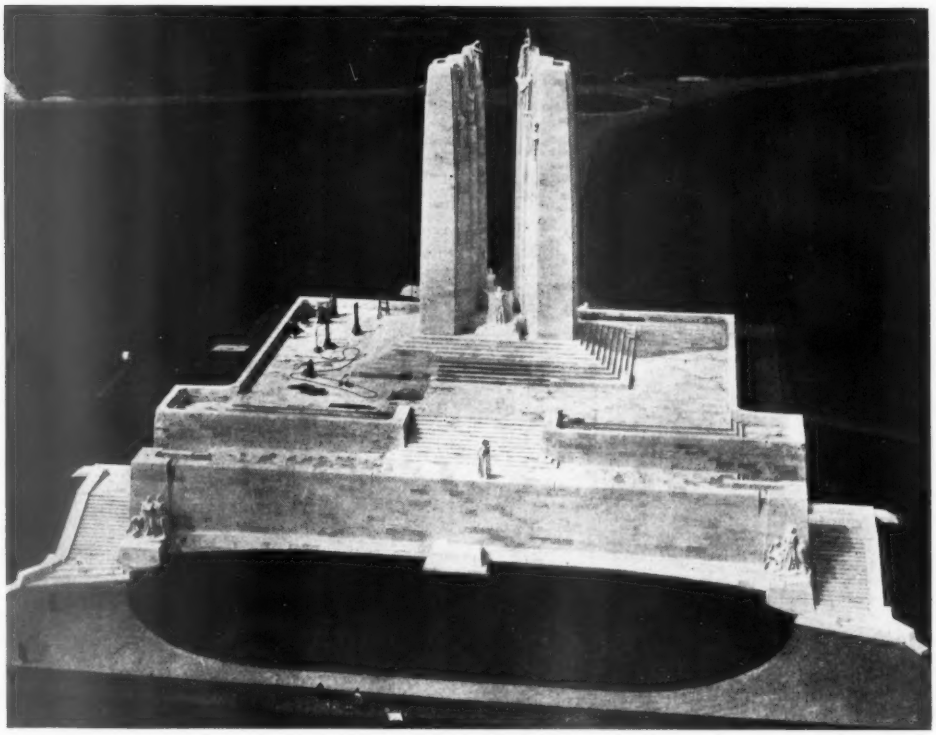
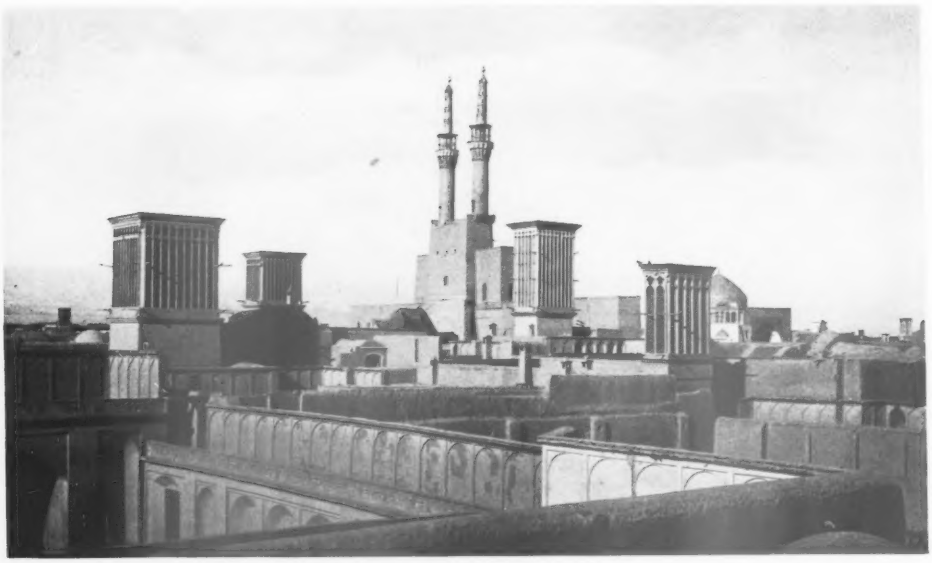
CANADIAN WAR MEMORIAL



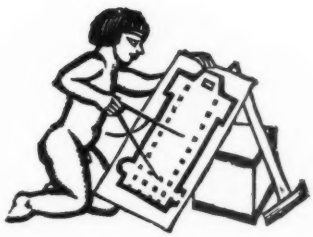
THE Canadian memorial to the missing at Vimy Ridge which will be unveiled by H.M. the King on July 26. The pylons are 136 feet in height, and the sculpture is the work of Mr. Walter Allward.



PERSIAN ARCHITECTURE

An exhibition of photographs of Persian architecture, the work of the American Institute for Persian Art and Archæology, was opened in the R.I.B.A. Building in Portland Place, W.1, on Tuesday last by Hussein Ala, the Iranian Minister in London. The exhibition will remain open until June 26.

The photographs reproduced above show: top, a shrine at Nisliapur; bottom, a general view looking across Jazd.



R.I.B.A. ELECTIONS

LAST week the vividly coloured voting papers for this year's R.I.B.A. Elections were received by members. By placing crosses against the names of the candidates which have their approval, members of the Institute can decide during the current fortnight who shall fill the vacancies on the Council and the four Standing Committees of Art, Literature, Practice and Science.

What proportion of members will use their powers remains, unfortunately, very questionable. And this despite the fact that it is at election time that members of the Institute can decide in large measure, if indirectly, what the quality of their professional society is to be.

Previous to last year the proportion of members voting at the annual elections had been at times as low as fifteen per cent. Last year a much wider interest was shown in the representatives at Portland Place, an interest which this JOURNAL did its best to help by the publication of an Election Supplement giving brief particulars of the candidates. But even then, when the number of candidates nominated by members showed such an encouraging increase, the numbers voting did not exceed a third of those who received ballot papers.

All the democratic elections of a very democratic country, from its Government elections downwards, have always been troubled by the problem of the non-voter. So much so that penalties for the voter who will not vote have been suggested from time to time. But in a country where polling for Government elections usually fluctuates between 55 and 90 per cent. of the total electorate, and where age, illness, ignorance and long distances to polling stations must always cause a great proportion of absentees, it would seem odd that a society of persons both able-bodied and intelligent, and who do not have to move a yard from their offices to vote, should be unable to poll more than a third of their total of votes.

What are the reasons for this state of affairs? It is to be presumed that they fall under three headings : complete lack of interest as to what does or does not happen at Portland Place; disbelief in the effectiveness of the ballot for making any changes in the Institute's policy which the voter desires to bring about ; and ignorance of the character and abilities of the various candidates nominated.

Lack of interest amongst a certain proportion of members is probably the most difficult to remedy of these three causes. Those who cannot be bothered to show the slightest interest in their professional society will probably never be bothered to listen to reasons why they should.

There has been a time in the past when provincial members were inclined to think that the Institute was run for those practising in London, and to consider that it never attempted to do much for architects collectively. If these things were ever true they are certainly not true today.

A close and efficient contact now exists between the R.I.B.A. and the membership of its Allied Societies, and the admirable progress of the Institute during the last ten years in its efforts to make the public understand the meaning and usefulness of architects, cannot be denied by anyone who even glances at the facts. If the uninterested member remains uninterested by these things it is doubtful whether anything can ever influence him.

The last two reasons for not voting, however, are worth more serious attention.

There is firstly the member who wants to change the policy of the R.I.B.A. and the directors of that policy, and considers his single vote useless as a weapon for doing so.

Such members, often young, energetic and intelligent, can produce arguments to support their policy of change which can justify nearly everything save their not voting. These arguments are too intricate to be examined here, but there is no reason to suppose that the Institute does not encourage young and energetic candidates. The Institute is a democratic body because if it fails to be representative of its membership it fails in its primary purpose ; and if because of the democratic basis of its elections the more progressive candidates fail to be elected, the blame cannot be attributed to those who are.

Whether the electoral system might with advantage be modified to allow greater chances of election to those younger men who are necessarily not so widely known, is a question well worth discussion at the R.I.B.A. But the remedy for any who feel discontented at present does not lie in apathy but in putting up their own candidates and continuing to vote for them—however small the total of votes may be.

Finally, there is the general complaint of members that they do not know who they are voting for. This JOURNAL feels strongly that this complaint is justified and ought to be remedied, and that it ought to be remedied by the R.I.B.A. itself.

As a guide to a possible form of remedy, the JOURNAL publishes this week some short biographical notes on the candidates standing for election to the Council.

The Architects' Journal
Westminster, S.W.1
Telephones: Whitehall
9212-7
Telegrams
Buildable
Parl
London

NOTES & TOPICS

THE CONFERENCE

THIS year our hosts at the Conference (as everyone now refers to the British Architects' Conference organized by the R.I.B.A.) are to be the members of the Hampshire and Isle of Wight Architectural Association, one of the largest and most energetic of the Allied Societies.

*

Southampton is to be the centre of interest; broadly speaking, for it would be difficult to find an outstanding centre of interest in Southampton itself. Sea-front and docks compete with quaint old streets and inns, the bleak and as yet unmatured surroundings to the civic centre contrast with the adjoining parks, and the forest-covered hills compete with the yachting centre.

*

A banquet on the S.S. "Asturias" will give a pretty local touch to the Conference and is conveniently centred between the formality of the opening day (when two of our more energetic youngsters, Mr. G. A. Jellicoe and Mr. W. G. Holford, are to read papers) and the more or less informal outings with which the four days close.

*

And Southampton is the headquarters of the Ordnance Survey office. . . .

ASSETS AND ETHICS

According to a report in the Press last Saturday the National Association of Building Societies at its Conference at Llandudno has been discussing a code of ethics which one gathers the Association hopes will be generally adopted by all Societies.

*

Ethics, which my dictionary defines as the science of morals, or a system of moral principles, seems an intriguing word to have chosen. Coming after Friday's report that the Building Societies' assets have, during the last 60 years or so, increased from £2,000,000 to over £600,000,000, is it possible that the statement has the amusing suggestion about it of a twinge of conscience?

SATELLITE TOWNS

Last week's article in *The Times* advocating satellite towns and entitled "Cities as they might be," in addition to mentioning such important matters as controlling and using in planning the tendency of industries to move to the less congested fringes of towns, stressed a second important point; namely, that a satellite town "should be planned as a complete community centre, so that while it is subsidiary to the city it has by reason of its structure and facilities a life of its own."

*

It is the lack of this which to a great extent accounts for the deadly dreariness (not ugliness) of so many of London's suburbs. To be 20-30 minutes by train from Charing Cross or Liverpool Street is not enough to be the only reason for the position of a town.

THE SOUTH SIDE

Perhaps something may at last be done about the south side of the river. The Southwark Borough Council has decided to ask the L.C.C. to call a conference of all concerned, local authorities and others, to discuss a development scheme.

*

A plan has been prepared by the borough engineer for dealing with the river frontage from Blackfriars Bridge to Southwark Bridge. But, however good this scheme may be, it is vital that the south side from Westminster to London Bridge at least should be planned as a whole and not borough by borough.

*

A scheme of this size should be the subject of an open competition with really big premiums.

PERSIA INVESTIGATED

To most people in England, Persian architecture was first discovered in 1931, when the Royal Academy held its special exhibition. But long before that Dr. Upham Pope and his colleagues from America had been penetrating and investigating and revealing by means of photographs the simple complexities of Persian work.

*

And now at the R.I.B.A. we have an opportunity of seeing Dr. Pope's second exhibition of photographs. They reveal further niceties of decoration on simple plastic forms, brick-facings woven into patterns which even Holland has never imagined, and colour combinations which make Ravenna and Messina look grey.

*

But colour is not for photographs. There seems to be a first-rate opportunity in Persia for some of the R.I.B.A. Owen Jones scholars to make some fresh and very exciting contributions to our knowledge of colour.

AIRPORT

Heaven knows how many people there were at the official opening of Gatwick Airport last Saturday; page 1 of the *Sunday Express* made it 70,000, but this optimistic figure had dwindled to 15,000 by page 7 or so of the same issue. But quite certainly there were too many for the

Dr. Arthur Upham Pope, Director of the American Institute for Persian Art and Archæology, organiser of the Exhibition of Photographs of Persian Architecture now being held in the R.I.B.A. building.

approach roads, which were packed with cars for miles, both coming and going, though they are hardly likely to be as thoroughly tested again for many years to come.

*

But why is it so impossible to find out what's happening at the average aerial display? I was lucky enough to be with a party of experts who explained it all in words of one syllable, but the general public seemed to have no idea of what was doing which—far less why.

*

And incidentally air displays give an admirable proof of the old theory that only about 1 per cent. of the human race can gaze upwards without letting their mouths fall wide open: a true saying which I have seldom seen so clearly demonstrated.

*

One original discovery I did make, however: the real and unavoidable snag about reinforced concrete is that there aren't any odd bricks lying about for spectators to stand on.

NOTICE BOARDS AND SIGNS

During the last few months at least one well-known firm of estate agents have been trying to improve the lettering upon their "For Sale" and "To Let" boards, and much better and quite as arresting they look.

*

While on the subject of notice boards, it seems a great pity that certain brewers are tending to standardize inn signs. When on a country walk it is rather disappointing to find one has to refresh oneself in every village at the "Indigo Fig-leaf" or whatever it is.

*

There must be hundreds of British artists who would be prepared to paint a fine light-hearted inn sign for a reasonable amount. And if it is essential to trade prestige to show that lots of pubs have one and the same fatherly firm watching over their every need—what about the moderate discretion of a Trust House plaque?

*

A huge (and usually deplorably ugly) trade sign is such a silly form of standardization.

DESIGNING PUBS

And while asking the owners to return to the good old ways in the matter of signs, I may as well include a second request—for brewery architects to be a little more progressively imaginative when they are designing new pubs.

*

A few weeks ago I spent a week-end at a completely rebuilt inn in Oxfordshire. The quality of the craftsmanship and materials made my mouth water. No flashing looked less than 10 lb.; every chimney and parapet had a D.P.C.; every asphalte turn-up rose a full five courses; every cill was of teak. And yet the interior was gloomily depressing in brown fielded panels, with fireplaces off the peg in miniature bricks and beaten metal antique light fittings.

*

There was a kind of seaside lodging-house feeling about the whole place, which surely cannot be very good for business.

*

New country pubs, which have insides that make one want to stay a long time and return again soon, must do a tremendous business. For they are very rare.

CASUAL TECHNICAL LABOUR

My note last week on the dangers of the casual employment of architectural assistants on defence works has apparently been read by quite a lot of people.

*

The Minister for the Co-ordination of Defence, Sir Thomas Inskip, has very rightly felt alarmed at the possible effect on industry of a spate of official orders, and has therefore taken care to spread the present load among private firms—from horse-shoe manufacturers to miscellaneous turnings.

*

Lack of a long-range policy in obtaining architectural services is bound to have unfortunate consequences.

*

It seems very odd that horse-shoes, for example, can be obtained through existing organizations, but that for the technical work in building a sort of casual intellectual labour corps should be created. ASTRAGAL

Last week's issue of the JOURNAL *contained the final section of the series on Town Halls. This week we continue weekly publication of Working Details.*

NEWS

POINTS FROM THIS ISSUE

SOUTH SIDE OF THE THAMES

At last week's 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 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."

The chairman of the Committee (Councillor Hinkins), in his report, said: "The condition of a large amount of property in the riverside area between Southwark Bridge and Blackfriars Bridge, especially the Bankside area, has been the subject of grave concern to the Council for many years. The Borough Engineer has submitted to us plans of a scheme prepared by him for the proposed future development of the riverside area. Members of the Council are well aware of the great need for the proper organized development of the area, which through various circumstances has been allowed to deteriorate, and in many parts is quite derelict. A considerable amount of the property in the Bankside area has become sterile, consequent on the long period during which the St. Paul's Bridge Scheme has remained in abeyance. The uncertainty of that Scheme being brought into effect has, in our opinion, been responsible to a great extent for the suspension of any development of property.

"In our opinion, it is now time that definite action should be taken to bring to an end the further deterioration of this area and that every effort should now be made to give effect to a Scheme such as that submitted to us by the Borough Engineer."

Councillor Hinkins pointed out that the Scheme had received very favourable recognition by the Mansion House Committee which has been considering the provision of a National Memorial to King George V; and that the plans had received the approbation of certain influential persons interested in the improvement of the south bank of the River Thames.

THE ARCHITECTS' DIARY

Thursday, June 11

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

ARCHITECTURAL ASSOCIATION, 36, *Bedford Square, W.C.1. Exhibition of work executed by members of the A.A. Students' Art Club. Until June 13.*

INTERNATIONAL EXHIBITION OF ACETYLENE, OXY-ACETYLENE WELDING AND ALLIED INDUSTRIES. *At Caxton Hall, Westminster, S.W.1. Until June 13.*

ROYAL WEST OF ENGLAND ACADEMY, *Bristol. R.I.B.A. Exhibition of "Everyday Things." Until June 13.*

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.*

Friday, June 12

NATIONAL HOUSING AND TOWN PLANNING COUNCIL. *At the County Hall, Lambeth, S.E.1. Annual Conference of Local Authorities in London and the Home Counties.*

Monday, June 15

INSTITUTION OF ELECTRICAL ENGINEERS. *Scottish Centre. At Glasgow. Summer Meeting.*

Tuesday, June 16

INSTITUTION OF CIVIL ENGINEERS, *Gt. George Street, S.W. "Water Power in Brazil, with special reference to the Sao Paulo Development." By A. W. Billings. 6 p.m.*

Wednesday, June 17

LONDON SOCIETY. *Visit to Ironmongers Hall, Shaftesbury Place, Aldersgate, E.C.1. 2.45 p.m.*

EXHIBITION OF PHOTOGRAPHS OF PERSIAN ARCHITECTURE

Although the architecture of Iran has enjoyed a high reputation among scholars and those who have travelled in the country, the most notable Persian buildings, the occupied mosques, were not available for study by Western scholars because of religious fanaticism until the last few years. But in 1929 the present Shah granted permission to Professor Upham Pope, Director of the American Institute, to enter any and all for the sake of systematic study.

The first task was to photograph as thoroughly as possible all the monuments. As a result of more than 50,000 miles of travel, including work in Afghanistan, the Caucasus and Armenia, the architectural staff of the American Institute have recorded well over 300 monuments and have assembled a collection of some 3,000 negatives.

A selection of the photographs and plans are now on exhibition at the R.I.B.A. building in Portland Place. The exhibition will remain open until June 26.

NEW HARBOUR FOR SARK

Sark, in the Channel Islands, is to spend £45,000 on a new harbour. Tenders are to be invited next month.

SOCIETY OF PAINTER DECORATORS

An exhibition of the work executed by members of the Society of Painter Decorators was opened by Mr. C. B. Cochran at the Building Centre, New Bond Street, W.1, on Monday last. The exhibition will remain open until June 27.

THE BUILDING INDUSTRIES NATIONAL COUNCIL

"The position of the building industry continues to be satisfactory," states the current issue of *The Building Industries Survey*, published by the Building Industries National Council, "the number of unemployed workpeople in April being some 20,000 below the total for March and that for a year ago. It must, however, be noted that the count was taken a week later than usual, on April 27, the fourth Monday in the month, as compared with March 23 and April 23, 1935, in each case the third Monday. Comparison is thus to some extent vitiated, since the difference in the number of unemployed from one week to the next is likely to be substantial at this time of the year when there is a strong downward seasonal movement.

"The building plan figures for dwelling-houses show a decline in value for the first quarter of the year as compared with a year ago, but the number of houses to which they relate is greater. The decline in the March figure as compared with last year is, however, confirmed by the preliminary figure for April, which shows a decline in value of 14.8 per cent. on the year. These facts place the continuance of housing by private enterprise at its recent level in some doubt, and raise the question whether a definite turning-point has been reached.

"In these circumstances it is essential that the Government should aim at the maintenance of cheap money as the basis of an expansion of industrial and commercial new construction and replacement, and should so organize its defence programme as to interfere as little as possible with the normal trade of the industry, and especially with the intensification of slum-clearance operations now called for under the five-year programme.

"Building of an industrial and commercial nature is fully maintained and in some areas shows further increases. The building plan statistics give favourable indications for this class of work."

TOWN AND COUNTRY PLANNING

Sir Godfrey Collins, Secretary of State for Scotland, in an address entitled "Town and Country Planning" at the conference of local authorities held in Edinburgh on June 5, said: "When we speak of planning we mean no more than determining on broad lines how we want our towns to develop. We do not require to plan in advance every detail of our future town, but we *do* need to have in our minds a picture of what we wish our town to look like. When we have that general picture we can

From the Exhibition of Photographs of Persian Architecture now being held at the R.I.B.A.: The Pulkhajoo Bridge, Isfahan.

more easily ensure that development proceeds in an orderly manner to fit in with the preconceived plan. If we do not control development, confusion arises—and the kind of confusion that all of us deplore today. With conscious effort we can create beauty in our towns and villages, and make them worthy expressions of the craftsmanship and vision of twentieth-century Scotland."

FOREST PRODUCTS RESEARCH LABORATORY

We are informed by the Director of the Forest Products Research Laboratory that the applicants for permission to attend the Summer School have been considerably more numerous than in 1935. The Director has, therefore, decided to increase the number to be accepted to 48, the maximum number which can be accommodated. He regrets that it is impossible to accept all applications received, but it is probable that a further opportunity for attendance at a similar course will be afforded on some future occasion.

SOUTH-EASTERN SOCIETY OF ARCHITECTS

Three summer visits have been arranged by the above Society, as follows: Brighton, Hove and Worthing Airport (June 20); Belgium (July 24-27); and Russia (August 15-September 13). Any member of the R.I.B.A. and its Allied Societies wishing to take part in any of these visits can obtain further particulars from the General Secretary of the South-Eastern Society of Architects, "St. Moritz," The Upper Avenue, Eastbourne.

JERRY-BUILDING

The annual conference of the National Association of Building Societies was held last week at Llandudno under the chairmanship of Sir Harold Bellman. In the course of his address the chairman said: "While the sheer bulk of housing output has evoked favourable comment, public opinion is as much concerned—and rightly concerned—with quality as with quantity. It is a fact that jerry-building is an evil of some magnitude. It is necessary, however, to preserve a sense of perspective in discussing jerry-building. A very large proportion of house-builders are loyal to the best traditions of their craft and give the house-purchaser good value for his money. There are a number of builders, however, who, having no background of tradition and indifferent to everything except balance sheet considerations, fail to give the purchaser value for his money and inflict irreparable damage to the civic environment. The building society movement is ready to co-operate with any responsible body which aims at eradicating the jerry-builder. The task is not easy and calls for the maximum co-operative effort of all the interests concerned. The local authorities should rigorously enforce sound byelaws; the building societies should exercise special caution in the valuation of doubtful properties; and the house-buying public—who after all are the final arbiters in this matter—should take the necessary precautions, whether by enlisting independent professional advice or otherwise, to ensure that they are getting value for their expenditure.

"Although the difficulties should not be minimized, the problem is not insoluble. It is a thoroughly vicious notion that crude and ugly houses are necessarily cheaper than those distinguished by repose and graceful balance. The charm of characteristic English domestic architecture owes nothing to richness of material or fussy ornamentation. We have achieved a large measure of success in wise interior planning, but the problem of exteriors and general grouping still awaits universal solution. The jerry-builder must not be allowed to perpetrate those ostentatious façades and dreary rear elevations which have been described as 'Queen Anne fronts and Mary Ann backs.'"

TEESSIDE ARCHITECTS

At the annual meeting of the Teesside Branch of the Northern Architectural Association, Mr. R. J. Archibald, of Middlesbrough, was elected chairman in succession to Mr. H. E. Jarvis, of Darlington, and Mr. E. C. Bell, of West Hartlepool, was appointed vice-chairman. Mr. Arthur Harrison, of Stockton, was re-elected hon. secretary. The following committee was elected: Stockton: Messrs. F. W. Turnbull and P. F. Burridge; Middlesbrough: Messrs. J. P. Rudd and R. M. Archibald; Hartlepools: Messrs. J. A. Senior and A. Golding; Darlington: Messrs. L. E. Wade and H. B. Richardson; Richmond: Messrs. E. Dent and S. Willis; Barnard Castle: Mr. C. D. Pickersgill.

ROYAL SOCIETY OF ULSTER ARCHITECTS

The annual meeting of the Royal Society of Ulster Architects was held recently at Belfast, when the following officers were re-elected:—Mr. R. S. Wilshere, M.C., F.R.I.B.A., P.A.S.I., president; Mr. T. R. Eagar, F.R.I.B.A., vice-president; Mr. J. H. Stevenson, F.R.I.B.A., treasurer. Mr. Val Smyth, A.R.I.B.A., was elected hon. secretary in place of Mr. H. V. M'Caughan, who has completed his term of office.

ANNOUNCEMENTS

Mr. Wilfred T. Quayle, Registered Architect and Chartered Surveyor, has

Peabody Donation Fund: Clapham Junction Estate. By Victor Wilkins. Perspective by Cyril A. Farey. (R.A. Exhibition, No. 1448.)

commenced practice at 29 Athol Street, Douglas, Isle of Man, where he will be pleased to receive trade catalogues.

Messrs. Howden and Stewart, Architects, have removed their offices to 81-84 Walter Wise's Buildings, 52 Joubert Street, Johannesburg.

OBITUARY

H. W. RISING

We regret to record the death of Mr. Henry Whiteman Rising, F.R.I.B.A., formerly a partner in the firm of Albury, Rising, and Morgan, Architects, of Reading.

Mr. Rising was aged 77. He was a member of the Berks, Bucks, and Oxon Architects Association.

J. A. CRUSH

We regret to record the death of Mr. John Arnold Crush, of Edgbaston. He was 51, and for some time had been in indifferent health. A Fellow of the R.I.B.A., he had been in practice in Birmingham for about 20 years, specializing in ecclesiastical architecture. Several important Roman Catholic churches in the Midlands were erected from his designs. He was also responsible for the design of the new church at Douai Abbey, Berkshire.

COMPETITIONS OPEN

JULY 6.—Sending-in Day. Exhibition Stand at the Building Trades' Exhibition to be held at Olympia in September next, for the Ascot Gas Water Heaters, Ltd. Assessors: Keith D. P. Murray, A.R.I.B.A., G. Grey Wornum, F.R.I.B.A., and F. R. Yerbury. Premiums: £100, £25, and £5. The latest date for submission of designs is July 6, 1936. Full particulars are obtainable from Ascot Gas Water Heaters, Ltd. 244 High Holborn, London, W.C.1.

AUGUST 21.—Sending-in Day. Municipal buildings and assembly hall for the Dartford Town Council. Assessor: P. D. Hepworth, F.R.I.B.A. Premiums: 200 guineas, 100 guineas and 50 guineas. The last day for submission of designs is August 21, 1936, and the last day for questions is June 29, 1936. Conditions of the competition may be obtained on application to Mr. J. James Hurtley, Town Clerk, Dartford. (Deposit: £1 1s.)

OCTOBER 26.—Sending-in Day. Competition (organized by the Timber Development Association) for the lay-out and individual design of a group of camp buildings, or holiday camp, which will be suitable for accommodating tourists. Assessors: Guy Dawber, R.A., PP.R.I.B.A., G. A. Jellicoe, F.R.I.B.A., G. Langley Taylor, F.R.I.B.A., and John Gloag (for the Timber Development Association). Premiums: First prize, £150; second prize, £50; third prize, £25; three special mention awards of £10 each. The competition is open to any registered architect or student (at any school recognized by the R.I.B.A.) of British nationality.

Designs must be submitted by October 26, to the Building Centre, 158 New Bond Street, London, W.1, marked "Timber Development Association Tourist Camp Competition." The results will be announced by Monday, November 30, 1936.

Full particulars of the competition are obtainable from the Secretary of the Association at 69 Cannon Street, E.C.4.

LETTERS *FROM* READERS

The Hampstead Case

SIR,—In regard to Astragal's remark in your issue for May 28 that "we are in trouble again," so serious is the evidence exhibited today of the somewhat peculiar activities of forces reactionary to contemporary architecture that a loose statement such as this stands in grave danger of being misused.

Would it not have been more appropriate, Sir, in view of the attitude towards contemporary architecture which is most worthy of you, to have championed the cause of clear thinking and rational practice by stating not just that "Connell, Ward and Lucas are in trouble again," but that "Connell, Ward and Lucas are being troubled again"—an alteration which would have added far less than this letter to your valuable space and avoided the loss of our valuable time in composing this protest?

CONNELL, WARD AND LUCAS

"You pay the Rent—Who gets the Profits?"

SIR,—May I express my appreciation to the Hon. Secretary of the Housing Group, A. T. O., for his confirmation of my letter in your issue for May 7?

The figure of £46,000 supplied by the L.C.C. for maintenance, repairs, etc., is on the low side and I cannot help thinking that some of the expenditure has been allocated against other funds. This, however, is not our concern.

Does Mr. Barr suggest in his concluding paragraph that we should look to the tenants of Downham for some contribution towards solving the housing problem, since they are in receipt of "unearned income" in the shape of profit rental?

The economic rent quoted in respect to this estate—namely, 16s. 2d., exclusive of rates—would bear an assessment producing a weekly payment of 6s. 9d. for rates and water rate, which would suggest that the economic rent is greater than 19s. 5d.

The object of a poster is to be self-explanatory and at the same time to attract the attention of the public. There should be no necessity for amplification by pamphlet. Further, the title of this particular poster was badly chosen and not conducive to encouraging the co-operation of those whose help would be of much material value.

The sympathy of the monied classes, if there is any lack in this direction, would be more easily obtained if it could be proved that it is necessary to spend £880 per house or flat to produce an average rental of 15s. per week and that those people who are actually in need of assistance are really obtaining it. My experience has been, however, that it is almost impossible to obtain from the municipalities accommodation adequate for an overcrowded family at a rental within its means.

May I suggest that the present policy in respect to housing pursued by the local and municipal authorities with the aid of the Government, is but another method of subsidising the industrialists?

ESTATE MANAGER

House, Cambridge Road, Hitchin. By Courtenay M. Crickmer. Perspective by the Architect. (R.A. Exhibition No. 1350.)

PARK ROYAL HOTEL

GENERAL PROBLEM.—*Hotel for Messrs. Barclay Perkins and Company. It was the special desire of the clients that a social hall and a reception room should be provided on the first floor.*

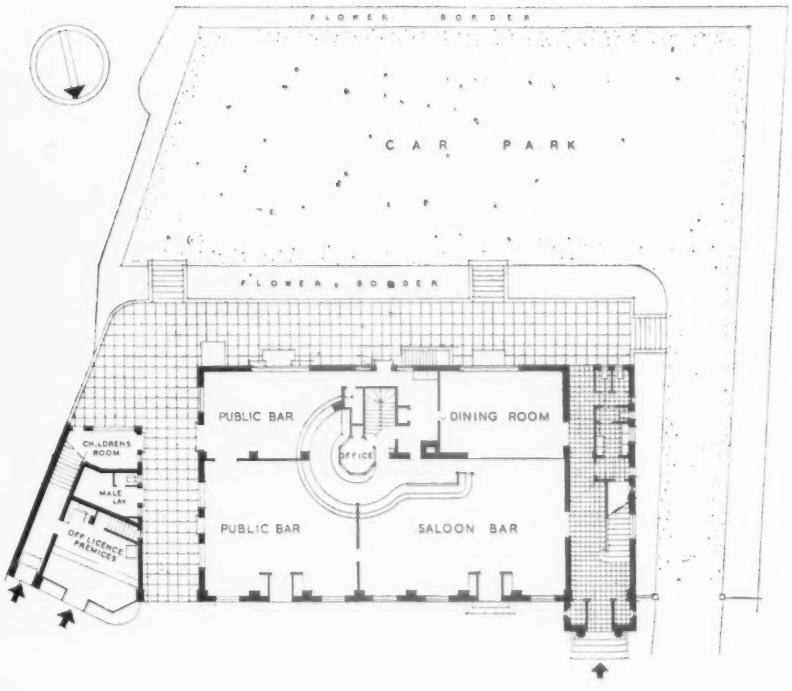
SITE.—*At Park Royal, Middlesex. The hotel is the first building to be completed of a scheme for the development of a site at the junction of Western Avenue and the main road leading to Hanger Hill estate. The remaining buildings of the scheme to be built include the new Park Royal station for the London Passenger Transport Board, now in course of erection, block of shops with flats over, and a petrol-filling station with offices above. All these buildings, including the hotel, have been designed as one scheme by the architects.*

CONSTRUCTION.—*The walls are brick, the colours of the facing bricks ranging from yellowish-brown to red. The metal windows and the external wood doors are fixed direct to the brickwork.*

The photographs show : right, the entrance from Western Avenue to the saloon bar and dining-room on the ground floor, and the social hall, used also as restaurant, and the reception room on the first floor ; below, the entrance front facing Western Avenue.

DESIGNED BY WELCH AND LANDER AND N. F. CACHEMAILLE-DAY

PARK ROYAL HOTEL: BY WELCH AND

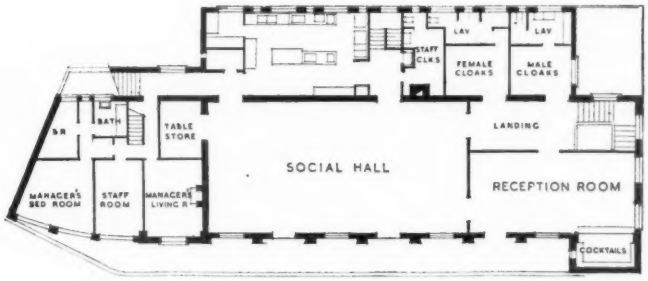


GROUND FLOOR PLAN

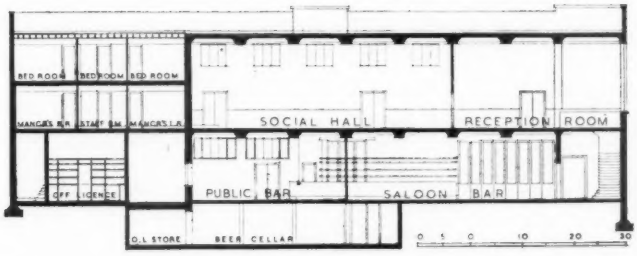
The photograph is taken looking from the first floor down the staircase towards the entrance from Western Avenue.

LANDER AND N. F. CACHEMAILLE-DAY

BASEMENT PLAN



FIRST FLOOR PLAN



LONGITUDINAL SECTION

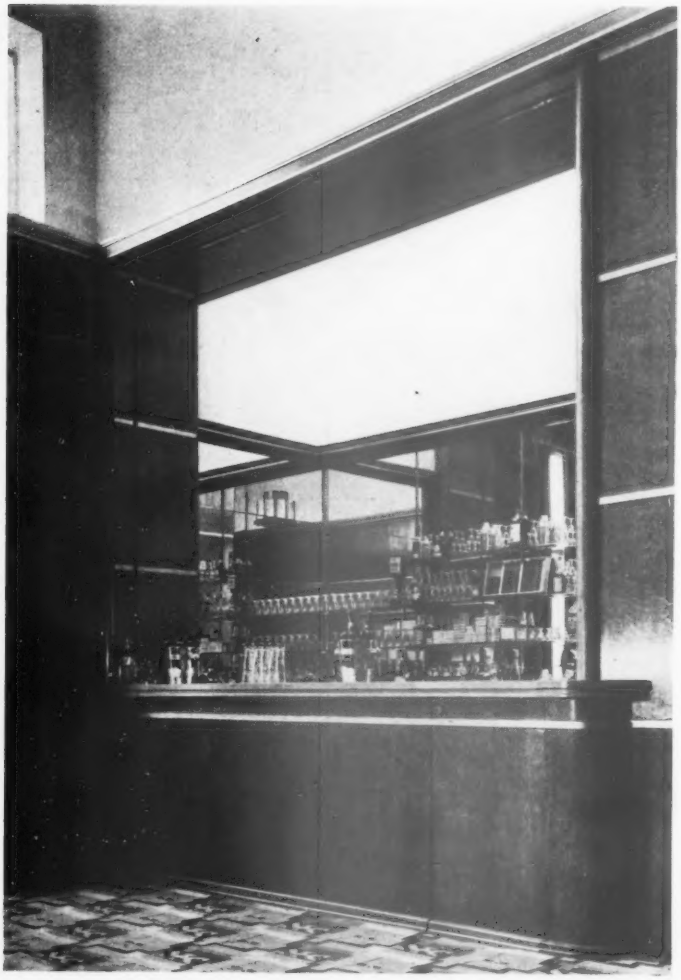
INTERNAL FINISHES—*In the saloon bar and dining-room the walls are panelled in oak plywood and relieved in soft wood, painted in bright tints of red and green; the friezes and ceilings are plastered, the shelves are glass, and the floors are finished with asbestos rubber tiles. In the public bars, the walls and counters are panelled in plywood with narrow V joints; the friezes and ceilings are plastered and the floors are finished with asbestos rubber tiles. The walls and ceilings of the entrance hall, staircase and first floor landing are plastered, the dado, floors and stair treads being finished in pale-green terrazzo.*

In the social hall, reception room and cocktail bar the walls are panelled in oak plywood relieved by soft wood, brightly painted, round the doors and windows; the friezes and ceilings are plastered and the floors are finished in maple laid in narrow widths. The built-in furniture and fittings are oak. In the kitchen and serveries the walls and floors are tiled, and the friezes and ceilings are plastered and distempered.

For list of general and sub-contractors see page 924.

The photograph is of the counter in the smaller public bar on the southerly side of the hotel.

PARK ROYAL HOTEL: BY WELCH AND



The photographs show : left, the cocktail bar ; below (left), the saloon bar ; right, the social hall, used also as a restaurant. On the page facing is a detail of the counter in the saloon bar.

LANDER AND N. F. CACHEMAILLE-DAY

ELECTION SUPPLEMENT

The voting papers for this year's R.I.B.A. elections were sent to members on June 3. The completed papers must be returned by Saturday, June 13. Some notes on the 37 candidates for places on the Council are printed on the following pages with the object of assisting members to make their votes.

UNOPPOSED MEMBERS OF COUNCIL 1936—37

Below is a list of those members of the Council who, having been elected previously, will remain members for the Session 1936-37, and of those who, being unopposed, are automatically elected.

PRESIDENT :

Thomas, Percy Edward, (Cardiff).

VICE-PRESIDENTS :

Sanders, Ingalton (Southampton); Holden, Charles Henry.

HON. SECRETARY :

Fletcher, Henry Martineau, M.A.CANTAB.

HON. TREASURER :

Hopkins, Lt.-Col. Percy Alfred.

MEMBERS OF THE COUNCIL :

William Henry Ansell; Robert Atkinson; John Begg (Edinburgh); Ernest Chawner Bewlay (Birmingham); Joseph Emberton; Harry Stuart Goodhart-Rendel; Professor Charles Herbert Reilly; Professor Albert Edward Richardson; Leo Sylvester Sullivan ; Sydney Tatchell ; Maurice Everett Webb; George Grey Wornum.

ASSOCIATE MEMBERS OF COUNCIL :

William Naseby Adams; Percival Cherry Blow (St. Albans); William Austin Daft (Oxford); Edwin Maxwell Fry; Norval Rowallan Paxton (Leeds); Basil Robert Ward.

LICENTIATE MEMBERS OF COUNCIL :

Howard Leslie Baker (Romford); Stanley Arthur Heaps; Percy John Waldram; Sidney Lunn Whitehouse (Birmingham).

PAST PRESIDENTS :

Dawber, Edward Guy; Scott, Sir Giles Gilbert.

SIX REPRESENTATIVES FROM THE NORTHERN PROVINCE OF ENGLAND :

Oswald, Harold (Northern Architectural Association); Westcott, Lieut.-Col. George (Manchester Society of Architects); Ward, Bernard Michael (Liverpool Architectural Society); Andrew, Harry (York and East Yorkshire Architectural Society); Bain, Victor (West Yorkshire Society of Architects); Teather, John Charles Amory (Sheffield, South Yorkshire and District Society of Architects and Surveyors).

FIVE REPRESENTATIVES FROM THE MIDLAND PROVINCE OF ENGLAND :

Hale, Alfred (Birmingham and Five Counties Architectural Association) ; Stretton, Clement (Leicester and Leicestershire Society of Architects); Allen, George Pemberton (Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects) ; Howitt, Claude Elborne (Nottingham, Derby and Lincoln Architectural Society); Swindells, Francis Harold (East Anglian Society of Architects).

SIX REPRESENTATIVES FROM THE SOUTHERN PROVINCE OF ENGLAND :

Kemeys-Jenkin, Captain Ernest Edward (Devon and Cornwall Architectural Society); Stenner, William James (Wessex Society of Architects); Snell, Alfred Saxon (Berks, Bucks and Oxon Architectural Association) ; Gutteridge, Lieut.-Col. Reginald Fowler (Hampshire and Isle of Wight Architectural Association); Bird, Hugo Ritchie (Essex, Cambridge and Hertfordshire Society of Architects). One representative to be nominated by the Council of the South-Eastern Society of Architects.

FOUR REPRESENTATIVES OF ALLIED SOCIETIES IN SCOTLAND :

Nominated by the Council of the Royal Incorporation of Architects in Scotland : Arthur, Col. John Maurice (Glasgow); Soutar, Charles Geddes (Dundee); Todd, William James Walker (Edinburgh) ; Whitie, William Brown (Glasgow).

ONE REPRESENTATIVE OF ALLIED SOCIETIES IN WALES :

Nominated by the Council of the South Wales Institute of Architects : Purchon, William Sydney (Cardiff).

TWO REPRESENTATIVES OF ALLIED SOCIETIES IN IRELAND :

Robinson, John Joseph (Royal Institute of the Architects of Ireland). One representative to be nominated by the Council of the Royal Society of Ulster Architects.

REPRESENTATIVES TO BE NOMINATED BY OVERSEAS SOCIETIES :

To be nominated by the Councils of each of the following : The Royal Architectural Institute of Canada; The Royal Australian Institute of Architects; The New Zealand Institute of Architects; The Institute of South African Architects; The Indian Institute of Architects.

REPRESENTATIVE OF THE ARCHITECTURAL ASSOCIATION (LONDON) :

Bucknell, Leonard Holcombe.

REPRESENTATIVE OF THE ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS.

CHAIRMAN OF THE BOARD OF ARCHITECTURAL EDUCATION :

Braddell, Thomas Arthur Darcy.

CHAIRMEN OF THE ART, LITERATURE, PRACTICE AND SCIENCE STANDING COMMITTEES.

CHAIRMAN OF THE ALLIED SOCIETIES' CONFERENCE :

Sanders, Ingalton (Southampton).

CHAIRMAN OF THE ARCHITECTS' REGISTRATION COUNCIL OF THE UNITED KINGDOM :

Tatchell, Sydney.

CHAIRMAN OF THE R.I.B.A. COMPETITIONS COMMITTEE.

CANDIDATES FOR ELECTION

Following are short biographical notes on the candidates standing for the Council in the current R.I.B.A. Election.

FELLOWS

ABERCROMBIE, LESLIE PATRICK

AGE : 57.
EDUCATION : Uppingham and Lucerne; articled to C. H. Heathcote, Manchester; Manchester School of Art and Liverpool University.
RECORD : Lecturer at Liverpool; Professor of Civic Design; Editor of *Town Planning Review* ; President of the Town Planning Institute; Member of Council, R.I.B.A. Professor of Town Planning, University of London.
PRACTICE : A considerable number of housing and similar schemes in the north and elsewhere, several being won in open competition.
PUBLICATIONS : Regional Planning Reports; *Dublin of the Future*, *Stratford-on-Avon*, etc.
ATTENDANCES : Council, 6; possible, 10.

ADAMSON, JAMES ROBERTSON (Bolton)

PRACTICE : private; partner in firm of Bradshaw Gass and Hope, Bolton, Lancashire.
EDUCATION : pupil of Sir John Burnet; Glasgow School of Architecture; Royal Technical College, Glasgow.
WORKS : municipal, commercial and domestic work carried out by the above firm, many being won in open competition.
RECORD : president of the Manchester Society of Architects, 1933-34 and 1934-35; appointed vice-chairman, R.I.B.A. Allied Societies' Conference for 1935-36; also a candidate for the Practice Standing Committee.
ATTENDANCES : Practice Standing Committee, 7; possible attendances, 9.

ADSHEAD, STANLEY DAVENPORT

AGE : 68.
EDUCATION : offices of George Sherrin, Ernest George and William Flockhart.
PRACTICE : private; partner in the firm of Adshead and Ramsey.
WORKS : public buildings and libraries won in competition; Ramsgate pavilion; work on the Duchy of Cornwall estate, and numerous housing schemes; also churches, hospitals and domestic work.
RECORD : Professor of Town Planning, Liverpool, 1909-1914; Past-Professor of Town Planning, London University; Member of Fine Arts Commission; Member of Council, R.I.B.A.
PUBLICATIONS : several regional town planning reports.
ATTENDANCES : R.I.B.A. Council, 4; possible, 10.

ASHLEY, HENRY V.

AGE : 64.
EDUCATION : articled to William Dunn and studied while travelling in England and France.
PRACTICE : private, partner in firm of Ashley and Winton Newman.
WORKS : numerous schemes won in competition; Art Galleries, Birmingham; Masonic Peace Memorial Buildings; hospital, bank, office and other buildings, and various housing schemes.

RECORD : past vice-president; member of Council; member of Competitions Committee and Practice Standing Committee.
ATTENDANCES : Council, 9; possible, 10. Practice, 9; possible, 10.

BUCKLAND, HERBERT TUDOR (Birmingham and London)

AGE : 67.
EDUCATION : articled to Henry Clerc, Birmingham; Birmingham School of Art.
PRACTICE : private, in firm of Buckland and Heywood; formerly architect to Birmingham Education Committee; member, R.I.B.A. Council.
WORKS : several schemes won in competition, including Royal Naval School, Holbrook; domestic and educational work and flat blocks.
ATTENDANCES : Council, 7; possible, 10.

CHERMAYEFF, SERGE

AGE : 36.
PRACTICE : private, in partnership with Erich Mendelsohn.
EDUCATION : 1918 - 1922, architectural studies on the Continent.
WORKS : Modern Exhibition, Waring and Gillow; Cambridge Theatre, interior; studios, Broadcasting House; studios, Broadcasting House, Birmingham; houses; Bexhill Pavilion; Gilbey's Offices, Camden Town.
RECORD : 1924-29, architect designer in Ernest Williams, Ltd.; 1929-31, director of Modern Art Department, Waring and Gillow; 1932, independent practice; 1933, elected Fellow, R.I.B.A.; partnership with Erich Mendelsohn; Member, M.A.R.S. (representative of M.A.R.S. on R.I.B.A. Foreign Relations Committee); Member, R.I.B.A. Public Relations Sub-Committee; Member, A.T.O.
ATTENDANCES : Foreign Relations Committee 3 ; possible, 4. Public Relations Committee, 3 ; possible, 3.

CORDINGLEY, REGINALD ANNANDALE (Manchester)

AGE : 40.
PRACTICE : private, partner in firm of Cordingley and McIntyre, Durham and Manchester.
EDUCATION : Manchester University; British School at Rome; in various offices in Manchester area.
WORKS : those attendant on office as architect to Dean and Chapter, Durham, to various ecclesiastical bodies and to certain Durham Colleges; Chelmsford Civic Centre; Church restorations; private schools.
RECORD : articled, 1911-14; Rome Scholar, 1923; Soc. of Architects American Travelling Scholar, 1923; M.A. (Manchester), 1922; Director, Durham University (Armstrong College), School of Architecture and Town Planning, 1930-34; Professor and Director, Manchester University School of Architecture and Town Planning since 1934.

COWLES-VOYSEY, CHARLES

AGE : 47.
PRACTICE : private, in London.
EDUCATION : son of C. F. Annesley Voysey; University College, London; articled to Horace Field and Simmonds.
WORKS : White Rock Pavilion, Hastings; Municipal Offices, Bognor Regis; Town Hall and Municipal Clinic, Worthing; Offices for the Corporation of Hastings; Municipal Offices, High Wycombe—all won in competition; schools; private houses.
RECORD : Donaldson Medallist, 1908-9; Berks, Bucks and Oxon Architecture Medal, 1932; Design Examiner, R.I.B.A. Final Examination; served on Literature, Competitions and Aerodromes Committees, R.I.B.A.

CULLEY, NORMAN (Huddersfield)

PRACTICE : private, in Huddersfield.
EDUCATION : articled to W. Cooper and Art and Engineering Schools, Huddersfield.
WORKS : domestic architecture in West Yorkshire ; town buildings, Huddersfield ; offices, shops, warehouses and mills and a considerable amount of housing work.
RECORD : head of architectural department, School of Art, Huddersfield; past-president West Yorkshire Society of Architects; past member R.I.B.A. Council; chairman, Huddersfield branch of West Yorkshire Society of Architects; founder and editor of the Journal of the West Yorkshire Society of Architects.

DAVIS, HAROLD STRATTON (Gloucester)

PRACTICE : private, in Gloucester; ecclesiastical surveyor to the Diocese of Gloucester.
WORKS : new churches in Gloucestershire; church repairs, alterations and extensions at Fairford, Cirencester, Berkeley and many others; factories, schools, office buildings, and domestic work.
RECORD : pupil to J. Fletcher Trew; assistant : H. Bulkeley Creswell, Waller and Son; private practice commenced 1913 ; president Gloucestershire Architectural Association and member Allied Societies Conference; past-member R.I.B.A. Literature Committee; president, Wessex Society of Architects, 1934-36; member R.I.B.A. Council.
ATTENDANCES : 9; possible, 10.

EASTON, JOHN MURRAY

AGE : 47.
PRACTICE : private; partner in firm of Stanley Hall, and Easton and Robertson.
EDUCATION : Articled to George Bennett Mitchell, London; and University College, London.
WORKS : (carried out by the firm), bathing pool, pavilion and hotel at Prestatyn, North Wales; British pavilion and restaurant, Paris Exhibition, 1925; New Horticultural Hall, London; No. 52 Cornhill, London, bank and offices; Queen Charlotte's Hospital, London; Royal Bank of Canada, Lothbury, London; Infants' Hospital, Vincent Square, London; Hospital for Sick Children, Great Ormond Street, London; zoological laboratories, Cambridge; new buildings for Caius College, Cambridge, etc.
RECORD: Godwin Bursary, 1927; R.I.B.A.; London Street Façade Medal for the Royal Horticultural Hall, 1928; member, Art Standing Committee ; past-member, Literature Committee.
ATTENDANCES : 4; possible, 10.

GEE, ERNEST (Liverpool)

AGE : 45.
PRACTICE : private, partner in the firm of Quiggin and Gee.
EDUCATION : Lausanne, Switzerland, and Liverpool School of Architecture; the University of Liverpool Holt Travelling Scholar; travelled in France, Switzerland, Italy, Belgium, and Germany.
WORKS : Liverpool Gas Co. new showrooms and offices; new drill hall, 55th Div. Sigs.; Bishop Chavasse Memorial Church; St. David's Church; factories, E. T. Gee and Sons, Ltd., Messrs. F. Braby & Co., Ltd., Brown and Rawcliffe.
RECORD : president, Liverpool Architectural Society, 1934-36, and member of the Council R.I.B.A. during that period; a serving member of the Constitutional Committee, R.I.B.A.
ATTENDANCES : 10; possible, 10.

GREIG, BAXTER

RECORD : Associate, 1902; Fellow, 1935; District Surveyor for St. Marylebone East.

GRIBBON, BLAKELEY RINDER (Leeds)

AGE : 52.
PRACTICE : private; senior partner in firm of Chorley, Gribbon and Foggitt; R.I.B.A., West Yorkshire Architecture Medal, 1931.
EDUCATION : Leeds College of Art; articled 1901 to firm of Chorley, Connon and Chorley; remained as assistant, partner 1921, senior partner 1931.
WORKS : ecclesiastical, bank and hospital work.
RECORD : president West Yorkshire Society of Architects 1932-34; R.I.B.A. Council, 1933-35; member of City of Leeds Commercial Development Committee.

HEPWORTH, PHILIP DALTON

AGE : 48.
EDUCATION : Architectural Association; British School at Rome, Ecole des Beaux Arts, and travelling in Europe and India; Ashpitel Prizeman; Pugin Student; Rome Scholar.
PRACTICE : Private, in London and Burma.
RECORD : Winner of various competitions, including Walthamstow Municipal Buildings; municipal, ecclesiastical, bank, flat, commercial and domestic work; member of Council, R.I.B.A.; member of A.A. Council; member Literature Committee.
PUBLICATIONS : *Your House and How to Build It*, and various monographs.
ATTENDANCES : Literature Committee, 1; possible, 10. Council, 6; possible, 10.

HOWITT, THOMAS CECIL (Nottingham)

AGE : 47.
PRACTICE : private.
EDUCATION : articled to the late A. N. Bromley, Nottingham; A.A. Schools; foreign travel.
WORKS : Birmingham civic centre; head office, Birmingham Bank; housing estates, Nottingham.
RECORD : Specialized in industrial housing; medallist in architectural design; winner of open competitions.

MOBERLY, ARTHUR HAMILTON

AGE : 50.
PRACTICE : private; partner in firm of Slater and Moberly, London.
EDUCATION : Winchester; King's College, Cambridge; A.A. School of Architecture; articled to E. J. May; R.A. School.
WORKS : Warrington Training College, Liverpool; additions to Hockerhill Training College, Bishop's Stortford; premises for Bourne and Hollingsworth, Ltd., Oxford Street, London; premises for John Lewis, Chelsea; houses at Oxford, Cambridge, etc.
RECORD : chairman, Literature Standing Committee, 1925-27; chairman, Board of Architectural Education, 1934-35.

OUGH, ARTHUR HENRY (Dawlish)

AGE : 72.
PRACTICE : private, at Dawlish, Devon.
EDUCATION : articled to late Henry Ough; A.A. School; R.A. Schools.
WORKS : factories, yacht clubs; houses and flats in the provinces; work in Hongkong.
RECORD : Arbitrations; past president, Devon and Cornwall Architectural Society; member of Council.
ATTENDANCES : 10; possible, 10.

PAKINGTON, HUMPHREY

AGE : 47.
PRACTICE : private, in London.
EDUCATION : A.A. School.
WORKS: domestic and other work in London and provinces; architect to Land Settlement Association.
RECORD : Holloway Scholarship; Diploma, 1925; A.A. Council; past-president, A.A.; member, R.I.B.A., Art Standing Committee, etc.
PUBLICATIONS : *Four in Family ; The Roving Eye ; How the World Builds ; English Villages and Hamlets.*
ATTENDANCE : 1; possible, 9.

ROBERTS, ARTHUR LEONARD

AGE : 59.
RECORD : secretary and treasurer of the

Hampshire and Isle of Wight Architectural Association since 1925. Member of the R.I.B.A. Registration Committee (1935-36).
PRACTICE : County Architect for Hampshire, and has been responsible for a large number of buildings in that county.

ROBERTSON, HOWARD MORLEY

AGE : 47.
PRACTICE : private, partner in firm of Stanley Hall and Easton and Robertson.
EDUCATION : A.A. School; Ecole des Beaux Arts, Paris; in various offices in London, Boston and New York.
WORKS : British Government Pavilion, Paris Exhibition of Decorative Arts, 1925; New Hall for the Royal Horticultural Society; work at the Savoy, Berkeley and Claridge's Hotels, London; British Pavilion, Brussels Exhibition, 1935.
RECORD : born, Salt Lake City, State of Utah, U.S.A.; Principal and Director of Education of the A.A. Schools of Architecture, London, since 1920; Godwin Bursar, R.I.B.A., 1933; London R.I.B.A. Architecture Medal for the Royal Horticultural Hall, 1928; late chairman, Building Industries National Council.
PUBLICATIONS : *Principles of Architectural Composition*, 1924; *Architecture Explained*, 1926; *Modern Architectural Design*, 1932, *etc.*

SCOTT, THOMAS EDWARD

AGE : 41.
PRACTICE : head of Department of Architecture, Surveying and Building at the Northern Polytechnic, London; also in private practice.
RECORD : joined staff of Northern Polytechnic, 1920; appointed head of Department, 1927; R.I.B.A. Athens Bursar, 1936; R.I.B.A. Council, 1935-36; Science Standing Committee since 1929, chairman 1935-36; Salaried Members Committee; Board of Architectural Education; Schools Committee; Examinations Committee; R.I.B.A. Final Examiner; R.I.B.A. Representative on the Admission Committee under the Architects' Registration Act since 1930.
ATTENDANCES : Council, 7; possible, 8. Science Committee, 7; possible, 9.

SLATER, JOHN ALAN

AGE : 51.
PRACTICE : private; partner in firm of Slater and Moberly, London.
EDUCATION : Architectural Association School.
WORKS : business premises in West End of London; houses at Bristol, Burnham, Watford, etc., in partnership with A. H. Moberly.
RECORD : president, Architectural Association, 1926-27; chairman, Practice Standing Committee, 1931-33; chairman, Public Relations Committee, 1933-35; member, R.I.B.A. Council, 1924-25; surveyor to the Berners Estate.

WATERHOUSE, MICHAEL THEODORE

PRACTICE : private : 1920-25, in partnership with his father (Paul Waterhouse); and now in partnership with C. G. Ripley.
RECORD : educated at Eton, Balliol College, Oxford, M.A., Architectural Association Schools and Royal Academy Schools; member of Council, Architectural Association, 1921-1925; Associate member of the R.I.B.A. Council on various occasions, 1926-1932; member of Practice Committee, 1931-1932.
WORK : hospital, offices and domestic work.

ASSOCIATES

CHALLICE, JOHN (Exeter)

AGE : 41.
PRACTICE : as partner in the practice of R. M. Challice and Son, of Exeter.
EDUCATION : articled to R. M. Challice; experience in the offices of Sidney Tatchell, and studied at the 1st Atelier of Architecture, Bedford Square, London.
WORKS : domestic, church, school, hospital, bank, business and factory premises.
RECORD : 10 years as secretary of the Devon and Cornwall Architectural Society; two years as representative on the Allied Societies Conference.
PUBLICATIONS : seven years editor of the *Journal of Proceedings of the Devon and Cornwall Architectural Society.*

DOUGILL, WESLEY (Liverpool)

PRACTICE : private; also Liverpool School of Architecture staff.
EDUCATION : Liverpool University and British School at Rome; chief assistant to Messrs. Harvey and Wicks, Birmingham; Sir Arnold Thornely and H. J. Rowse, Liverpool.
WORKS : domestic work in Yorkshire, Westmorland and Buckinghamshire; churches, institutes and other buildings in the North; winner, with E. A. Ferriby, of Portsmouth Sea-front Lay-out Competition, 1936.
RECORD : editor of the *Town Planning Review*; Research Fellow in Civic Design; special lecturer in Civic Architecture, Manchester; hon. sec., Liverpool Architectural Society; R.I.B.A. Godwin and Wimperis Bursar, 1935; member of Art Standing Committee, and Housing and Town Planning Committee, R.I.B.A.; twice finalist Prix de Rome; second Lever Prize in Architecture; joint holder Holt Scholarship in Architecture; R.I.B.A. Measured Drawings Prize, 1923.
ATTENDANCES : Art Standing Committee, 6; possible, 10.

DOWER, JOHN GORDON

AGE : 35.
PRACTICE : private, in London.
EDUCATION : Leys, Cambridge; St. John's College, Cambridge.
WORKS : flats for the Shoreditch Housing Association; cottages and farm buildings; house alterations, etc., in London and the country; estate development schemes.
RECORD : M.A. Cantab.; editorial consultant to the Council for Research on Housing Construction and the National Housing Committee; lecturer to the A.A. School of Planning; secretary (1930-33) of the R.I.B.A. Aerodromes Committee and secretary (1933-34) and member (1935) of the Aerodromes Advisory Board; member of the Housing and Town Planning, Public Relations and Registration Committees of the R.I.B.A.; R.I.B.A. Representative on the Architects' Registration Council.

DUNCAN, RONALD AVER

AGE : 47.
PRACTICE : private; partner in firm of Percy Tubbs, Son and Duncan, London.
EDUCATION : articled to Oakley and Lawrence of Bristol; trained in A.A. Schools; assistant to Robert Atkinson, Sir Herbert Baker, A. Marshall Mackenzie and Sons.
WORKS : *Glasgow Herald* Offices, Fleet Street, London; office, factory and domestic work and exhibition and display designing, including the "House of the Future," *Daily Mail* Ideal Home Exhibition, Olympia; furniture and industrial designing generally.
RECORD : 3rd year master and lecturer (1917-22) at the A.A. School; lecturer at the Northern Polytechnic, London (1920-22); R.I.B.A. Essay Medallist; acted as honorary secretary to the R.I.B.A. Exhibition Sub-Committee since 1931; member of the R.I.B.A. Public Relations Committee; active in organizing the new R.I.B.A. Junior Committee.
PUBLICATIONS : *The Architecture of a New Era.*

JORDAN, ROBERT FURNEAUX

PRACTICE : private.
RECORD : A.A. School; Associate, 1928; Senior Hon. Secretary, Junior Members' Committee.

MACKELLAR, ROBERT NORMAN (Newcastle-upon-Tyne)

EDUCATION : Glasgow; assistant in several offices.
PRACTICE : private, in firm of Cackett, Burns Dick and Mackellar.
WORKS : office, school, commercial and domestic buildings.
RECORD : secretary, Northern Architectural Society; Member of Council, R.I.B.A.
ATTENDANCES : R.I.B.A. Council, 5; possible, 10.

WEBBER, ERNEST BERRY

EDUCATION : London School of Building; Offices of Robert Atkinson and Vincent Harris.
PRACTICE : private, in London; winner of open competitions, including Manchester Art Gallery, Southampton Civic Centre, Peterborough Town Hall, Daniel Neal's Store, Southern Rhodesian Parliament Buildings, etc.
Record : chairman, Competitions Committee; member of Council.
ATTENDANCES : Council, 7; possible, 8.

WHITE, L. W. THORNTON

PRACTICES : private, in London, Yorkshire and Rutland; also A.A. School staff.
WORKS : domestic work, housing and commercial buildings.
RECORD : Ashpitel Prizeman, 1926; Soane Medallist, 1928; R.I.B.A. Henry Jarvis (Rome) Scholar, 1928; hon. sec. to the R.I.B.A. Science Standing Committee; hon. sec. to the R.I.B.A. Informal General Meetings; hon. sec. to the R.I.B.A. Social Committee; lectured on architecture at several schools, and vice-principal of the A.A. School; Gidea Park small house competition : first place for both house and garden in Class D, first place for house in Class C; also joint secretary, the Science Standing Committee; Chairman, Junior Members' Committee of the R.I.B.A.
ATTENDANCES : Science Committee, 8; possible, 10.

WOODWARD, CHARLES

PRACTICE : private, in firm of William Woodward and Sons.
RECORD : Associate, 1908; chairman, Practice Standing Committee; member of Council.
ATTENDANCES : Council, 8; possible, 10. Practice Standing Committee, 10; possible, 10.

LICENTIATES

BEGLEY, WILLIAM WALTER (Selsdon)

AGE : 43.
PRACTICE : on architectural staff of the L.C.C. since 1912.
RECORD : Fellow of Royal Historical Society; member of the R.I.B.A. Literature Committee since 1930; member of Committee of Society for the Protection of Ancient Buildings; member of the Active Committee, London Survey Committee, since 1925.
ATTENDANCES : Literature Committee, 5; possible, 10.

BLANC, LOUIS

PRACTICE : private, in London.
WORKS : new building for D. H. Evans, Oxford Street.
RECORD : member, R.I.B.A. London Building Act Committee; Hon. Sec., R.I.B.A. London Building Act Committee (1927 to 1935); R.I.B.A. representative on L.C.C. Advisory Committee on the Amendment of the London Building Act (1931-1935).

JONES, WILLIAM ALBAN (Leeds)

AGE : 61.
PRACTICE : private; partner in the firm of W. Alban Jones and John E. Stocks, Leeds.
EDUCATION : articled to the late W. Bakewell; School of Art, Leeds.
WORKS : Hove Public Library; Bethnal Green Town Hall; Kursaal, Douglas, Isle of Man; Fire Office, Leeds; Baptist Church, Leeds; houses in Yorkshire.
RECORD : president of West Yorkshire Society of Architects, 1924-26.

TAYLOR, FRANCIS ROBERT

PRACTICE : private.
EDUCATION : articled to John Lee; Birbeck Institute and Architectural Association.
WORKS : commercial, flat, office and domestic work in London and provinces.
RECORD : lecturer in building at Battersea Polytechnic; past-member, Art Committee; member of Council and Science Standing Committees.
ATTENDANCES : Council, 10; possible, 10. Science Committee, 8; possible, 10.

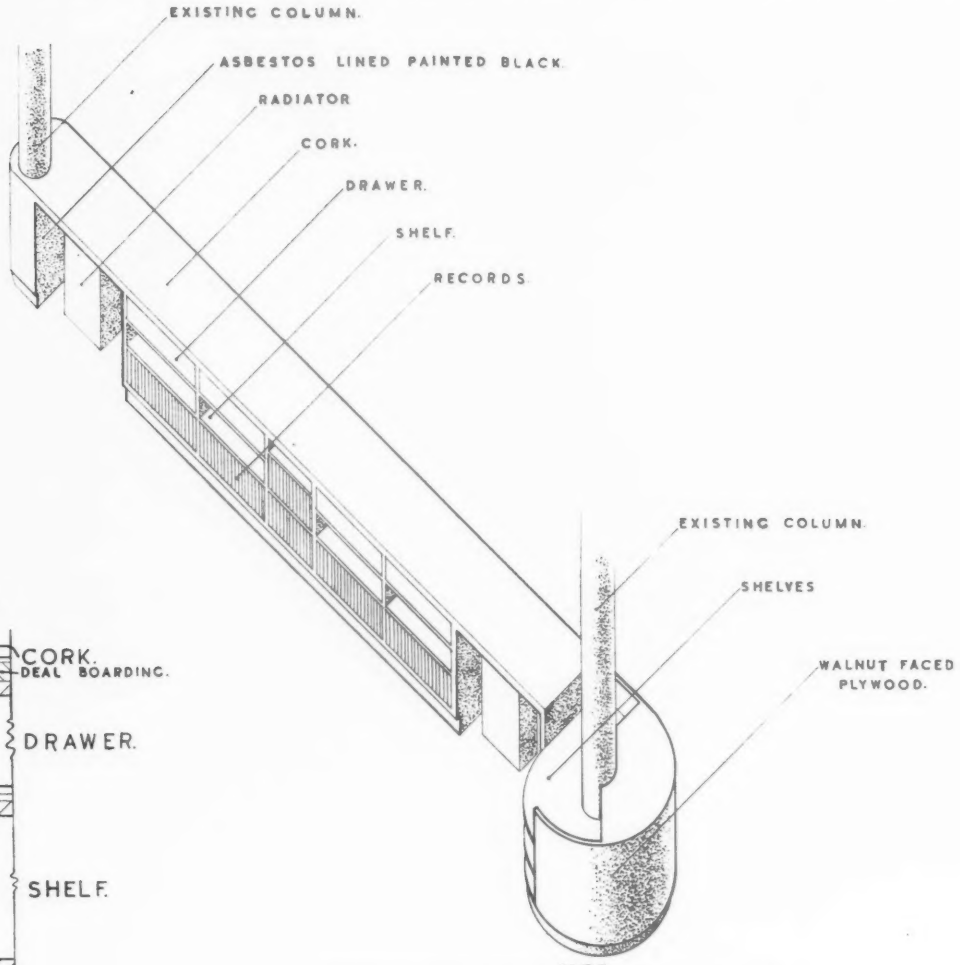
WORKING DETAILS : 435

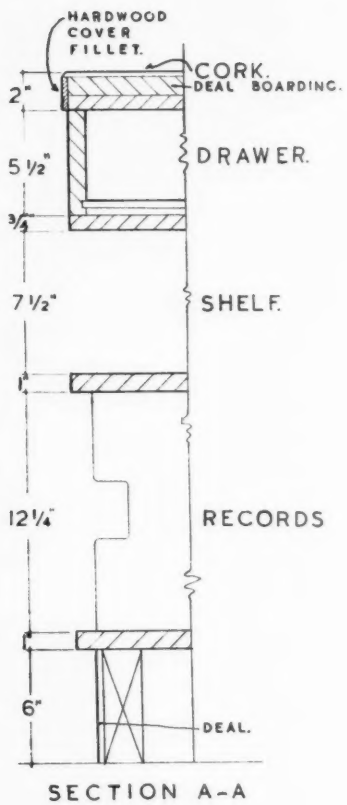
COUNTER • H.M.V. SHOWROOMS, OXFORD STREET, W.1 • JOSEPH EMBERTON

The counter illustrated above is designed for the sale of gramophone records, and the whole of the lower half is devoted to storage space. The counter is faced with walnut veneered plywood, and has a cork top. An axonometric and details are shown overleaf.

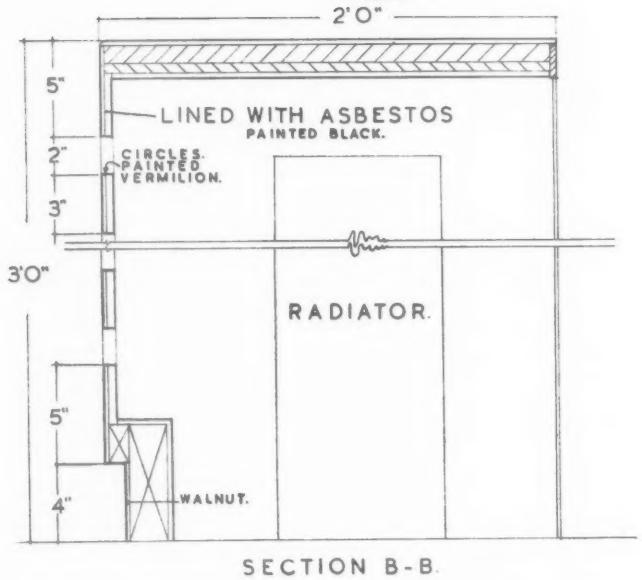
WORKING DETAILS : 436

COUNTER • H.M.V. SHOWROOMS, OXFORD STREET, W.1 • JOSEPH EMBERTON

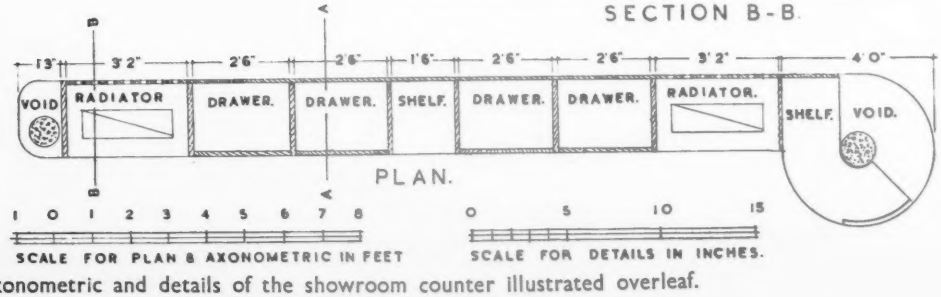




SECTION A-A



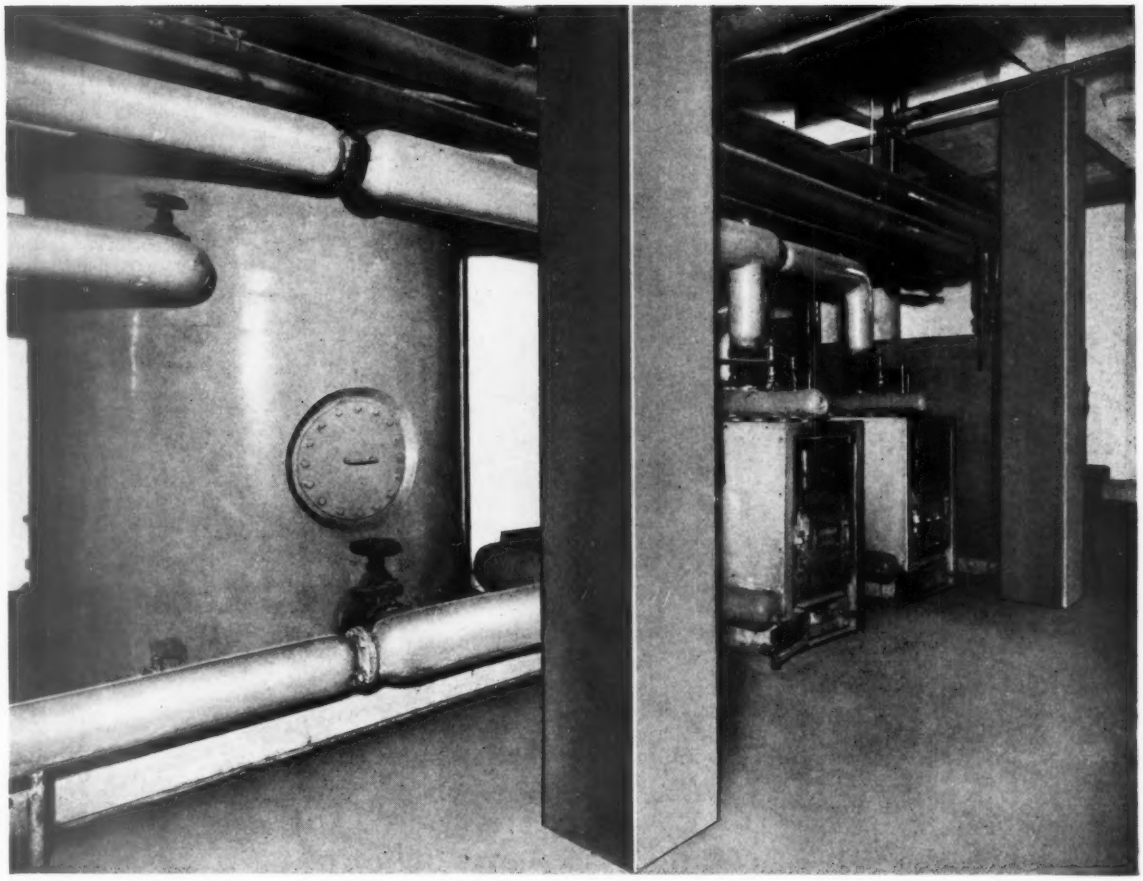
SECTION B-B.



Axonometric and details of the showroom counter illustrated overleaf.

WORKING DETAILS : 437

BOILER HOUSE • FLATS AT STREATHAM • FREDERICK GIBBERD

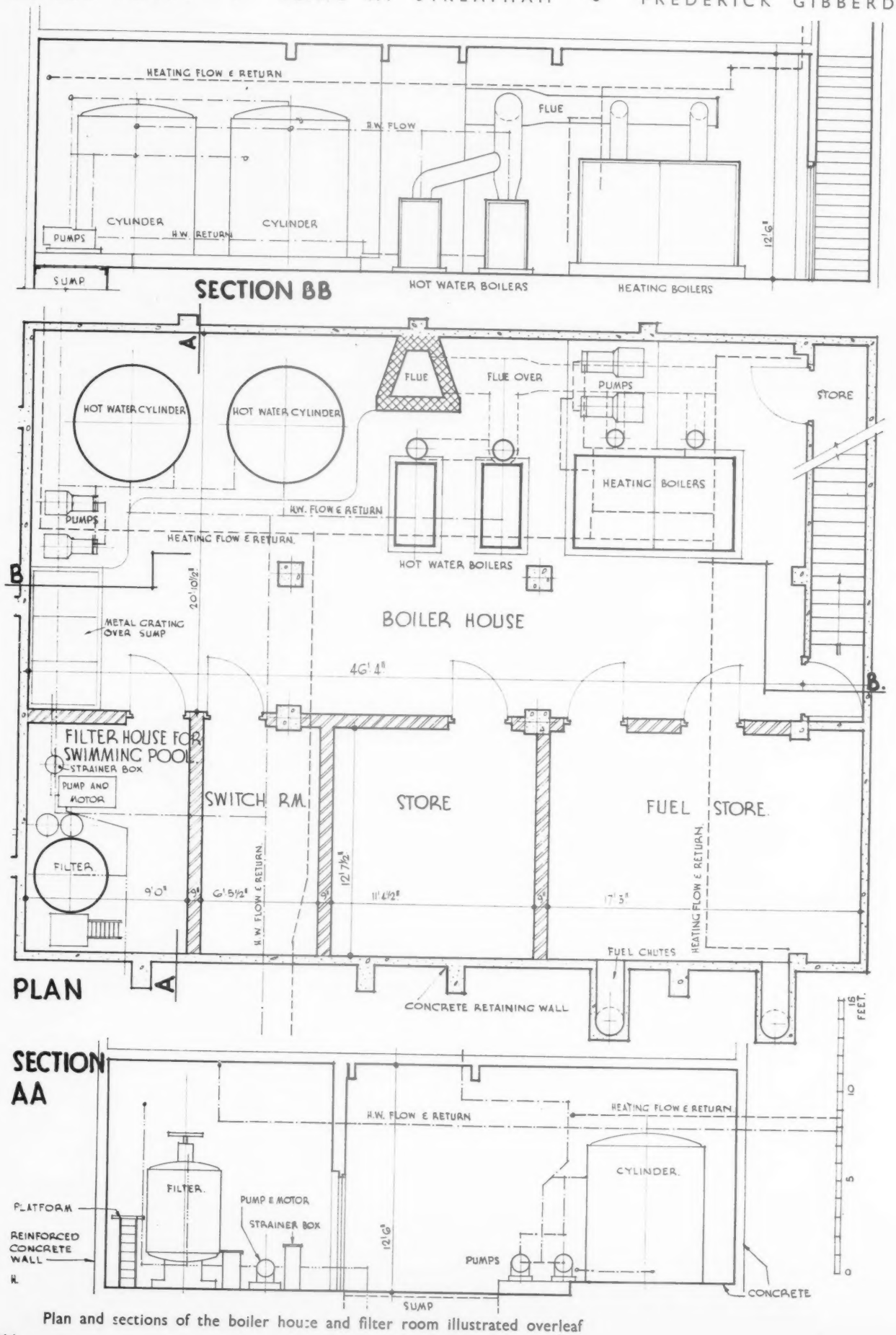


The boiler house illustrated above supplies heat and hot water for a block of 218 flats, and there is also a small filter plant for the swimming pool. The lay-out has been arranged so that automatic stokers can be installed at a later date. A plan and sections are shown overleaf.

FILING REFERENCE:

WORKING DETAILS : 438

BOILER HOUSE • FLATS AT STREATHAM • FREDERICK GIBBERD



Plan and sections of the boiler house and filter room illustrated overleaf

LONDON GLIDING CLUB, DUNSTABLE

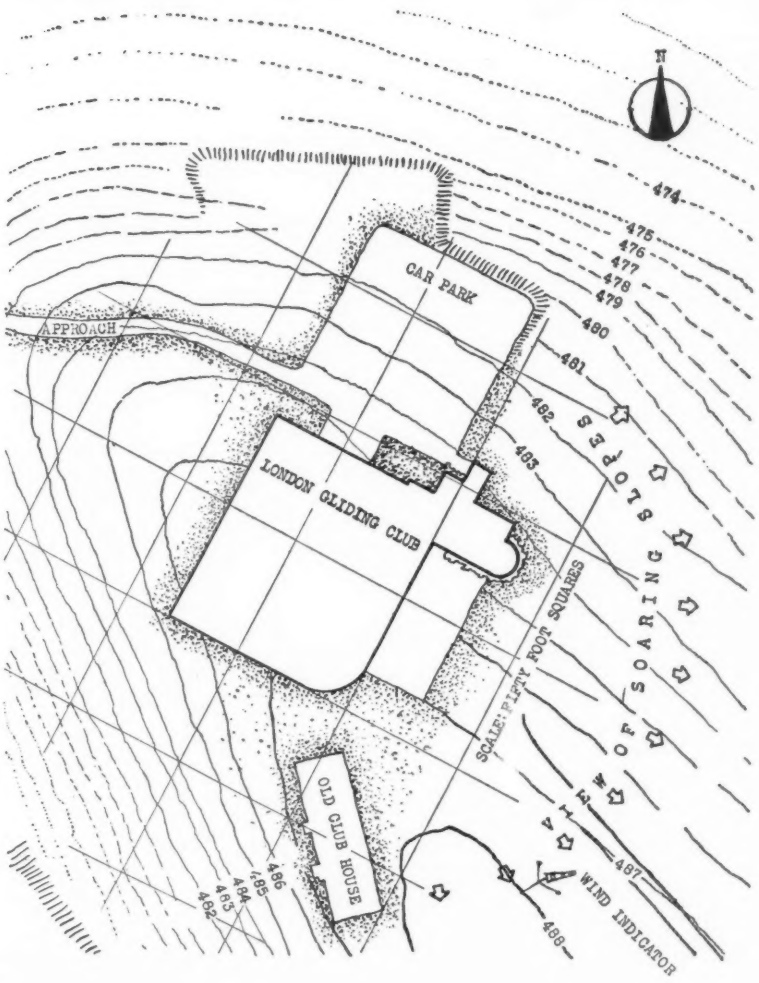
DESIGNED BY CHRISTOPHER NICHOLSON

GENERAL PROBLEM.—*Club and hangar, combined in one building, for the London Gliding Club, the biggest centre of gliding in this country. The hangar accommodates about 25 machines, fully rigged for gliding.*

SITE.—*On the Dunstable Downs, Bedfordshire. The building is placed well back on the site so as to leave the landing space free and allow a simultaneous view of all the gliding activities from the windows of the clubhouse.*

CONSTRUCTION.—*The hangar is of steel frame construction with its side walls, back and roof covered with corrugated asbestos sheeting. The lintol over the hangar opening is formed by a deep plate girder, the top flange of which forms the cill of the lounge windows above. On this girder are built tubular steel window mullions which support the roof of the lounge. The back wall of the lounge is formed by a lattice girder faced with insulating board. Generally, the remainder of the building is of similar construction to the lounge, a light steel frame, covered with expanded metal on insulating board, resting on a brick base.*

The photograph is of the south-east front, showing the 60 ft. hangar opening and the 90 ft. continuous windows to the lounge on the first floor.

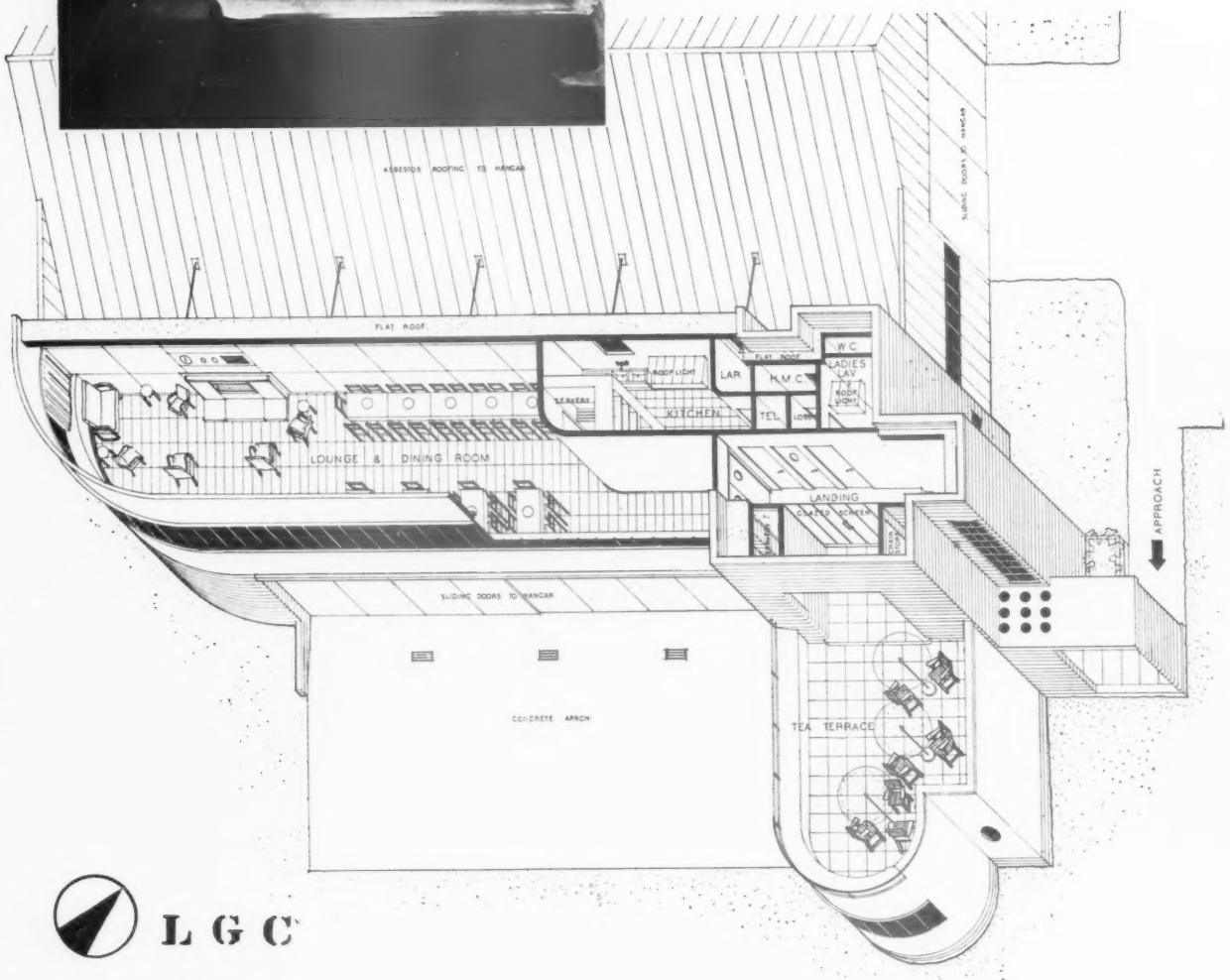


LONDON GLIDING CLUB, DUNSTABLE:

INTERNAL FINISHES—*In the lounge and restaurant the finishes are insulating board or plaster, painted, with a plywood floor, and standard tables, dining chairs and armchairs. The tables were designed by the architect. The electric fire is of stainless steel, set in a fireplace surround, and having a floor slab in front of it, in slabs of travertine marble. A wind indicator, worked from the roof of the club will later decorate the wall space over the fireplace. Later, also, a relief map is to be placed on the wall of the staircase, and lit at night by concealed strip lighting. Generally the interior is treated in plain painted surfaces in light colours, stronger patches of colour being added in the soffit of the entrance canopy, the interior of the bar and the upholstery of the furniture. E. G. Nicholson was responsible for the interior decoration of the club, the choice of colours and so on.*

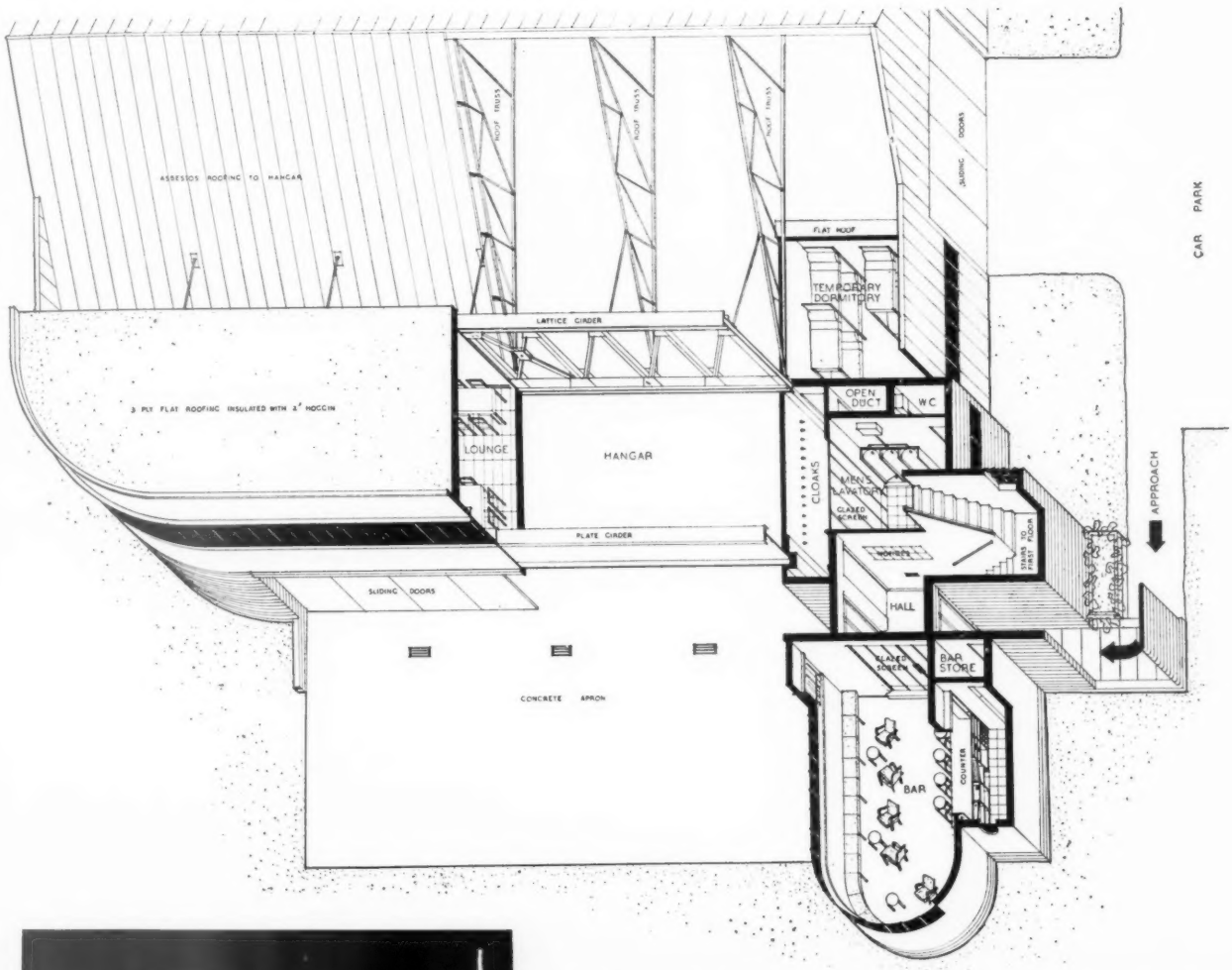
For general and sub-contractors see page 924.

The photograph is of the first floor landing outside the lounge.

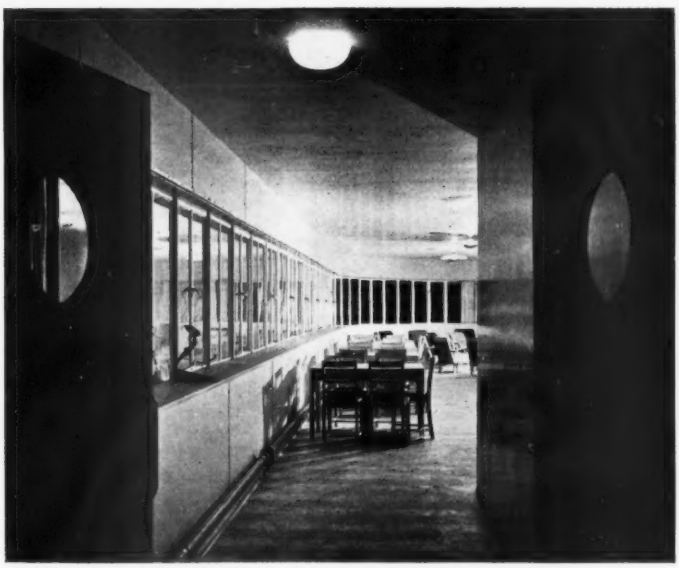


LGC

DESIGNED BY CHRISTOPHER NICHOLSON



The photographs show : left, looking from the lounge into the first floor landing ; below, looking from the first floor landing into the lounge.

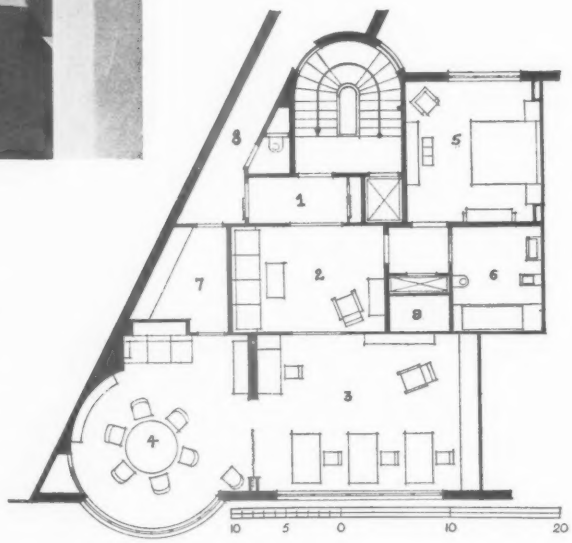


LONDON GLIDING CLUB, DUNSTABLE:

The photographs show: above, two views of the long, curved window in the lounge. It is 90 ft. long, and overlooks both the slope of the downs where the gliders take off and the landing-ground in front of the club. On the page facing are two views in the bar, taken from outside and inside the counter, respectively.

DESIGNED BY CHRISTOPHER NICHOLSON

AN ARCHITECT'S OWN OFFICE AND



GENERAL.—*In designing this combined office and flat for his own use in an existing block, the architect was faced with a rather awkward existing plan, which with comparatively few alterations, has been made to work remarkably well. The living and dining room is also used as a conference room where details may be discussed with clients, and the partition between it and the main draughting room 3 (see plan on right) has been largely removed, giving a greater feeling of spaciousness. Above is a view of the combined living and dining room, below the drawing office.*

Key to Accommodation

1 : Lobby

2 : Entrance hall and waiting room

3 : Main draughting room

4 : Living and dining room

5 : Bedroom

6 : Bathroom

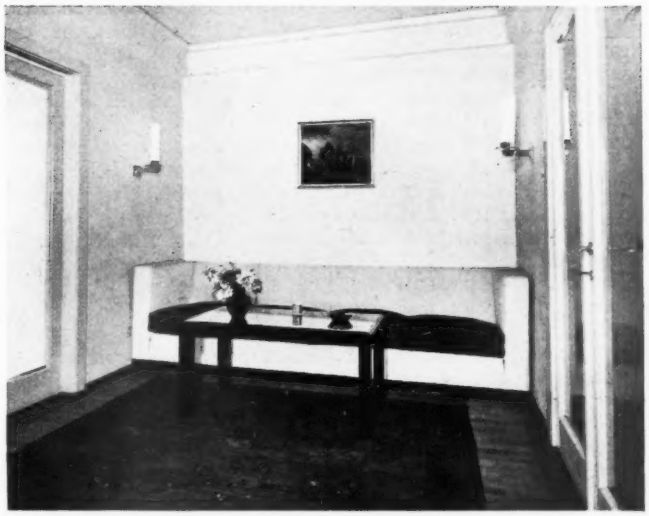
7 : Studio

8 : Passage to kitchen

9 : Duct

PRIVATE RESIDENCE IN BUCHAREST

DESIGNED BY RUDOLF FRAENKEL



FINISHES.—*Floors : oak parquet laid on concrete with cork insulation.*

Entrance hall and waiting-room : divan in white and dark brown, table of black walnut covered with smoke glass plate, cocktail cupboard.

Office : drawing-tables of black oak and tubular steel. Typist's desk with built-in typewriter. Built-in book-shelves and drawing cupboards. Blackboard with tubular lighting at top and bottom.

Living and conference room: furniture of black walnut with brass fittings, curtains orange velour, chair and divan covering light blue velour, grey carpet.

The photographs on this page show: above the drawing office and dining room ; right, the entrance hall and waiting room.

L I T E R A T U R E

SUMMARIZED PLANNING

[*BY H. MYLES WRIGHT*]

Planning: An Annual Notebook. By E. & O. E. 1936. London: The Architect and Building News. Price 5s.

THIS, to begin in the way, for once justified, of far too many reviews, is a good book. What is more, its subject is at once one of the largest possible and also the most important of all subjects to architects; and both of these qualities are rare in good books. But, perhaps because of just these qualities, *Planning* is not easy to review.

For a long time now architects have been wondering whether the larger part of the knowledge needed for carrying on their day-to-day practice could not be collected, summarized and in some manner made available for easy and continual reference. Gradually it was decided that this achievement was possible. In spite of changing requirements and new materials and processes, it was felt that the conservatism inherent in all building would prevent such a summary of architectural knowledge going the way of so many medical compilations and being published only to find itself out of date.

This decision, arrived at almost simultaneously by a number of people, was something of a milestone in the architectural progress of this country. A profession in which building, surveying, structural engineering, business, financial and legal ability, interior decoration and furniture design, sanitation, and archæology jostled each other under the dual leadership of planning (variously defined) and artistic ability (even more variously defined)—this glorious profession was to suffer a stocktaking and a card-indexing.

It was not a hopeful task for anyone—or rather the first stage was easy, but nothing else. The first stage was to divide all the knowledge necessary for carrying on a normal architectural practice into two divisions: the first, knowledge of planning; the second, knowledge of construction and materials.

In *Planning*, E. and O. E. have, as their title implies, assembled only knowledge belonging to the first division. But that they have taken the larger and more difficult part of architecture for their subject no architect will question.

Before coming to that subject, it is worth while mentioning how soon the simplification of architecture becomes extremely difficult. To divorce planning from construction and materials is an obvious first step; but at once the codification of architectural knowledge has introduced an arbitrary simplification which is not true in fact. Planning *must* be influenced by materials and construction—can sometimes be largely controlled by them—and so the first reservation to architecture made easy comes into being.

But this reservation, being always in the minds of architects, does not detract from the value of summarizing architectural in formation. And in *Planning*, E. and O. E. have allowed for the influence of materials by having in mind, as the basis of their planning notes, constructional methods covering a comprehensive range of "up-to-date normal" types.

In moving on to the planning of buildings from the point of view of summarizing useful knowledge for the practising architect or student, the reviewer must abandon all claims to higher criticism and become one more of those who cannot be sure of the best way until they see it done.

The planning of buildings—and a pause of suitable diffidence is made here—may be said to consist of four parts: The arrangement of units and the spaces between them; the arrangement of groups of units and the circulations between them; the bringing of these units, and groups of units and circulations, into harmony with public or other regulations governing the building type concerned; and, fourthly, the final fusion of the result with conditions of cost, with their influence on construction, and conditions arising from the site.

It is realized that these four divisions are not stages, for they may be all considered simultaneously, just as architectural æsthetics play a part in them all; but for the purpose of *summarizing* the essentials of planning they may be legitimately considered separately.

And it is by judging E. and O. E.'s book by these four divisions, that the value of their notes can be appreciated.

First, as to *units*. These may in buildings be anything from sinks to swimming baths, from greyhound tracks to golf bags. The important thing for the architect to know is their usual size, and from several sources, of which E. and O. E. are one, this information is being steadily provided.

Next, spaces between units, groups of units and their connecting circulations.

Here, E. and O. E., as might be expected, come out strong. Their lay-outs, of which there are many, may be divided into two groups; the ideal, and the normal as suggested by regulations. Lifts, school classrooms, municipal suites, operating theatres, are chosen at random amongst the fifteen building types covered by the notes.

In these lay-outs, illustrated by line diagrams and dimensioned sketches, E. and O. E. really run together two of the divisions of planning made above—the ideal layouts of groups of units and their modification by various regulations. And in this fusion lies the real danger of all attempts at summarized planning. To be useful, planning must take account of existing regulations. But, since in some building types the existing regulations are sufficiently stringent as almost to control the plan, there is the distressing likelihood of the planning notes provided for reference being not so much summaries of ideal layouts prepared by two progressive and capable architects as summaries of regulations which are in many cases out of date.

This danger does not, of course, apply to the lay-outs of rooms, counters and such "units," but to the lay-outs of parts of buildings, where its ill-effects are potentially greater.

E. and O. E. are aware of this drawback. In "Schools," for instance, they are careful to state that the existing regulations are retrograde. But it still seems regrettable that "Planning" may help to perpetuate a seat-spacing for schools which has been deplored for years by progressive educational authorities.

The final stage of planning—that of adjusting to a given site both ideal lay-out and the same lay-out modified by regulations—is, perhaps wisely, not illustrated by any completed schemes. The omission is unfortunate in that the serious student, having progressed carefully through the ideal plan and its changing by regulations, can learn a lot from the study of a chosen scheme which has actually been built. It is a wise omission in that it compels attention to the essentials of planning, and in that completed schemes are available for study elsewhere.

Planning makes a big step forward towards summarizing in an orderly way all that can be so reduced to order in architecture, providing that architects always bear in mind that regulations are there to be changed—not to be accepted as immutable decrees of Providence.

E. and O. E. deserve well of architects. A tribute which is not lessened by the fact that the reviewer does not like

their lettering, and by the suspicion that the binding of "Planning" does not look likely to stand up to the reading it ought to get.

PICTORIAL GUIDES

Amsterdam, Copenhagen, Stockholm, Hamburg. London. B. T. Batsford. Price 2s. 6d. each.

GUIDE books seem to be falling sharply into two classes: the somewhat depressing encyclopædic type with small illustrations and even smaller print, and the picture book with a running commentary. These Batsford guides belong to the second group. Mr. Gilbert's photographs are often brilliant, sometimes little more than mediocre, but the general effect is excellent and the make-up is good.

Of the four towns so far published, Hamburg, Stockholm and Amsterdam I know, and the guides are a pleasant reminder of things already seen; the Copenhagen volume makes me want to go there. So it would seem that these guides fulfil their necessary function. There remains one fault which can easily be corrected in future editions. The last two pages of each guide consist of tabulated information on hotels, restaurants, cinemas, and other necessary addresses, excellent as far as it goes, but surely some indication of price should be given. "Cheap but good"—"expensive but worth it"—a few extra words of description would improve the list out of all recognition without taking up much more space.

H. P. B. S.

•

Publications Received

The Housing Act, 1935. By H. A. Hill, assisted by A. W. Nicholls. London: Butterworth & Co., and Shaw and Sons. Price 30s.

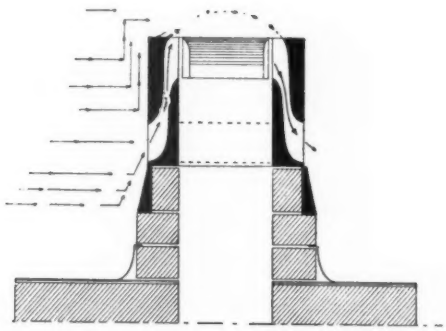
The Students' Text Book of Heating and Ventilating. By Norman Wignall, A.M.I.Mech.E. London: The Heating and Ventilating Engineer.

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

Manchester Made Over. By Alfred P. Simon. London: P. S. King and Son. Price 6s.

The Law of Housing and Town Planning (Third Edition). By John J. Clarke, M.A. London: Sir Isaac Pitman. Price 15s.

Water Heating by Electricity. By J. Russell Hickmott. London: Percival Marshall and Co., Ltd. Price 1s. 6d.



TRADE NOTES

[*EDITED BY PHILIP SCHOLBERG*]

Concrete Research

THE fourth annual report of the Reinforced Concrete Association shows that research on concrete and reinforced concrete has been continued, and progress has been made in the investigations into:—

(1) The redistribution of moments in reinforced concrete members and frames;

(2) The cracking of reinforced concrete members under conditions of complete and incomplete restraint;

(3) The effect of variations in the sand content of concrete upon its strength and workability.

A study of the effect of the size of cracks on the corrosion of steel reinforcement has also been begun.

•

The work on cracking is proceeding in the following directions:

(a) *Load Cracking.*—The general mechanism of cracking, and its relation to amount, type, and distribution of steel, concrete strength in tension and bond is being investigated, partly by analysis of previous crack measurements and partly by direct tests. It has been shown theoretically that the crack widths increase with steel stress at a rate inversely proportional to the percentage of steel and proportional to the bar size. These conclusions have been justified by a few tension tests on bars embedded in concrete and these tests are being extended.

(b) *Shrinkage Cracking.*—The formation of shrinkage cracks in reinforced concrete depends on the combined effects of shrinkage, creep, elasticity and tensile strength.

The main attack on the problem has been made by using special apparatus which has been designed and constructed to impose various degrees of end restraint on the concrete. Concrete specimens, with an extensometer attached to the central portion, have been maintained under tensile loads by means of springs, and these loads have been adjusted periodically to ensure that the shrinkage movements have been entirely balanced by the elastic movements and creep produced by them. Since in practice complete restraint will not usually be imposed, and it is possible that the relative resistances to cracking of the various concretes may be somewhat altered with the degree of fixity, further tests are being made in which fixity is not complete. Owing to the nature of the experiments and the time required, progress on the problem is necessarily slow.

(c) *Corrosion.*—A number of beams hav been loaded and left in the open. Measurements of the progressive cracking and deflection are to be made, and the beams will be examined periodically for signs of corrosion.

•

A series of tests has been made to examine the effect of the sand content on the workability and strength of concrete. The most important conclusion that could be drawn from the tests was that the best proportions depend on the workability required; where a high degree of workability is essential, and a high water content must be used, it is best to use a mix with a high sand content. The investigation has been extended to cover the use of granite aggregate, and the results show that although there are some points of difference, for the most part the same relations hold for both granite and gravel aggregates.

•

A précis of the results obtained under section 1 was also published in the report, but is too long for reproduction here.

The Prevention of Down-Draught

Walking round London, or for that matter any other town, it is quite impossible not to notice that about one-third of the chimneys one sees have draught preventers on them—the astounding variety of height, shape and size amply demonstrating that some work and some don't.

•

Yet another type is shown in the headpiece to these notes—the Konkerwind—which is fixed under a guarantee—the only way, so far as I can see, of proving that manufacturers have faith in their product. An additional argument is the fact that it has been employed on the new L.C.C. flats at Poynders Road, Clapham.

The section explains well enough how it works. The rectangular units being made up in sections, ¾ section, U-shaped, ½ section L-shaped, and a straight quarter section, thus allowing any size to be made up quite easily. Prices are reasonable, particularly as the top five courses of brickwork can be omitted.

Addresses:

The Reinforced Concrete Association, Ltd., 91 Petty France, Westminster, S.W.1.

Konkerwind, Ltd., 190 Regent Street, W.1.

LAW REPORTS

RIGHT OF WAY DISPUTE—DEDICATION BY USER

Merstham Manor, Ltd. v. *Coulsdon and Purley U.D.C.—King's Bench Division. Before Mr. Justice Hilbery.*

THIS was an action by Merstham Manor, Ltd., of Reigate, Surrey, against the Coulsdon and Purley Urban District Council for alleged trespass.

The plaintiffs were the owners of an estate in the parish of Coulsdon, which comprised land formerly part of the Wood Place Farm. There was a road which ran between the woodland, called Three Corner Street, and this roadway was on the west side of Wood Place Lane, a public highway which, in turn, was bounded by the Southern Railway line.

Plaintiffs' case was that the defendants wrongfully claimed to use the Shaw roadway as a public highway.

Defendants contended that the roadway was a public highway.

Plaintiffs alleged that defendants had wrongfully removed a gate and gate-post at the northern end of the road and a fence at the southern end.

The question in dispute was whether the road through the Shaw was a private roadway or a public highway.

Mr. W. Marshall Freeman and Mr. A. W. Nicholls appeared for the plaintiffs, and Mr. S. G. Turner, K.C., and Mr. C. E. W. Simes for the defendants.

His lordship, in a considered judgment, said the only question to be decided by him was whether the roadway in question was a public highway. The defendants had contended that they had established that this roadway had actually been enjoyed by the public as of right and without interruption, for a full period of twenty years and, indeed, for a full period of forty years, and that there was not sufficient evidence adduced by the plaintiff that there was no intention during that period to dedicate such way, or that during that period of twenty years there was not at any time any person in possession of such land capable of dedicating such way.

Having heard the evidence and the arguments his lordship was satisfied that there was not sufficient evidence of an intention not to dedicate. Indeed, he rather thought that there has been a long course of conduct by the plaintiffs consistent only with an intention to dedicate. In his opinion the defendants had established their case under the Right of Way Act, 1932, and he entered judgment for the defendants, with costs.

CONSTRUCTION OF A LEASE—CLAIM FOR DILAPIDATIONS

Oldfield v. *Turner & Co., Ltd.—Chancery Division. Before Mr. Justice Eve.*

THIS action was an unusual one, inasmuch as the point at issue was whether the covenant in a lease for liability for dilapidations extended to repairs found to be necessary in new buildings which were non-existent at the time of the granting of the lease. His lordship found that the repair covenants did not apply to that part of the property erected since the granting of the lease.

The plaintiffs were L. W. and E. F. Oldfield, who claimed possession of land, including a rope walk at Bradstock Road, Hackney, from the defendants, W. Turner & Co., Ltd., the lessees, on the ground of breaches of covenant to repair.

Mr. Lionel Cohen, K.C., for the plaintiffs, stated that the lease was granted in 1862 for a period of just over 78 years to the defendants' predecessors, and contained the usual repairing covenants. When the plaintiffs' surveyor inspected the buildings they found that the dilapidations were considerable, and they accordingly served the defendants with the usual notices. The defendants resisted the claim and now put forward the defence that hardly any of the buildings now in existence were erected at the time of the lease and that the covenants only applied to a house standing on a part of the property not held by them, and that it did not apply to the rope works.

Counsel contended that the Court could not construe the covenants in that way and submitted that, in their true construction the covenants not only covered the house and the rope works, but the new buildings which had now been erected and existed on the land.

Mr. E. M. Winterbotham, for the defendants, said his argument was that it was impossible to include in the covenants the new buildings erected since the granting of the lease, some of which were erected as late as 1915. He contended that the right of re-entry disappeared at the time the property was severed, and the house went to other lessees, the covenant to repair went with the house and his clients could not be liable for dilapidations on property which never passed to them.

His lordship, in giving judgment, said the case was an unusual one. Here he had to construe the covenants and having regard to the facts of the case he came to the conclusion that defendants were not here liable. The covenants did not apply to the property held by the defendants and he dismissed the action with costs.

THE BUILDINGS ILLUSTRATED

PARK ROYAL HOTEL (pages 903–907). The general contractors were Commercial Structures, Ltd., who were also responsible for plaster and decorative plaster. The principal sub-contractors and suppliers included Salter, Edwards & Co., asphalte; Auclaye Brickfields, Ltd., bricks; Matthew T. Shaw & Co., Ltd., structural steel; Caxton Floor Co., solid floors, terrazzo finish; Diespeker & Co., Ltd., stair-treads; Davis, Bennett & Co., Ltd., central heating; Benham and Sons, ventilation and kitchen equipment; J. S. and F. Folkard, Ltd., sanitary fittings, grates; Gas Light and Coke Co., gas fixtures and gas fittings; C. J. Ferguson and Sons, electric wiring; Best and Lloyd, Ltd., electric light fixtures; The Griffin Light Co., electric lights in bars; J. Speirs & Co., door furniture; Crittall Manufacturing Co., casements and window furniture; Haskins & Co., rolling shutters; Cattle, Ltd., joinery; F. Hodge, Ltd., wall tiling; Turners Asbestos Cement Co., tiling in bars; Haymills, Ltd., shrubs and trees; Shimeild and Sons, bar fittings; J. and E. Hall, service lifts and bottle lifts; Fergusons, clocks; M.W.B., water supply; Pearce Signs, Ltd., sign; Trussed Concrete Steel Co., Ltd., Reinforced Concrete, Foundations and Basement.

HANGAR AND CLUBHOUSE FOR THE LONDON GLIDING CLUB, DUNSTABLE (pages 915–919). The general contractors were C. H. Boyd and Son, Ltd., and the principal sub-contractors were :— Stuart's Granolithic Co., Ltd., R. C. staircase; Cork Insulation Co., Ltd., cork treads; London Brick Co., Ltd., facing bricks; Smith Walker, Ltd., structural steel; Standard Flat Roofing Co., Ltd., 3-ply standard roofing to lounge and bar; Universal Asbestos Mfg. Co., Ltd., corrugated asbestos sheeting to roof and walls; Chance Bros. & Co., Ltd., cross-reeded glass to R.C. windows and staircase; Limmer and Trinidad Lake Asphalte Co., Ltd., black acetas asphalt to bar; Archibald Low electrics, Ltd., central heating; A. J. Tatham, Ltd., surround to memorial fireplace to lounge; Well Fire and Foundry Co., Ltd., special electric fire; Arthur Cozens, electric wiring; Oswald Hollman, electric light fixtures; Joseph Chater and Sons, Ltd., sanitary fittings; The Dryad Metal Works, door furniture and staircase balustrade; Taylor Pearse & Co., Ltd., door furniture; Lenscrete, Ltd., R.C. window; Williams and Williams, Ltd., metal windows; Post Office telephones; The Sliding Door Mfg. Co., and Silent Gliding Doors, sliding doors to hangar; Light Steelwork (1925), Ltd., tubular balustrade; The Trussed Concrete Steel Co., Ltd., Reinforced Concrete Engineers, terrace in "Solcheck" tiles; Donald Bros., Ltd., and Allan Walton Textiles, textiles; John Hall and Sons, Ltd., exterior and interior paintwork; Henry Stone and Son, Ltd., "Plan" chairs; Finmar, Ltd., stools; Eric Munday, Ltd., signs; The Tentest Fibre Board Company, Ltd., Tentest insulating-board used for insulation and as an exterior and interior lining.

★

In our issue May 28 a photograph on page 847, showing various types of school windows was wrongly attributed to Messrs. Butler, Jackman and Edmonds. The architect of this building was Mr. Harold Fletcher Trew, F.R.I.B.A.

★

We regret that the name of the Tentest Fibre Board Company, Ltd., was omitted from the list of contractors for the Gatwick airport, illustrated in our last issue. They supplied the Tentest used for the lining of the tunnel.

★

Messrs. Kerner-Greenwood & Co., Ltd., whose advertisement illustrating the use of "Pudlo" Brand cement waterproofer in the construction of the first-class swimming pool on the R.M.S. "Queen Mary" appeared in our June 4 issue, ask us to state that the tiles and faience were made by Messrs. Carter & Co., Ltd., of Poole, Dorset.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS (15 miles radius)

HAYES. *Cinema.* The U.D.C. has approved detailed plans, submitted by the Universal Finance Corporation, Ltd., for a cinema and four shops, to be erected at East Avenue.

HAYES. *Estate Development.* Further developments are to be undertaken at Birchway by the Great Western (London) Garden Village Society, Ltd., 117 Saxon Drive, W.3. Lay-out, houses and type plans have been approved.

HILLINGDON. *Shops, etc.* Silver Houses (Hillingdon), Ltd., are to erect 17 shops, with living accommodation over, at the junction of Uxbridge Road and Long Lane.

IVER. *Estate Development.* Messrs. E. and J. Cotton, Ltd., 12 Church Road, Ashford, Middlesex, are to develop an estate at Church Road, Iver. Lay-out plans have been approved.

SANDERSTEAD. *School.* The Surrey Education Committee is to erect an elementary school at Sanderstead, at a cost of £11,815.

TOTTENHAM. *Flats and Maisonettes.* Mr. G. Ellis Jackson is to erect 260 flats and maisonettes in Ladysmith Road, Tottenham.

UXBRIDGE. *Houses.* Thirty-six houses are to be erected at the Hillingdon Place estate, by Silver Houses (Hillingdon), Ltd., Long Lane, Hillingdon.

UXBRIDGE. *Shops.* New business premises are to be erected on the site of 137 and 138 High Street, by Messrs. Mulholland and Tebb, Ltd.

WARLINGHAM. *Reconstruction.* The Surrey Education Committee is to reconstruct two schools at Warlingham, at a cost of £15,100.

MIDLAND COUNTIES

BIRMINGHAM. *Baths.* The Corporation has obtained sanction to borrow £33,500 for the erection of baths in Bristol Road, Northfield.

BEDFORD. *Houses.* The Corporation is to prepare plans for 60 houses for the relief of overcrowding.

CASTLE BROMWICH. *Development.* Messrs. H. Dare and Sons, Ltd., builders, of Ward End, Birmingham, are to develop the Timberley estate, Bradford Road, Castle Bromwich.

HANLEY. *Factory.* Messrs. Alcock, Limdley and Bloore are to erect a factory in Slippery Lane, Hanley.

HANLEY. *Houses, etc.* Plans passed: Office extensions, Cooper Street, for Messrs. Steele and Cowlishaw; two houses, off Albany Road, for Mr. J. Kelly; two houses, Hanley Road, for Mr. J. Jackson; warehouse, Chell Street, for Messrs. Tilstone Tiles; 34 houses, off Etruria Vale Road, for Mr. J. Whittaker; two houses, Longton Road, for Messrs. Pass and Proctor; three houses, Alfred Street, for Mr. R. Ansell; seven houses, off Etruria Vale Road, for Mr. E. Harris.

STAFFS. *Houses.* Messrs. Cotton, Son and Hulme, architects, Tunstall, are to erect 58 houses for Mr. G. L. D. Bates in Sandyford, Goldenhill, Staffs.

STOKE-ON-TRENT. *Houses.* Plans passed by the Corporation: Two houses, Hunters Croft, for Messrs. Leese and Peers; two houses, off Chamberlain Avenue, for Mr. A. H. Hood; extensions, Devon Pottery, Sutherland Street, for Messrs. Fielding & Co.; conversion, Ship Inn, to two houses, South Street, for Mr. E. Lawton; four houses, Duke Street, for Mr. E. Jones; 20 houses, off Blurton Road, for Messrs. P. Bailey & Co., Ltd.; four houses, off Blurton Road, for Mr. B. J. Brittle; two houses, Star and Garter Road, for Mr. J. Bartholomew; six houses, Stone Road, for Mr. W. Braithwaite; alterations, Queen's Head Inn, Basford, for Parkers (Burslem), Brewery, Ltd.; four houses, Lancaster Road, for Modern Architectural Estates; two houses, Allerton Road, for Mr. G. A. Johnson; six houses, off Chamberlain Avenue, for Mrs. T. Cartlidge; shop and house, Sandon Road, for Mr. E. H. Lewis; 72 houses, off Chaplin Road, for Mr. L. J. Cope.

STOKE-ON-TRENT. *School.* The Stoke-on-Trent Education Committee is seeking sanction to borrow £57,719 for the erection of a high school for girls at Thistley Hough.

STOKE-ON-TRENT. *Abattoir.* The Corporation is to negotiate for a site in Hanley for the erection of an abattoir.

STOKE-ON-TRENT. *Baths.* The Corporation has approved plans by the city architect for the erection of baths in Wharf Street, at a cost of £81,000.

STOKE-ON-TRENT. *Municipal Hall.* The Corporation has asked the city architect to prepare plans for the erection of a municipal hall at Abbey Hulton.

SUTTON COLDFIELD. *Extensions, etc.* Plans passed by the Corporation: Extensions, Wylde Green Hotel, Birmingham Road, for Ansells Brewery, Ltd.; eight houses, Chester Road, for Mr. T. L. Latimer; nine houses, off Chester Road, for Mr. E. R. Martin; 10 houses, Melrose Avenue, for Mr. W. G. Darley; 20 houses, Sutton Oak Road, for Mr. W. E. Cobbett.

SUTTON COLDFIELD. *Houses.* The Corporation is to erect a further 74 houses on the Holland House estate, at a cost of £27,800.

WARWICK. *Cottage Homes.* The Warwickshire C.C. is to erect grouped cottage homes at Myton Grange, Warwick, at a cost of £19,400.

WARWICK. *Cinema.* The Bath Cinema Co. (Leamington), Ltd., are to erect a cinema in Coten End, Warwick.

NORTHERN COUNTIES

BIRKENHEAD. *Cinema.* The Corporation has passed plans for the erection of a Regal cinema in Woodchurch Road, Prenton.

BIRKENHEAD. *Houses.* The Corporation is to erect 30 houses in Hoylake Road and 174 in Bidston Hill.

BOLTON. *Houses, etc.* Plans passed by the Corporation: Ten houses, Orwell Road, for Messrs. Leigh Bros., Ltd.; 46 houses, Wisbeck Street, for Messrs. F. Merrison, Ltd.; works extensions, Garside Street, for Messrs. Rigby Taylor, Ltd.; 16 houses, off Manchesree Road, for Messrs. E. and S. Street, Ltd.; six houses, New Hall Lane, for Messrs. R. Paiton and Sons; works extensions, Scholey Lane, for Messrs. Knowles, Ltd.; 10 houses, off Belmont Road, for Mr. W. C. Rank.

BOLTON. *Extensions.* The Corporation is to prepare plans for extensions at the institution.

HULL. *School.* The Education Committee is to erect an elementary school for 920 in Taylor Avenue.

LEEDS. *Church.* The Corporation has sold a church site in Station Road on the Cross Gates housing estate to the trustees of St. Teresa's R.C. Church.

LEEDS. *Cinema and Shops.* The Corporation has approved plans submitted by Mr. William Hobson for the erection of a cinema and shops at Harrogate Road.

SHEFFIELD. *School.* The Sheffield Education Committee is to erect an elementary school at Halifax Road, at a cost of £73,500.

SHEFFIELD. *School.* The Sheffield Education Committee is to erect a secondary school for 600 boys at Nether Edge, at a cost of £78,600.

SHEFFIELD. *Flats, etc.* Plans passed by the Corporation: Four flats, Nethergreen Road, for Mr. J. Gibson; 28 bungalows, off Rivilin Valley Road, for Mr. M. Bonner; five shops and houses, Tyler Street, for Mr. E. Thompson; garage and motor showrooms, West Bar, for Messrs. Kennings, Ltd.; four shops, London Road, for Mr. H. M. Fineberg; warehouse, Eccleshall Road, for Messrs. R. Ingram, Ltd.; two houses, Montrose Road, for Mr. H. Seymour; two houses, Fairbairn Road, for Mr. H. Smith; six houses, Norton Lane, for Messrs. J. Marsh and Son, Ltd.; two houses, Old Park Avenue, for Messrs. B. Bennett, Ltd.; five houses, Dobcroft Road, for Messrs. J. H. S. Randall, Ltd.; 10 houses, Anns Road, for Messrs. T. Wilkinson and Sons, Ltd.; two houses, Cherry Bank Road, for Mr. L. Nicholson; two houses, Gerard Street, for Mr. W. Croft; four houses, Elm Field Avenue, for Mr. H. Simpson; 33 houses, Elm Field Avenue, for Mr. S. G. Bailey; two houses, Airedale Road, for Mr. J. N. Reed.

SMETHWICK. *Clinic.* The Corporation is to erect a clinic for rheumatic treatment, at a cost of £11,000.

SMETHWICK. *Houses.* The Corporation has approved revised plans by the borough engineer for the erection of 96 houses at Halnes Lane, at a cost of £23,412.

SMETHWICK. *Nursery School.* The Smethwick Education Committee has appointed the borough engineer as architect for the proposed new nursery school.

SOUTHERN COUNTIES

BOURNEMOUTH. *Sanatorium.* The Corporation has decided to purchase the Heath Farm, Longham, for the erection of a sanatorium-hospital.

BOURNEMOUTH. *Stand, Houses, etc.* Plans passed by the Corporation: Football stand, Dean Court, for Boscombe Football Club; additions, Norfolk Hotel, Richmond Hill, for Mr. F. J. McInnes; six bungalows, Moorvale Road, for Mr. P. J. Jolliffe; two shops and eight flats, Castle Lane, for Mr. J. Elliott; alterations and additions, 642 Christchurch Road, for Home and Colonial Stores; 32 flats, Boscombe Cliff Road, for Mr. S. Kermode; four houses, Leybourne Avenue, for Sunny Homes, Ltd; three bungalows, Howeth Road, for Mr. E. Walker; pavilion, Broadway Lane, for Electricity Supply Co., Ltd.; two bungalows, Western Avenue, for Mr. F. E. Etches; shops, offices and flats, Christchurch Road, for Messrs. Fox and Son; two bungalows, Walton Road, for Mr. J. Jones; nine houses, Lombard Avenue, for Mr. A. Bedford; two houses, West Way, for Mr. C. M. Hunt; three bungalows, Cheddington Road, for Messrs. Opperman and Jones; two houses, Castle Lane, for Mr. H. Richards; three bungalows, Forest View Road, for Messrs. C. Burt & Co.; two houses, Tuckton Road, for Mr. A. Aston; cinema, shops and flats, Christchurch Road, for Messrs. Elcock & Co.; six flats, Malvern Road, for Mr. C. Wotherspoon; six houses, Durrington Road, for Messrs. H. C. Mills and Son; four shops, Warnford Road, for Mr. H. Chubb; five houses, Harland Road, for Messrs. T. Sutcliffe and Son; four houses, Branksome Wood Road, for Messrs. A. C. Barnes & Co.; two bungalows, Walliscott Road, for Mr. W. J. Clapcott.

BOURNEMOUTH. *Police Headquarters.* The Corporation has approved plans of the borough engineer for the erection of police headquarters in Madeira Road, at a cost of £33,000.

PORTSMOUTH. *Airport.* The Corporation has prepared a scheme for the provision of an airport involving a total expenditure of £1,114,850.

WALES

SWANSEA. *Houses.* The Corporation is to proceed with schemes for the erection of 218 houses on the Townhill estate.

SWANSEA. *Houses.* The Corporation has arranged for 134 houses to be erected on the Trewyddfa estate by the borough architect, at a cost of £43,280.

SWANSEA. *Alterations, etc.* Plans passed by the Corporation: Alterations and additions, Holy Trinity Vicarage, Heathfield Road, for Parochial Church Council; store and workshop, Neath Road, for Mr. L. H. Samuel; eight houses, Heathfield Road, for Mr. J. C. Oliver; rebuilding Belle Vue Hotel, Nelson Street, for Messrs. Truman, Hanbury, Buxton & Co. Ltd.; Church hall, Hawthorne Avenue, for St. Barnabas Parochial Council; four houses, Stepney Street, for Estateway Builders, Ltd.; four houses, Pickets Mead, for Mr. S. Brick; six houses, Moorside Road, for Mr. G. Symons; two houses, Middle Road, for Mr. W. D. Williams.

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 1¼
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 0¾
A	Accrington	N.W. Counties	1 6½	1 2
A_2	Addlestone	S. Counties	1 5	1 0¾
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	11¼
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 0¾
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 2¾
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 0¾
A_2	Bournemouth	S. Counties	1 5½	1 1½
B_2	Bovey Tracey	S.W. Counties	1 3½	11¾
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	11¾
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 0¾
A	Chelmsford	E. Counties	1 5	1 0¾
A	Cheltenham	S.W. Counties	1 5	1 0¾
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_2	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 0¾
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 0¾
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 0¾
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_3	FELIXSTOWE	E. Counties	1 5	1 0¾
A	Filey	Yorkshire	1 5	1 0¾
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	11¾
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_3	Grantham	Mid. Counties	1 5	1 0¾
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	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 0¾
A_2	Keswick	N.W. Counties	1 5	1 0¾
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 2¾
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 0¾
A_2	Malvern	Mid. Counties	1 5	1 0¾
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 0¾
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	11¾
B_2	Monmouth & S. and E. Glamorganshire	S. Wales & M	1 3½	11¾
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 0¾
A	Oldham	N.W. Counties	1 6½	1 2
A_3	Oswestry	N.W. Counties	1 5	1 0¾
A_1	Oxford	S. Counties	1 6	1 1½
A	PAISLEY	Scotland	*1 6½	1 2
B_3	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 0¾
A_1	Rhondda Valley	S. Wales & M.	1 6	1 1½
A	Ripon	Yorkshire	1 5	1 0¾
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_3	Salisbury	S.W. Counties	1 3½	11¾
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 0¾
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	11¾
A_3	Tunbridge Wells	S. Counties	1 5	1 0¾
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 0¾
A	Wolverhampton	Mid. Counties	1 6½	1 2
A_2	Worcester	Mid. Counties	1 5½	1 1½
A_2	Worksop	Yorkshire	1 5	1 0¾
A_1	Wrexham	N.W. Counties	1 6	1 1½
A	Wycombe	S. Counties	1 5	1 0¾
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	0	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

		s.	d.
The following d/d F.O.R. at Nine Elms:			
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, ¾"	"	1	4	0
" 1"	"		16	0
" 1½"	"	1	6	0
Plywood, per ft. sup. Thickness				18

Qualities	¼" A	¼" B	¼" BB	⅜" A	⅜" B	⅜" BB	½" A	½" B	½" BB	¾" A	¾" B	¾" BB
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	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	–	1/–	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.)

	⅛"	¼"	½"	1"	1¼"	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–1½" 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, ⅜"	"	10	6
" " ½"	"	10	3
" " ⅝"	"	10	0

SMITH AND FOUNDER—*continued*

		s.	d.
Mild steel reinforcing rods, ¾"	cwt.	9	6
" " ⅞"	"	9	6
" " 1"	"	9	6
" " 1¼"	"	9	6
" " 1½"	"	9	6
" " 1¾"	"	9	6
" " 2"	"	9	6

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

		3" s.	3" d.	4" s.	4" d.	6" s.	6" d.
L.C.C. soil and waste pipes:							
Plain cast	F.R.	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

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	

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.
" " 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
Flashed opals (white and coloured)	"	1	0	and	2
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	‡11	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 ⅜"	"		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.			1½
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	"			7½
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
¾″ deal sawn boarding and fixing to joists	Sqr.	1	14	6
1″ " " " " " "	"	1	17	6
1¼″ " " " " " "	"	2	3	0
¾″ × 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
1¼″ " " "	"		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
1¼″ do.	"		1	9

CARPENTER AND JOINER—*continued*

		s.	d.
1½″ 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
1½″ deal four-panel square, both sides, door	F.S.	2	0
2″ " " " " " "	"	2	8
1½″ " 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	8
1¼″ deal treads, 1″ risers in staircases, and tongued and grooved together on and including strong fir carriages	"	2	6
1½″ deal moulded wall strings	"	2	1
1½″ " 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	"		1½
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

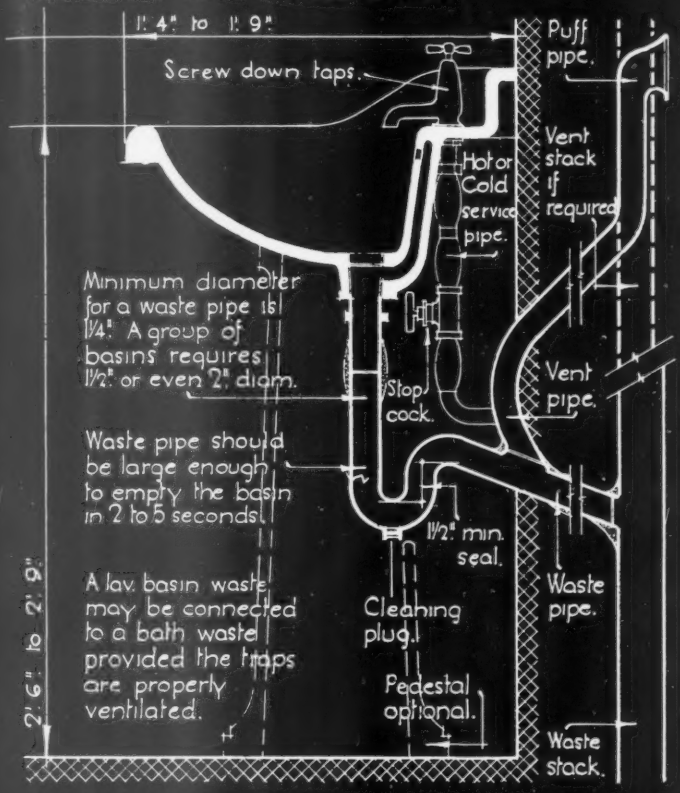
		s.	d.
21 oz. sheet glass and glazing with putty	F.S.		6½
26 oz. do. and do.	"		7½
Flemish, Arctic Figured (white) and glazing with putty	"	1	1
Cathedral glass and do.	"	1	2
Glazing only, British polished plate	"		7
Extra, only if in beds	"		2
Washleather	F.R.		4

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	6
Do. and brush grain and twice varnish	"	5	0
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

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

TYPICAL ARRANGEMENT OF PLUMBING TO A SINGLE BASIN.



HEIGHT OF WASTE VENTILATING PIPE:

When a waste pipe serves more than one fitment on different storeys it should be carried up vertically to such a height and position as to prevent nuisance, injury or danger to health. A height of not less than 2' 0" (preferably 3' 0") above the top of any windows within a distance of 15' 0" (preferably 20' 0") is desirable.

TRAP VENTILATING PIPES :

Traps should be ventilated when two or more basins are connected to the same waste pipe (unless anti-siphonage traps are used). The trap ventilating pipe should be carried up to the same height as the waste pipe or connected to it at a point above the highest basin.

SINGLE BASINS :

The trap of a single lavatory basin can (except where the one-pipe system is used) be ventilated by a puff pipe turned through the external wall at a point above the basin. When a basin is fitted in a bedroom it is particularly desirable that the traps should be ventilated.

SIZE OF VENT:

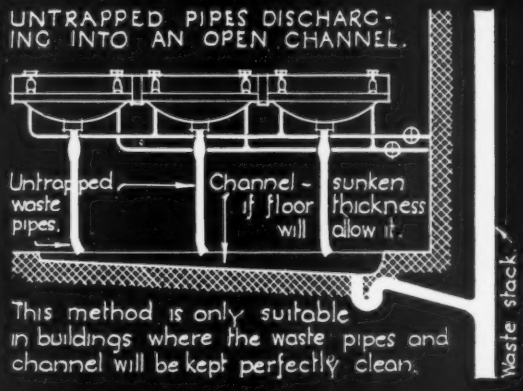
Branch vents should be ⅔ the diameter of the waste pipe although they need not exceed 2" and must not be less than 1¼" diameter. The main vent pipes should have the same diameter as waste pipes.

DISCHARGE :

The waste pipe may, in some districts, discharge into a hopper or over a gully, but it is considered more sanitary to discharge into a gully under the grating.

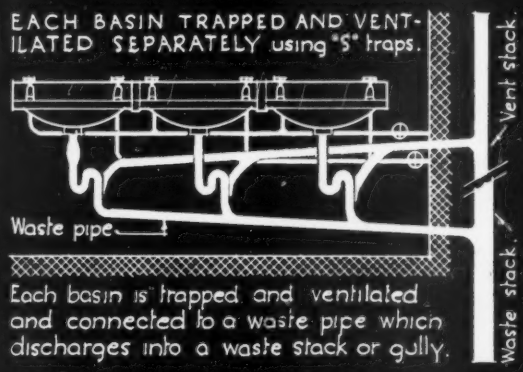
VARIOUS METHODS OF PLUMBING RANGES OF LAVATORY BASINS

UNTRAPPED PIPES DISCHARGING INTO AN OPEN CHANNEL.



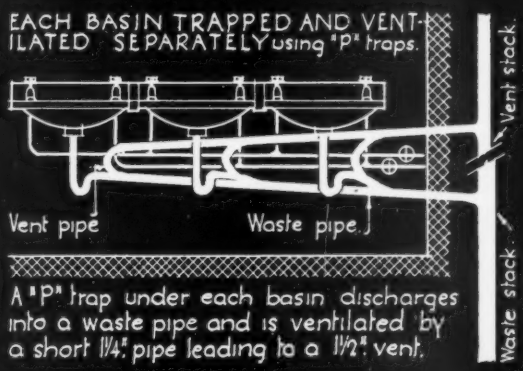
This method is only suitable in buildings where the waste pipes and channel will be kept perfectly clean.

EACH BASIN TRAPPED AND VENTILATED SEPARATELY using "S" traps.



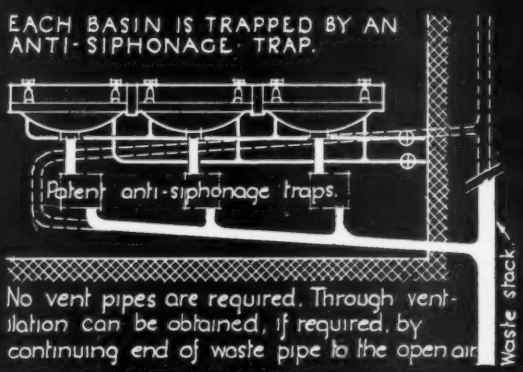
Each basin is trapped and ventilated and connected to a waste pipe which discharges into a waste stack or gully.

EACH BASIN TRAPPED AND VENTILATED SEPARATELY using "P" traps.



A "P" trap under each basin discharges into a waste pipe and is ventilated by a short 1¼" pipe leading to a 1½" vent.

EACH BASIN IS TRAPPED BY AN ANTI-SIPHONAGE TRAP.



No vent pipes are required. Through ventilation can be obtained, if required, by continuing end of waste pipe to the open air.

Information from the Lead Sheet & Pipe Development Council.

INFORMATION SHEET : VARIOUS METHODS OF PLUMBING LAVATORY BASINS · 22

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 364 •

PLUMBING

Subject : Plumbing to Lavatory Basins

This Sheet sets out a number of ways of arranging the plumbing required to lavatory basins.

Lavatory Basins

Lavatory basins may be of the " built-up " type, with marble or similar slab material to form the top and with the bowl fixed below, or they may be in one complete unit. Lavatory basins are made in a variety of materials, usually earthenware or fireclay, and in a number of sizes and shapes.

Pipework

The lead trap is joined to a brass union pipe by means of a wiped joint, and the brass union is in turn screwed to the tail-piece projecting from the basin. The tail of the trap is joined to the waste pipe by another wiped joint, and the vent pipe, if provided, is wiped on to either the trap or the waste pipe.

Traps

The trap should be kept up as near to the basin as the connections and joint will allow.

The minimum water seal required by the London County Council and by most Local Authorities is $1\frac{1}{2}$ ins. All traps should be provided with a brass cleaning eye.

Traps and Wastes

Traps and wastes to lavatory basins should never be less than $1\frac{1}{4}$ ins. diameter, but $1\frac{1}{2}$ ins. is recommended wherever possible.

Where more than one basin is connected to a waste branch, the branch may have to be increased to 2 ins. diameter.

Ventilation of Traps

Where only one basin is connected to a waste pipe which discharges into a gulley, the trap need not be ventilated. In certain circumstances, however, e.g. when the basin is in a bedroom, it is desirable that the trap should be ventilated ; in such cases a " puff " pipe may be used, terminating outside the external wall at a point above the level of the top of the basin.

When more than one fitting is connected to a waste pipe or waste stack the traps of each fitting must be ventilated unless a patent or deep seal trap is used.

The ventilating pipe must be carried up to discharge into the open air above the highest fitting.

Sizes of Ventilating Pipes

Pipes ventilating traps should be not less than two-thirds the diameter of the trap, but must not be less than $1\frac{1}{4}$ ins. ; pipes ventilating waste pipes should be of the same diameter as the waste pipe itself.

Sizes of Supply Pipes

Water service branches to taps in lavatory basins are usually $\frac{3}{8}$ in. or $\frac{1}{2}$ in. diameter.

Plumbing to Ranges of Lavatory Basins

1. *Open channel.* The diagram given shows a method of carrying away water from basins by means of short lengths of waste pipe from each basin discharging into an open channel, the outlet from the channel to the main waste being trapped.

This method is suitable for use in hospitals, schools, factories, etc., and is a very sanitary arrangement as there is ample air circulation and the open channel, being exposed, is unlikely to be neglected.

The channel may be raised above the floor, but it is usually desirable to sink it, so that it may be used when washing down the floor. The fall in the channel need not be more than 2 ins. in 10 ft.

2. *Each basin trapped and connected to a common waste pipe.* Two varieties of this arrangement are shown, this being the commonest way of plumbing to a range of fittings.

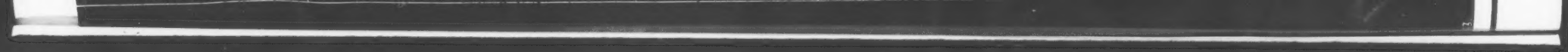
Each basin is trapped and each trap ventilated, the traps being connected to a common waste branch, and the vents being connected to a common ventilating pipe. Care should be taken that the ventilating pipe is taken off the waste pipe at a point and in a direction likely to reduce the possibility of matter collecting in the mouth of the ventilating pipe.

All pipes should be kept up as high as possible under the basins to be out of sight, and if possible they should be concealed altogether.

Anti-Syphonage Traps

The ventilation of traps may be omitted where deep seal or patent anti-syphonage traps are used. It is desirable, however, that the waste pipe should be ventilated wherever possible.

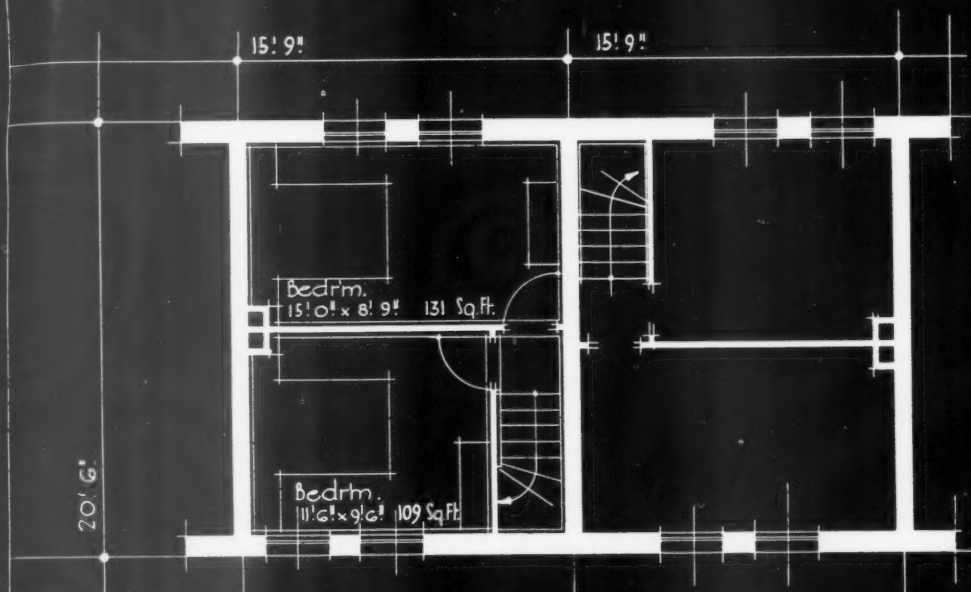
Information from : Lead Sheet and Pipe Development Council
Address : Golden Cross House, Duncannon Street, W.C.2.
Telephone : Whitehall 3715



THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION.

TYPES OF FLAT UNIT : BRUSSELS.

TYPE : 3 room, 2 storey, with cooking recess.

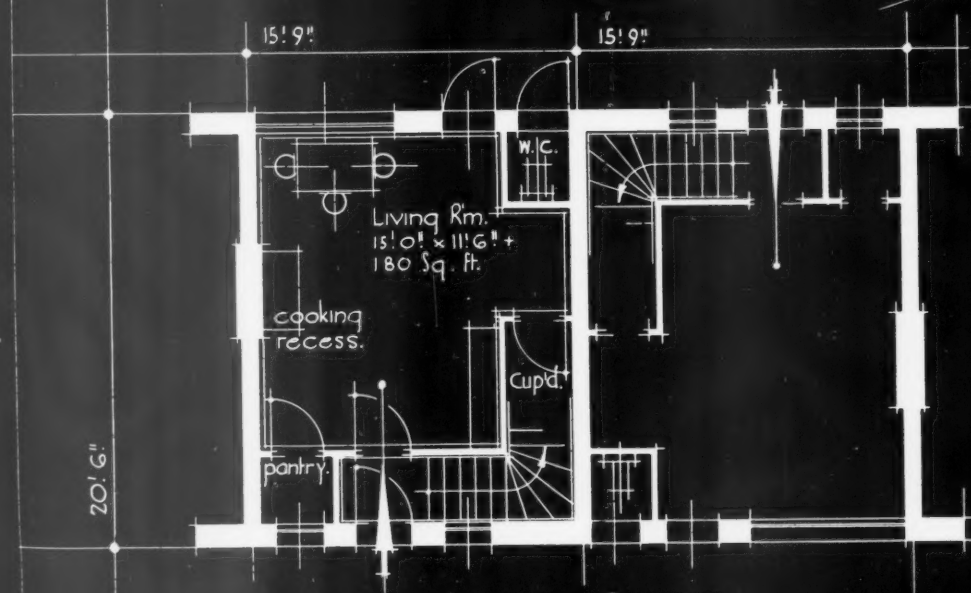


UPPER FLOOR PLANS.

Total area of unit : 322 sq.ft.

Habitable area : 420 sq.ft.

Service area : 96 sq.ft (plus the area of Cooking recess).

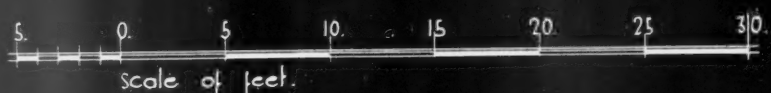


GROUND FLOOR PLANS.

Total area given includes :

the external walls,

½ the division walls between flats,



INFORMATION SHEET : INDUSTRIAL HOUSING 13.

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1

Supplement to THE ARCHITECTS' JOURNAL for June 11, 1936

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 365 •

INDUSTRIAL HOUSING UNITS—XIII

Brussels

The units given on this Sheet are for two-storied blocks or for balcony access blocks.

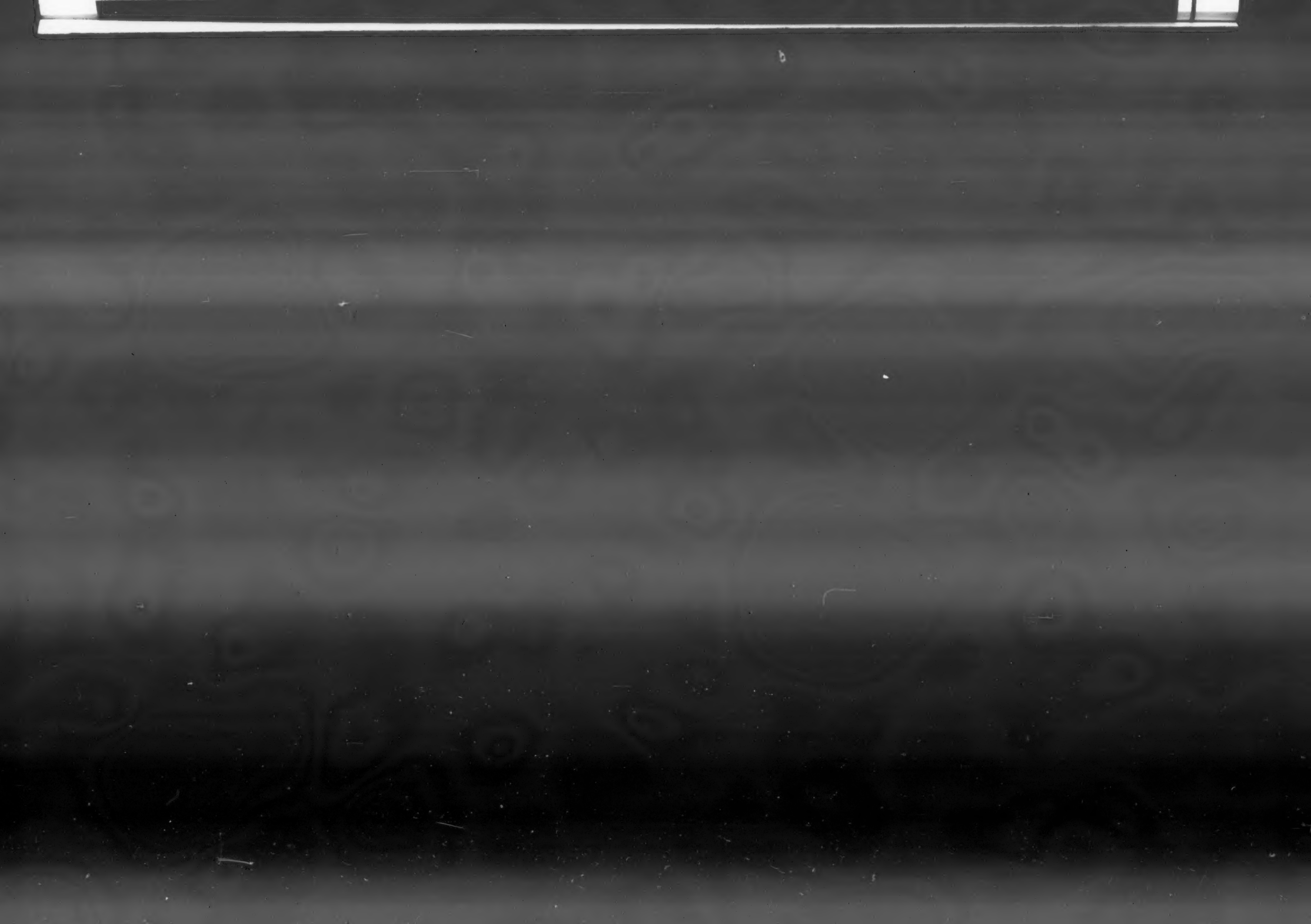
The units may be repeated with the same aspect to each, or they may be arranged as shown, alternate units being reversed, thus separating the entrances to alternate flats and varying the aspect.

Each unit consists of a living room with cooking recess, and two bedrooms, w.c. cupboard, and pantry.

It will be noticed that no bath or shower was provided, and that the w.c. has external entrance.

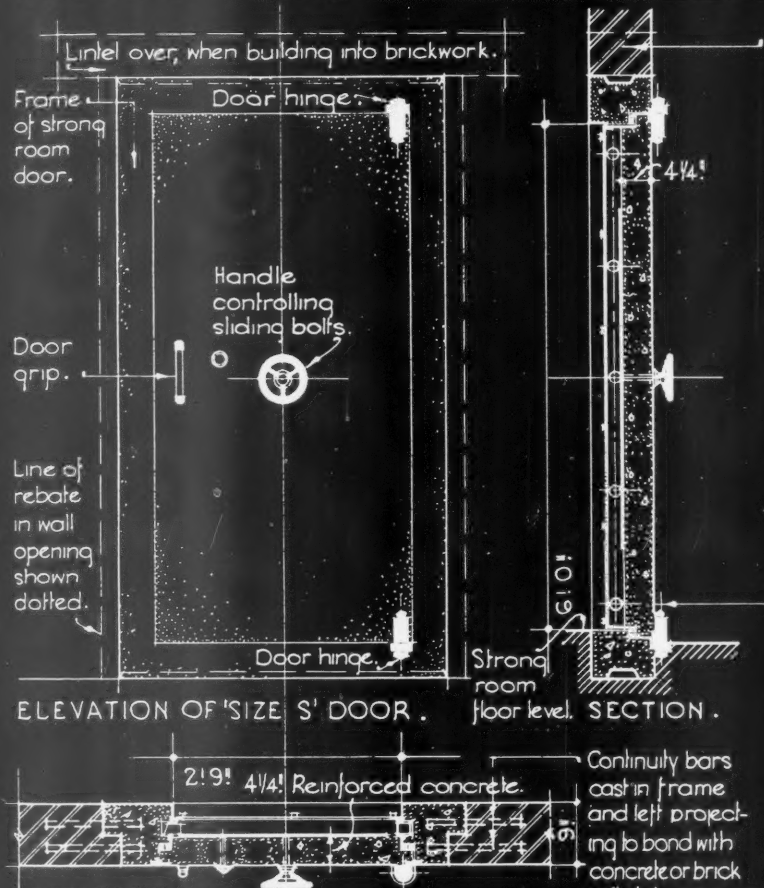
The cooking recess forms parts of the living room, the range serving both for cooking and heating.

The service area includes all that space which is not used as living accommodation for the occupants, i.e., service area includes kitchens, wardrobes, baths, w.c.s and lobbies.



THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

DETAILS OF FORTIS REINFORCED CONCRETE DOORS TO STRONG ROOMS :



ELEVATION OF 'SIZE S' DOOR. SECTION. PLAN OF 'SIZE S' DOOR.

FORTIS STRONG ROOM DOORS are supplied with a reinforced concrete frame for building into brick or concrete wall of strong room.

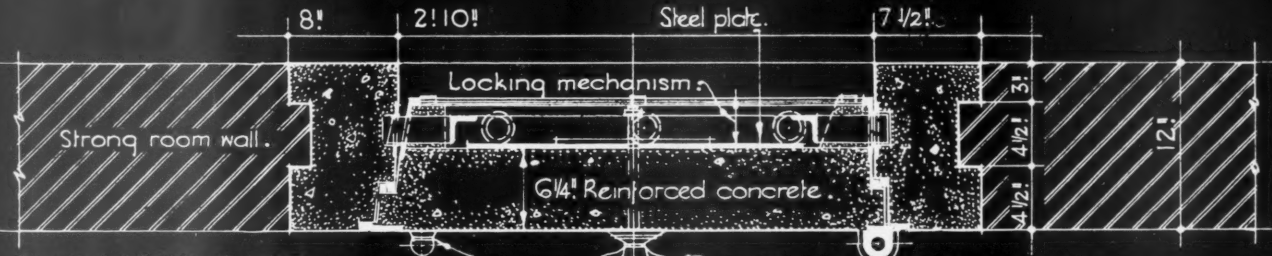
Size.	Size of opening	Total thickness of door	Thickness of concrete of door.	Approx. weight of door.
S.	6'0"×2'9"	7"	4¼"	¾ tons.
A.	6'1"×2'10"	10"	6¼"	1 "
A.X.	6'1"×2'10"	10"	6¼"	1 "
B.	6'6"×3'0"	16½"	12"	3 "

TABLE GIVING SIZES OF DOOR OPENING, & SIZES, WEIGHT, & THICKNESS OF DOOR :

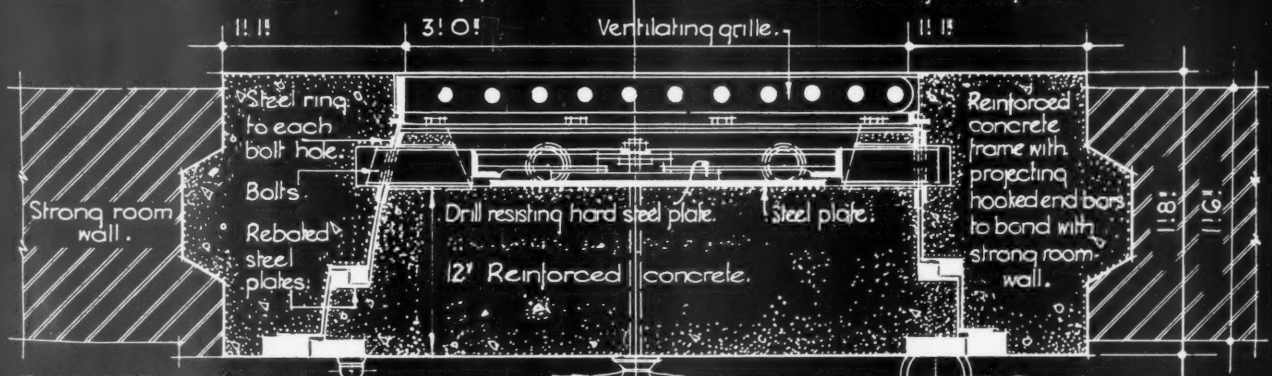
'SIZE S' DOOR · This type is also made with a 3'0" wide opening.

SIZE A.X. door is the same size as 'SIZE A' door, but has additional reinforcement and heavier lock plates etc.

NOTE · For particulars of construction and reinforcement in the doors, see notes on the back of this sheet.



PLAN OF 'SIZE A' DOOR.



PLAN OF 'SIZE B' DOOR.

Information from Fortis Reinforced Concrete Safe Co. Ltd.

INFORMATION SHEET : REINFORCED CONCRETE STRONG ROOM DOORS :

SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1·

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET
• 366 •
STRONG ROOM DOORS

Type Illustrated : Fortis Strong Room Doors.

This Sheet deals with Fortis strong room doors and frames and shows the application of reinforced concrete to this work.

Fire Resistance :

The reinforced concrete of which the door is composed provides the necessary resistance to fire. It is to be particularly noted that the door is not a steel casing filled with concrete. The face of the door is concrete and there is no steel running from the front of the door to the back, by which heat might be transmitted.

Penetration of flame or hot gases past the edges of the door is prevented by the close fit of the door in the frame and by two rebated steel plates.

Round the edge of the door is a steel frame which fits into a steel rim set in the door frame, while mid-way between the inside and outside is a double rebate of sectional steel, a rebate forming part of the door mating with a similar one in the door frame, providing an efficient firelock, embedded in the concrete and protected by a considerable thickness.

Reinforcement :

The reinforcement varies with the type of door, but, in general, consists of steel mesh and hard twisted steel bars, the arrangement providing numerous edges of steel surrounded by concrete. In addition to resistance against cutting and drilling implements the construction is for all practical purposes immune from penetration by the oxy-acetylene flame.

Locking Mechanism :

The locking and bolting mechanism fulfils all the usual requirements. It is arranged on the back of the door and is therefore protected by the full thickness of the reinforced concrete of which the door is composed. The mechanism is mounted on a steel plate secured to the concrete by embedded bolts. In the case of the burglar-resisting quality doors, hard drill-resisting plates are provided over the lock. Large solid steel bolts secure the door.

Building In :

Reinforced concrete frames are supplied with the doors, with lugs and projecting bars for building into brick or concrete walls.

Finishes :

Doors and frames are usually supplied in lead colour ready to receive final body colour and varnish, but where desired they can be supplied in finished colours.

Types of Fortis Strong Room Doors :

Size	Type	Size of Opening	Price
S	Fire and thief-resisting ...	6′ 0″ × 2′ 9″	£65
A	Fire and burglar-resisting	6′ 1″ × 2′ 10″	£115
AX	Special quality burglar-resisting	6′ 1″ × 2′ 10″	£145
B	Bankers' quality	6′ 6″ × 3′ 0″	£275

Price includes for delivery on site, with skilled assistance for hanging of door. Grille gates extra.

In addition to strong room doors, the company designs and constructs complete strong rooms, and supplies portable safes.

Manufacturers : Fortis Reinforced Concrete Safe Co., Ltd. (in association with Empire Stone Co., Ltd.).

Head Office : Thanet House, 231 Strand, London, W.C.2.

Telephone : Central 9007.