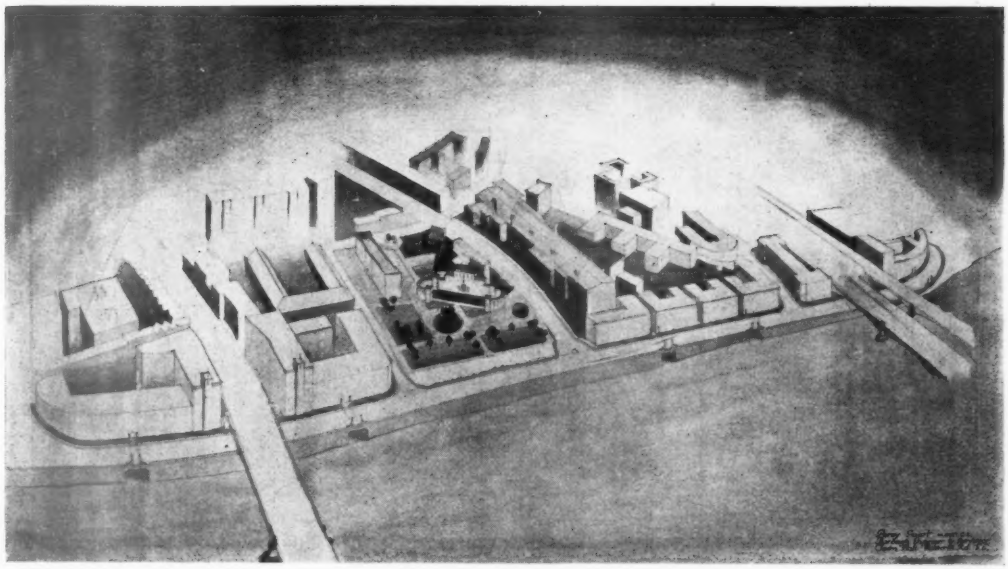
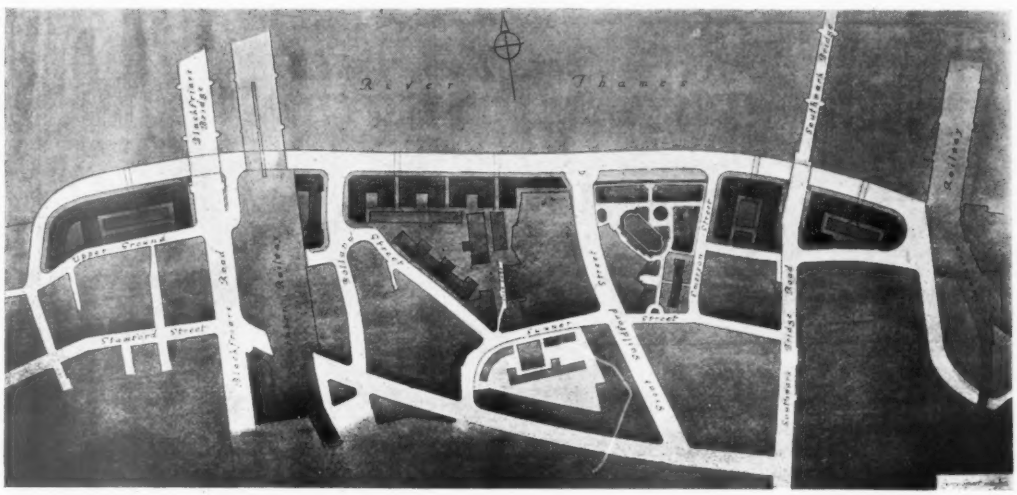
DEVELOPMENT OF THE SOUTH BANK

FROM BLACKFRIARS BRIDGE TO SOUTHWARK BRIDGE



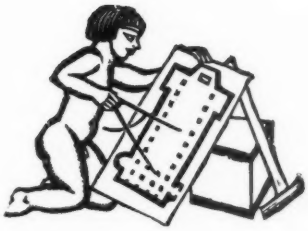


AT a recent meeting of the Southwark Borough Council the following recommendation of the Works and Depot Committee was adopted: "That the scheme and plans prepared by the Borough Engineer (Mr. Percy Smart) for the development of the northern end of the Borough and improvement of the Thames bank be submitted to the London County Council for consideration, and that the London County Council be requested to convene a conference of representatives of the County Council, the City Corporation, the Borough Council and other bodies and persons interested in the improvement of the south bank of the River Thames for the purpose of dealing with the area in a comprehensive manner."

Above we reproduce a perspective view looking from the river. Blackfriars Bridge is shown on the right of the drawing and Southwark Bridge on the left; a layout plan is reproduced below.

PERSIAN ARCHITECTURE

A detail of the vaulting in a shrine at Ardistan. From the Exhibition of photographs of Persian Architecture now being held at the R.I.B.A.



THE USE OF LAND

IT is clear from the recurrent notice given to news of planning schemes or proposals in the daily press that there is a growing interest in the subject on the part of the general public. The interest appears to arise from two main causes : first, difficulties arising from traffic congestion and delays, and generally known as the traffic problem ; and, secondly, the spoliation of the countryside by uncontrolled building development.

Various proposals have been made to solve these and other planning problems, but all which promise any success involve such drastic interference with present liberties and alterations in present conditions that they must arouse the greatest opposition and in consequence be the subject of very great delay in carrying out.

If the history of any reform in this country is delved into, the reform nearly always appears to have come about by enlightened individuals not creating an equally enlightened public opinion in its favour, but stimulating and directing in definite channels an already existing and growing public opinion.

This is likely to be true about town and country planning just as much as about any other reform and from this, follows, that the best chance of getting any far-reaching planning done smoothly and surely is to make use of such natural movements and tendencies that may be discovered in the development which is taking place all over the country. The first part of the problem, therefore, is to discover these movements and tendencies.

All over the country development is taking place and the use of land is changing in an apparently haphazard way. It is, however, possible to detect what appear to be some definite tendencies in this development. For example, there is the tendency of industries to grow up along the main roads on the outskirts of towns and in some instances considerable distances from towns, which seems to indicate the extreme importance industry, or at least some industries, attach to road transport facilities.

If this tendency is utilized something might well be done to attract industries to definitely chosen or planned places by providing exceptional facilities for transport, though naturally it is not suggested that such facilities would of themselves be sufficient. It is more than probable that there are many other kinds of movement going on which, if known, could be used to bring some order into the present chaos of things, but without a very complete survey it is almost impossible to know what they are.

Some years ago a voluntary organization, calling itself the Land Utilization Survey of Britain, started the gigantic task of recording the use to which all land in this country, field by field, is put. From time to time attractively coloured maps have been issued, and now the first part of the final report, dealing with the county of Berkshire,* has been published. This report, which is in great detail and amplifies the information on the maps, as well as dealing with other matters, has been made from an agricultural point of view.

Land upon which nothing grows, irrespective of its use, whether for buildings, gravel pits, cemeteries or what not, is just described as "land agriculturally unproductive," and is all coloured pink on the map. Then, again, buildings with gardens are grouped with allotments, orchards and nurseries, are coloured purple so that it is not possible to tell from the map whether a purple patch is an orchard or a bit of suburban development. However, the survey on which both the maps and the report are based does contain some more detailed information.

The survey was made upon the six inches to the mile ordnance sheets, and the information recorded on them was reduced to the scale of, and shown upon, the one inch to the mile ordnance map. This must have entailed an immense amount of labour, but it was well worth doing, as it has produced maps of large areas of land upon reasonable sized sheets of paper and makes it possible to obtain a general grasp of matters, which it would not have been possible to get from a number of larger scale maps.

This is a very good start and the Land Utilization Survey of Britain is entitled to the highest praise for its work, but though the survey is extremely useful, for the purposes of town and country planning, it is not enough. Just the same and just as detailed information is wanted about the urban areas. A survey showing, on the smallest scale map possible, the building development which has taken place, its general type and, what is not possible in an agricultural survey without an enormous amount of enquiry, the date at which the development or change in the use of the land took place.

With such surveys as these, together with the mass of statistical information at present available, it should be possible to study the trend of development and redevelopment of the country with intelligence and with a fair hope of discovering those tendencies and movements which it is suggested should be directed and controlled.

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* *The Land of Britain.* The Report of the Land Utilization Survey of Britain. Part 78 : Berkshire. By J. A. Stephenson, with an historical section by W. G. East. London : 18 Houghton Street, W.C.2. Price 2s. 6d.

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NOTES & TOPICS

MR. A. R. POWYS

I HAVE just been shown an advance proof of a letter to be published this week, in which Lord Esher appeals for donations to a memorial fund to the late Mr. Powys, a memorial to take the modest and practical form of endowing the education of his two small children.

*

I am only too delighted to call attention to this appeal. Mr. Powys had a mind which could have made a success of many things, but he chose to devote his energetic life chiefly to the services of the Society for the Protection of Ancient Buildings, suppressing his own material interests to this end.

*

As Lord Esher says, Powys sacrificed the best of his life . . . . now it is our turn to do what we can.

TOWN PLANNING AGAIN

The question of open spaces crops up again—this time in a letter from Messrs. Eden, Holford and Stephenson, to *The Times*, pointing out how a typical satellite town, planned with the most high-minded motives, can so easily become the dreary suburb, largely through increased rates on agricultural land.

*

Shortly after reading this letter I happened to be glancing through the current number of the *Geographical Magazine*, and found myself reading an article on Red Deer in Scotland, where the following statement suddenly caught my eye. " . . . The density is found to average one to about 40 acres. This is a figure which is surprisingly constant for wild members of the deer family in the northern hemisphere, and it would seem that deer are peculiarly averse from conditions of overcrowding."

*

A grossly unfair parallel, of course, for the deer is a free moving animal in search of food, whereas *homo sapiens* can only search for work. But do human beings realize even remotely how much space they need—purely for physical efficiency apart from amenities—and what percentage of the population ever gets it ?

GREATER LONDON PLANNING

Speaking at the conference of representatives of Local Authorities in London and the Home Counties at the County Hall last week, Professor Abercrombie said he was convinced that the only satisfactory way of dealing with the future planning of London was to set up a commission to take over from the 300 odd local authorities all major planning schemes, and to leave to them only the job of carrying out the details after the main principles had been laid down by the commission.

*

It may be remembered I made a very similar suggestion some months ago, and I do hope that everyone interested in town planning will hammer away at the idea until something gets done about it.

PLAN WITH IMAGINATION

The B.B.C. is expanding its headquarters. For a long time we have known that its work has required additional premises . . . St. George's Hall, Maida Vale, sundry private houses in Portland Place, and many other little units.

*

Now we are told that the whole island site bounded by Duchess Street, Langham Place and Hallam Street is to be re-planned. The civil engineer to the B.B.C. is to do this piece of imaginative work and afterwards an architect is to be appointed.

*

Once again therefore officialdom would appear not to have realized the importance of first using men trained to use their imagination to arrange spaces for use. Useful space is far more important than walls and floors and ceilings. And a building of B.B.C. importance has a far better chance of success if an architect and an engineer work together from the start, balancing considerations of useful space with considerations of enclosing it economically.

*

There is all the difference between an engineer planning a lot of rooms in the " Queen Mary " and asking other people merely to decorate them, and a designer planning apartments and rooms for use and delight, modifying them to some slight extent to make their enclosure economically possible, and achieving a unified whole which is a joy (rather than a confusion) to travel in.

ROMANCE AND ROMANTICISM

John Rennie was a great engineer, with a flair for modelling pleasing visual shapes out of essentially scientific bases. Quite fittingly it is proposed to put up a memorial to him, and what better site than at his birthplace at Phantassie ?

*

But all memorials in this country have an unfortunate habit of submerging their real identity under a romantic mask . . . expressing something between a smirk and a grin.

*

So that I am really not a bit surprised to learn that the Rennie Memorial is to take the form of " a seat in stone, with a baluster from Waterloo Bridge in the centre, mounted with a sundial, with a bronze medallion of Rennie mounted in the back of the seat."

*

The most impressive thing about the old Waterloo Bridge

The wedding took place last Saturday between Mr. William Tatton Brown and Miss Aileen Sparrow. The photograph shows the bride and bridegroom leaving Chelsea Old Church under an arch of tee-squares held by fellow architects.

is Rennie's complete understanding of the pressure curves involved, curves which show on his original drawings and which are proved and approved by engineers today. The grace and quality of the bridge depended far more on the translation of these curves of pressure into structural form than on the almost accidental use of the fashionable Greek doric detail.

*

But a seat and a sundial . . . a bowl of goldfish would have slightly more connection with bridging the Thames.

SURREALISTS

The International Surrealist Exhibition is attracting a record public. Most critics are inclined either to scoff, deride, ridicule, despise, cavil, sneer, scout, hoot, hiss, scorn, spurn, disregard or merely smile and murmur pooh-pooh on seeing this exhibition.

*

Indeed, it is a great temptation to do one or all of these things in any London exhibition atmosphere. We all ought to have been sitting down in comfortable abstraction, and each one of these works ought to have been passed singly before our eyes.

*

That would have given some sort of movement to each individual effort. And who did not, bless my soul, want to see these pictures move ?

*

Surrealism is exciting stuff . . . but its ultimate expression is surely to be through movement, even cinema movement, rather than through paint.

OPTIONAL ADVICE ?

Northampton seems to give a lead to civic authorities in proposing the formation of an Arts Advisory Committee " to shape the city's æsthetic future." The proposed committee is formed of three local architects, the chief librarian and curator, the head of the Art School, the president of the local Master Builders' Association, a local artist, the Town Clerk, and the borough engineer.

*

It is to advise on the design of all new public buildings, all elevations on to new or widened streets, and on all park planning and street furnishings.

*

There is, however, the usual snag, for we read that the Council at its discretion *may* submit schemes for the opinion of the new Advisory Committee. *May*, mind you, not *shall*.

FACTS AND FIGURES

Sir Kingsley Wood raised a cheer on Tuesday afternoon for the passing of the three million mark in new houses built since the Armistice. The pace is pretty merry. In the half-year ended last March, 5,000 more houses than had been built in any earlier six months made a total of 174,609, and the slum clearance programme had so far given 400,000 slum dwellers new accommodation.

*

He also gave some interesting figures about the small house boom. Some 271,389 of last year's total of 323,926 houses were built by private enterprise without State assistance.

FAIR COMPARISON

My fan-mail this week brings me a peculiar tribute from an admirer who has read my note about Casual Intellectual Labour. He (or is it she ?) compares an advertisement for an assistant in a provincial architect's office with a higher salaried assistantship offered by the Air Ministry.

*

Precisely : as I have said before, casually treated labour expects greater remuneration, but for a strictly limited period. In 1931 many architects, especially in the provinces, made considerable efforts to keep their assistants in employment. Very, very few Councils or official departments were so considerate . . . why should they be ?

TRUE STORY

Overheard at the R.I.B.A. last Monday—

" My dear, I had no idea there were so many remains of palaces in Persia . . ."

" But, Auntie . . ."

" And all these lovely drawings . . . . it must have taken the poor men hours of work in measuring, all in the hot sun, too . . ."

" But, Auntie . . ."

" And to think of all this past civilization, all these grand buildings we didn't know anything about . . . and really, my dear, how sad it is to think that we don't want to build like this nowadays . . . you know, my dear, I almost think that . . ."

" But, Auntie, this isn't a part of the Persian exhibition at all, this is only the work submitted for the Rome Scholarship this year . . . do let's go upstairs again, those photographs are much more modern . . . positively thrilling. . . ."

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

LEVERHULME SCHOLARSHIP IN ARCHITECTURE

The Leverhulme Scholarship tenable at the Architectural Association School of Architecture, value £1,000, which includes payment of fees and maintenance for a period of five years, has been awarded this year to Mr. W. A. S. Doig, of Dundee.

PUBLIC HALL, HARPENDEN

Amended plans for a new public hall at Harpenden were adopted by Harpenden Urban District Council last week.

The alterations provide for a revised main elevation, a larger main hall and improved stage and dressing rooms.

The estimated cost is £16,000, and the Ministry of Health is to be asked to sanction a loan for this amount, and the Public Works Loan Board to advance the money.

The architects are Messrs. G. R. Yeats and T. A. Bull, whose design was placed first in a recent competition.

A NEW ADVISORY COMMITTEE

The Town Planning Committee of the Carlisle City Council has resolved that the Cumberland branch of the Northern Architectural Association be invited to appoint a panel of architects to inspect plans submitted to them, and advise the Corporation as to the appearance of buildings proposed to be erected.

UNIVERSITY OF CAMBRIDGE

We are informed that the post of Director of the School of Architecture is vacant. The appointment, which will date from October 1, 1936, will be made on the recommendation of the General Board for a period not exceeding five years. The person appointed must reside in Cambridge; he will be eligible for reappointment, provided that the period of appointment or reappointment does not extend beyond the end of the academical year in which he attains the age of sixty-five years. The stipend of the director will be £750, and he must place himself under the superannuation scheme. The person appointed will be required to act as Head of the Department of Architecture, to direct the work of the Department, and to give lectures. He will be allowed to undertake private practice as an architect provided this does not interfere with his duties as Director of the School of Architecture.

Applications for this post, together with the names of not more than three persons to whom reference can be made, should be sent before July 11, 1936, to the Secretary General of the Faculties, The Registry of the University, Cambridge, from whom further particulars may be obtained. No testimonials should be sent in the first instance.

A PLAN FOR THE CITY

The Court of Common Council of the City of London decided last week to prepare a town-planning scheme for the City, excluding the Temples.

Sir Banister Fletcher said they would have to consider the height of buildings, especially in relation to St. Paul's and other outstanding structures. He agreed with the suggestion for a co-ordinating Committee, since the L.C.C. would remain the authority under the London Building Act.

THE ARCHITECTS' DIARY

Thursday, June 18

R.I.B.A., 66 *Portland Place, W.1. Exhibition of designs submitted in the Final Competition for The Rome Scholarship. Until June 20. 10 a.m. to 8 p.m. (Saturday, June 20, 10 a.m. to 5 p.m.)*

ROYAL ACADEMY, *Burlington House, Piccadilly, W.1. Summer Exhibition. Until August 3.*

SOCIETY OF PAINTER DECORATORS. *At the Building Centre, 158 New Bond Street, W.1. Exhibition of work executed by members of the Society. Until June 27. 10 a.m. to 6 p.m. (Saturdays, 10 a.m. to 1 p.m.).*

EXHIBITION OF PERSIAN ARCHITECTURE. *At the R.I.B.A., 66 Portland Place, W.1 (organised by the American Institute for Persian Art and Archæology.) Until June 26.*

Monday, June 22

R.I.B.A., 66 *Portland Place, W.1. Announcements of Results of Annual Elections of Council and Standing Committees. 8 p.m.*

Tuesday, June 23

ARCHITECTS' REGISTRATION COUNCIL. *At the R.I.B.A., 66 Portland Place, W.1. 17th Ordinary Meeting. 5 p.m.*

Wednesday, June 24

R.I.B.A. ANNUAL CONFERENCE. *At Southampton. Until June 27. Informal reception in the Chantry Hall, St. Mary's Street. 8 p.m.*

Thursday, June 25

R.I.B.A. CONFERENCE. *At Southampton. At the Chantry Hall, St. Mary's Street. Inaugural Address by the President and Addresses by Mr. G. A. Jellicoe on "The Architecture of To-morrow" and Professor W. G. Holford on "The Planning of a Great Seaport." 10.30 a.m. Conference Photograph in the Chantry Hall Grounds. 12.30 p.m. Visits. 2.15 p.m. Banquet, s.s. Asturias. 7.30 p.m.*

Friday, June 26

R.I.B.A. CONFERENCE. *At Southampton. Whole-day Tours to Isle of Wight or Salisbury or Bournemouth. 9.30 a.m. Reception and Dance given by the Mayor and Corporation of Southampton on the Royal Pier. 8 p.m.*

LONDON SOCIETY. *Visit to the Newspaper Library of the British Museum, 130 Colindale Avenue, N.W.9. 2.45 p.m.*

Saturday, June 27

R.I.B.A. CONFERENCE. *At Southampton. Informal visits.*

WEST YORKSHIRE SOCIETY OF ARCHITECTS

The R.I.B.A. Bronze Medal for a building erected during the past five years within the area of the West Yorkshire Society of Architects has been awarded to Mr. Frederick L. Charlton, F.R.I.B.A., for his Church of St. Philip, Osmondthorpe, Leeds. The Church of St. Philip was erected from designs submitted by Mr. Charlton in a competition organized by the Church Forward Movement.

HOUSING AND TOWN PLANNING

Mr. W. H. Gaunt presided at a conference of representatives of local authorities in London and the Home Counties at County Hall, Westminster, last week. The subject for discussion was housing and town planning problems. The chairman said in the matter of planning and housing no more legislation was necessary at present. What was necessary was more tightening up and vigorous administration. In the Act of 1935 there were too many instances of "may" instead of "shall," so that dilatory authorities were able to refrain from doing more than they were compelled to do. In the case of bedroom accommodation under the Act the regulations were, in his opinion, too flexible, and lax administration would result in the standard proving far too low.

Speaking of the planning of London for the future, Professor Abercrombie said that he had been greatly interested in a recent article in *The Times* on "Cities as They Might Be," with suggestions for satellite towns, such as Guildford, outside London. He considered the only satisfactory way of dealing with the planning of London would be the setting up of a commission to deal with it, to take away from the 300 odd local authorities the major problems of planning but leaving them with their existing powers of carrying out details after major decisions had been reached.

LONDON MASTER BUILDERS' ASSOCIATION

The annual reception of the London Master Builders' Association will be held at Grosvenor House, Park Lane, on Wednesday, July 15. Mr. Eric Burt, the president of the Association, and Mrs. Eric Burt, will receive the guests.

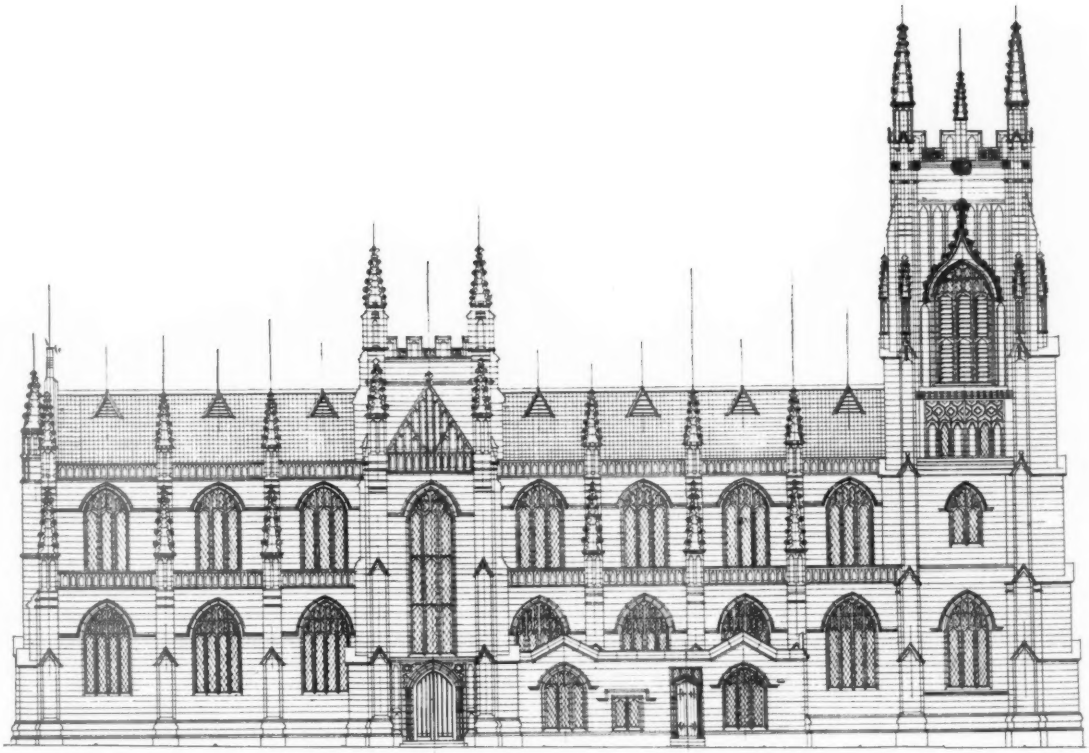
R.I.B.A.

On Monday next, June 22, at 8 p.m., a general meeting will be held for the purpose of receiving the Scrutineers' Report on the Annual Elections of Council and Standing Committees.

This will be followed by a talk by Colonel W. Garforth, D.S.O., M.C., on "A Few Principles of Protection in Air Raids," and an informal and private discussion on matters of current professional interest or concern.

THE ROME SCHOLARSHIP

The Faculty of Architecture of the British School at Rome has awarded the Rome Scholarship for 1936 to Mr. P. E. D. Hirst,



The Sydney Competition : North elevation of the Cathedral Church of St. Andrew, George Street, Sydney.

B.ARCH., of the Liverpool University School of Architecture.

The Faculty has also awarded a premium of £100 to Mr. Hubert Bennett, A.R.I.B.A., of the Manchester University School of Architecture, who received an Honourable Mention in the competition.

The scholarship is provided by the R.I.B.A., which makes a grant of £750 a year to the British School at Rome. It is awarded by the Faculty of Architecture of the British School at Rome, and is contested annually by students selected from the various architectural schools in the country. The winner is required to go to Rome to study for a period of two or three years at the British School at Rome.

This year the subject of the competition was "A Centre of International Justice."

Mr. Hirst is twenty-five, and was born and educated at Liverpool. In June, 1935, he obtained the B.ARCH. degree of Liverpool University with First Class Honours. During his University course he won in successive years the Ravenshead, Holt, H. W. Williams and Lord Waring Travelling Studentships, besides the John Lewis and John Rankin Prizes. Mr. Hirst, who is at present studio instructor in the Liverpool School of Architecture, gained admission to the competition through the open class.

Mr. Bennett is twenty-six years of age, and was born in Manchester, receiving his education at the Manchester College of Technology and the University School of Architecture. In 1929 he was awarded an R.I.B.A. Maintenance and, in 1933, he won the Arthur Cates Prize, in 1934, the Soane Medallion, and, in 1936, the Neale Bursary of the R.I.B.A. Mr. Bennett, who gained admission to the competition through the open class, is at present staff lecturer and instructor at the Polytechnic School of Architecture, Regent Street, London.

The Rome Scholarship in Architecture is now provided for by an annual grant made to the British School at Rome by the Council of the R.I.B.A., and is ordinarily tenable for two years.

An exhibition of the competition designs is now being held at the R.I.B.A., and will remain open until June 20, between the hours of 10 a.m. and 8 p.m. (Saturday, June 20 : 10 a.m. and 5 p.m.).

COMPETITION NEWS

THE SYDNEY COMPETITION

His Grace the Archbishop of Sydney, Sir Giles Gilbert Scott, R.A., F.R.I.B.A., and Mr. Bertrand J. Waterhouse, F.R.I.B.A., form the jury of assessors in connection with a competition for extension of St. Andrew's Cathedral, Sydney, and other Cathedral buildings. Competitors in the British Isles may obtain copies of the conditions and site plan on application, not later than July 11, 1936, to the Secretary, R.I.B.A., 66 Portland Place, London, W.1.

The premiums offered are £500, £300 and £200. Competitors in the British Isles may send in any questions, to the Secretary, R.I.B.A., not later than August 11, 1936, and designs must be sent direct to the Secretary, N.S.W. Chapter of the Royal Australian Institute of Architects, Science House, Essex and Gloucester Streets, Sydney, to be received there not later than February 28, 1937.

Following are some extracts from the conditions of the competition.

SITE

The extension of the present site acquired by the Church Authorities makes the area a very important one, and it is desired to utilize it to the very best advantage to provide an enlargement of the Cathedral and the buildings enumerated in the Schedule of Accommodation, grouped in a manner architecturally satisfactory and convenient for Church work. Competitors may assume a site free from all buildings, with the exception of the Cathedral. (See site plan on page 936.)

COST

The cost of the completed scheme, including the enlargement of the Cathedral and other buildings mentioned in the Schedule of Accommodation, must not exceed £500,000.

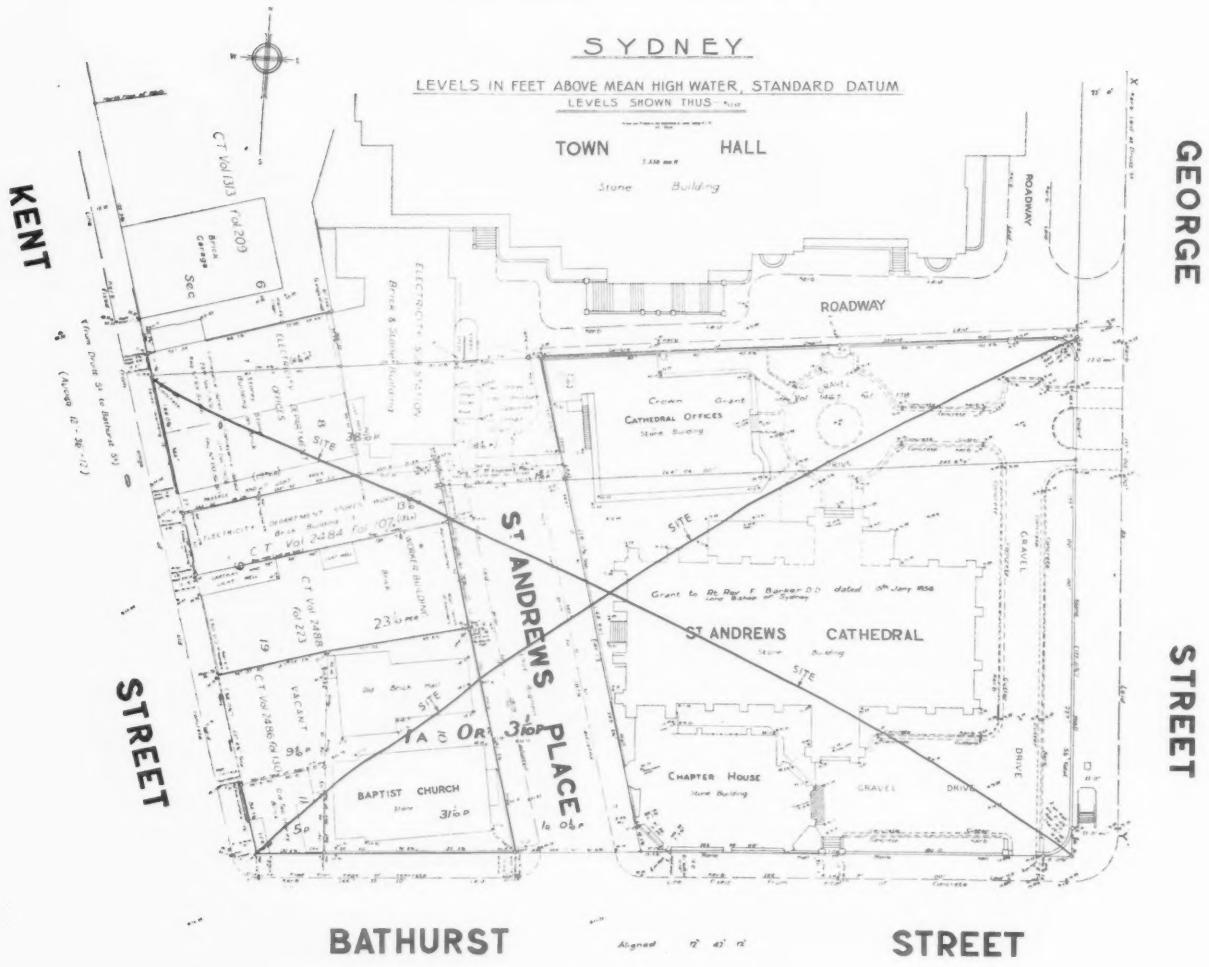
Competitors are to regard as a primary consideration of the competition the retention of as much of the present Cathedral building (not Chapter House) as is possible, but any reasonable modification of the building will be permitted. The question of orientation is left to the competitor.

REPORT

The drawings must be accompanied by a concise typewritten description of the buildings, explaining construction, finish, and materials proposed to be used, and giving such information as cannot be clearly shown on the drawings. An estimate of cost of each separate building must also be sent.

AWARD

It is the intention of the assessors in Sydney to make a selection of ten (10) designs which in their opinion best fulfil the conditions.



The Sydney Competition: Site Plan

and requirements, but the whole of the designs received will be forwarded to London for the consideration of Sir Giles Gilbert Scott, R.A. and the final decision shall be made in Sydney.

DRAWINGS REQUIRED

For each building plan of each floor, sufficient sections to explain the designs, and all elevations, all to a scale of 1/16th of an inch to a foot, together with a ½-in. detail of a portion of the Cathedral and other buildings. A block plan showing relationship and grouping of buildings to the same scale as site plan. No perspectives will be admitted, but the drawings may be in pencil or ink, and tinted as simply as possible to explain the design, and they need not be unnecessarily elaborated.

SCHEDULE OF ACCOMMODATION

The following schedule gives the accommodation required, and competitors should keep as nearly as possible to the areas given, but it is left entirely to their discretion to plan the buildings as they think proper, bearing in mind the purpose of each building and the group effect.

1 : *The Cathedral*

The accommodation to be 2,000 minimum and 3,000 maximum, including the Choir.

2 : *Chapter House*

The seating accommodation to be for 1,200 persons.

3 : *Diocesan Church House*

BASEMENT

	Feet
Record room	17 × 17
Strong room	14 × 13
Men's lavatory	15 × 7
Ladies' lavatory	15 × 7
Kitchen	22 × 12
Essential hall and corridors.	
Records	24 × 16
Lumber room	24 × 10
Store	24 × 12
Larger room	24 × 29
Restaurant for 50 people, store, etc.	
Lift service to archbishop's room.	

GROUND FLOOR

Registrar	16 × 78
Chief clerk	16 × 14
Clergy room	16 × 8
Room	16 × 8
General office	24 × 22
Secretary	24 × 11
Accountants	24 × 12
Cowper room	24 × 29
Essential halls and corridors.	

FIRST FLOOR

Dean's room	18 × 18
Dean's room	12 × 9
Two bedrooms	11 × 7
Archdeacon's room	16 × 8
Church record	16 × 8
B.C.A. (clerks)	16 × 8
Bathroom	16 × 8
Two lavatories	18 × 16
B.C.A. (secretary)	12 × 9
H.M.S. (1)	11 × 9
H.M.S. (secretary)	18 × 9
H.M.S. office	24 × 9
Library	24 × 12
No. 2 Committee	24 × 10
Archbishop's room	22 × 15
Archbishop's waiting room	12 × 10
Archbishop's spare room	12 × 10
Essential halls and corridors.	

4 : *Additional Accommodation*

Canon's room	12 × 9
Library (1)	25 × 20
Library (2)	25 × 20
Bishop's room (1)	12 × 9
Bishop's room (2)	12 × 9
Precentor's room	12 × 9
Precentor's room (2)	12 × 9
Strong room on each floor (small).	

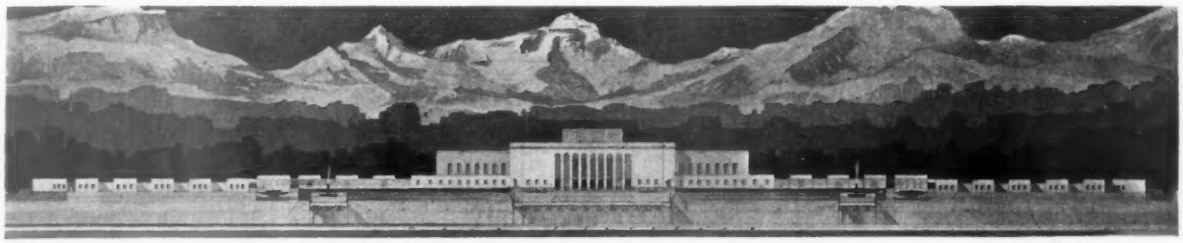
5 : *Verger's Quarters*

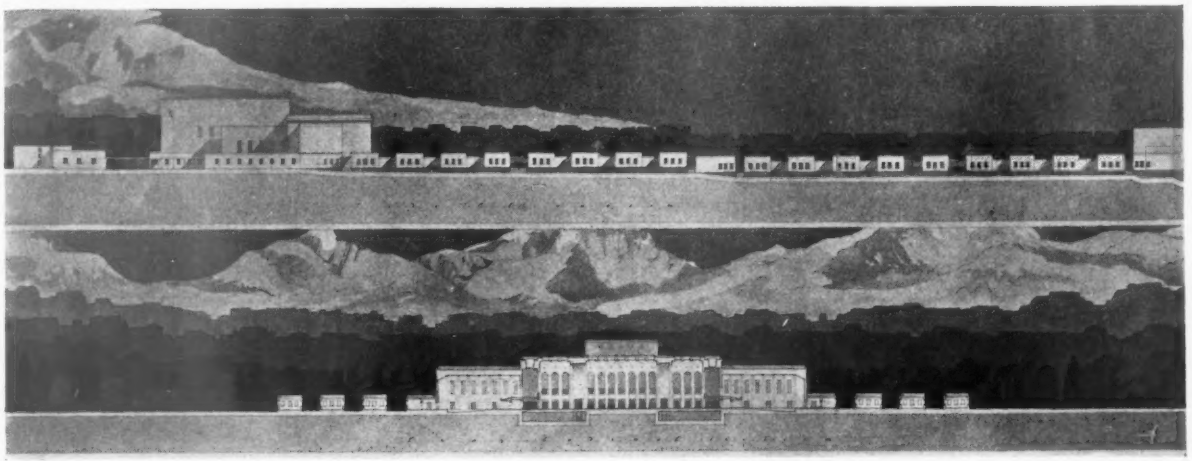
Sitting-room	14 × 12
Kitchen	12 × 9
Bathroom	5 × 8
Bedroom	13 × 11
Bedroom	11 × 6
Laundry	12 × 7
Lavatory, etc.	

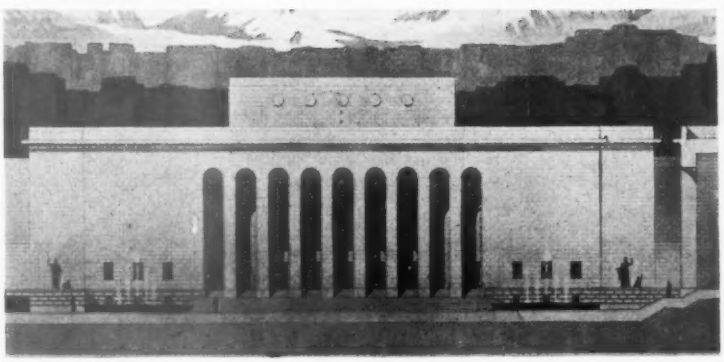
6 : *Choir School*

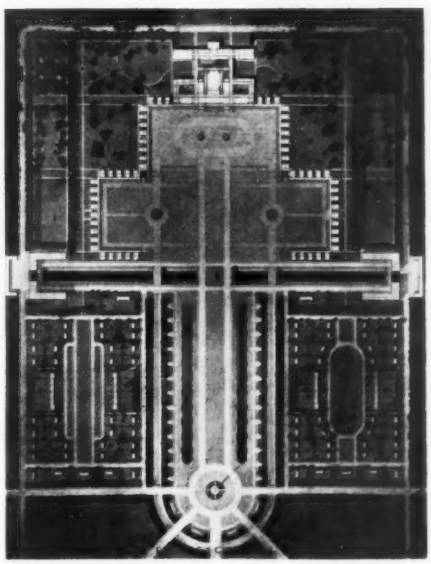
Three rooms	24 × 15
Lavatory accommodation.	

ROME SCHOLARSHIP: WINNING DESIGN









The illustrations are: main and side elevations, longitudinal section, detail of main front and site plan. The subject was: "A Centre of International Justice." The ground floor plan is reproduced overleaf.

BY PERCY D. HIRST

7: *Deanery*

Study	16 × 13
Sitting room	22 × 14
Dining-room	18 × 14
Kitchen	14 × 11
Maid's bedroom	10 × 10
Bathroom and w.c.	8 × 6
Laundry	10 × 8
Bedroom	20 × 14
Bedroom	16 × 12
Bedroom	14 × 10
Bathroom, w.c., etc.	10 × 8

Note.—This accommodation for the deanery may be provided as a flat, or separate building.

EXHIBITION STAND

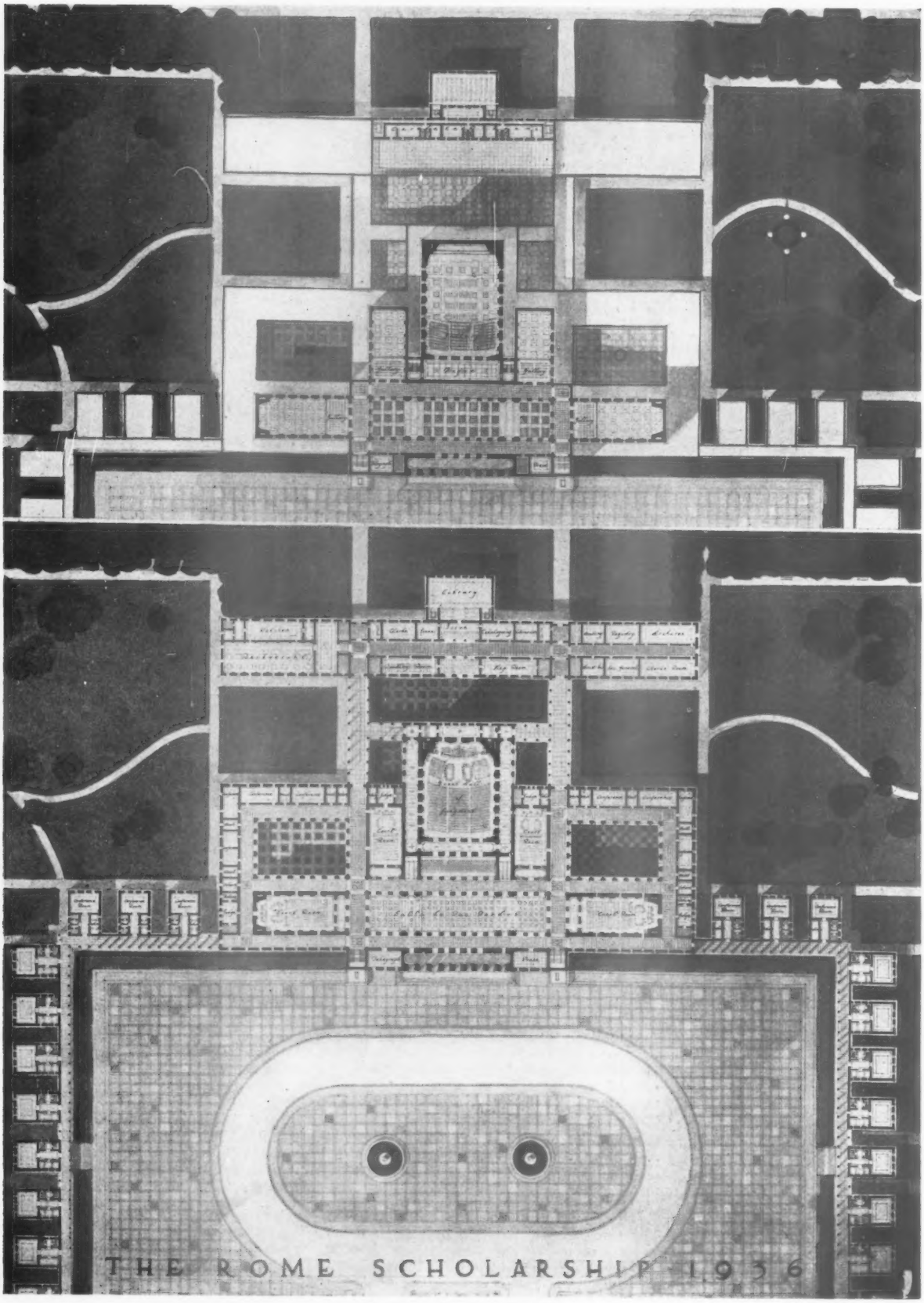
Ascot Gas Water Heaters, Ltd., ask us to draw attention to a misprint in the conditions for their competition for an Exhibition Stand at the Building Trades Exhibition. Under the heading, "Drawings Required," the phrase occurs: "A general perspective on half-inch imperial sheet"; this should, of course, read: "A general perspective on half-imperial sheet."

They would also like to remind competitors of the correct method of sending in their entries. Drawings should be submitted under a pseudonym, together with a sealed envelope with the pseudonym outside and the completed entry form inside on which the full name and address of the competitor appears. The entry form should accompany the drawings and should not be sent in separately as several of the competitors have done.

BANNED COMPETITION

The following notice has been issued by the R.I.B.A.: "The Competitions Committee calls the attention of members to the fact that the conditions of the competition for New Municipal Offices, Louth, are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee is in negotiation with the promoters in the hope of securing an amendment. In the meantime, members should not take part in the competition."

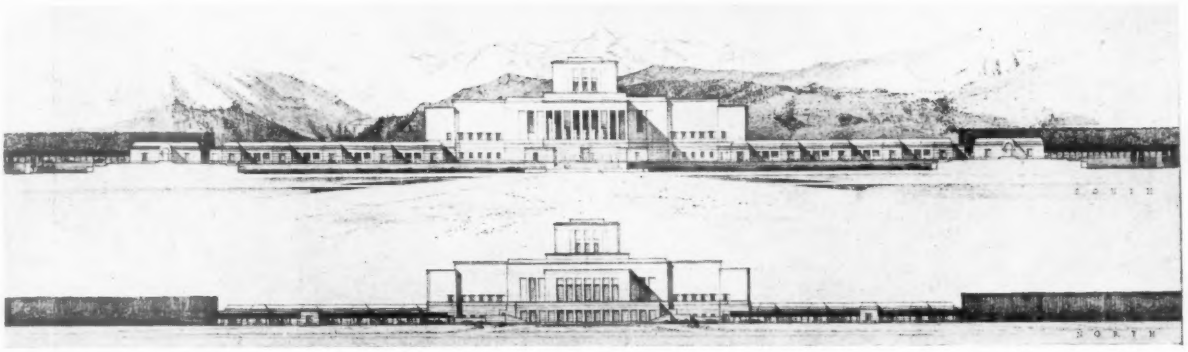
THE ROME SCHOLARSHIP: SUBJECT, A

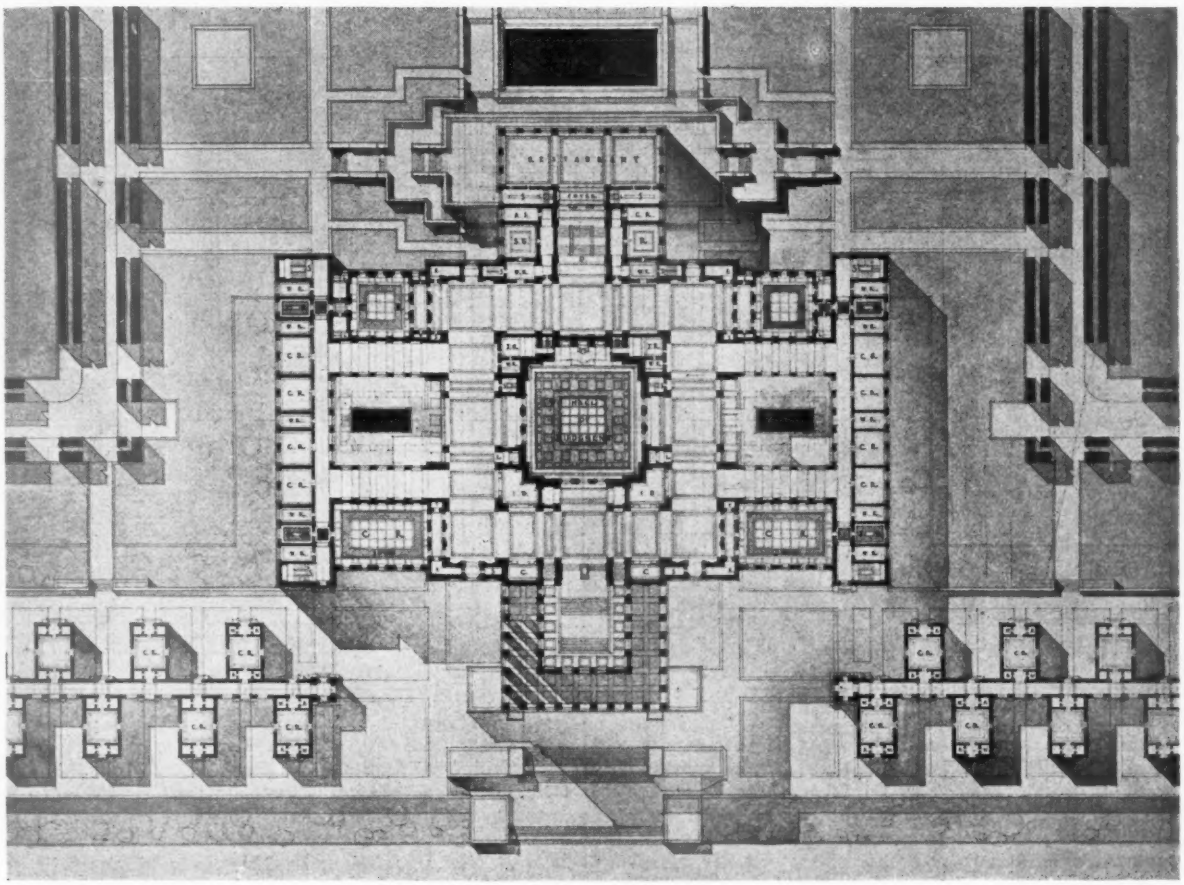


Ground and first floor plans.

WINNING DESIGN: BY P. E. D. HIRST

CENTRE OF INTERNATIONAL JUSTICE

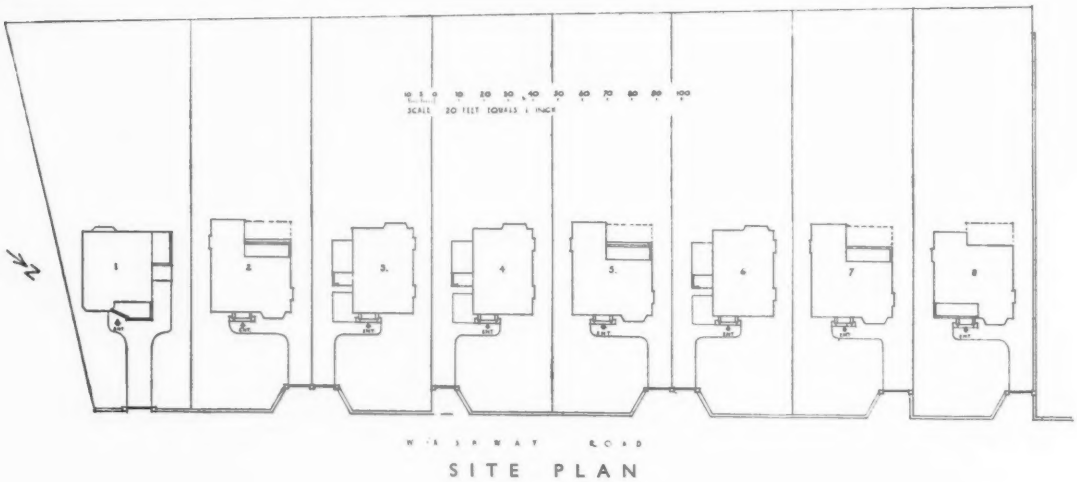




South and north elevations, section, and ground floor plan of the commended design.

COMMENDED DESIGN: BY HUBERT BENNETT

HOUSES AT SALE, CHESHIRE:



SITE PLAN

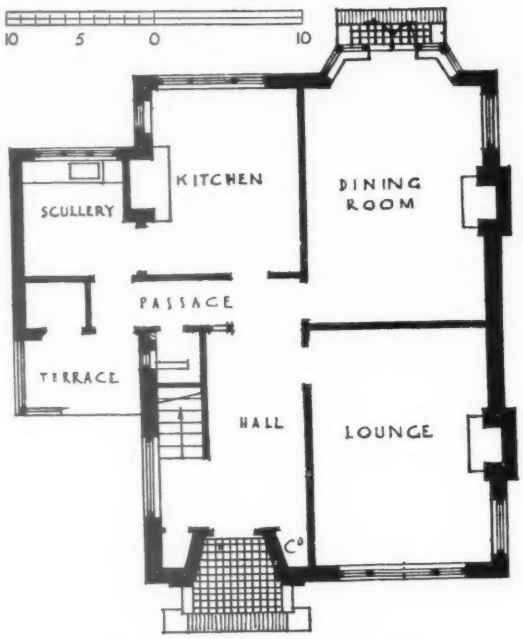
GENERAL PROBLEM. *A group of eight houses for professional class families. One was designed and built to order, and the remainder were designed in three types and offered for sale on completion. The first type, of which three houses were built, is for a small family which occasionally accommodates guests or children home from school. This type could be used either as a four-bedroomed or a two-bedroomed house. In the latter case one of the two smaller bedrooms could serve as a dressing-room and the other as a sun room. The second type, of which three houses also were built, could be used by a professional man, such as a doctor or dentist. The smaller room on the ground floor would serve as the surgery or consulting room or it could be used as a study. The third type, of which one only was built, was definitely designed for a doctor or dentist.*

SITE. *In Washway Road, part of the main Manchester to Chester road, on the Homelands estate, which had already been developed by the owners with smaller and cheaper houses. The sites have a frontage facing approximately north-east. They are deep and there is a good outlook to the rear, the principal aspect. The houses are set well back from the main road.*

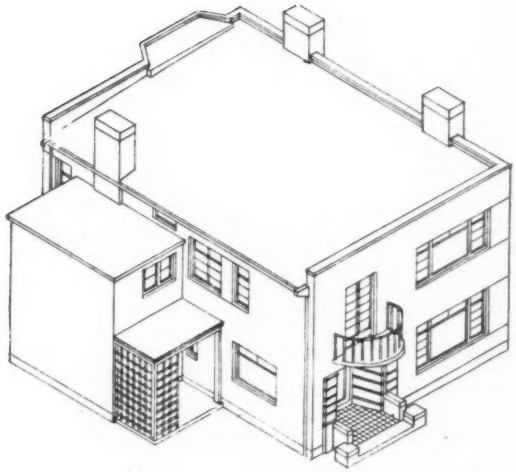
The photograph shows the front of the houses, facing the main road.

BY R. A. CORDINGLEY AND D. McINTYRE

FIRST FLOOR PLAN



GROUND FLOOR PLAN



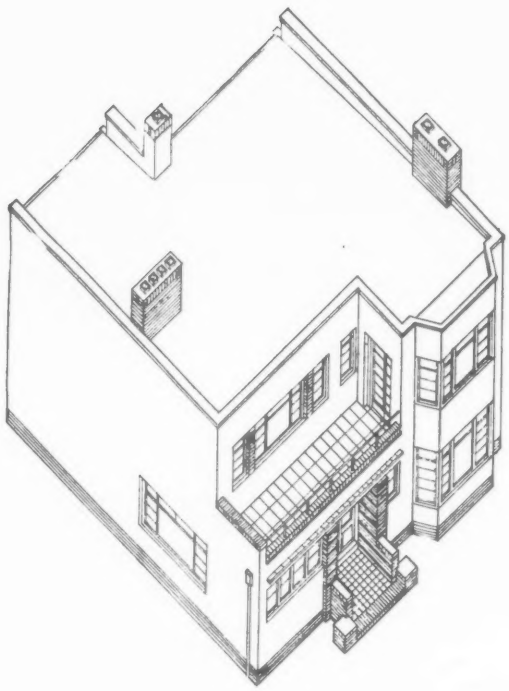
PLAN.—*Each type of house has been specially designed for aspect and to trap as much sun as possible. The average purchaser in the district is not interested in houses in which all the principal rooms face away from the road, no matter what their aspect may be. For this reason one principal room in each house is designed on the road elevation.*

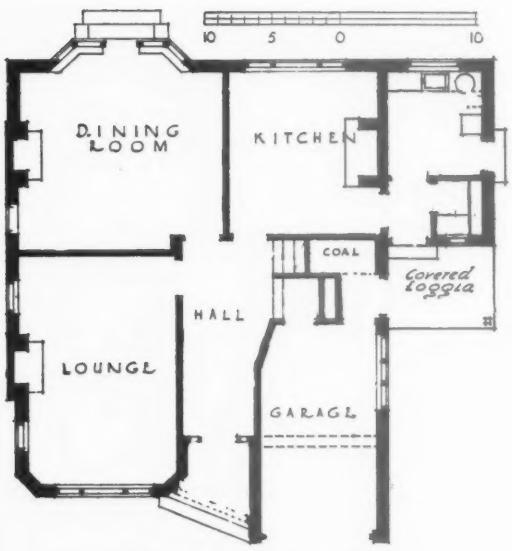
The photograph is of the entrance doorway of one of the three houses (Nos. 3, 4 and 6), built for a small professional class family. The isometric drawing shows the complete elevation. The two smaller bedrooms shown on the plans could be used for occasional guests or for children home from school, or they could serve as a dressing room and sun room, respectively.

HOUSES AT SALE, CHESHIRE:

MAIN ELEVATION

FIRST FLOOR PLAN



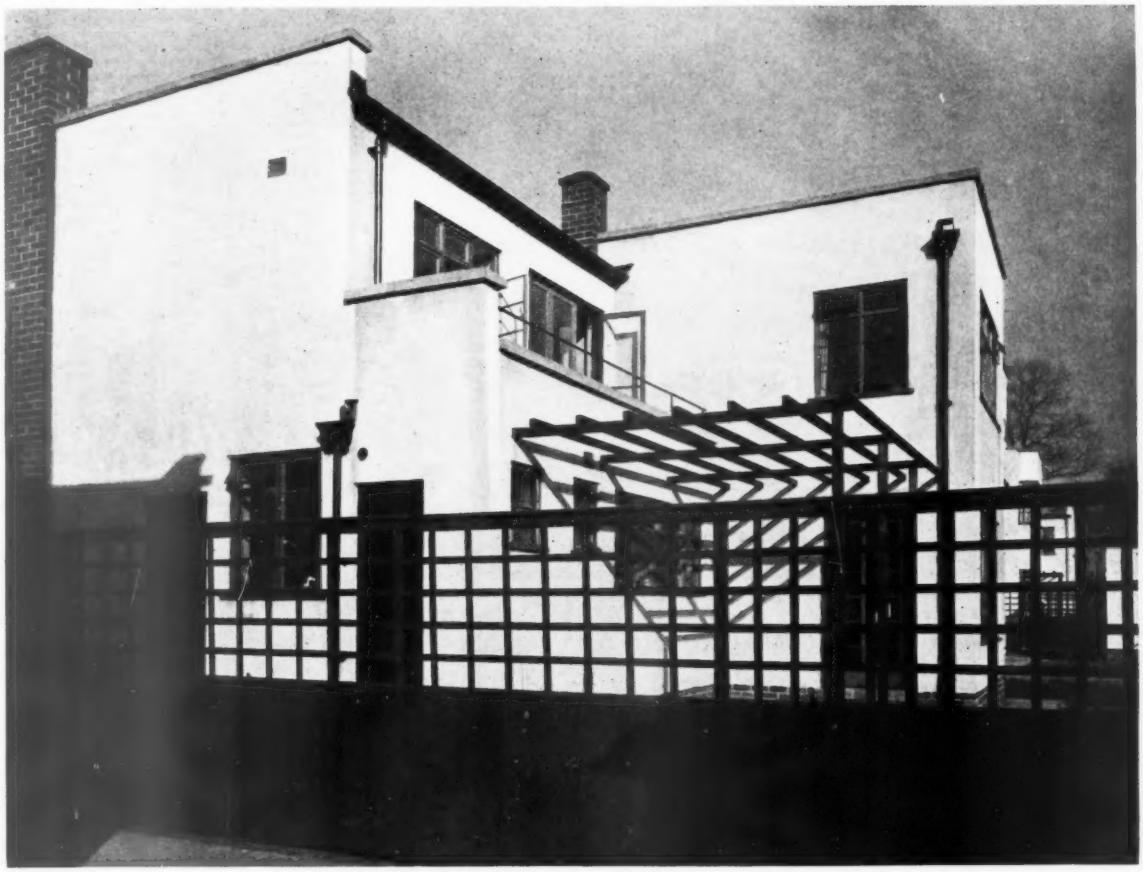


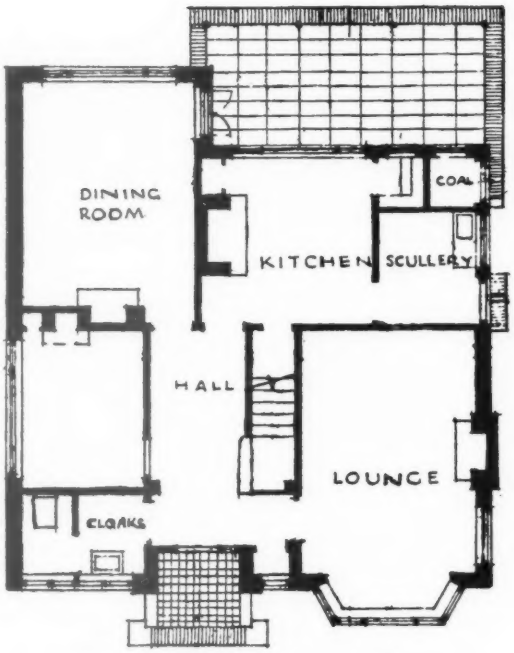
GROUND FLOOR PLAN

CONSTRUCTION.—*External walls are 11 ins. brick, with stucco finish; windows are steel in wood frames. The floors and roofs are of timber, the roofs being felted and asphalted. Internal walls are brick.*

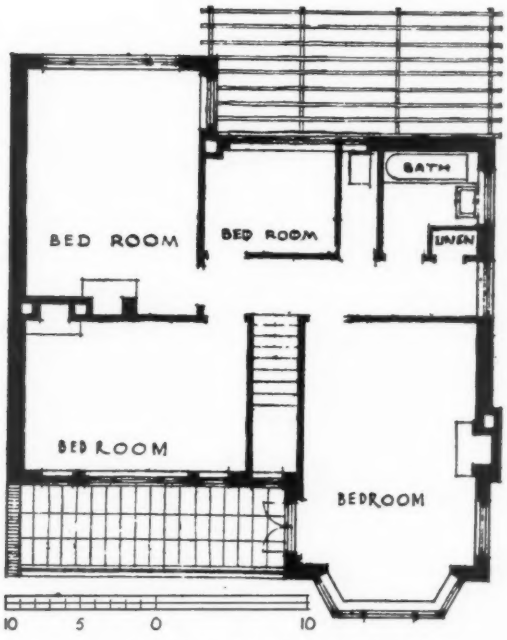
The drawings in the left-hand column of this page are of the house (No. 1) built to order. The photograph and isometric drawing in the right-hand column show the entrance front of the house (No. 8) which was built for definite occupation by a doctor or dentist. Plans of this house are reproduced on the facing page. The photograph at the top of the facing page is of the garden front of one of the houses (Nos. 2, 5 and 7). Further illustrations of this house appear on page 944.

BY R. A. CORDINGLEY AND D. McINTYRE



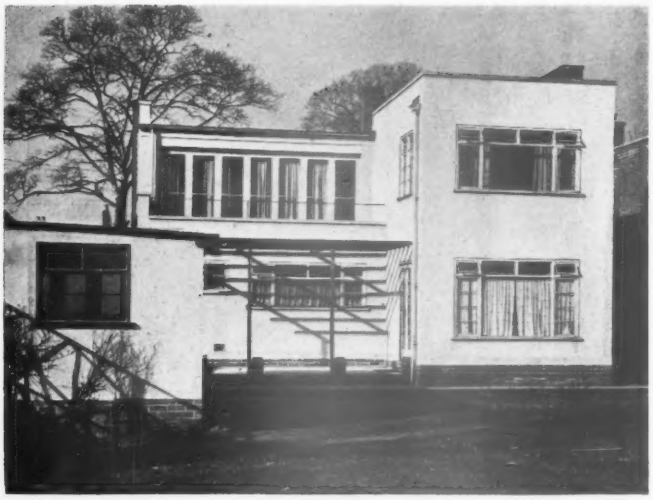


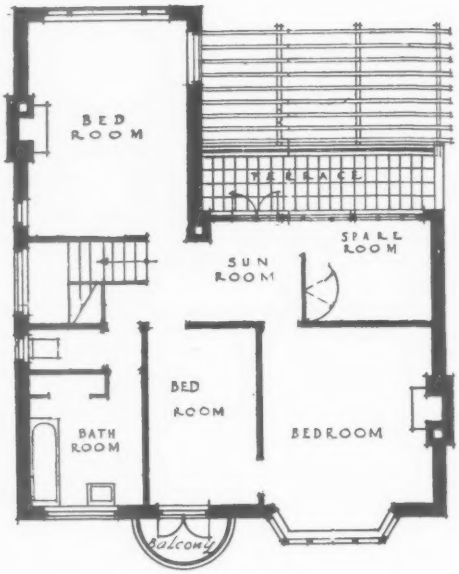
GROUND FLOOR PLAN



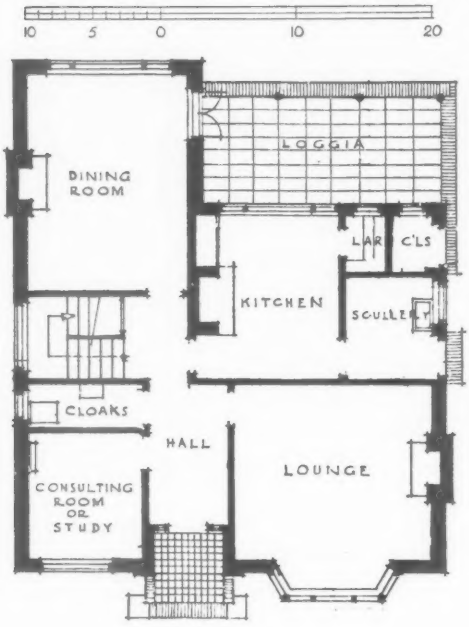
FIRST FLOOR PLAN

HOUSES AT SALE, CHESHIRE

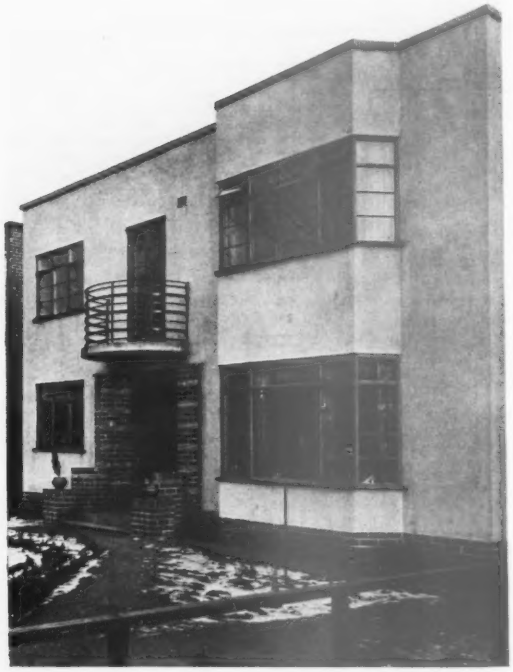




INTERNAL FINISHES.—*Decorative treatment is simple and in cheerful colours; fitments and finishings are unmoulded. The bathrooms are tiled to dado height and the baths are cased in.*
For list of general and sub-contractors see page 960.



The plans on this page are of one of the houses (Nos. 2, 5 and 7) built to meet the needs of a professional man such as a doctor or dentist. The photographs show: above, the garden side, and below, the entrance front of the same house.



DESIGNED BY

R. A. CORDINGLEY

AND

D. McINTYRE

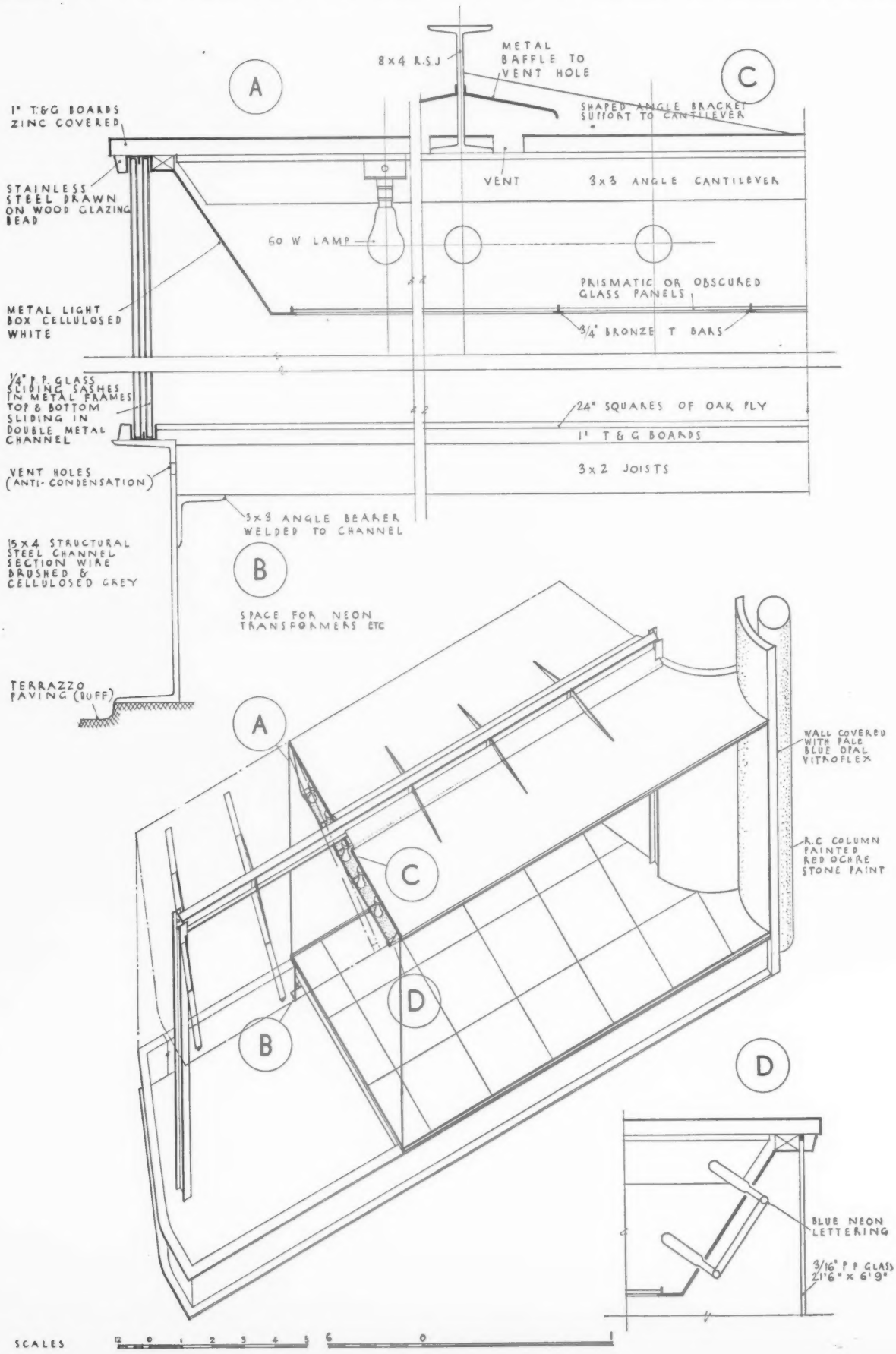
WORKING DETAILS : 439

SHOP-FRONT • GOLDERS GREEN, N.W. • E. GOLDFINGER (R. JENSEN, ASSISTANT)

The shop-front illustrated above is planned for the display of dresses, stockings, etc., and is top lit by a series of 60-watt lamps which also induce an air flow by conduction through the showcase and prevent internal condensation on the glass. The zinc-covered top of the showcase is supported on 3 in. by 3 in. angle cantilevers which are carried by an 8 in. by 4 in. R.S.J. An axonometric and details are shown overleaf.

WORKING DETAILS : 440

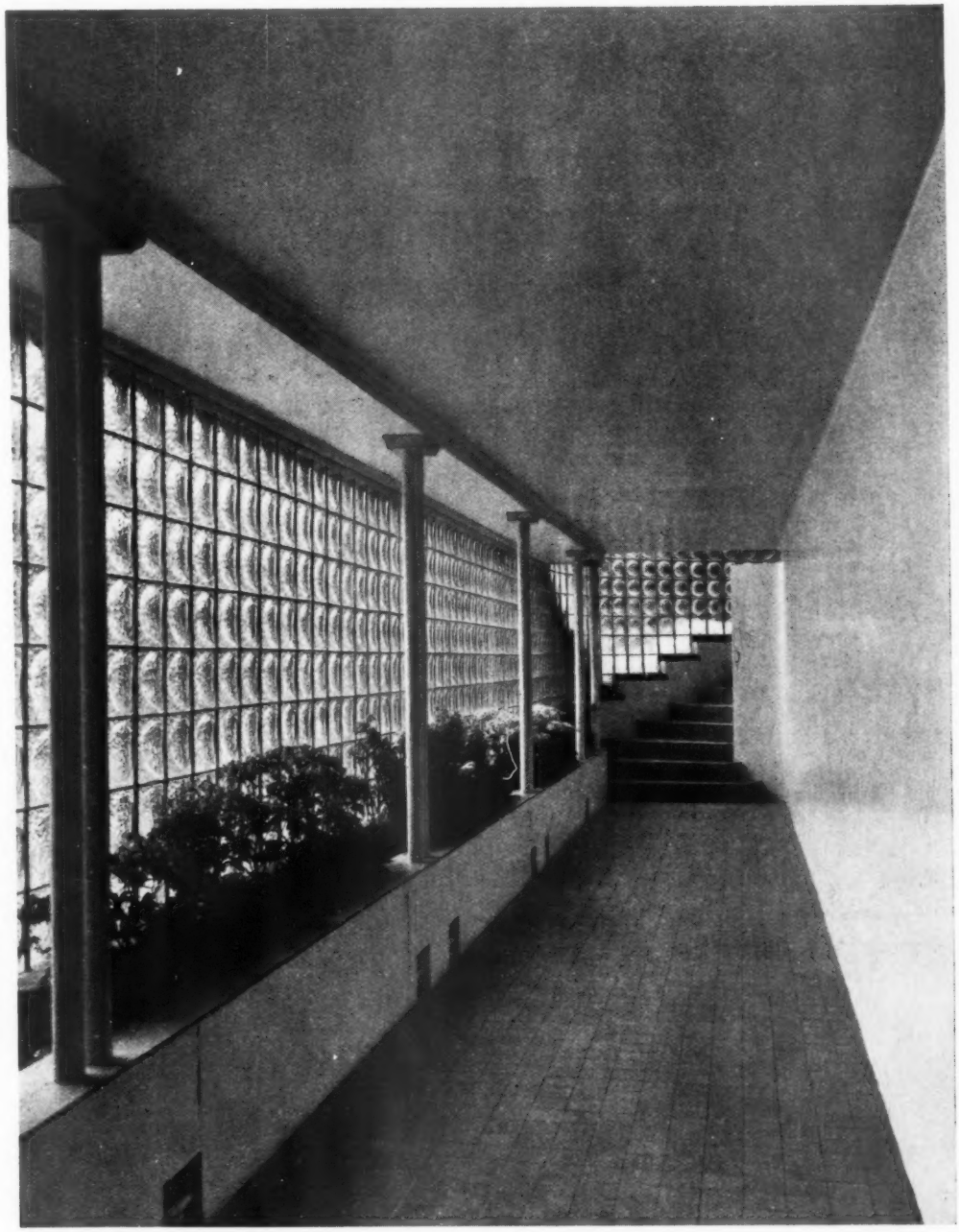
SHOP-FRONT • GOLDERS GREEN, N.W. • E. GOLDFINGER (R. JENSEN, ASSISTANT)



Axonometric and details of the shop-front illustrated overleaf

WORKING · DETAILS : 441

CORRIDOR • HOUSE AT BRAMSHOTT • ADRIAN STOKES

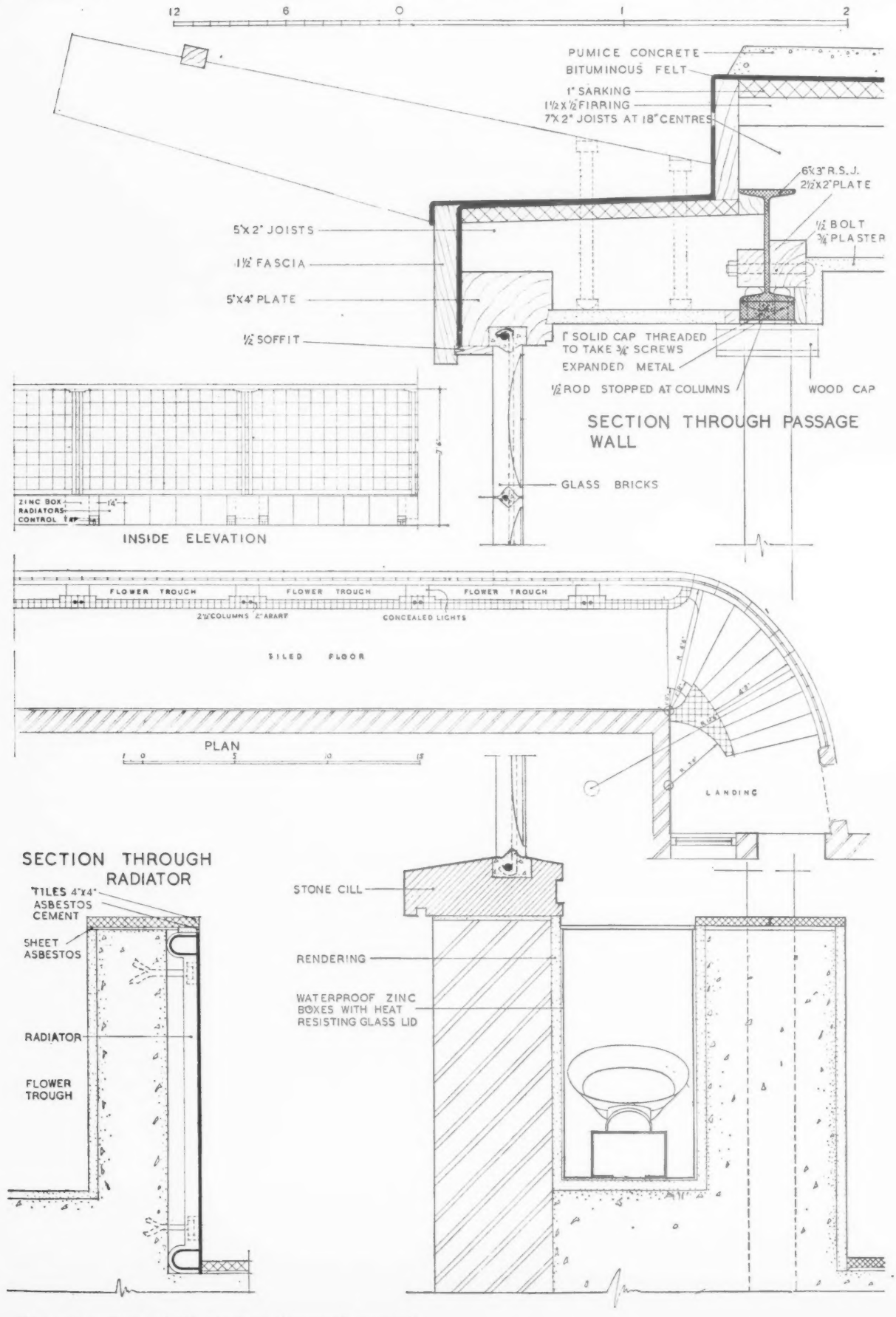


The passage illustrated above was built to connect an existing house with a new wing ; owing to the position of the kitchen and service quarters, direct connection between the two was otherwise only possible at first-floor level. The passage wall is constructed entirely of glass bricks, the roof, which is of light wooden construction, being supported by three pairs of free-standing columns $2\frac{1}{2}$ ins. diameter. Behind each pair of columns is a zinc box containing two lighting reflectors, which, projecting upwards through a glass lid, illuminate the glass wall as effectively by night as natural light by day. A plan and sections are shown overleaf.

FILING REFERENCE:

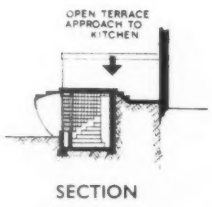
WORKING DETAILS : 442

CORRIDOR • HOUSE AT BRAMSHOTT • ADRIAN STOKES

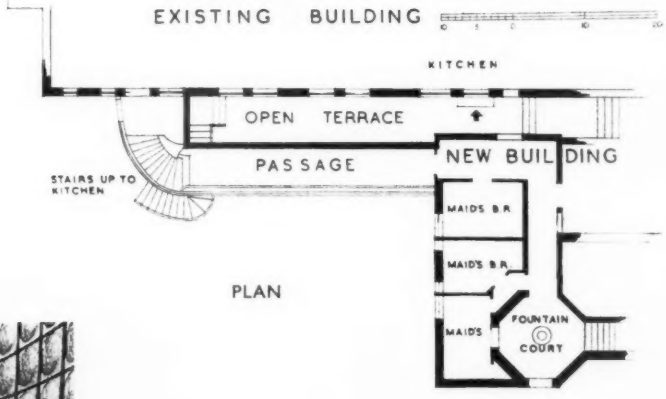


Plan and sections of the corridor illustrated overleaf

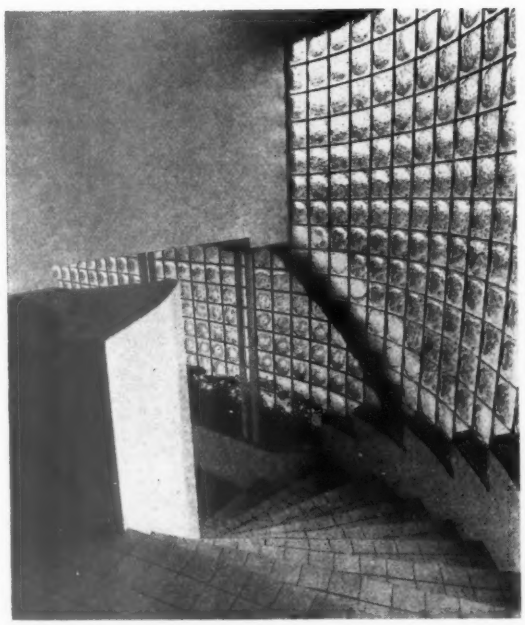
ADDITIONS, HOUSE AT BRAMSHOTT



SECTION



PLAN

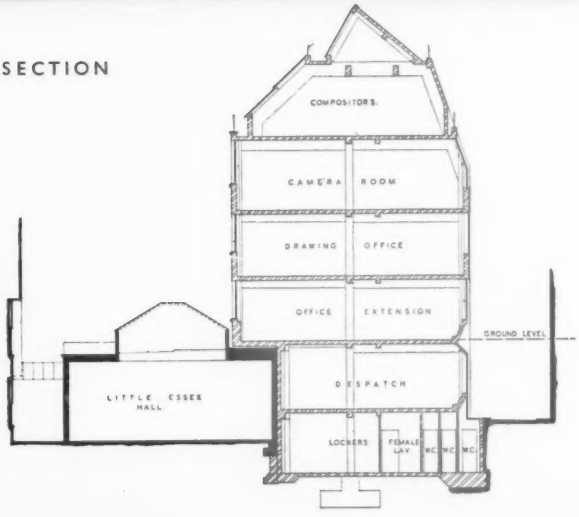


DESIGNED BY ADRIAN STOKES

The problem was to keep the new wing, seen on the right in the photograph, in keeping with the existing building. The internal planning of the house was such that direct access from one wing to the other was only possible at first-floor level, while the position of the kitchen door had to be taken into consideration in planning an external passage. The difficulty was solved by a careful utilization of different levels. Two curved staircases are used, one external and the other internal, to bring the passage down slightly below ground level while taking the traffic to the kitchen up over its roof on to the open terrace thus formed in front of the kitchen door. See also detail on facing page.

PROCESS ENGRAVERS' WORKS, LITTLE ESSEX STREET, W.C.:

SECTION



GENERAL PROBLEM.—*To extend the Milford Lane premises of the Sun Engraving Company. Formerly the building housed the general offices, accountants, line etching and camera studios, the composing, stereo and artists' departments being distributed in various parts of London. The new extension in Little Essex Street enables the London business of the company to be centralized in one building.*

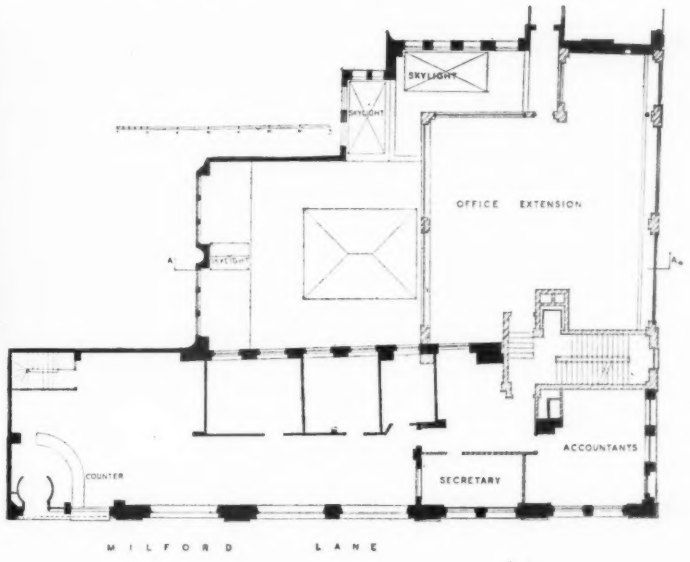
SITE.—*The site of the new extension was occupied formerly by three cottages some 150 years old, fronting on Little Essex Street and backing on to a large lighting area occupied to the height of one storey by Little Essex Hall. The average overall dimensions of the site are 45 ft. to the street, with a depth of 28 ft. The natural width of the site was considered to be insufficient for the extension and an agreement was entered into with the adjoining owners for the purchase of the lease of 8 ft. of the lighting area at the rear of the cottages, so that the extension could overlap Little Essex Hall above the ground floor storey. This necessitated the provision of a girder some 8½ tons in weight spanning the hall, with one column in the basement of the new building and the other penetrating the studios and basement of 9 Little Essex Street. The width of the new building above the ground floor storey was thus increased from 28 ft. to 36 ft., enabling all departments to be planned with comfort and with a margin for future expansion.*

Having increased the width it was essential to raise the building to accommodate a basement and five storeys. This additional raising above the former two storeys of the cottages made a second series of negotiations necessary with the owners of the properties on the south side of Little Essex Street. The narrow width of Little Essex Street, i.e. 14 ft., and the character of the building opposite made the negotiations more difficult but they were brought to a satisfactory conclusion mainly by the decision to use faience for the facing of the new building.

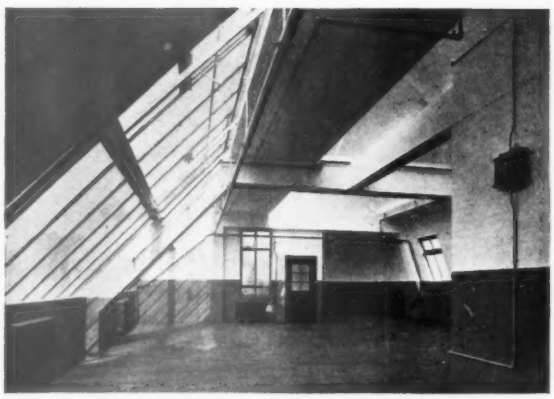
The negotiations were conducted and the consequent delay took place with the knowledge that the contracts for the new premises would have to be placed before the advent of Town Planning General Interim Development Act (No. 19) Order which was about to become operative. It has since transpired that the building in its present form would probably have been cramped by the loss of the two upper storeys to conform with the new regulations, had not the contract been signed and the work started before they came into force.

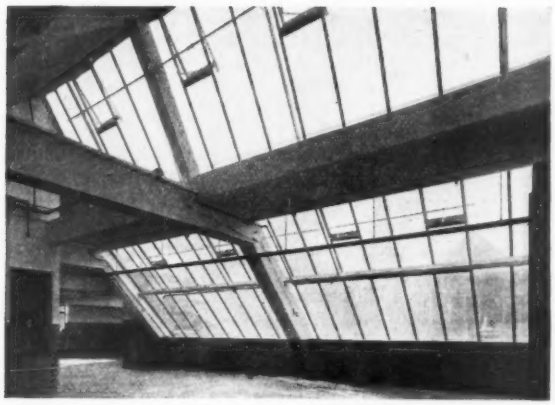
The illustrations show : The Little Essex Street front ; a view of the foundry and composing room on the third floor; and section A.A. showing how the building overlaps Little Essex Hall above the ground floor storey.

DESIGNED BY STANLEY PEACH AND PARTNERS



GROUND FLOOR PLAN

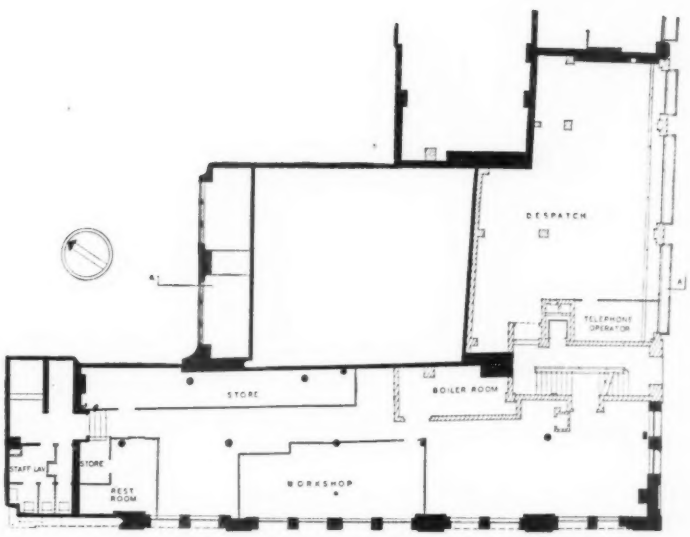




CONSTRUCTION.—*The main construction is steel framed, supported on reinforced concrete foundations, resting on stiff yellow clay, the floors being of hollow tile construction, with asphalt covering to flats, slopes and gutters. The walls are solid brick, plastered on the inside, except for special tiling, and faced with impervious white glazed tiles to the areas and with faience to the elevation to the street. The staircase is of pressed steel with granolithic treads. Lead sheathed glazing has been used for all lanterns and skylights; and specially made windows have been designed for all elevations to obtain maximum light.*

For full list of general and sub-contractors see page 960.

The photographs show: top, the despatch department, centre, two views in the composing room. The plans are of the lower ground and ground floors. The basement is planned as a small welfare centre for the female members of the staff.



LOWER GROUND FLOOR PLAN

G

LETTERS FROM READERS

Powys Memorial Benefit Fund

SIR,—Prior to the death of our late secretary, the Committee had decided that Mr. Powys's completion of twenty-five years' devoted service, which would have been accomplished in October next, should be suitably marked. A small sub-committee was formed to that end, and had proposed that a fund should be raised to present Mr. Powys with a piece of inscribed plate and a cheque.

In the sad circumstances which have arisen, it is suggested that we should direct our efforts towards a Memorial Fund for the benefit of Mrs. Powys, and especially for the education of her two small children. We might thus, in some measure, give practical illustration of our appreciation of Mr. Powys's work.

It is common knowledge among those who have regularly attended committee, and must be patent to all who have followed the Society's fortunes, that Mr. Powys sacrificed himself and his professional prospects, without reserve, to the protection of ancient buildings. That, by his personality and skill, he might have attained to eminence and wealth in his profession is beyond question; but he set aside such ambition in our interests, which he always placed first.

Finally, by overworking to a degree which had often caused the Committee grave anxiety, he gave us all that man can give—his life; for not until his physical collapse did he cease his work, and then, alas, it was too late. Greater devotion to duty than this no man can show, and thereby it is clear that there falls upon us, in whose service Mr. Powys so long and so unselfishly laboured, a solemn obligation. In the years of life that Mr. Powys had every reason to hope lay before him, he would have amply provided for those dear to him and reliant upon his protection who survive him and, therefore, the task of doing all possible to mitigate their loss is a trust which is ours. Mr. Powys never failed us, and it is now our turn.

I write to acquaint you with the scheme by which it is hoped that the Society may generously discharge this trust, and I am sure that your readers will welcome the opportunity to associate themselves with it. The Committee will be deeply grateful for such support as your readers may be so kind as to give, and donations should be sent to the Hon. Treasurer, Mr. H. Everett, 20 Buckingham Street, Adelphi, London, W.C.2.

ESHER,
Chairman,
Society for the Protection of Ancient Buildings

LORD ESHER (Chairman of the Society for the Protection of Ancient Buildings).

H. L. PIRIE (Chief Engineer, Coal Utilization Council).

Recent Developments in Heating

SIR,—I notice that in the article by Mr. Gordon Alexander on recent developments in Heating, Lighting and Ventilating, which appeared in your issue for May 28, there is no mention of the automatic control of temperature in plants using coal or coke. Oil-fired boilers are described as "automatic" and there is a reference to mechanical stokers for solid fuel; but a reader of the article might obtain the impression that the automatic principle was confined to plants using oil fuel.

This is, of course, very far from the facts, and thermostatic control of temperature was applied to coal-burning plants many years before it was used with oil-burners.

There are various methods of effecting this control. For example: *Air Temperature Control*, in which a thermostat is placed in one of the rooms to be heated and set at a pre-determined temperature, say 60 deg. F. As soon as the air in the room reaches this temperature the motor that drives the draught fan and stoker feed is automatically cut out, and the fire dies down thus reducing the output of heat. When the temperature has fallen 2 degrees the motor cuts in again and continues in operation until a temperature of 60 degrees is once more attained.

Water Temperature Control, in which an aquastat is used, immersed in the water to be heated. When the temperature of the water reaches the aquastat setting, the motor is cut out as in the case of the thermostat.

"*No-Load*" *Control*; in very mild weather both the air and water temperature controls might be out of action for a long time. To prevent the fire going out, a time control may be fitted, which starts and stops the motor at predetermined intervals.

There is another point about mechanical stokers for solid fuel that deserves mention, namely those which operate on the underfeed principle and enable bituminous coal to be burned without smoke. The object of feeding from below is that volatile gases in the coal should, on their way to the smoke-stack, pass through a layer of incandescent fuel, where they are ignited and consumed, thus producing useful heat without smoke. In the meanwhile, the solid residue from which the volatile gases were released is forced up into the fire and in turn consumed, leaving nothing but non-combustible ash which fuses into clinker and is removed from the furnace.

The fuel is conveyed to the furnace by means of a continuously revolving screw leading from a hopper, and the only labour entailed is that of filling the hopper once in 24 hours and removing the previous day's clinker—the work of a few minutes.

In the gravity type, the rate of feed is in proportion to the amount of fuel consumed. The result is automatic stoking without mechanical means; and here also labour is reduced to the minimum (since the hopper need only be filled once in 24 hours and the ash or clinker removed every other day—or even less frequently); there is perfect combustion and remarkable economy in fuel; automatic control of temperature; and absence of smoke, fumes, soot and dirt. H. L. PIRIE.

Le Play Society

We have received from the Secretary of the Le Play Society, 58 Gordon Square, W.C.1, a leaflet giving the Society's summer programme. Under the leadership of Professor H. J. Fleure, a group of members and others will visit Roumania (August 2–September 1) for the purpose of geographical and sociological study. They will travel *via* Episcopia Bihorului and Sibiu to Paltinish. After visiting Bucharest and other historic centres, the party will go to Dobruja and Constansa, and will return to London by way of Istanbul, Piræus, and Athens. The study of Russia and Poland under the guidance of Sir E. John Russell is to be continued. This group will leave London on August 1. Cities most closely associated with Polish history will be visited, and time will also be spent in country districts for the study of the problems of agriculture and peasant life. The Polish expedition will return on August 30, but a section will go on to Russia with Sir John Russell, spending a few days at Kiev and Moscow. Professor C. B. Fawcett, of the University of London, is to lead a group to Czecho-Slovakia, visiting Prague, etc., and going on to Telgart and afterwards to the High Tatra (August 6-27). Another group of members will be leaving for Russia on August 8, under the leadership of Mr. W. Arnold Riley, for general studies.

Details of these tours may be obtained from Miss Margaret Tatton at the above address.

RECONSTRUCTION OF HOUSES, CLAPHAM COMMON, S.W.

ARCHITECT, DAVID ROBERTSON (ROBERTSON AND MARSH)

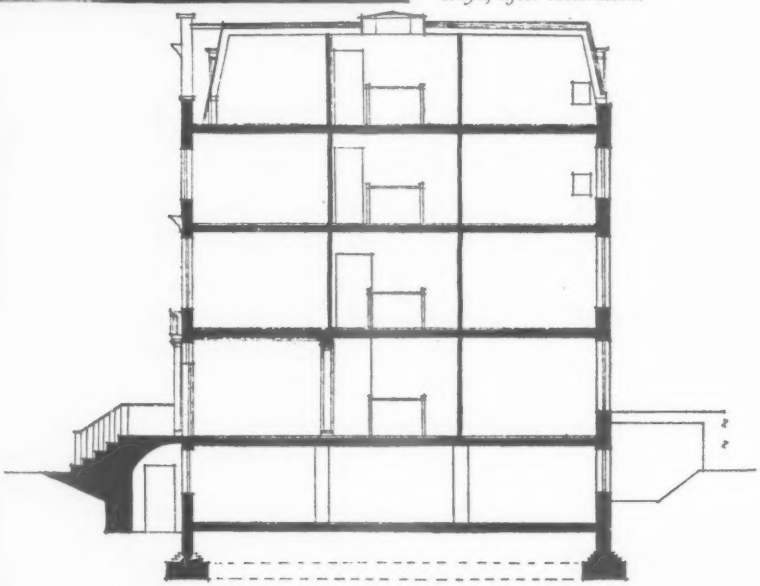
GENERAL PROBLEM.—*Reconstruction of a row of ten early eighteenth century houses at North Side, Clapham Common, S.W. The tradition of the neighbourhood attributes the houses to Wren. In the eighteenth century several of them were occupied by members of the famous Clapham Sect. William Wilberforce went to live in one of them in 1797, and Zachary Macaulay, the father of the historian, is believed to have kept his school at No. 14.*

The photographs show, top, three of the houses, Nos. 15, 16 and 17, after restoration and conversion into ten flats; and the houses before restoration.

RECONSTRUCTION OF EIGHTEENTH-CENTURY

PLAN.—*All the houses, with the exception of three, Nos. 15, 16 and 17, which have been converted into ten flats, have been restored to their original condition. The staircase and several of the panelled rooms formerly in No. 16 had been moved some years previously to the London Museum. This left the house a mere shell and made the houses on each side practically impossible to deal with separately. In No. 16, therefore, has been built the central staircase, serving the two flats on each floor. The remaining space in this house has been used to form the hall and, in the front, the dining rooms connected by double doors with the unaltered rooms in Nos. 15 and 17 and, at the back, kitchens and bathrooms. This enabled the work to be carried out with very little alteration to the character of the original houses or to the proportions of the rooms, many of which are panelled.*

The photographs show two of the early eighteenth-century doorways, after restoration.



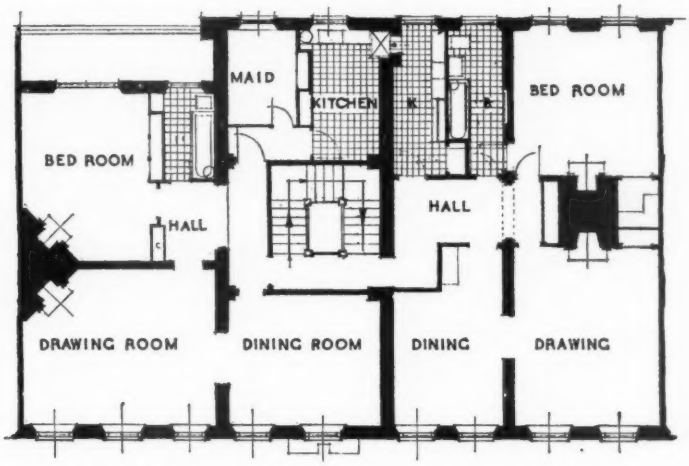
SECTION

HOUSES, CLAPHAM COMMON, S.W.

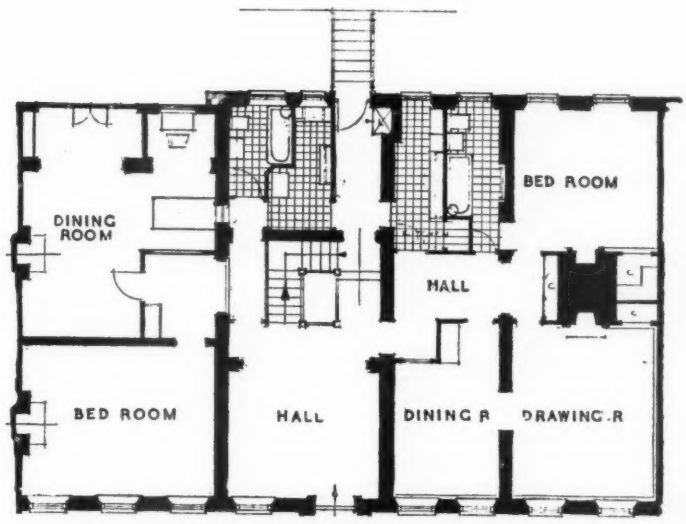
ARCHITECT,

DAVID

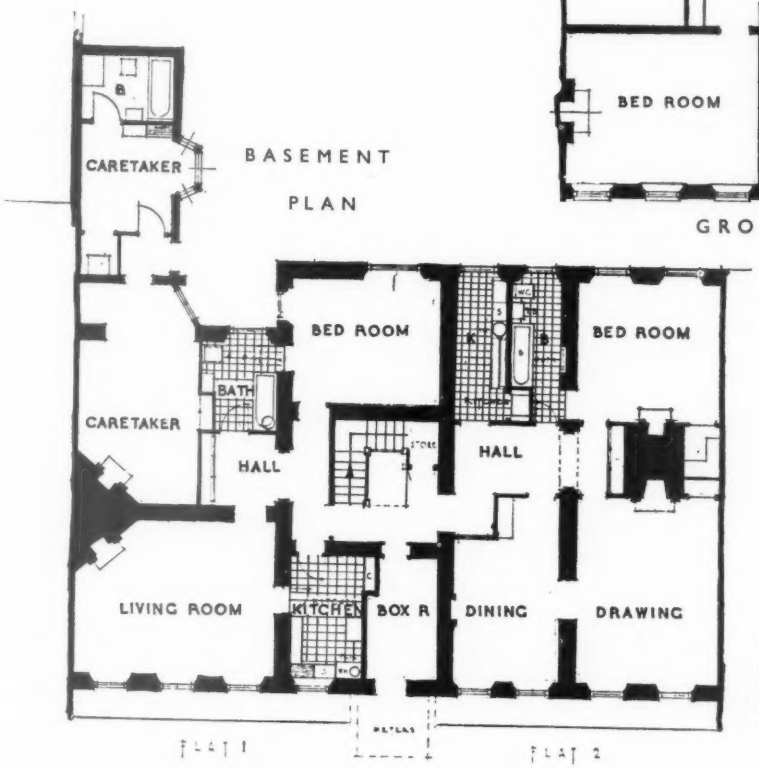
ROBERTSON

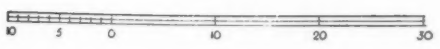


TYPICAL UPPER FLOOR PLAN

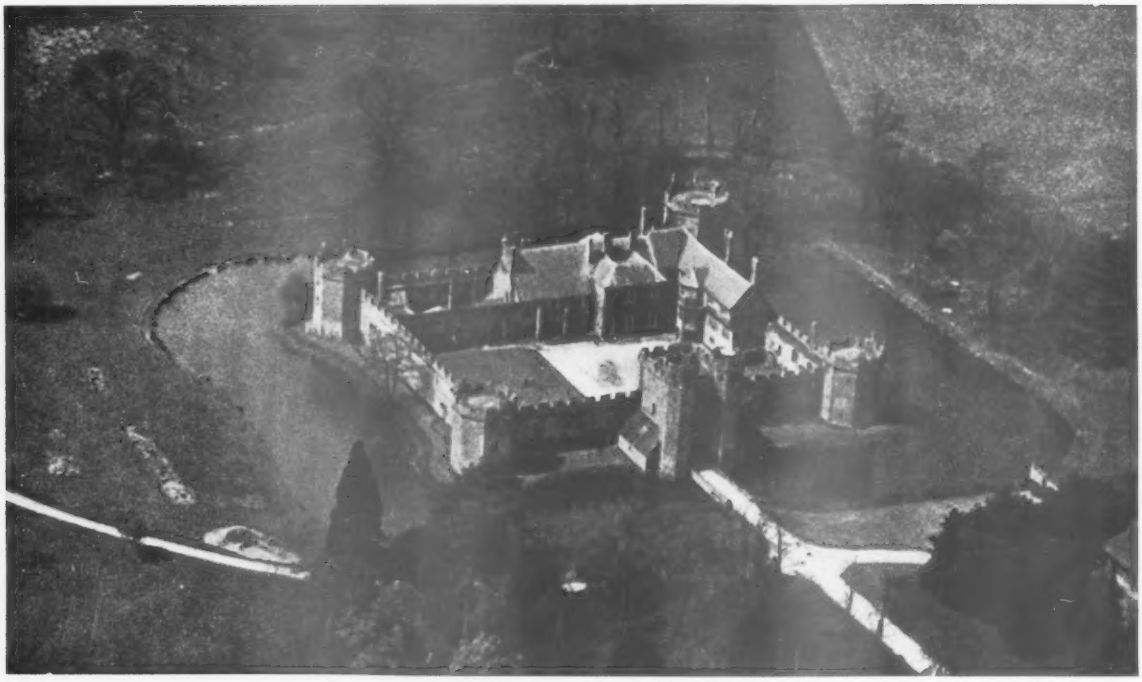


GROUND FLOOR PLAN





The photograph is of one of the panelled rooms. The plans show how the three houses, Nos. 15, 16 and 17, have been converted into flats. For list of general and sub-contractors, see page 960.



Maxstoke, Warwickshire. From "The English Castle."

LITERATURE

CASTLES

By J. A. GOTCH

The English Castle. By Hugh Braun, with a Foreword by Hilaire Belloc. London : Batsford. Price 7s. 6d.

THIS is a very interesting, readable book, for Mr. Braun treats his rather complicated subject in a simple manner, as free from technicalities as may be, and where these are unavoidable they are lucidly explained. As he truly says, the ordinary person, when motoring through the country, is more inclined to visit cathedrals or ancient houses than the ruins of a castle. The reason is not far to seek, for cathedrals and houses are more comprehensible than castles. The motorist can find in the former much that he can connect with his own knowledge and experience, but in the ruins of a castle, even if well preserved, he can grasp little beyond the fact that it must have been a place of formidable strength. Mr. Braun's book will go far to remove this disability, and to explain the purpose of the masses of masonry which are apt to be rather bewildering to those inexperienced in such buildings.

Warkworth, Northumberland. From "The English Castle."

The development of castles is fully described, from the time when they were merely great mounds of earth with certain accessories of timber, through the periods when they were built of stone, first as great strongholds, primarily planned for defence but also not a little for aggression ; then through the times when, in addition to means of defence, there were buildings suitable for dwelling in comfort and state, and so on to the time when adequate defence failed before assaults by artillery, and the great castle gave way to the fortified manor-house, strong enough to resist petty marauders.

All this is duly set forth. The means of attack are described, the greatest menace being that of undermining ; and the devices adopted for foiling these attacks are explained. As long as the offensive weapons were bows and arrows and machines for hurling huge missiles, including on occasion the bodies of mules and prisoners, defence kept pace with attack. But artillery was a very different matter, and after its introduction the impregnable stronghold became a thing of the past.

Such, very briefly, is the theme of the book. The author observes that he has found evidence of the existence at one time or another of some fifteen

hundred castles in England and perhaps two hundred in Wales. Not a tithe of them can now show any remains, but of those that do survive, he deals with the most interesting and characteristic, and illustrates his theme with many photographs and drawings, among the latter being some interesting reconstructions of the earlier castles, the fortified mounds.

The book will appeal not only to specialists, such as architects and antiquaries, but to the ordinary traveller who desires to extend his knowledge in a very interesting direction by being able to understand the real meaning of the picturesque ruins which he is now perhaps inclined to neglect as being to him almost unintelligible.

A foreword, quite helpful in presenting the perspective of the subject, is contributed by Mr. Hilaire Belloc.

ARCHITECTS' AND TECHNICIANS' ORGANIZATION

The A.T.O. Bulletin. Obtainable from the Secretary, 15A Gloucester Gate, N.W.1. Price 4d.

"WE are convinced that there is plenty of room for a publication of this kind which will consistently give expression to a point of view which is not represented in any existing architectural or technical journal. To explain this point of view is to explain the aims of the A.T.O.," writes the editor

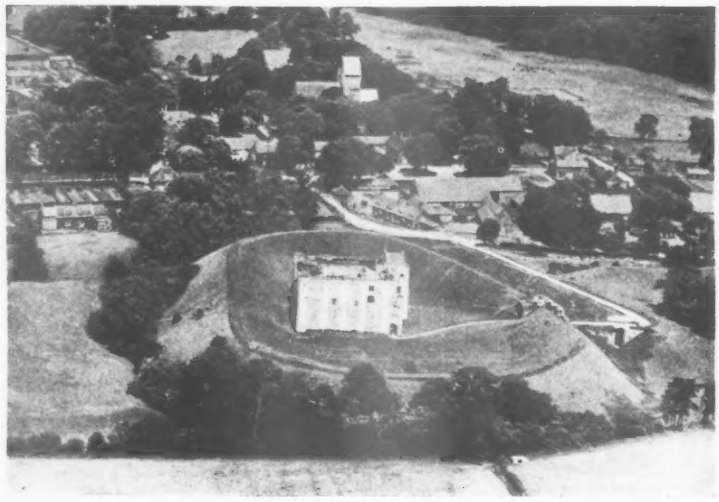
The photographs show: top, Caernarvon; right, Ludlow, Shropshire.

of this modest first number of the mouthpiece of the Architects' and Technicians' Organization. For instance, no serious attempt, he claims, has been made elsewhere to define what architecture should be in this present state of society, to present the viewpoint of the tenant in working-class housing or to show the relation between the problems of the building worker and those of the architect.

The aims of the A.T.O. are varied, but appear to be mainly the result of discontent with the existing state of society and "the impotent and degrading position of the architect" within it. They are chiefly concerned with better working-class housing, improved conditions for architects and technicians, and the support of "all those organizations" which are striving for a rational solution of present-day problems. The A.T.O. intends also to oppose "in every possible way" all tendencies to Fascism and war which offer an essential menace to the carrying out of the above aims and to the advancement of material prosperity and culture, and which prevent "architects and technicians from fully discharging their social responsibilities."

Actual constructive achievements of the organization carried out during the one year in which it has been in existence include the formulation of a clear outlook on matters such as the status and scope of official architects as opposed to private practitioners, and on the very topical subject of architectural education. It has also made good use of its Tenants' Defence Group, while its Housing Group has achieved a considerable amount of research work. The A.T.O. has, moreover, recently organized an important housing exhibition.

The earnest aims of the A.T.O. and its expression of discontent with the present frustration of the true architect deserve nothing but praise. One is logically led to the conclusion, however, that its heroic intentions are but another attempt to cure the disease by treating the symptoms and that its work is but one more sad case of diffused energy and misdirected talent. Though the organization is certainly "left" in tendency, it has apparently no definite political views and discussion has occurred within the movement as to "what extent members of the learned professions should take action, or indeed interest, in political matters." It may as well be asked, "Is the architect a human being?" Surely the architect's trained powers of reasoning should alone make him the most politically conscious of individuals. A rational Weltanschauung would lead him to the inevitable conclusion that if the social economic foundations of society are rotten, most of the manifestations of that society will also be rotten and that the only cure for the cancer is the knife.



Castle Rising, Norfolk. From "The English Castle," reviewed on the preceding page.

In the Bulletin appears an excellently written review of Sir John Orr's surprising document, "Food, Health and Income," in which he finds that half the population of this country is suffering from malnutrition. Apart from the present appalling state of economic chaos, and approaching war, starvation in the midst of plenty should alone afford sufficient proof that there is only one vital contemporary issue for all professions, creeds and classes, unless a handful of international credit manipulators can be termed a class.

It would be unjust to criticise the actual production of the Bulletin, for here, again, the "grim goddess of finance" has had her inevitable last word. Suffice it to say that it is simple and direct in treatment. For the time being it is to be produced once in two months.

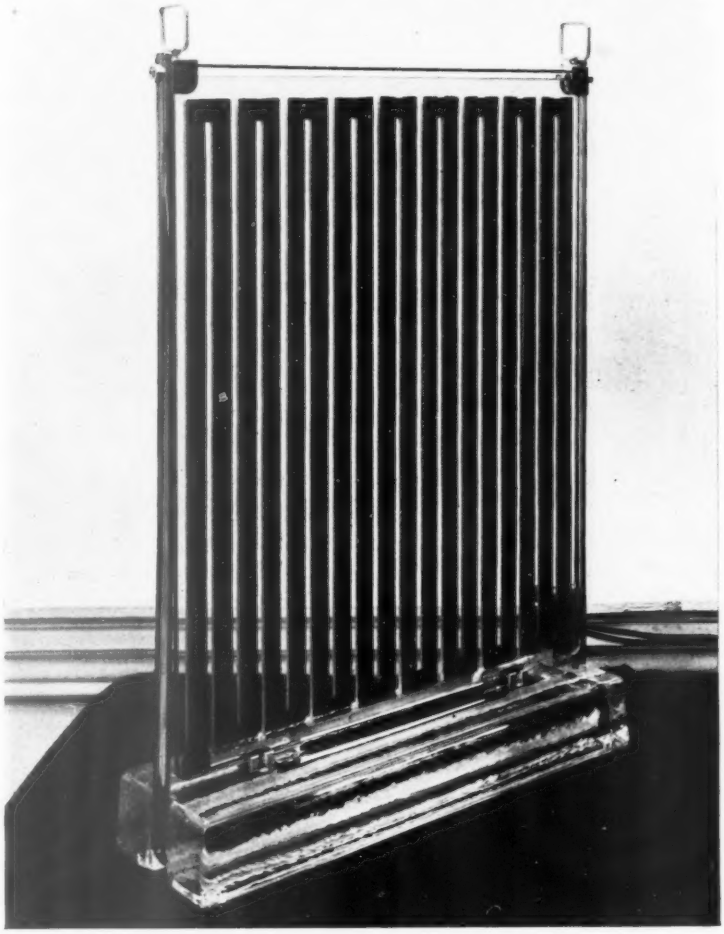
Publications Received

Cock Sparrow: by Oliver P. Bernard, London: Jonathan Cape, Ltd., price 10s. 6d.

Wirral Countryside: A Cautionary Guide. Published by the Wirral Society. Liverpool: the University Press; London: Hodder & Stoughton, price 6d.

Gardening in Towns: by H. H. Thomas. London: Methuen, price 5s. 0d.

House at Englefield Green. By Robert Lutyens. Perspective by Harold Greenwood. (R.A. Exhibition. No. 1344.)



TRADE NOTES

[EDITED BY PHILIP SCHOLBERG]

An Unorthodox Electric Fire

THE illustration at the top of this page shows a new type of electric fire which was exhibited by Pilkingtons during their recent show at the Building Centre. The heat resisting properties of Armourplate glass have been made use of before in oven doors and in its final application this virtue has been logically developed so that it is used as the radiating member for an applied metallic element.

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Constructionally, the fire is remarkably simple. Two sheets of glass are used, held about half an inch apart by a light chromium-plated frame. On the inner face of each sheet of glass is the heating element, a thin strip form of conductor, the composition of which is kept secret, but which is presumably either sprayed or electrolytically deposited. Leads are taken off at opposite ends of the pattern, and the whole sheet of glass becomes warm.

The actual running temperature of the glass is not very high, compared with the usual coiled element, but it is hot enough to give the casual user a certain amount of surprise, though no great pain, a point which I tested personally. For this reason a lamp is mounted in the glass base of the fire, to act as a tell-tale.

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The type illustrated here is rated at 750 watts, though other sizes are available : it should also be realised that almost any pattern can be employed, provided that it is more or less a continuous line, or can be easily subdivided into simple units. Experimental work on these fires is now completed, and production is to start quite soon.

Radiant Heating by Gas

The Cox surface combustion system has been in use for various purposes for a good many years, and is now being developed for large-scale heating in churches, halls and factories, with the additional advantage that it can be used in the open air or for partially-covered grandstands.

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The gas is burnt in a patent combustor, which consists of an iron burner box and frame, in which is fitted a porous refractory brick through which an air-gas mixture is passed, and on the surface of which it burns in a series of minute closely-spaced bunsen flames which heat the surface of the brick.

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The burners are made in two standard circular units 6 ins. and 9⅝ ins. diameter, and are mounted in various positions according to the size of the room, either horizontally in the centre or at an angle on the walls, about 9 ft. from the floor. Any shape or size of burner can be simply made up, the amount of heating surface required being in square inches about one-tenth of the floor area in square feet.

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Two pipe leads to each burner are needed, one for gas, and one for the air supply, which is delivered at a pressure of 3 ins. water gauge by a small electrically driven fan with an air filter. Control valves are also available to cut off the gas supply should the fan set fail, with interlocking levers to render the whole device completely foolproof, and the heaters can, when necessary, be thermostatically controlled, leaving only a small pilot flame.

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The units cost £2 10s. 6d., and £5 5s. for the 6 in. and 9⅝ in. sizes, and the motor fan sets are £7 15s. upwards, according to size. Only one fan, of course, is necessary for any number of heaters.

Addresses

Pilkington Bros., Ltd., St. Helens, Lancashire.

Radiant Heating, Ltd., Radiant Works, Harmood Street, Chalk Farm Road, N.W.1.

CINEMATOGRAPH TRADE EXHIBITION

Following the practice established in previous years, the Cinematograph Trade Exhibition, which is to be held at Eastbourne, from June 22 to 26, in connection with the annual summer conference of the Cinematograph Exhibitors' Association, will contain a section displaying drawings and photographs loaned by the following : Messrs. Leslie H. Kemp and Tasker; Percy L. Browne and Son; Roberts and Wood; Mr. Robert Cromie, F.R.I.B.A.; and Mr. George Coles, F.R.I.B.A.

MODERN ITALY

An exhibition of photographs of "Modern Italy" will be opened by Signor Grandi, the Italian Ambassador, at the Camer Club, 17 John Street, Adelphi, W.C., on Friday next, June 19, at 4.30 p.m. The exhibition will include about 200 photographs and will be opened to the public, free of charge, daily from 11 a.m. to 1 p.m., and from 3 p.m. to 6 p.m.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

Housing

MR. G. WHITE asked the Minister of Health if the survey of overcrowded conditions as defined by the Housing Act, 1935, had been completed; and if he could give the House some indication of the number of houses which were overcrowded and the number of persons concerned.

Sir K. Wood said that up to June 1, 1,024 local authorities had submitted reports: the reports showed that 6,431,464 houses were inspected of which 247,884 were found to be overcrowded. These reports included 55 county boroughs in which 1,902,149 houses were inspected and 71,600 were found to be overcrowded.

Up to June 1 reports had been received from 1,272 local authorities out of a total of 1,536. These reports show that 7,893,399 houses were inspected, and 296,738 were found to be overcrowded, an average of 3.8 per cent. The reports included 74 county boroughs in which 2,588,020 houses were inspected and 99,581 were found to be unfit, an average of 3.8 per cent.

The reports received included most of the large centres of population and he did not think that the results were likely to be substantially affected when the outstanding reports which he had urged local authorities to submit forthwith were received.

Mr. Joel asked the Minister of Health whether he could state the programme of the technical sub-committee of the Central Advisory Housing Committee who were now visiting different towns in the country to familiarize themselves with housing conditions.

Sir K. Wood said that the General Purposes and Technical Sub-Committee of the Central Housing Advisory Committee had decided that some of its meetings should be made the occasions for visits to housing estates in various cities. Following this arrangement, the Sub-Committee had visited estates of the London County Council, and estates at Birmingham, Dudley, Liverpool and Manchester. He was not aware that any further visits were contemplated at present.

Fire Protection

Mr. Kelly asked the Minister of Health whether recommendations had been made to hospitals and other institutions as to the prevention of and protection from fire; and whether any committee of experts had been appointed to deal with these dangers.

Mr. Shakespeare, who replied, said that no general recommendations had been issued by his Department, but attention was drawn to the importance of this matter when plans of buildings were being considered, or otherwise as occasion arose. The Minister was not aware that any committee of experts had been appointed to deal with safeguards against fires at institutions.

SLUM CLEARANCE PROGRESS IN SCOTLAND

Between January, 1934, and April last, local authorities had secured the vacation, with a view to closure and demolition, of 28,529 unfit houses, of which they estimated there were 63,000 in Scotland at the end of 1933. This leaves 34,471 such houses still to be dealt with and the Secretary of State continues to press for the accomplishment of the task by the end of 1938. That depends almost entirely upon the rate at which the local authorities can complete new houses in the remaining 32 months. The number actually completed by them in April was 1,360—a figure which may be expected to increase as the building season progresses. The number of houses under construction by local authorities at April 30 was 17,664.

Most of the new houses will be occupied by families removing from overcrowded houses, but the houses thereby vacated in so far as they are fit will afford suitable accommodation for many families displaced from unfit houses. The Department of Health reports that according to its returns 858 unfit houses were vacated during April—a rate of fully 10,000 per annum.

Fully 20,000 dwellings have been reconstructed in Scotland with the aid of grants under the Housing (Rural Workers) Act since it was passed ten years ago. The northern counties have done well. Inverness County Council has paid or promised grant in respect of the reconstruction of 1,355 houses included in applications received up to October, 1933, when it decided to cease operations under the scheme. Lately, however, it has decided to revive operations so as to assist urgent improvements and works for the alleviation of overcrowding in the county.

LAW REPORT

ACTION AGAINST BUILDER

Curtis v. *Davies. Official Referee's Court. Before Mr. C. M. Pitman, K.C.*

IN this case Mr. T. H. Curtis, of Ray Mill Road, Maidenhead, sued Mr. E. J. Davies, a builder of Blackamore Lane, Maidenhead, to recover damages for alleged breach of warranty in connection with the plaintiff's house, "Our Abode," which plaintiff purchased from the defendant in 1929 for £800.

The plaintiff's case was that the defendant warranted the house as well built and of good material and not affected by floods, whereas plaintiff now alleged that the house was not well built and failed to comply with the byelaws of the Maidenhead Urban District Council. The plaintiff also pleaded that the house was subject to flooding, and he claimed £158 damages.

The defendant denied that any warranty was given, and in evidence defendant stated that he had never told the plaintiff that the house was not liable to flooding, because he did not know at the time whether it was so or not. Defendant further stated that all his houses were well built, though he did not tell the plaintiff so.

After hearing the whole of the evidence, the Official Referee, in giving judgment, said he had come to the conclusion that the defendant had given no warranty and that the plaintiff must have known that that part of Maidenhead was subject to floods. Whilst expressing sympathy with the plaintiff, he gave judgment for the defendant, with costs.

Mr. P. J. S. Bevan appeared for the plaintiff, and Mr. Cohn for the defendant.

THE BUILDINGS ILLUSTRATED

MILFORD HOUSE, FOR THE SUN ENGRAVING CO. (pages 950–951). The general contractors were George Parker and Sons, Ltd., and the principal sub-contractors and suppliers included: H. Sabey & Co., Ltd., demolition; Peter Lind & Co., Ltd., foundations; General Asphalte Co., Ltd., asphalte; Diespeker & Co., Ltd., reinforced concrete and roof asphalted on new extension; Shaws Glazed Brick Co., Ltd., terra cotta; Dawnays, Ltd., structural steel; Turners Asbestos Cement Co., Bigsix roof on old building; Hills Patent Glazing Co., Ltd., patent glazing; Horsley Smith & Co., Ltd., wood block flooring; Colley Meikle & Co., Ltd., central heating and boilers; Surrey Engineering Co., Ltd., electric wiring, light fixtures and ventilation; Bingley, Son and Follit, slate sinks; J. Chater and Sons, Ltd., lavatory fittings; Fredk. Braby & Co., Ltd., internal metal staircase; Nettlefold and Sons, Ltd., door furniture; Crittall Manufacturing Co., Ltd., casements and window furniture; Express Lift Co., Ltd., lift gates and lifts; Wilmer and Sons, Ltd., iron staircases; Country Industries, Ltd., street lamp; Tile Decorations, Ltd., tiling.

FLATS, NORTH SIDE, CLAPHAM COMMON (pages 953-955). The general contractor was J. A. Barlow, and the principal sub-contractors and suppliers included: Excel Asphalte Co., Ltd., asphalte; Mathew T. Shaw & Co., Ltd., structural steel; Roberts, Adlard & Co., Ltd., tiles; Langley London Ltd., roofing felt; Gt. Metropolitan Flooring Co., Ltd., wood block flooring; South Metropolitan Gas Co., gas fixtures and gas fittings; County of London Electric Supply Co., Ltd., electric wiring, electric heating and bells; Simplex Electric Co., Ltd., electric heating; Alfred Goslett & Co., Ltd., sanitary fittings and stairtreads; Gypsum Mines, Ltd., Sirapite plaster.

North Wales Architectural Society

At the annual meeting of the North Wales Architectural Society held recently at Bangor, the following officers were elected: President, Mr. Richard Hall, F.R.I.B.A.; vice-president, Mr. S. Colwyn Foulkes, M.ARCH., A.R.I.B.A.; hon. treasurer, Mr. Richard Hall, F.R.I.B.A.; hon. secretary, Capt. Robert Parker, M.C., A.R.I.B.A., P.A.S.I. Members of Council: Messrs. Whitfield Burnett, F.R.I.B.A.; H. Harold Hughes, M.A., A.R.I.B.A.; G. A. Humphreys, F.R.I.B.A., F.S.A.; Herbert L. North, B.A.CANTAB., F.R.I.B.A.; and F. A. Roberts, F.R.I.B.A. Hon. excursion secretary: Mr. L. Moseley, L.R.I.B.A., P.A.S.I. Representative on Liverpool Architectural Society Council: Messrs. G. A. Humphreys, and S. Colwyn Foulkes. Allied Societies Conference: Mr. S. Colwyn Foulkes. Auditor: Mr. H. Senogles, F.C.A.

Manufacturers' Item

The work of fixing the electric wires and cables on the "Queen Mary" has been considerably lightened by the use of Harco perforated steel cable plates, of which a total length of 8½ miles was used. Harco perforated steel cable plates are manufactured by Messrs. G. A. Harvey & Co. (London), Ltd., of Woolwich Road, London, S.E.7.

THE WEEK'S BUILDING NEWS

LONDON & DISTRICTS (15 MILES RADIUS)

CHELSEA. *Flats and Shops.* The B.C. has authorised Mr. A. S. Souter, the architect, to proceed with the scheme for the erection of the remaining 80 flats and 9 shops on the Manor Street area.

EAST HAM. *Houses, etc.* Plans passed by the Corporation : Extensions, shopping hall, Myrtle Road, and 26 houses, Stevenage Road, for Mr. R. J. Slater; foundry extensions, Beckton Road, for Mr. G. R. Unthank; extensions, Grantham Works, Grantham Road, for Mr. T. Anders; office, 65 Whitta Road, for Mr. G. Botwright; alterations, Premier cinema, High Street, for Provincial Cinema Theatres, Ltd.; laboratory, Boleyn Road, for New London Electric Works, Ltd.; alterations, 177 High Street, for Messrs. W. Peck & Co.

EAST HAM. *Rehousing.* The Corporation is considering a scheme by the Borough Engineer for rehousing on sites in Park Avenue and Vicarage Lane.

HAMPTON HILL. *Flats.* Mr. A. C. Crowtan is to erect 144 flats on the site of the isolation hospital, Uxbridge Road, Hampton Hill, Middlesex.

HARROW. *Estate Development.* The D.C. Houses, Ltd., 5 Howberry Road, Edgware, propose to develop the Canons Park Estate by the erection of 703 houses. Plans are under consideration.

SOUTHGATE. *Houses, etc.* Plans passed by the Corporation : Three houses, Ivy Road, for Mr. M. Joseph; four houses, Stone Hall Road, for Mr. C. E. Ward; 14 houses, Brycedale Crescent, and 20 houses, Roseneath Estate; 110 houses, Oakwood Park Road, for Mr. G. W. Newman; 38 houses, Seafield Road, for Mr. E. Pollex; factory, Regents Avenue, for Mr. K. McIntosh; five houses, Cresswell Way, for Messrs. Reader Bros.; 42 houses, Arnos Grove, for Mr. H. A. Nash; 13 houses, Laken Heath, for Mr. T. S. Rutter; two houses, The Spinney, for Messrs. A. Scott and Sons; seven shops and flats, Green Lanes, for Mr. B. Locke; 12 houses, Morton Way, for Mr. H. C. Keene; 18 flats, Green Lanes, for James Estates, Ltd.; 36 flats, Churchfield site, High Street, for Mr. F. Gibberd; four houses, The Birches, for Mr. C. W. D. Walden; nursing home, Chase Road, for Messrs. Simon, Haynes & Co.; development, Heddon Court Estate, Cockfosters, for Mr. F. W. Walker.

STANMORE. *Hotel, etc.* A site at London Road and Brockley Hill, is to be developed by Incorporated Properties, Ltd., for shops with flats over and a residential hotel, including playing fields, tennis courts, swimming pool, etc.

SUDBURY. *Flats.* The Wembley U.D.C. has given permission to Messrs. G. and G. Hilton, of Harrow Road, Wembley, to erect 36 flats at the extension of Priory Close, Sudbury.

WEALDSTONE. *Flats.* The Ministry of Health has upheld the appeal by Mr. W. J. Bass, Kinfaye Potter Street, Pinner, against the Council's refusal to grant permission to erect flats at the junction of Edward Road and Albert Road, Wealdstone.

WEMBLEY. *Flats.* The U.D.C. has granted permission to Mr. De Metz to erect two three-storey blocks of flats in Kingsbury Lane, opposite Birchen Grove.

WEMBLEY. *Flats.* The U.D.C. has approved plans prepared by Messrs. P. Chase Gardener & Co., Hounslow, for the erection of a four-storey block of 18 flats in Kingsbury Road.

WESTMINSTER. *Flats, etc.* Plans passed by the City Council : Flats, 22 Frith Street, for Messrs. Ryan, Caddy & Co.; showrooms, offices and flats, 27–8 Soho Square and 61 Greek Street, for Messrs. D. and J. D. Wood; service flats, 19 Princes Gate, for Messrs. C. Saunders and Sons; flats, 17–20 Arlington Street, for Mr. M. Rosenauer; flats, 19–28 Ennismore Gardens, for Mr. G. Jeeves; flats, 8 Chesham Street, for Messrs. Byron Burge, Ltd.; flats and offices, Grosvenor Square and Grosvenor Street, for Mr. R. W. Barton; hotel and shops, Wilton Road and Vauxhall Bridge Road, for Messrs. Wimperis, Simpson and Guthrie; showrooms, offices and flats, Berkeley Square and Bruton Street, for Mr. L. L. T. Sloot; air mail station, Buckingham Palace Road, for Imperial Airways, Ltd.; rendering, 23–4 Pall Mall and 29 St. James's Square as offices, for Messrs. Wimperis, Simpson and Guthrie; flats and offices, Park Street and South Street for Messrs. Anns and Haigh; offices, 23–5 Soho Square, for Housing Corporation of Great Britain, Ltd.; conversion, 2–10 Lowndes Street, to board residences.

SOUTHERN COUNTIES

GRAVESEND. *School.* The Corporation has asked the Borough Architect to prepare plans for the erection of a school for 800 on the West Court Estate at an estimated cost of £20,000.

GUILDFORD. *Shops and Flats.* Mr. Boyd Scott has prepared plans for the erection of a block of shops and flats at the corner of Farnham Road and Railway Approach, Guildford.

HAVANT. *Hall.* The U.D.C. has approved plans by Mr. Stallard, for the proposed erection of a church hall, in connection with St. Wilfrid's Church.

TORQUAY. *Pier, etc.* The Corporation has adopted a scheme prepared by the Borough Engineer (Mr. P. W. Ladmore) for the demolition of the present pier, and the erection of a new structure, provision being made for a large hall to accommodate 1,500. The cost is estimated at £62,000, plus £10,000 for furniture and equipment.

WEST SUSSEX. *Schools.* The C.C. has agreed to the erection of new schools at Selsey and Sidlesham, at an estimated cost of £32,000. Plans by the County Architect.

WORTHING. *Flats, etc.* Plans passed by the Corporation : 48 flats, Lansdowne Road, for Onslow Estates, Ltd.; showrooms, 51–5 Montague Place, for Messrs. Marks and Spencer, Ltd.; two houses, Seldens Way, for Messrs. Boxall and Stracey; two houses, Offington Drive, for Messrs. L. Daynes, Wood and Son; additions, George Hotel, Goring Road, for Kemp Town Brewery, Ltd.; two houses, Peveril Road, for Messrs. Sparks and Son; three houses, Sea Lane, for Novean Homes, Ltd.; 76 houses, Alinora Estate, Goring Road, for Worthing Estates Building Co.; 16 houses, Upper Brighton Road, for Sompting Manor Estate, Ltd.; 24 houses, Goring Park Estate, for Messrs. Wignall and Ainsworth; two houses, West Park Lane, for West Park Estates, Ltd.; two houses, Loxwood Avenue, for Messrs. G. Baker and Son; two houses, Hollingbury Gardens, for Mr. F. Kenton; alterations, 35 Montague Street, for Messrs. F. W. Woolworth & Co., Ltd.; three houses, Meadow Road, for Mr. H. M. Potter.

WORTHING. *Hall, etc.* The Town Council has decided to invite tenders for the erection of a windscreen, amusement hall, re-decking of pier and other structural alterations, estimated to cost £9,250.

MIDLAND COUNTIES

BIRMINGHAM. *Housing.* The Corporation is to commence the development of another housing estate at Turfpits Lane at a cost of £351,343.

BIRMINGHAM. *Extensions.* The Corporation is to extend the Nechells gasworks at a cost of £166,211.

BURTON-ON-TRENT. *Office Extensions.* The Corporation is to proceed with the schemes for office extensions in King Edward Place at a cost of £40,000.

NORTHAMPTON. *Houses.* The Corporation is to erect 200 houses on the Spencer Estate.

NORTHAMPTON. *Library.* The Corporation has approved plans for the erection of library and police premises at Kingsthorpe.

NORTHAMPTON. *Conversion, etc.* Plans passed by the Corporation : Conversion chapel to service garage, Artizan Road, for Mr. A. Walker; stores, 78 St. James' Road, for Messrs. Padmore and Barnes, Ltd.; four houses, Rushmere Avenue, for Messrs. Stafford and Agutter; two houses, Chalk Lane, for Messrs. Claridge and Godwin; six houses, Cyril Street, for Messrs. S. G. Sale & Co.; four houses, Malcolm Drive, for Messrs. Chowns, Ltd.; 11 houses, Towcester Road, for Mr. R. H. Hewins; 96 houses, The Headlands, for Messrs. T. Wilson and Sons, Ltd.; seven houses, Bushland Road, for Messrs. A. Glenn and Sons, Ltd.

WOLVERHAMPTON. *Development, etc.* Plans passed by the Corporation : Development, Buttons Farm estate, for Messrs. Joynson Bros.; two shops, Penn Road, for Broadway Brewery, Ltd.; shop alterations, Queen Square, for Midland Furnishing Co.; two houses, off Pinfold Lane, for Messrs. Moore Bros.; estate development, Warstones Road and Springhill Lane, for Mr. W. H. Whitehead; Methodist Church hall, Wimbourne Road, for Mr. F. Birch; two houses, Wychbury Road, for Mr. O. Denning; two houses, Wychbury Road, for Mr. L. McLean; two houses, Pinfold Lane, for Mr. G. H. Wain; 50 houses, off Hollybush Lane, for Messrs. A. M. Griffiths and Son, Ltd.; alterations, Sunbeam Works, Villiers Street, for Mr. F. H. Farrer; 32 houses, off Marsh Lane, for Mr. L. T. Turner; three houses, Oxley Church Road, for Mr. W. Winsper; store extensions, Market Street, for Messrs. Marks and Spencer, Ltd.; warehouse, Temple Street, for Mr. R. F. Hill.

NORTHERN COUNTIES

BLACKPOOL. *Houses, etc.* Plans passed by the Corporation : Two houses, Crichton Place, for Mr. W. Deardon; three houses, Caxton Avenue, for Mr. J. Ridyard; two houses, Bosworth Place, for Messrs. Abson Bros.; 11 houses, Galway Avenue, for Messrs. Render and Seddon, Ltd.; four houses, Bispham Road, for Mr. N. A. Robson; eight houses, Wilson Square, for Messrs. Kennard and Mills; three houses, Neville Avenue, for Mr. A. A. Holt; 25 houses, Brentwood Avenue, for Messrs. R. and H. Fletcher, Ltd.; six houses, Alpic Drive, for Messrs. Ramsden Bros., Ltd.; ten houses, Bathurst Avenue, for Mr. W. H. Airey; two houses, Merlyn Road, for Messrs. W. Wastwood and Son; six houses, Warbreck Hill Road, for Messrs. J. Cryer and Sons; four houses, Highfield Road, for Messrs. R. E. Davies, Ltd.; two houses, Parkway, for Messrs. I. Fletcher, Ltd.; private hotel, Reads Avenue, for Ashworth's Private Hotels; bus garage, Devonshire Road, for Ribble Motor Services, Ltd.; saloon, lounge and café, Dickson Road, for Imperial Hydro Hotel Co., Ltd.; hotel, Devonshire Road, for Messrs. J. W. Lees & Co., Ltd.

BLACKPOOL. *Development.* Messrs. Fairbrother, Hall and Hedges, are to develop the Carleton House Estate, Blackpool.

BRADFORD. *Church.* The Corporation has sold a site on the Eccleshall Estate to the Woodhouse Grove Methodist Circuit for the erection of a church.

BRADFORD. *Extensions.* The Corporation is to extend buildings at the power station at a cost of about £200,000.

ROTHERHAM. *Warehouse, etc.* Plans passed by the Corporation : Warehouse extension, Holmes Mills, for Messrs. J. J. Habershon and Sons, Ltd.; 2 houses, Coach Road, for Messrs. A. Cooper and Sons, Ltd.; works extensions, Wortley Road, for Messrs. R. Jenkins & Co., Ltd.; works extensions, Grange Mill Lane, for Messrs. A. Shardlow & Co., Ltd.; 12 houses and shop, Wortley Road, for Messrs. Fraser & Co.; five houses, Goose Lane, for Mr. O. Parkin.

ROTHERHAM. *Extensions.* The Corporation is acquiring property in Howard Street for the extension of the municipal offices.

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 s. d.	II s. d.
A_1	ABERDARE ...	S. Wales & M.	1 5½	1 1½
A	Aberdeen ...	Scotland	1 6½	1 2
A_1	Abergavenny ...	S. Wales & M.	1 6	1 1½
A_2	Abingdon ...	S. Counties	1 5	1 0½
A	Accrington ...	N.W. Counties	1 6½	1 2
A_2	Addlestone ...	S. Counties	1 5	1 0½
A	Adlington ...	N.W. Counties	1 6½	1 2
A	Airdrie ...	Scotland	*1 6½	1 2
C	Aldeburgh ...	E. Counties	1 2½	11
A	Altrincham ...	N.W. Counties	1 6½	1 2
B_2	Appleby ...	N.W. Counties	1 3	11½
A	Ashton-under-Lyne	N.W. Counties	1 6½	1 2
B_1	Aylesbury ...	S. Counties	1 4	1 0
B_1	BANBURY ...	S. Counties	1 4	1 0
B_1	Bangor ...	N.W. Counties	1 4	1 0
A_2	Barnard Castle	N.E. Coast	1 5	1 0½
A	Barnsley ...	Yorkshire	1 6½	1 2
B	Barnstaple ...	S.W. Counties	1 4½	1 0½
A	Barrow ...	N.W. Counties	1 6½	1 2
A	Barry	S. Wales & M.	1 6½	1 2
B_1	Basingstoke ...	S.W. Counties	1 4	1 0
A_2	Bath	S.W. Counties	1 5½	1 1½
A	Batley ...	Yorkshire	1 6½	1 2
A_2	Bedford ...	E. Counties	1 5½	1 1½
A_2	Berwick-on-Tweed	N.E. Coast	1 5½	1 1½
A_2	Bewdley ...	Mid. Counties	1 5½	1 1½
B_2	Bicester ...	S. Counties	1 3	11½
	Birkenhead ...	N.W. Counties	*1 7½	1 2½
A	Birmingham ...	Mid. Counties	1 6½	1 2
A_1	Bishop Auckland	N.E. Coast	1 6	1 1½
A	Blackburn ...	N.W. Counties	1 6½	1 2
A	Blackpool ...	N.W. Counties	1 6½	1 2
A	Blyth	N.E. Coast	1 6½	1 2
B_1	Bognor ...	S. Counties	1 4	1 0
A	Bolton ...	N.W. Counties	1 6½	1 2
A_2	Boston ...	Mid. Counties	1 5	1 0½
A_2	Bournemouth...	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 3½	11½
A	Bradford ...	Yorkshire	1 6½	1 2
A_1	Brentwood ...	E. Counties	1 6	1 1½
A	Bridgend ...	S. Wales & M.	1 6½	1 2
B	Bridgwater ...	S.W. Counties	1 4½	1 0½
A_1	Bridlington ...	Yorkshire	1 6	1 1½
A	Brighouse ...	Yorkshire	1 6½	1 2
A_2	Brighton ...	S. Counties	1 5½	1 1½
A	Bristol ...	S.W. Counties	1 6½	1 2
B	Brixham ...	S.W. Counties	1 3½	11½
A	Bromsgrove ...	Mid. Counties	1 5½	1 1½
B	Bromyard ...	Mid. Counties	1 3	11½
A	Burnley ...	N.W. Counties	1 6½	1 2
A	Burslem ...	Mid. Counties	1 6½	1 2
A	Burton-on-Trent	Mid. Counties	1 6½	1 2
A	Bury	N.W. Counties	1 6½	1 2
A	Buxton ...	N.W. Counties	1 6	1 1½
A_1	CAMBRIDGE	E. Counties	1 6	1 1½
B_1	Canterbury ...	S. Counties	1 4	1 0
A	Cardiff ...	S. Wales & M.	1 6½	1 2
A	Carlisle ...	N.W. Counties	1 6½	1 2
B	Carmarthen ...	S. Wales & M.	1 4½	1 0½
B	Carnarvon ...	N.W. Counties	1 4½	1 0½
A	Carnforth ...	N.W. Counties	1 6½	1 2
A	Castleford ...	Yorkshire	1 6½	1 2
A_2	Chatham ...	S. Counties	1 5	1 0½
A	Chelmsford ...	E. Counties	1 5	1 0½
A	Cheltenham ...	S.W. Counties	1 5	1 0½
A	Chester ...	N.W. Counties	1 6½	1 2
A	Chesterfield ...	Mid. Counties	1 6½	1 2
B_1	Chichester ...	S. Counties	1 4	1 0
A	Chorley ...	N.W. Counties	1 6½	1 2
B_1	Cirencester ...	S. Counties	1 4	1 0
A	Clitheroe ...	N.W. Counties	1 6½	1 2
A	Clydebank ...	Scotland	1 6½	1 2
A	Coalville ...	Mid. Counties	1 6½	1 2
A_2	Colchester ...	E. Counties	1 5½	1 1½
A	Colne	N.W. Counties	1 6	1 1½
A_1	Colwyn Bay ...	N.W. Counties	1 5½	1 1½
A_1	Consett ...	N.E. Coast	1 6	1 1½
A_2	Conway ...	N.W. Counties	1 5½	1 1½
A	Coventry ...	Mid. Counties	1 6½	1 2
A_2	Crewe	N.W. Counties	1 5½	1 1½
A	Cumberland ...	N.W. Counties	1 5	1 0½
A	DARLINGTON	N.E. Coast	1 6½	1 2
A	Darwen ...	N.W. Counties	1 6½	1 2
B	Deal	S. Counties	1 4	1 0
A_2	Denbigh ...	N.W. Counties	1 5	1 0½
A	Derby	Mid. Counties	1 6½	1 2
A	Dewsbury ...	Yorkshire	1 6½	1 2
B	Didcot ...	S. Counties	1 4½	1 0½
A	Doncaster ...	Yorkshire	1 6½	1 2
B_1	Dorchester ...	S.W. Counties	1 4	1 0
A	Driffield ...	Yorkshire	1 5	1 0½
A_2	Droitwich ...	Mid. Counties	1 5½	1 1½
A	Dudley ...	Mid. Counties	1 6½	1 2
A_2	Dumfries ...	Scotland	1 6	1 1½
A	Dundee ...	Scotland	1 6½	1 2
A	Durham ...	N.E. Coast	1 6½	1 2
A_2	EASTBOURNE	S. Counties	1 5½	1 1½
A_1	Ebbw Vale ...	S. Wales & M.	1 6	1 1½
A	Edinburgh ...	Scotland	1 6½	1 2
A_1	Glamorgan-shire, Rhondda Valley District ...	S. Wales & M.	1 6	1 1½
A_2	Exeter ...	S.W. Counties	*1 5½	1 1½
B	Exmouth ...	S.W. Counties	1 4½	1 0½
A_2	FELIXSTOWE	E. Counties	1 5	1 0½
A	Filey	Yorkshire	1 5	1 0½
A	Fleetwood ...	N.W. Counties	1 6½	1 2
B_1	Folkestone ...	S. Counties	1 4	1 0
A	Frodsham ...	N.W. Counties	1 6½	1 2
B_2	Frome ...	S.W. Counties	1 3½	11½
A	GATESHEAD	N.E. Coast	1 6½	1 2
B	Gillingham ...	S. Counties	1 4½	1 0½
A	Glasgow ...	Scotland	1 7	1 2½
A_2	Gloucester ...	S.W. Counties	1 5½	1 1½
A_2	Goole ...	Yorkshire	1 5½	1 1½
A_2	Gosport ...	S. Counties	1 5½	1 1½
A_2	Grantham ...	Mid. Counties	1 5	1 0½
A_1	Gravesend ...	S. Counties	1 6	1 1½
A	Greenock ...	Scotland	*1 6½	1 2
A	Grimsby ...	Mid. Counties	1 6½	1 2
B	Guildford ...	S. Counties	1 4½	1 0½
A	HALIFAX ...	Yorkshire	1 6½	1 2
A	Hanley ...	Mid. Counties	1 6½	1 2
A	Harrogate ...	Yorkshire	1 6½	1 2
A	Hartlepools ...	N.E. Coast	1 6½	1 2
B	Harwich ...	E. Counties	1 4½	1 0½
B_1	Hastings ...	S. Counties	1 4	1 0
A_2	Hatfield ...	S. Counties	1 5½	1 1½
B	Hereford ...	S.W. Counties	1 4½	1 0½
A_2	Hertford ...	E. Counties	1 5½	1 1½
A	Heysham ...	N.W. Counties	1 6½	1 2
A	Howden ...	N.E. Coast	1 6½	1 2
A	Huddersfield ...	Yorkshire	1 6½	1 2
A	Hull	Yorkshire	1 6½	1 2
A	ILKLEY ...	Yorkshire	1 6½	1 2
A	Immingham ...	Mid. Counties	1 6½	1 2
A_2	Ipswich ...	E. Counties	1 5½	1 1½
B_2	Isle of Wight ...	S. Counties	1 4½	1 0½
A	JARROW ...	N.E. Coast	1 6½	1 2
A	KEIGHLEY ...	Yorkshire	1 6½	1 2
A_2	Kendal ...	N.W. Counties	1 5	1 0½
A_2	Keswick ...	N.W. Counties	1 5	1 0½
A_1	Kettering ...	Mid. Counties	1 6	1 1½
A_2	Kidderminster	Mid. Counties	1 5½	1 1½
B_1	King's Lynn ...	E. Counties	1 4	1 0
A	LANCASTER ...	N.W. Counties	1 6½	1 2
A_1	Leamington ...	Mid. Counties	1 6	1 1½
A	Leeds	Yorkshire	1 6½	1 2
A	Leek	Mid. Counties	1 6½	1 2
A	Leicester ...	Mid. Counties	1 6½	1 2
A	Leigh	N.W. Counties	1 6½	1 2
B	Lewes	S. Counties	1 3	11½
A_2	Lichfield ...	Mid. Counties	1 5½	1 1½
A	Lincoln ...	Mid. Counties	1 6½	1 2
	Liverpool ...	N.W. Counties	*1 8	1 3
A_2	Llandudno ...	N.W. Counties	1 5½	1 1½
A	Llanelly ...	S. Wales & M.	1 6½	1 2
	London (12-miles radius)		1 8	1 3
	Do. (12-15 miles radius)		1 7½	1 2½
A	Long Eaton ...	Mid. Counties	1 6½	1 2
A	Loughborough	Mid. Counties	1 6½	1 2
A_1	Luton	E. Counties	1 6	1 1½
A	Lytham ...	N.W. Counties	1 6½	1 2
A_1	MACCLESFIELD	N.W. Counties	1 6	1 1½
A_2	Maidstone ...	S. Counties	1 5	1 0½
A_2	Malvern ...	Mid. Counties	1 5	1 0½
A	Manchester ...	N.W. Counties	1 6½	1 2
A	Mansfield ...	Mid. Counties	1 6½	1 2
B_1	Margate ...	S. Counties	1 4	1 0
A	Matlock ...	Mid. Counties	1 5	1 0½
A_1	Merthyr ...	S. Wales & M.	1 6	1 1½
A	Middlesbrough	N.E. Coast	1 6½	1 2
A_2	Middlewich ...	N.W. Counties	1 5½	1 1½
B_2	Minehead ...	S.W. Counties	1 3½	11½
B_2	Monmouth ... & S. and E. Glamorganshire	S. Wales & M	1 3½	11½
A	Morecambe ...	N.W. Counties	1 6½	1 2
A_2	NANTWICH ...	N.W. Counties	1 5½	1 1½
A	Neath	S. Wales & M.	1 6½	1 2
A	Nelson ...	N.W. Counties	1 6½	1 2
A	Newcastle ...	N.E. Coast	1 6½	1 2
A	Newport ...	S. Wales & M	1 6½	1 2
A	Normanton ...	Yorkshire	1 6½	1 2
A	Northampton	Mid. Counties	1 6½	1 2
A	North Shields...	N.E. Coast	1 6½	1 2
A	North Staffs ...	Mid. Counties	1 6½	1 2
A_1	Norwich ...	E. Counties	1 6	1 1½
A	Nottingham ...	Mid. Counties	1 6½	1 2
A	Nuneaton ...	Mid. Counties	1 6½	1 2
A	OAKHAM ...	Mid. Counties	1 5	1 0½
A	Oldham ...	N.W. Counties	1 6½	1 2
A_2	Oswestry ...	N.W. Counties	1 5	1 0½
A_1	Oxford ...	S. Counties	1 6	1 1½
A	PAISLEY ...	Scotland	*1 6½	1 2
B_2	Pembroke ...	S. Wales & M.	1 3	11½
A	Perth	Scotland	*1 6½	1 2
A_1	Peterborough	E. Counties	1 6	1 1½
A	Plymouth ...	S.W. Counties	*1 6½	1 2
A	Pontefract ...	Yorkshire	1 6½	1 2
A_1	Pontypridd ...	S. Wales & M.	1 6	1 1½
A_2	Portsmouth ...	S. Counties	1 5½	1 1½
A	Preston ...	N.W. Counties	1 6½	1 2
A	QUEENSFERRY	N.W. Counties	1 6½	1 2
A_2	READING ...	S. Counties	1 5½	1 1½
B	Reigate ...	S. Counties	1 4½	1 0½
A	Retford ...	Mid. Counties	1 5	1 0½
A_1	Rhondda Valley	S. Wales & M.	1 6	1 1½
A	Ripon	Yorkshire	1 5	1 0½
A	Rochdale ...	N.W. Counties	1 6½	1 2
B	Rochester ...	S. Counties	1 4½	1 0½
A_1	Ruabon ...	N.W. Counties	1 6	1 1½
A	Rugby ...	Mid. Counties	1 6½	1 2
A_2	Rugeley ...	Mid. Counties	1 5½	1 1½
A	Runcorn ...	N.W. Counties	1 6½	1 2
A_1	ST. ALBANS ...	E. Counties	1 6	1 1½
A	St. Helens ...	N.W. Counties	1 6½	1 2
B_2	Salisbury ...	S.W. Counties	1 3½	11½
A_1	Scarborough ...	Yorkshire	1 6	1 1½
A	Scunthorpe ...	Mid. Counties	1 6½	1 2
A	Sheffield ...	Yorkshire	1 6½	1 2
A	Shipley ...	Yorkshire	1 6½	1 2
A_2	Shrewsbury ...	Mid. Counties	1 5½	1 1½
A_2	Skipton ...	Yorkshire	1 5½	1 1½
A_2	Slough ...	S. Counties	1 5½	1 1½
A_1	Solihull ...	Mid. Counties	1 6	1 1½
A_2	Southampton ...	S. Counties	1 5½	1 1½
A_1	Southend-on-Sea ...	E. Counties	1 6	1 1½
A	Southport ...	N.W. Counties	1 6½	1 2
A	S. Shields ...	N.E. Coast	1 6½	1 2
A_1	Stafford ...	Mid. Counties	1 6	1 1½
A	Stirling ...	Scotland	1 7	1 2½
A	Stockport ...	N.W. Counties	1 6½	1 2
A	Stockton-on-Tees ...	N.E. Coast	1 6½	1 2
A	Stoke-on-Trent	Mid. Counties	1 6½	1 2
B	Stroud ...	S.W. Counties	1 4½	1 0½
A	Sunderland ...	N.E. Coast	1 6½	1 2
A	Swansea ...	S. Wales & M.	1 6½	1 2
A	Swindon ...	S.W. Counties	1 5	1 0½
A_1	TAMWORTH ...	N.W. Counties	1 6	1 1½
B	Taunton ...	S.W. Counties	1 4½	1 0½
A	Teesside Dist....	N.E. Counties	1 6½	1 2
A_2	Teignmouth ...	S.W. Coast	1 5½	1 1½
A	Todmorden ...	Yorkshire	1 6½	1 2
A_1	Torquay ...	S.W. Counties	1 6	1 1½
B_2	Truro	S.W. Counties	1 3½	11½
A_2	Tunbridge Wells	S. Counties	1 5	1 0½
A	Tunstall ...	Mid. Counties	1 6½	1 2
A	Tyne District	N.E. Coast	1 6½	1 2
A	WAKEFIELD	Yorkshire	1 6½	1 2
A	Walsall ...	Mid. Counties	1 6½	1 2
A	Warrington ...	N.W. Counties	1 6½	1 2
A_1	Warwick ...	Mid. Counties	1 6	1 1½
A_1	Wellingborough	Mid. Counties	1 6	1 1½
A	West Bromwich	Mid. Counties	1 6½	1 2
A_2	Weston-s.-Mare	W. Counties	1 5½	1 1½
A_2	Whitby ...	Yorkshire	1 5½	1 1½
A	Widnes ...	N.W. Counties	1 6½	1 2
A	Wigan ...	N.W. Counties	1 6½	1 2
B	Winchester ...	S. Counties	1 4½	1 0½
A_2	Windsor ...	S. Counties	1 5½	1 0½
A	Wolverhampton	Mid. Counties	1 6½	1 2
A_2	Worcester ...	Mid. Counties	1 5½	1 1½
A_2	Worksop ...	Yorkshire	1 5	1 0½
A_1	Wrexham ...	N.W. Counties	1 6	1 1½
A	Wycombe ...	S. Counties	1 5	1 0½
B	YARMOUTH ...	E. Counties	1 4½	1 0½
B	Yeovil ...	S.W. Counties	1 4½	1 0½
A	York	Yorkshire	1 6½	1 2

* In these areas the rates of wages for certain trades (usually painters and plasterers) vary slightly from those given.

The rates for every trade in any given area will be sent on request.

CURRENT PRICES

The wages are the standard Union rates of wages payable in London at the time of publication. The prices given below are for materials of good quality and include delivery to site in Central London area, unless otherwise stated. For delivery outside this area, adjustment should be made for the cost of transport. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry. The whole of the information given is copyright.

WAGES

		s.	d.
Bricklayer	per hour	1	8
Carpenter	,,	1	8
Joiner	,,	1	8
Machinist	,,	1	8
Mason (Banker)	,,	1	8
,, (Fixer)	,,	1	9
Plumber	,,	1	8
Painter	,,	1	7
Paperhanger	,,	1	7
Glazier	,,	1	7
Slater	,,	1	8
Scaffolder	,,	1	4
Timberman	,,	1	4
Navvy	,,	1	3
General Labourer	,,	1	3
Lorryman	,,	1	5½
Crane Driver	,,	1	7
Watchman	per week	2	10

MATERIALS

EXCAVATOR AND CONCRETOR

		£	s.	d.
Grey Stone Lime	per ton	2	2	0
Blue Lias Lime	,,	1	16	6
Hydrated Lime	,,	3	0	9
Portland Cement, in 4 ton lots (d/d site, including Paper Bags)	,,	1	19	0
Rapid Hardening Cement, in 4-ton lots (d/d site, including Paper Bags)	,,	2	5	0
White Portland Cement, in 1-ton lots	,,	8	15	0
Thames Ballast	per Y.C.		6	6
¾" Crushed Ballast	,,		7	0
Building Sand	,,		7	6
Washed Sand	,,		8	6
2" Broken Brick	,,		8	0
¾" ,, ,,	,,		10	3
Pan Breeze	,,		6	6
Coke Breeze	,,		8	9

DRAINLAYER

BEST STONEWARE DRAIN PIPES AND FITTINGS

		4" s.	4" d.	6" s.	6" d.
Straight Pipes	per F.R.	0	9	1	1
Bends	each	1	9	2	6
Taper Bends	,,	3	6	5	3
Rest Bends	,,	4	3	6	3
Single Junctions	,,	3	6	5	3
Double	,,	4	9	6	6
Straight channels	per F.R.	1	6	2	6
¾" Channel bends	each	2	9	4	0
Channel junctions	,,	4	6	6	6
Channel tapers	,,	2	9	4	0
Yard gullies	,,	6	9	8	9
Interceptors	,,	16	0	19	6
IRON DRAINS:					
Iron drain pipe	per F.R.	1	6	2	6
Bends	each	5	0	10	6
Inspection bends	,,	9	0	15	0
Single junctions	,,	8	9	18	0
Double junctions	,,	13	6	30	0
Lead Wool	lb.		6		—
Gaskin	,,		5		—

BRICKLAYER

		£	s.	d.
Fletton	per M.	2	15	0
Grooved do.	,,	2	17	0
Phorpres bricks	,,	2	15	0
,, Cellular bricks	,,	2	15	0
Stocks, 1st quality	,,	4	11	0
,, 2nd ,,	,,	4	2	6
Blue Bricks, Pressed	,,	8	17	6
,, Wirecuts	,,	7	17	6
,, Brindles	,,	7	0	0
,, Bullnose	,,	9	0	0
Red Sand-faced Facings	,,	6	18	6
Red Rubbers for Arches	,,	12	0	0
Multicoloured Facings	,,	7	10	0
Luton Facings	,,	7	10	0
Phorpres White Facings	,,	3	17	3
,, Rustic Facings	,,	3	12	3
Midhurst White Facings	,,	5	0	0
Glazed Bricks, Ivory, White or Salt glazed, 1st quality:				
Stretchers	,,	21	0	0
Headers	,,	20	10	0
Bullnose	,,	27	10	0
Double Stretchers	,,	29	10	0
Double Headers	,,	26	10	0
Glazed Second Quality, *Less*	,,	1	0	0
,, Buffs and Creams, *Add*	,,	2	0	0
,, Other Colours	,,	5	10	0
2" Breeze Partition Blocks	per Y.S.		1	7
2½" ,, ,, ,,	,,		1	10
3" ,, ,, ,,	,,		2	1
4" ,, ,, ,,	,,		2	6

MASON

The following d/d F.O.R. at Nine Elms:		s.	d.
Portland stone, Whitbed	F.C.	4	4½
,, Basebed	,,	4	7½
Bath stone	,,	2	10
York stone	,,	6	6
,, ,, Sawn templates	,,	7	6
,, ,, Paving, 2"	F.S.	1	8
,, ,, ,, 3"	,,	2	6

SLATER AND TILER

First quality Bangor or Portmadoc slates d/d F.O.R. London station:

		£	s.	d.
24" × 12" Duchesses	per M.	28	17	6
22" × 12" Marchionesses	,,	24	10	0
20" × 10" Countesses	,,	19	5	0
18" × 10" Viscountesses	,,	15	10	0
18" × 9" Ladies	,,	13	17	6
Westmorland green (random sizes)	per ton	8	10	0
Old Delabole slates d/d in full truck loads to Nine Elms Station:				
20" × 10" medium grey per 1,000 (actual)		21	11	6
,, ,, green ,, ,,		24	7	4
Best machine roofing tiles	,,	4	5	0
Best hand-made do.	,,	4	17	6
Hips and valleys	each			9
,, hand-made	,,			9½
Nails, compo	lb.		1	4
,, copper	,,		1	6

CARPENTER AND JOINER

		£	s.	d.
Good carcassing timber	F.C.		2	2
Birch	as 1" F.S.			9
Deal, Joiner's	,, ,,			5
,, ,, 2nds	,, ,,			4
Mahogany, Honduras	,, ,,		1	3
,, African	,, ,,		1	1
,, Cuban	,, ,,		2	6
Oak, plain American	,, ,,		1	0
,, Figured ,,	,, ,,		1	3
,, plain Japanese	,, ,,		1	2
,, Figured ,,	,, ,,		1	5
,, Austrian wainscot	,, ,,		1	6
,, English	,, ,,		1	11
Pine, Yellow	,, ,,		1	0
,, Oregon	,, ,,			4
,, British Columbian	,, ,,			4
Teak, Moulmein	,, ,,		1	3
,, Burma	,, ,,		1	2
Walnut, American	,, ,,		2	3
,, French	,, ,,		2	3
Whitewood, American	,, ,,		1	1
Deal floorings, ¾"	Sq.		18	6
,, 1"	,,	1	1	6
,, 1¼"	,,	1	2	0
,, 1½"	,,	1	5	0
,, 1¾"	,,	1	10	0
Deal matchings, ¾"	,,		14	0
,, 1"	,,		15	6
Rough boarding, 1"	,,	1	4	0
,, 1¼"	,,		16	0
,, 1½"	,,		18	0
Plywood, per ft. sup.	,,	1	6	0

Thickness / Qualities	¾" A d.	¾" B d.	¾" BB d.	1" A d.	1" B d.	1" BB d.	1¼" A d.	1¼" B d.	1¼" BB d.	1½" A d.	1½" B d.	1½" BB d.
Birch 60 × 48	4	2½	2	5	3	2½	7	5	4	8	6	5
Cheap Alder	–	2	1½	–	3½	2	–	–	–	–	–	–
Oregon Pine	–	2½	–	3	2½	–	4	3½	–	5	4½	–
Gaboon Mahogany	4	3½	–	5	4½	–	7	6½	–	8	7	–
Figured Oak	6½	5	–	7½	5½	–	10	8	–	11/–	9	–

		d.
Scotch glue	lb.	8

SMITH AND FOUNDER

Tubes and Fittings

(The following are the standard list prices, from which should be deducted the various percentages as set forth below.)

		½"	¾"	1"	1½"	2"
Tubes, 2'–14' long	per ft. run	4	5½	9½	1/1	1/10
Pieces, 12"–23" long	each	10	1/1	1/11	2/8	4/9
,, 3"–11½" long	,,	7	9	1/3	1/8	3/–
Long screws, 12"–23½" long	,,	11	1/3	2/2	2/10	5/3
,, ,, 3" M–½" long	,,	8	10	1/5	1/11	3/6
Bends	,,	8	11	1/7½	2/7½	5/2
Springs not socketed	,,	5	7	1/1½	1/11½	3/11
Socket unions	,,	2/–	3/–	5/6	6/9	10/–
Elbows, square	,,	10	1/1	1/6	2/2	4/3
Tees	,,	1/–	1/3	1/10	2/6	5/1
Crosses	,,	2/2	2/9	4/1	5/6	10/6
Plain sockets and nipples	,,	3	4	6	8	1/3
Diminished sockets	,,	4	6	9	1/–	2/–
Flanges	,,	9	1/–	1/4	1/9	2/9
Caps	,,	3½	5	8	1/–	2/–
Backnuts	,,	2	3	5	6	1/1
Iron main cocks	,,	1/6	2/3	4/2	5/4	11/6
,, with brass plugs	,,	—	4/–	7/6	10/–	21/–

Discounts	TUBES. Per cent.		Per cent.
Gas	65	Galvanized gas	52½
Water	61½	,, water	47½
Steam	57½	,, steam	42½
	FITTINGS.		
Gas	57½	Galvanized gas	47½
Water	52½	,, water	42½
Steam	47½	,, steam	37½

		s.	d.
Rolled steel joists cut to length	cwt.	12	9
Mild steel reinforcing rods, ¾"	,,	10	6
,, ,, ½"	,,	10	3
,, ,, ⅜"	,,	10	0

SMITH AND FOUNDER—*continued*

		s.	d.
Mild steel reinforcing rods, ¼"	cwt.	9	6
,, ,, ⅝"	,,	9	6
,, ,, 1"	,,	9	6
,, ,, 1¼"	,,	9	6
,, ,, 1½"	,,	9	6

	¾" s.	¾" d.	4" s.	4" d.
Cast-iron rain-water pipes of ordinary thickness metal	F.R.	8		10
Shoes	each	2	0	3 0
Anti-splash shoes	,,	4	6	8 0
Boots	,,	3	0	4 0
Bends	,,	2	7	3 9
,, with access door	,,		—	6 3
Heads	,,	4	0	5 0
Swan-necks up to 9" offsets	,,	3	9	6 0
Plinth bends, 4½" to 6"	,,	3	9	5 3
Half-round rain-water gutters of ordinary thickness metal	F.R.	5		6
Stop ends	each	6		6
Angles	,,	1	7	1 11
Obtuse angles	,,	2	0	2 6
Outlets	,,	1	9	2 3

PLUMBER

		s.	d.
Lead, milled sheets	cwt.	24	6
,, drawn pipes	,,	24	6
,, soil pipe	,,	30	0
,, scrap	,,	16	0
Solder, plumbers'	lb.		9½
,, fine do.	,,	1	0
Copper, sheet	,,		8½
,, tubes	,,		11

L.C.C. soil and waste pipes:	3" F.R.	4"	6"
Plain cast	1 0	1 2	2 6
Coated	1 1	1 3	2 8
Galvanized	2 0	2 6	4 6
Holderbats	each 3 10	4 0	4 9
Bends	,, 3 9	5 3	10 3
Shoes	,, 2 10	4 4	9 6
Heads	,, 4 8	8 5	12 9

PLASTERER

		£	s.	d.
Lime, chalk	per ton	2	5	0
Plaster, Coarse	,,	2	10	0
,, fine	,,	4	15	0
Hydrated lime	,,	3	0	9
Sirapite	,,	3	6	0
Keene's cement	,,	5	0	0
Gothite Plaster	,,	3	6	0
Pioneer Plaster	,,	3	6	0
Thistle plaster	,,	3	6	0
Sand, washed	Y.C.		11	6
Hair	lb.			6
Laths, sawn	bundle		2	4
,, rent	,,		3	9
Lath nails	lb.			3

GLAZIER

		s.	d.	s.	d.
Sheet glass, 21 oz., squares n/e 2 ft.	s. F.S.				2½
,, ,, 26 oz. ,, ,,	,,				3
Flemish, Arctic, Figures (white)*	,,				7
Blazoned glasses	,,			2	6
Reeded: Cross Reeded	,,				11
Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite	,,				6
Crown sheet glass (n/e 12" × 10")	,,			2	0
Flashed opals (white and coloured)	,,	1	0 and	2	0
¼" rough cast; rolled plate	,,				5½
¼" wired cast; wired rolled	,,				9½
¼" Georgian wired cast	,,				11
¼" Polished plate, n/e 1 ft.	,,	†10	to ‡1		1
,, ,, 2 ,,	,,	†1	2 ,, ‡1		4
,, ,, 4 ,,	,,	†2	3 ,, ‡2		6
,, ,, 8 ,,	,,	†2	9 ,, ‡3		2
,, ,, 20 ,,	,,	†3	1 ,, ‡3		9
,, ,, 45 ,,	,,	†3	3 ,, ‡4		0
,, ,, 100 ,,	,,	†4	0 ,, ‡4		10
Vita glass, sheet, n/e 1 ft.	,,				1 0
,, ,, ,, 2 ft.	,,				1 3
,, ,, ,, over 2 ft.	,,				1 9
,, ,, plate, n/e 1 ft.	,,				1 6
,, ,, ,, 2 ft.	,,				3 0
,, ,, ,, 5 ft.	,,				4 0
,, ,, ,, 7 ft.	,,				5 0
,, ,, ,, 15 ft.	,,				6 0
,, ,, ,, over 15 ft.	,,				7 6
"Calorex" sheet 21 oz., and 32 oz.	,,	2	6 and	3	6
,, rough cast ¼" and ¼"	,,		8½ ,,	1	0
Putty, linseed oil	lb.				3

* *Colours, 1d. F.S. extra.*

† *Ordinary glazing quality.* ‡ *Selected glazing quality.*

PAINTER

		£	s.	d.
White lead in 1 cwt. casks	cwt.	2	8	6
Linseed oil	gall.		2	3
Boiled oil	,,		2	9
Turpentine	,,		4	1½
Patent knotting	,,		14	0
Distemper washable	cwt.	2	6	0
,, ordinary	,,	2	0	0
Whitening	,,		4	0
Size, double	firkin		3	0
Copal varnish	gall.		13	0
Flat varnish	,,		14	0
Outside varnish	,,		16	0
White enamel	,,	1	15	0
Ready mixed paint	,,		13	6
Brunswick black	,,		7	6

CURRENT PRICES FOR MEASURED WORK

The following prices are for work to new buildings of average size, executed under normal conditions in the London area. They include establishment charges and profit. While every care has been taken in its compilation, no responsibility can be accepted for the accuracy of the list. The whole of the information given is copyright.

EXCAVATOR AND CONCRETOR

		£ s. d.
Digging over surface n/e 12" deep and cart away	Y.S.	2 9
" to reduce levels n/e 5' 0" deep and cart away	Y.C.	8 6
" to form basement n/e 5' 0" and cart away	"	9 0
" " 10' 0" deep and cart away	"	9 6
" " 15' 0" deep and cart away	"	10 0
If in stiff clay	add "	6
If in underpinning	" "	4 0
Planking and strutting to sides of excavation	F.S.	1 0
" " to pier holes	"	5
" " to trenches	"	5
" " extra, only if left in	"	3
Hardcore, filled in and rammed	Y.C.	10 0
Portland cement concrete in foundations (6–1)	"	1 6 0
" " (4-2-1)	"	1 12 6
" " underpinning	"	1 16 0
Finishing surface of concrete, space face	Y.S.	7

DRAINLAYER

		4" s. d.	6" s. d.
Stoneware drains, laid complete (digging and concrete to be priced separately)	F.R.	1 6	2 3
Extra, only for bends	Each	2 8	3 9
" junctions	"	3 9	4 6
Gullies and gratings	"	16 6	18 0
Cast iron drains, and laying and jointing	F.R.	4 9	6 9
Extra, only for bends	Each	10 6	15 6

BRICKLAYER

		£ s. d.
Brickwork, Flettons in lime mortar	Per Rod	26 10 0
" " in cement	"	27 12 6
" Stocks in cement	"	34 0 0
" Blues in cement	"	50 0 0
Extra only for circular on plan	"	2 0 0
" backing to masonry	"	1 10 0
" raising on old walls	"	2 0 0
" underpinning	"	5 10 0½
Fair Face and pointing internally	F.S.	1¼
Extra over fletton brickwork for picked stock facings and pointing	"	8
" " " red brick facings and pointing	"	11
" " " blue brick facings and pointing	"	1 4
" " " glazed brick facings and pointing	"	3 6
Tuck pointing	"	7⅛
Weather pointing in cement	"	3
Slate dampcourse	"	10
Vertical dampcourse	"	1 1

ASPHALTER

		s. d.
½" Horizontal dampcourse	Y.S.	4 9
½" Vertical dampcourse	"	7 9
½" paving or flat	"	6 3
1" paving or flat	"	7 6
1" × 6" skirting	F.R.	1 0
Angle fillet	"	2½
Rounded angle	"	2½
Cesspools	Each	5 6

MASON

		£ s. d.
Portland stone, including all labours hoisting, fixing and cleaning down, complete	F.C.	17 9
Bath stone and do., all as last	"	13 6
Artificial stone and do.	"	13 0
York stone templates, fixed complete	"	10 6
" thresholds	"	13 6
" sills	"	1 0 6

SLATER AND TILER

		£ s. d.
Slating, Bangor or equal to a 3" lap, and fixing with compo nails, 20" × 10"	Sqr.	3 10 0
Do., 18" × 9"	"	3 7 0
Do., 24" × 12"	"	3 17 0
Westmorland slating, laid with diminished courses	"	6 0 0
Tiling, best hand-made sand-faced, laid to a 4" gauge, nailed every fourth course	"	3 0 0
Do., all as last, but of machine-made tiles	"	2 16 0
20" × 10" medium Old Delabole slating, laid to a 3" lap (grey)	"	2 16 0
" " " " " " " (green)	"	4 15 0

CARPENTER AND JOINER

		£ s. d.
Flat boarded centering to concrete floors, including all strutting	Sqr.	2 2 6
Shuttering to sides and soffits of beams	F.S.	7
" to stanchions	"	7
" to staircases	"	1 6
Fir and fixing in wall plates, lintols, etc.	F.C.	3 9
Fir framed in floors	"	4 6
" " roofs	"	6 6
" " trusses	"	7 6
" " partitions	"	8 6
⅞" deal sawn boarding and fixing to joists	Sqr.	1 14 6
1" " " " " "	"	1 17 6
1½" " " " " "	"	2 3 0
⅞" × 2" fir battening for Countess slating	"	9 6
Do., for 4" gauge tiling	"	12 0
Stout feather-edged tilting fillet	F.R.	4½
Patent inodorous felt, 1 ply	Y.S.	2 3
" " " 2 "	"	2 9
" " " 3 "	"	3 3
Stout herringbone strutting to 9" joists	F.R.	10½
1" deal gutter boards and bearers	F.S.	1 2
1½" " " "	"	1 6
2" deal wrought rounded roll	F.R.	8
1" deal grooved and tongued flooring, laid complete, including cleaning off	Sqr.	2 1 0
1¼" do.	"	2 10 0
1½" do.	"	2 17 0
1" deal moulded skirting fixed on, and including grounds plugged to wall	F.S.	1 6
1½" do.	"	1 9

CARPENTER AND JOINER—*continued*

		s. d.
1¼" deal moulded sashes of average size	F.S.	1 9½
2" " " " " "	"	1 11½
1½" deal cased frames double hung, of 6" × 3" oak sills, 1¼" pulley stiles, 1¼" heads, 1" inside and outside linings, ⅜" parting beads, and with brass faced axle pulleys, etc., fixed complete	"	3 7
2" " " " " "	"	3 10
Extra only for moulded horns	Each	6
1⅛" deal four-panel square, both sides, door	F.S.	2 0
2" " " " "	"	2 8
1⅛" " but moulded both sides	"	2 4
2" " " " "	"	3 0
4" × 3" deal, rebated and moulded frames	F.R.	1 0
4½" × 3½" " " " "	"	1 4
1¼" deal tongued and moulded window board, on and including deal bearers	F.S.	1 9
1¼" deal treads, 1" risers in staircases, and tongued and grooved together on and including strong fir carriages	"	2 6
1¼" deal moulded wall strings	"	2 1
1⅛" " outer strings	"	2 4
Ends of treads and risers housed to string	Each	1 9
3" × 2" deal moulded handrail	F.R.	1 3
1" × 1" deal balusters and housing each end	Each	2 0
1½" × 1½" " " "	"	2 9
3" × 3" deal wrought framed newels	F.R.	1 3
Extra only for newel caps	Each	6 0
Do., pendants	"	6 0

SMITH AND FOUNDER

		£ s. d.
Rolled steel joists, cut to length, and hoisting and fixing in position	Per cwt.	16 6
Riveted plate or compound girders, and hoisting and fixing in position	"	1 0 6
Do., stanchions with riveted caps and bases and do.	"	19 0
Mild steel bar reinforcement, ½" and up, bent and fixed complete	"	17 6
Corrugated iron sheeting fixed to wood framing, including all bolts and nuts 20 g.	F.S.	11
Wrot-iron caulked and cambered chimney bars	Per cwt.	1 10 0

PLUMBER

		£ s. d.
Milled lead and labour in flats	cwt.	1 18 6
Do. in flashings	"	2 2 0
Do. in covering to turrets	"	2 7 6
Do. in soakers	"	1 13 3
Labour to welted edge	F.R.	3½
Open copper nailing	"	3
Close " "	"	4

		½" s. d.	¾" s. d.	1" s. d.	1¼" s. d.	2" s. d.	4" s. d.
Lead service pipe and fixing with pipe hooks	F.R.	10	1 0	1 3	2 0	2 10	—
Do. soil pipe and fixing with cast lead tacks	"	—	—	—	—	—	5 6
Extra, only to bends	Each	—	—	—	—	2 0	6 9
Do. to stop ends	"	6½	8	9	11	1 0	—
Boiler screws and unions	"	3 3	3 9	5 0	8 0	—	—
Lead traps	"	—	—	—	6 3	8 9	—
Screw down bib valves	"	6 9	9 6	11 0	—	—	—
Do. stop cocks	"	7 0	9 6	12 6	—	—	—

		£ s. d.
4" cast-iron ½-rd. gutter and fixing	F.R.	1 0
Extra, only stop ends	Each	1 0
Do. angles	"	1 6
Do. outlets	"	2 9
4" dia. cast-iron rain-water pipe and fixing with ears cast on	F.R.	1 2
Extra, only for shoes	Each	1 3
Do. for plain heads	"	5 6

PLASTERER AND TILING

		s. d.
Expanded metal lathing, small mesh	Y.S.	2 0
Do. in n/w to beams, stanchions, etc.	"	2 9
Lathing with sawn laths to ceilings	"	1 3
½" screeding in Portland cement and sand or tiling, wood block floor, etc.	"	1 5
Do. vertical	"	1 7
Rough render on walls	"	1 2½
Render, float and set in lime and hair	"	1 9
Render and set in Sirapite	"	1 11
Render, backing in cement and sand, and set in Keene's cement	"	2 9
Extra, only if on lathing	"	4
Keene's cement, angle and arris	F.R.	6
Arris	"	1¾
Rounded angle, small	"	3
Plain cornices in plaster, including dubbing out, per 1" girth	"	1½
1" granolithic pavings	Y.S.	3 6
1½" " " " "	"	4 6
6" × 6" white glazed wall tiling and fixing on prepared screed	"	17 6
9" × 3" " " " "	"	1 2 6
Extra, only for small quadrant angle	F.R.	8

GLAZIER

	s. d.
21 oz. sheet glass and glazing with putty	F.S. 6½
26 oz. do. and do.	" 7¾
Flemish, Arctic Figured (white) and glazing with putty	" 1 1
Cathedral glass and do.	" 1 2
Glazing only, British polished plate	" 7
Extra, only if in beds	" 2
Washleather	F.R. 4

PAINTER

		s. d.
Clearcolle and whiten ceilings	Y.S.	6
Do. and distemper walls	"	9
Do. with washable distemper	"	1 1
Knot, stop, prime and paint four coats of oil colour on plain surfaces	"	3 3
Do. on woodwork	"	3 6
Do. on steelwork	"	3 0
Do. and brush grain and twice varnish	"	5 6
Stain and twice varnish woodwork	"	1 11
Stain and wax-polish woodwork	"	4 6
French polishing	F.S.	1 2
Stripping off old paper	Piece	2 0
Hanging ordinary paper	from "	2 9

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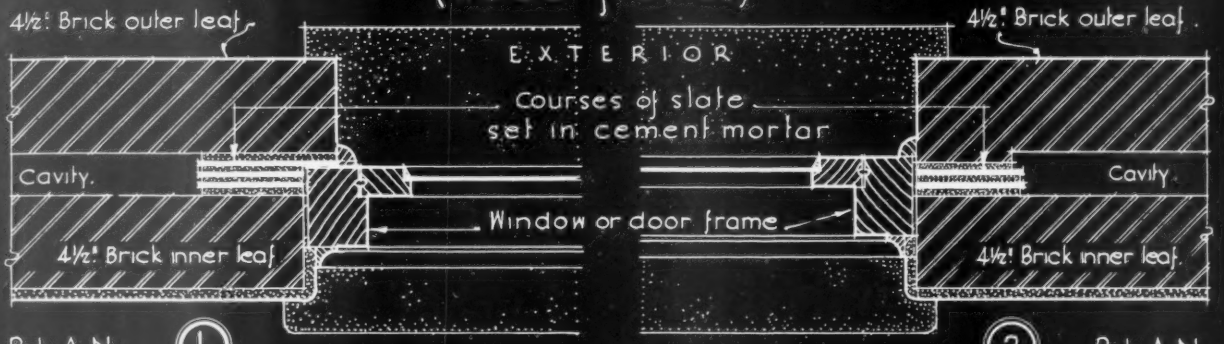
DETAILS SHOWING TREATMENTS OF JAMBS TO OPENINGS IN CAVITY WALLS: (Wood frames.)

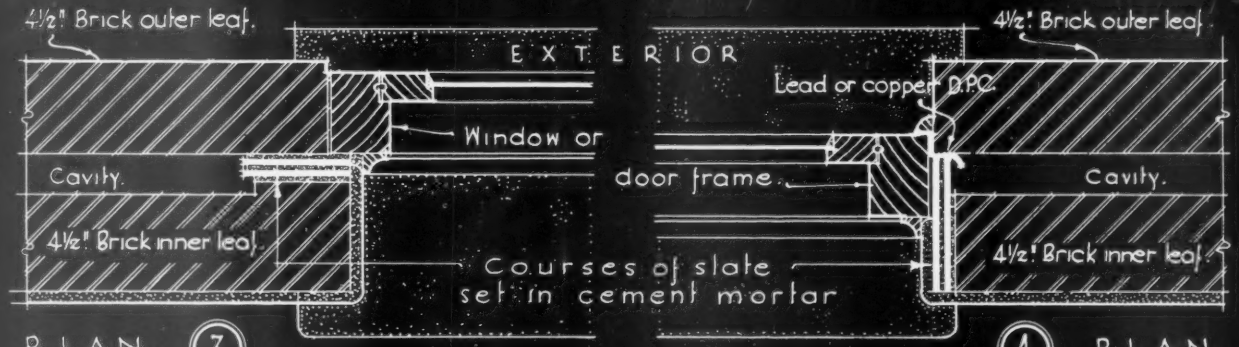


PLAN. (1.)

The D.P.C. shown serves to seal off the wood frame from the damp air in the cavity & to provide a waterproof barrier between the inner & outer leaves The rebated jamb provides a firm bedding for the wood frame and protection from the weather.

(2.) PLAN.

The D.P.C. formed of two courses of slate set in cement mortar forms the necessary waterproof barrier & permits the brickwork of the outer leaf to be returned to form a solid bearing for the lintel above.

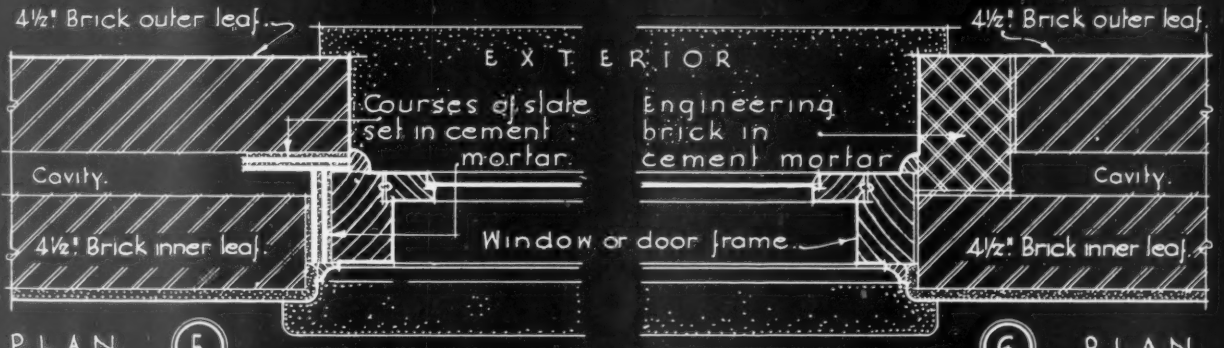


PLAN. (3.)

A method of building the jamb for use where the frame is required to be flush with or near the external face of the wall. This detail exposes the wood frame to the weather excessively.

(4.) PLAN.

In this detail the lead or copper D.P.C. provides a barrier to the passage of moisture from the outer leaf and the slate D.P.C. protects the back of the wood frame.



PLAN. (5.)

The D.P.C. is shown here in two sections, one to protect the back of the wood frame and the other to prevent the passage of moisture from the outer to the inner leaf.

(6.) PLAN.

In this method the D.P.C. is formed of engineering bricks of low porosity set in cement mortar, forming at the same time a solid bearing for the lintel above.

Information from the Clay Products Technical Bureau of Great Britain.

INFORMATION SHEET: CAVITY WALL CONSTRUCTION · 3 · JAMBS.

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1 · Olive A. Bayne.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 367 •

BRICKWORK

Subject : Cavity Wall Construction

The details given on this Sheet show various methods of building and waterproofing the jambs of door or window openings in walls of cavity construction.

The details are shown applied to 11 in. cavity walls consisting of an inner and outer leaf each 4½ ins. thick, separated by a 2-in. cavity. The same general principles can be applied to cavity walls in which the inner leaf is 9 ins. thick.

General Precautions :

(1) Whatever form of jamb is used, it is important that the cavity should be sealed off from the wood frame, to protect the vertical edges of the frames from the possibly damaging effects of damp air in the cavity. In each of the details shown on this sheet, the damp-proof course is arranged to serve this purpose.

(2) It is always necessary to remove all excess mortar from the vertical face formed by the D.P.C. at the end of the cavity. Unless removed, this mortar will bridge the cavity and nullify the effect of the D.P.C.

(3) Horizontal D.P.C.s over the heads of openings have been dealt with on Sheet No. 359; it is, however, necessary to emphasize here, that any such D.P.C. bridging the cavity must be extended laterally beyond the line of the vertical D.P.C. in the jamb.

(4) All slate D.P.C.s should be bedded in cement mortar and the joints between slates staggered.

Detail No. 1 :

This form of construction requires a wider opening in the inner leaf of the wall than in the outer leaf, to provide the rebated jamb in which the frame is set.

The space between the two leaves is filled solid with slates set on edge in cement mortar to form a D.P.C. and a solid jamb, the outer course of slates being carried out over the face of the rebate to protect the wood frame. With this construction the frame, being set back from the external wall face, is well protected from the weather and firmly bedded throughout its height.

Detail No. 2 :

In this method of building the brick jamb, no rebate is formed, and the fixing of the frame depends more upon the building-in at the head and cill and upon the lugs built into the brickwork at intervals in the height of the frame.

The water barrier of slate set in cement is again used, but of only two courses, the remainder of the width of the cavity being filled by building the jamb of the outer leaf with cut headers to form a return. Small spaces are left in the alternate courses between these cut headers which may be filled with slate set in cement mortar. The frame may, in this type of jamb, be set nearer the inner or the outer face of the wall than is shown on the drawing. The nearer it is set to the inner face of the wall the more is it protected from the weather, and the greater is the advantage taken of the thickness of the wall. The frame must not, of course, be set so as to expose the edge of the slate D.P.C.

Detail No. 3 :

This detail is a variation of Nos. 1 and 2, for use when window frames are required to be set flush with or near to the external face of the wall; it is open to the objection that the wood frame is greatly exposed to the weather.

Detail No. 4 :

The method of building-in the slate D.P.C. shown in this detail is a common one, but too frequently the outer edge of the slate is not protected. This permits water to obtain access to the mortar between the slates and thence to work its way rapidly through to the plaster face.

The lead or copper flashing shown in the detail protects this edge and effectively prevents any damp penetration at that point.

Detail No. 5 :

The slate D.P.C.s are arranged in this detail firstly to provide a water barrier to the passage of water beyond the outer leaf of the wall, and secondly to form a backing to the wood frame to ensure that the wood is not exposed to the damp air in the cavity, with the consequent possibility of dry rot.

Detail No. 6 :

This method of forming the jamb, using engineering bricks of low porosity, provides a strong and solid bearing for lintels. The bricks may be arranged as cut headers on all courses, thus giving a straight joint between the engineering brick and the general wall, or they may be bonded with the outer leaf by using stretchers of engineering brick in each alternate course and filling the space left behind the stretchers with an engineering brickbat set in cement mortar.

The vertical straight joint against the inner leaf must be carefully made to be continuous throughout, preferably in a waterproof cement mortar.

Previous Sheets :

Information Sheets already issued by this Bureau are : No. 331, British Standard Sizes of Bricks; No. 334, Cost of Buildings; No. 343, Design of Retaining Walls; No. 359, Cavity Wall Construction No.1; No. 361, Cavity Wall Construction No. 2.

Information from : The Clay Products Technical Bureau of Great Britain
Address : 19 Hobart Place, S.W.1
Telephone : Sloane 7805

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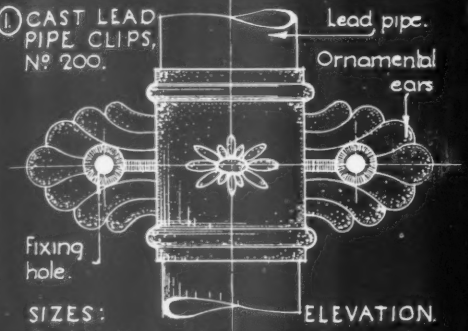
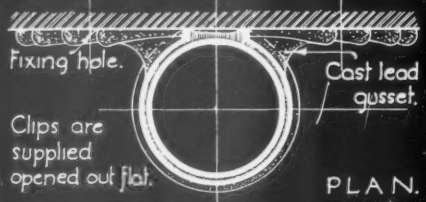
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

DETAILS OF VARIOUS METHODS OF SUPPORTING VERTICAL LEAD PIPE STACKS:

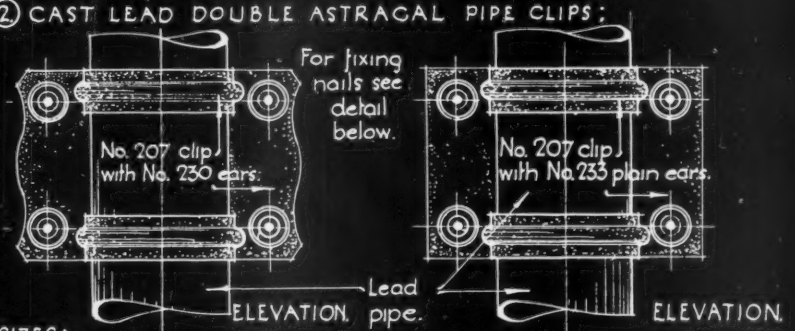
① CAST LEAD PIPE CLIPS, No. 200.



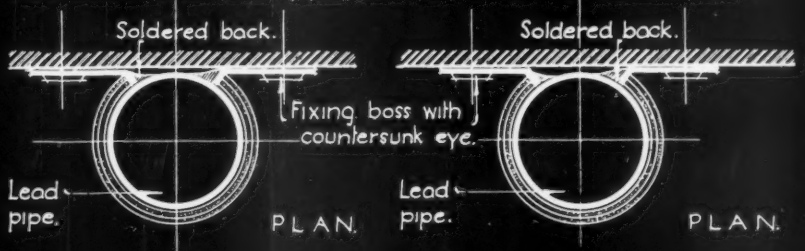
SIZES: Cast lead pipe clips are made in eighteen sizes or pipes from ¾" to 4¾" external diameter. Provision is made at back for soldering if necessary.



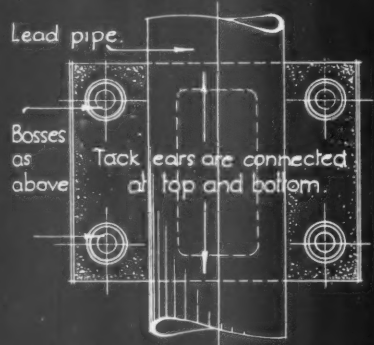
② CAST LEAD DOUBLE ASTRAGAL PIPE CLIPS:



SIZES: Double astragal pipe clips are made with various patterns of ears and in sizes to suit pipes from 1½" to 4½" internal diameter.

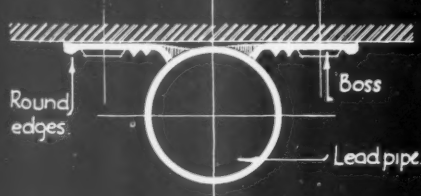


③ CAST LEAD TACKS:



ELEVATION OF TACK No. 233.

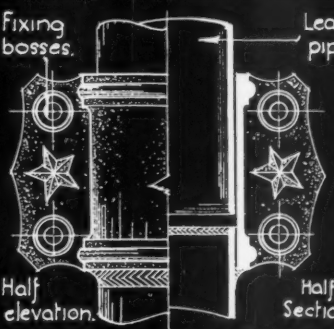
SIZES: Tacks are made in 10 and 14 lb. substance in various lengths to suit pipes from ½ to 4½" internal diam.



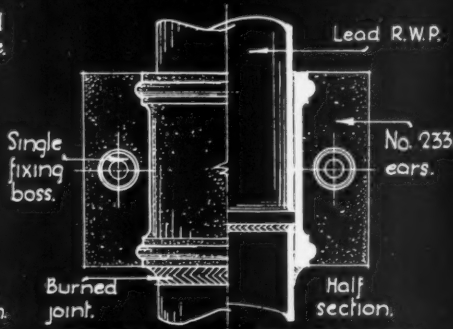
PLAN OF TACK No. 228 WIPED TO PIPE.

④ TYPES AND USES OF CAST LEAD SOCKETS:

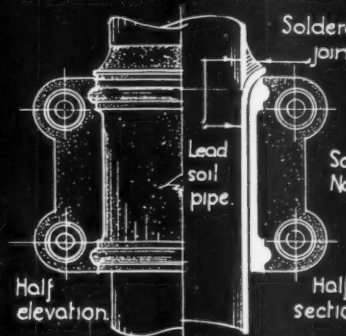
Depth of sockets equals approx. 1½ times the internal diameter of pipe.



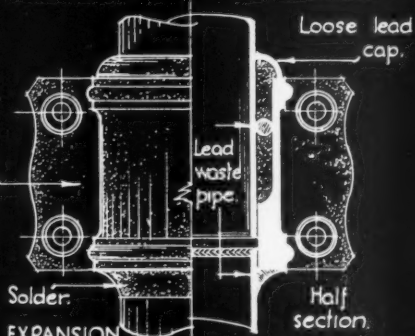
No. 212 SOCKET WITH No. 231 EARS.



No. 212 SOCKET AS USED FOR R.W.P.



No. 212 SOCKET AS USED FOR SOIL PIPE.



EXPANSION SOCKET AS USED FOR LAV. & BATH WASTES.

NOTE: A variety of ear designs is available for each type socket. For weights and sizes of all fittings see reverse side hereof.

ROUND LEAD-HEADED FIXING NAILS.

Information from Claughton Bros. Limited.

INFORMATION SHEET: CAST LEAD CUPS, TACKS & SOCKETS FOR SUPPORTING LEAD PIPES

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1. Oscar A. Bayne

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INFORMATION SHEET

• 368 •

PLUMBING

Subject : The fixing of Lead Pipes

The details given on this Sheet show the various types and designs of standard lead clips, and sockets with fixing ears, for fixing all types of lead pipe to walls, etc.

The tables below set out the various sizes of each type of fitting and the current prices of each.

Prices

It should be noted that the prices given are current prices at the date of publication and are subject to trade discounts. These prices are liable to variation with changes in the market price of the materials used.

CAST LEAD CLIPS

No. 200 CLIPS

No and Letter denoting Size	Inside Diameter and Approximate Weight per Yard of Lead Pipes which Clips will fit	Approximate EXTERNAL Diameter which Clips will fit	Price per doz. Flat	Price per doz. Angle
200 E	⅜×5, ½×4, ⅝×2	Or any Pipe ⅜ in. External diameter ...	1 7	1 5
200 F	⅜×6, ½×5, ⅝×3½	,, ½" ,, ...	1 11	1 7
200 G	⅜×6, ⅝×4½	,, ⅝" ,, ...	2 1	1 9
200 H	½×7½, ⅝×5½, ¾×3	,, ¾" ,, ...	2 3	1 11
200 J	½×9, ⅝×7, ⅞×5	,, 1" ,, ...	2 5	1 11
200 K	⅝×8, ¾×6½, ⅞×4	,, 1 ⅛" ,, ...	2 7	2 1
200 L	⅝×10, ¾×8	,, 1¼" ,, ...	2 9	2 3
200 M	¾×10, 1×5	,, 1 ⅜" ,, ...	2 11	2 5
200 N	¾×12, 1×6	,, 1½" ,, ...	3 –	2 7
200 P	1×10, 1½×4	,, 1⅝" ,, ...	3 4	2 9
200 R	1×14, 1½×8	,, 1¾" ,, ...	3 10	2 11
200 S	1½×17, 1½×10	,, 1⅞" ,, ...	4 4	3 4
200 T	1½×24, 2×12	,, 2" ,, ...	6 8	5 9
200 U	2½×12, 2½×14, 2½×16	,, 2⅛" ,, ...	17 3	15 4
200 V	3×14, 3×17, 3×20	,, 3¼" ,, ...	23 –	19 2
200W	3½×18, 3½×21, 3½×24	,, 3⅜" ,, ...	34 5	30 7
200 X	4×24	,, 4⅛" ,, ...	40 2	34 5
200 Y	4½×26	,, 4⅜" ,, ...	47 10	42 1

CAST LEAD TACKS

THE PRICES BELOW ARE FOR DOUBLE "TACKS" (PER DOZ.) SINGLE "TACKS" HALF PRICE

Diameter of Pipe	½"		⅝"		¾"			1"			1¼"			1½"			2"	
Length of Tack	2	3	2	3	2	2⅜	3⅛	2⅜	3	3⅛	3	3½	4	3	3½		3	3⅛
Letter denoting Size ...	X	Y	V	Z	T	U	LT	R	S	LR	N	P	LN	M	LM			
No. of Thickness 10 lbs. ...	3 10	5 9	3 10	5 9	3 10	4 10	8 1	4 10	6 3	8 7	6 8	9 1	10 6	6 8	9 7			
233 ,, 14 lbs. ...	4 10	6 8	4 10	6 8	4 10	5 9	9 7	5 9	7 2	10 3	7 8	10 6	12 5	7 8	11 –			

Diameter of Pipe	2"		2½"		3"			3½"			4"			4½"	
Length of Tack	4	5⅛	3⅜	5⅛	4½	5½	6	5½	6	6⅞	6	6⅞	8	6⅞	8
Letter denoting Size ...	L	LL	K	J	H	BJ	G	F	BD	E	D	EB	C	B	BA
No. of Thickness 10 lbs. ...	11 –	15 9	9 7	16 3	15 4	16 9	22 –	17 3	22 6	28 3	23 –	30 2	40 2	32 1	42 2
233 ,, 14 lbs. ...	13 5	19 2	11 –	19 7	17 8	20 1	26 9	20 7	27 3	34 5	27 9	36 4	47 10	38 3	49 8

CAST LEAD SOCKETS

PRICE EACH

Ordinary Socket No.	Size of Pipe (inches)	1½	2	2½	3	3½	4	4½
	Length of Socket (inches)	3	3	3⅜	4½	5½	6	6⅞
	Letter denoting Size	N	M	K	H	F	D	B
212	With Ears equal to 10 lb.	3 4	3 10	4 10	5 9	7/2	8 7	10 1
212	With Ears equal to 14 lb.	3 10	4 4	5 3	6 3	7 8	9 1	11 –
If with No. 227, 228, 232, or 236 Ears ...	10 lb. ...	—	—	4 8	5 7	6 10	8 1	9 5
	14 lb. ...	—	—	5 1	6 1	7 4	8 7	10 4
If with No. 240, 245, 246, or 247 Scroll Ears ...	10 lb. ...	6 3	6 8	7 8	9 1	10 6	12 5	13 11
	14 lb. ...	6 8	7 2	8 1	9 7	11 –	12 11	14 10
Expansion Socket No.	Size of Pipe (inside diam. inches)	1½	2	2½	3	3½	4	
	Length of Socket (inches)	3	3⅜	4½	5½	6	6⅞	
	Letter denoting Size	N	LM	LK	SJ	SE	BB	
213	With Ears equal to 10 lb.	4 1	5 1	6 1	7 8	9 1	10 6	
213	With Ears equal to 14 lb.	4 8	5 7	6 7	8 1	9 7	11 6	
If with No. 227, 228, 232, or 236 Ears ...	10 lb. ...	—	4 11	5 11	7 4	8 7	9 11	
	14 lb. ...	—	5 5	6 5	7 10	9 1	10 10	
If with No. 240, 245, 246, or 247 Scroll Ears	10 lb. ...	7 –	8 –	9 5	11 –	12 11	14 10	
	14 lb. ...	7 6	8 5	9 11	11 6	13 5	15 9	

Loose caps for expansion sockets as shown for 2" 2/11, 2½" 3/4, 3" 3/10, 3½" 4/4, 4" 4/10 per doz. When ordering, please specify List No., letter denoting size, design of ears, and whether 10 or 14 lb.

ANGLE SOCKETS IN EITHER No. 212 or 213, 1/– each extra.

DOUBLE ASTRAGAL PIPE CLIPS

PRICE EACH

Size of Pipe (inside diam.) ...	1½"			2"			2½"			3"				3½"				4"				4½"		
Length of Ear ...	3"	3⅜"	4"	3"	4"	5⅛"	3⅜"	4"	5⅛"	3⅜"	4½"	5⅛"	6"	4½"	5⅛"	6"	6⅞"	5⅛"	6"	6⅞"	8"	6"	6⅞"	8"
No. Letters Denoting Size ...	N	P	LN	M	L	LL	K	SL	J	SK	H	SJ	G	SH	F	SE	E	SF	D	BB	C	SD	B	BA
207 With 10 lb. Ears ...	1/11	2/3	2/7	2/3	2/11	3/4	2/11	3/2	3/6	2/11	3/4	3/10	4/10	3/10	4/4	5/3	6/3	4/10	5/9	6/8	7/8	6/3	7/2	8/2
207 With 14 lb. Ears ...	2/3	2/7	2/11	2/7	3/2	3/10	3/2	3/6	4/–	3/2	3/10	4/4	5/5	4/4	4/10	5/11	7/–	5/3	6/5	7/6	8/7	6/10	8/–	9/1
If with No. 227, 228, 10 lb.	—	2/1	2/5	—	2/8	—	2/8	3/–	3/2	2/8	3/2	3/6	4/4	3/8	4/–	4/10	5/7	4/6	5/3	6/1	7/–	5/9	6/7	7/6
232, or 236 Ears 14 lb.	—	2/5	2/8	—	3/–	—	3/–	3/4	3/8	3/–	3/8	4/–	4/11	4/2	4/6	5/5	6/5	4/11	5/11	6/10	8/–	6/5	7/4	8/5
If with No. 245, 246, 10 lb.	—	5/1	5/5	—	5/9	6/8	5/9	6/1	6/10	5/9	6/8	7/2	8/7	7/2	7/8	9/1	—	8/2	9/7	—	—	10/1	—	—
or 247 Ears ... 14 lb.	—	5/5	5/9	—	6/1	7/2	6/1	6/5	7/4	6/1	7/2	7/8	9/3	7/8	8/2	9/9	—	8/7	10/3	—	—	10/8	—	—

Please, when Ordering, give LIST NUMBER, LETTER DENOTING SIZE, DESIGN OF EARS, and state whether 10 or 14 lb.

LEAD HEADED NAILS

No. 820

Size of Lead Head, 1", 1¼", and 1½"	Per doz.
2½" to 4"×⅛", Iron Shank	2/11
2½" to 4"×⅛", Galv. Iron Shank	3/4
3"×⅛", Tough Brass Shank	5/9
4"×⅛", Tough Brass Shank	6/8
3"×⅜", Tough Brass Shank	6/8
4"×⅜", Tough Brass Shank	7/8

Suitable for fixing tacks, etc., having plain bosses or washers as our tack 231, or for perfectly plain tacks or ears.

Name of Manufacturer : Claughton Bros., Ltd.

Address : Sanitary Lead Works, Bramley, Leeds

Telephone : Stanningley 71186 and 71187

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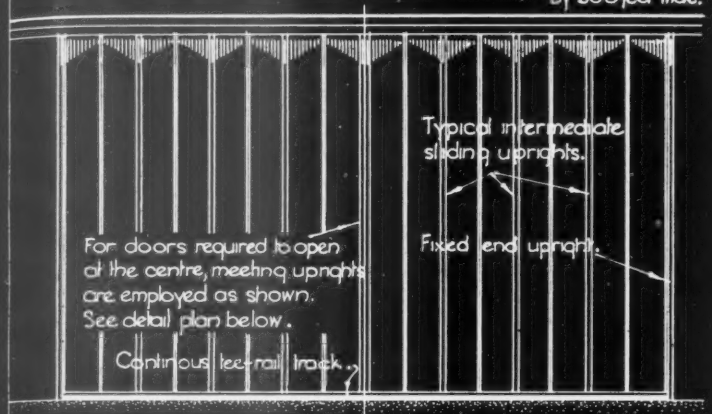
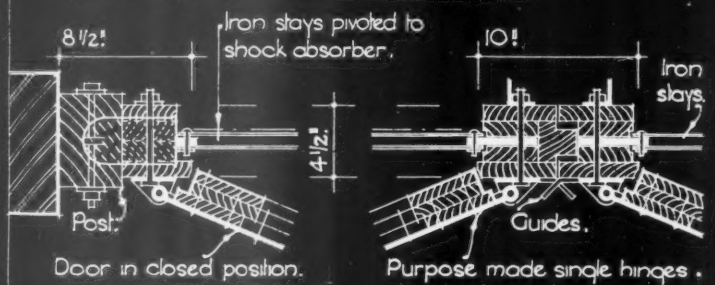
CONSTRUCTIONAL DETAILS OF ESAVIAN AEROSHED FOLDING AND SLIDING DOORS:

NOTE: Aeroshed doors are obtainable in sizes up to 60 feet high by 300 feet wide.

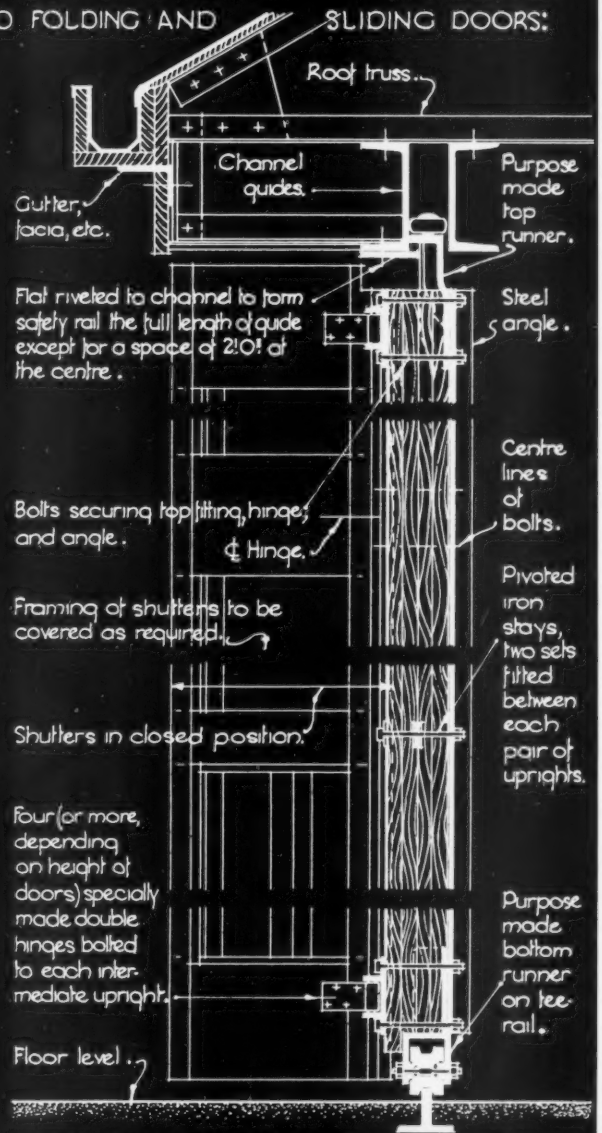


TYPICAL ELEVATION OF DOORS.

TYPICAL PLANS showing doors in closed and open positions. Doors of good height are made to stand corrugated as shown, against wind pressure, and are fitted with special stays, buffers, shock absorbers, etc.



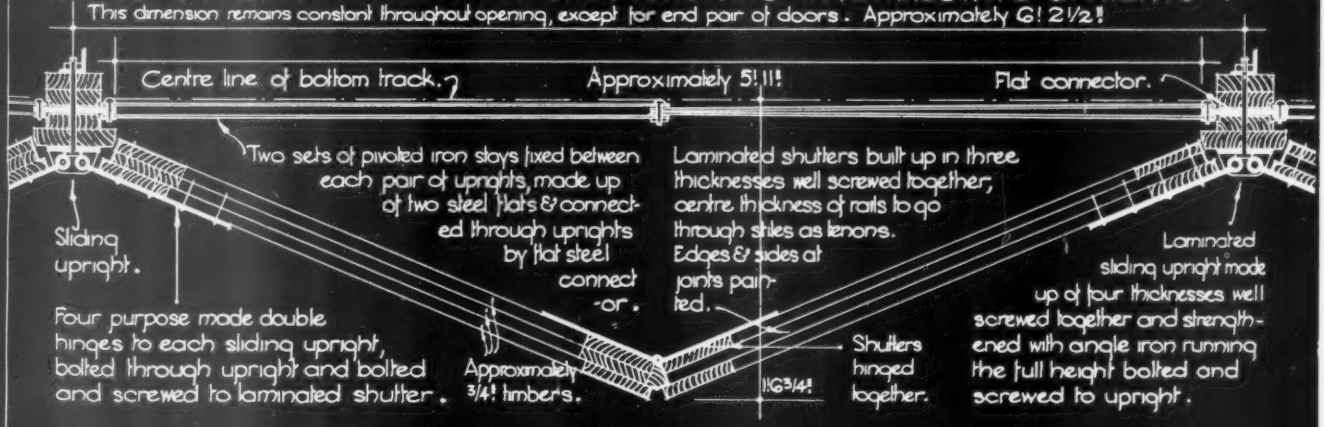
DETAIL PLANS OF FIXED END AND MEETING UPRIGHTS.



DETAIL SECTION THROUGH TYPICAL UPRIGHT.

DETAIL PLAN OF TYPICAL PAIR OF SHUTTERS AND INTERMEDIATE UPRIGHTS:

This dimension remains constant throughout opening, except for end pair of doors. Approximately 6' 2 1/2"



Information from The Educational Supply Association Ltd.

INFORMATION SHEET: WOOD FRAMED SLIDING & FOLDING HANGAR DOORS.

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1. Oscar A. Bayer.

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 369 •

AERODROME EQUIPMENT

Product : Esavian Aeroshed Folding and Sliding Doors

Aeroshed doors are a type of sliding and folding door especially designed and equipped to serve openings of great width or great height, or both, as required in aerodrome hangars, factories, shipyards, and large garages. The details given on this Sheet show the construction of the doors and the method of operation. It should especially be noted that the doors are supported on the tee-rail at the foot and do not require to be carried overhead : guides only are required at the top.

Specification of Standard Type Doors :

(1) The timber used for the doors is British Columbian pine or deal. Shutters and sliding uprights are built up in laminations for additional strength, the laminations are set in lead priming before being assembled and are securely screwed from the back of the shutters. The matchboard covering on the shutters is screwed from the back. All doors are knotted and given one coat of priming before leaving the factory.

(2) *Hand Winding Gear.*—Doors over 25 feet in height are operated by a winding gear which is of the endless cable type, the winch being carried on the centre meeting sliding upright. Cable adjusters are provided at either end. Winding gear is advisable but not necessary for doors between 20 ft. and 25 ft. in height.

(3) *Electrical Winding Gear.*—Doors are driven with an electric motor, through the winding gear, giving a speed of 55 yards a minute. All gear is complete with limit switches, which prevent over-folding when extended, and are provided with push-button control, marked "open," "closed," and "stop."

(4) *Centre Fastening of Doors.*—Doors are fitted with switches cutting off the current, making it impossible to open the doors until the lever fasteners are uncoupled. In the event of failure of current the doors may immediately be converted to the hand drive.

Table of Sizes of Esavian Aeroshed Doors :

Size of Clear Opening	No. of Leaves folding each side	Space taken up by Leaves when folded	Overall Size of Doors
100 ft.	18 leaves	7 ft.	114 ft.
120 ,,	22 ,,	9 ,,	138 ,,
140 ,,	24 ,,	10 ,,	160 ,,
160 ,,	28 ,,	11 ,,	182 ,,
180 ,,	32 ,,	12 ,,	204 ,,
200 ,,	36 ,,	13 ,,	226 ,,
220 ,,	38 ,,	13 ft. 6 in.	247 ,,
240 ,,	42 ,,	14 ft. 6 in.	269 ,,
260 ,,	46 ,,	16 ft.	292 ,,
280 ,,	48 ,,	17 ,,	314 ,,
300 ,,	52 ,,	18 ,,	336 ,,

Manufacturers : The Educational Supply Association, Limited.
Address : 171-181 High Holborn, London, W.C.1.
Telephone : Holborn 9116.
Works : Esavian Works, Stevenage, Herts.
Telephone : Stevenage 197.