They are either shouldered, tenoned, glued and wedged through the outer uprights, or they may be carefully fitted three-quarter way into the upright. A 2-inch iron screw should be inserted to hold the oval bars in position at every point on each upright.

A suitable size for the uprights is $2\frac{1}{2}$ inches by $1\frac{7}{8}$ inches and for the bottom rail about 3 inches by $2\frac{1}{2}$ inches. The uprights carrying the travelling gear must, of course, be the full length of the ladder; the other uprights may be shorter, projecting not less than 9 inches above the topmost horizontal bar. The topmost horizontal bar should be at least 16 inches below the level of the iron sliding bar.

The open squares should be 19 inches or not more than 20 inches wide and between 19 inches and 22 inches high.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

DETAILS OF LEAD FLOWERBOX TO PETER JONES' PREMISES, SLOANE SQUARE, S.W.



The lead sheets were cast in the workshop to conform approximately to the curves of the building and the final forming was carried out on the site.

The burning together of the three parts of the box was done on the site with oxygen blow-pipes.

The cover plates conceal joints in the front of the flowerbox, and have been made easily removable.

Information from The Lead Sheet & Pipe Development Council.

INFORMATION SHEET: CONTINUOUS LEAD FLOWERBOX: 24.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1. *Alan A. Bayne*

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 389 •

PLUMBING

Subject : Flower Boxes

This Sheet gives details of the form and construction of the flower box installed at the first floor level of the new premises for Messrs. Peter Jones in Sloane Square, London.

Architects :

Messrs. Slater and Moberly, FF.R.I.B.A.

Associated Architect :

W. Crabtree, Esq., A.R.I.B.A.

Consultant Architect :

Professor C. H. Reilly, F.R.I.B.A.

Craftsmen for the flower box :

Messrs. Forge, Ltd., 2 York Mews South, W.1.

As shown by the key plan, the flower box runs continuously round the building at first floor cill level from the southern to the northern corner of the building. It is proposed at some future date to extend the box to its full length of approximately one thousand feet.

Leadwork

The box is formed of cast and sheet lead, the front and base being cast to approximately the curve required, and worked on the site to the exact shape. The sheet lead lining was worked to shape in the usual way with lead burned seams wherever required.

Lead Alloy

The metal for the cast lead work was alloyed with a small percentage of antimony and a small amount of silver to obtain additional strength and hardness.

Construction

A tubular metal frame has been provided throughout to support and give rigidity to the lead front to the box.

This frame consists of a continuous tubular rail supported at intervals on tubular brackets built into the wall and fixed to the base of the box by soldering to the lead work.

Information from : The Lead Sheet and Pipe Development Council.

Address : Golden Cross House,
Duncannon Street, W.C.2.

Telephone : Whitehall 3715.

S

TH

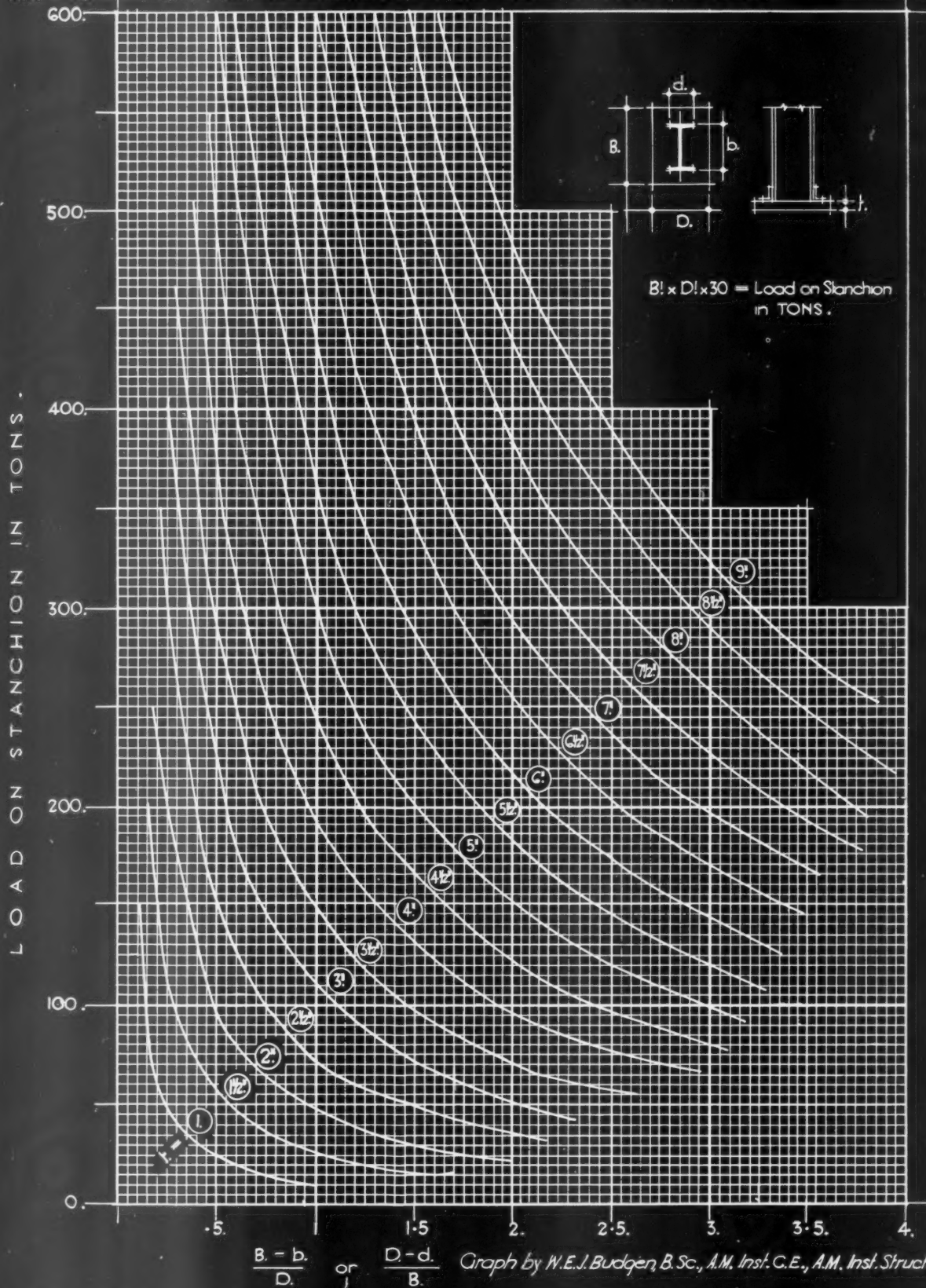
GR
AC

·
Z
TO
Z
O
H
C
N
S
T
Z
O
D
A
C
I

IN
SIR

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

GRAPH GIVING THICKNESS OF BLOOM BASE REQUIRED FOR ANY STANCHION LOAD, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CODE OF PRACTICE 1932.



INFORMATION SHEET : STRUCTURAL STEELWORK : BLOOM BASES.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI *Osca. & Bayne.*

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 390 •

L.C.C. STEELWORK CODE

Column Bases

Gusset bases with grillages have now been largely displaced by bloom or slab bases. This is largely due to the saving in depth of the foundation, since the top of the concrete base can be much nearer the floor level when there are no gussets to be covered.

The graph on the front of this sheet has been prepared in accordance with the rules given in Clause 23 of the Code of Practice for the use of Structural Steel, and enables the necessary thickness of a rectangular base to be determined for any load. The plan dimensions of the base are determined so that the pressure on the reinforced concrete base does not exceed 30 tons per sq. ft.

The top of the base and the underside of the column must be machined dead square, since all the load is assumed to be transmitted from the column to the base by direct bearing.