St. Dunstan's Nursing Home (Extension), Amersham Hill, High Wycombe .

Architects: Brocklehurst & Cooper. Contractors: Gibson & Co., High Wycombe.

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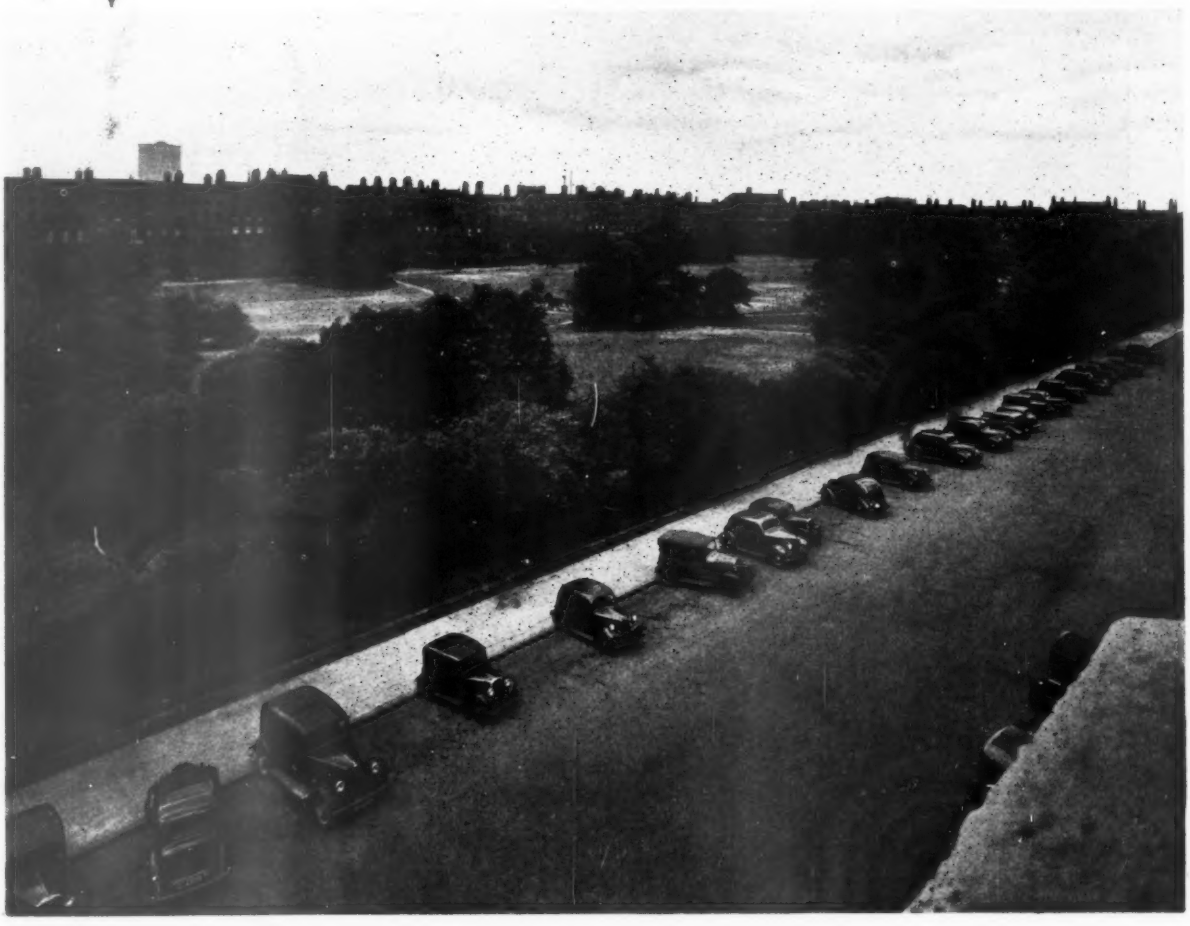
The Editor will be glad to receive MS. articles and also illustrations of current architecture in this country and abroad with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

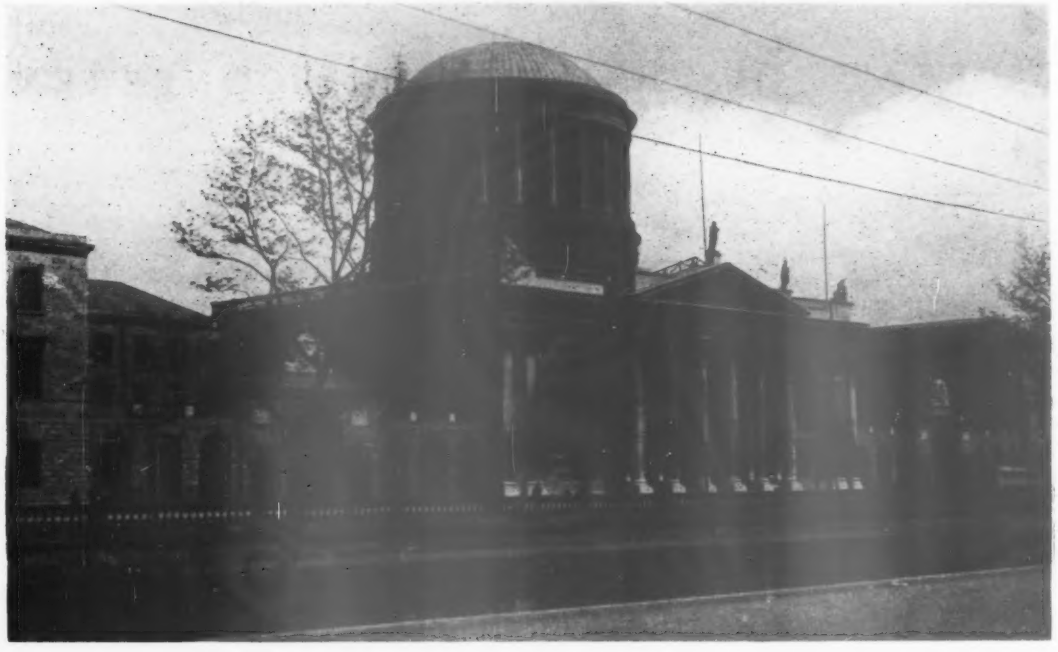
THURSDAY, JUNE 22, 1939 NUMBER 2318 : VOLUME 89

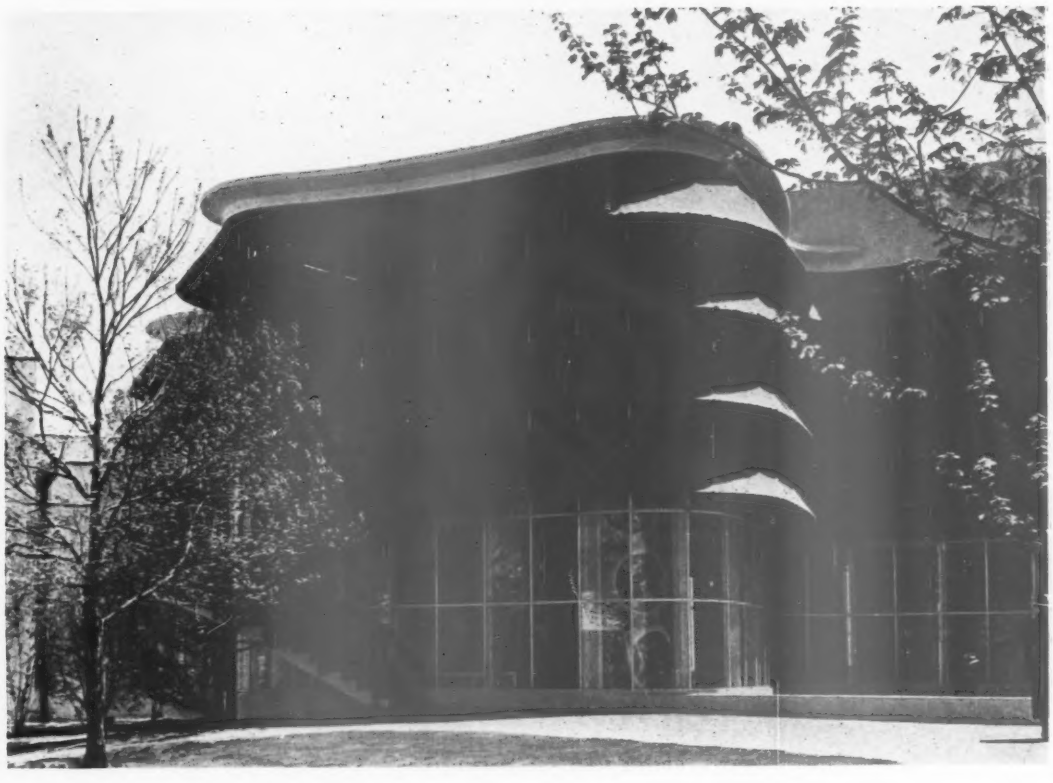
PRINCIPAL CONTENTS

THE SEAT OF THE R.I.B.A. CONFERENCE



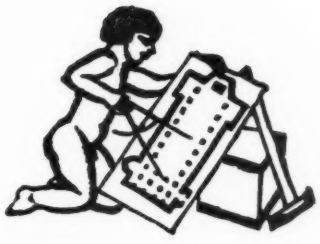
Merrion Square, Dublin, looking north. It is a railed-in park and contains about 13 acres planted with trees and shrubs. Three sides of the square are occupied by residential houses, the west side being bounded by Leinster Lawn. Merrion Square itself has been purchased from the Earl of Pembroke as the site for the proposed erection of a Catholic Cathedral.
The building indicated by the arrow is that of the Royal Institute of the Architects of Ireland, and the headquarters of the R.I.B.A. Conference now in progress.





FROM DUBLIN TO NEW YORK

Top, Dublin's building number one, the Four Courts, erected in 1786 from the designs of Thomas Cooley. Bottom, New York's building number one (from the Irish viewpoint) at the 1939 World's Fair: the Irish Pavilion, designed by Michael Scott.



OIRELAND

TO say "Ireland" to Englishmen is nowadays half-way to having them on the run. This is a big change for a not very considerable country to have brought about in a phlegmatic race. But there it is : the history of their Empire has accustomed the English to awkward situations and no doubt they will become accustomed to this.

In the meanwhile English visitors, such as the architects now in Dublin for the Conference, must find Ireland difficult—difficult because so many of the ordinary Englishman's mental pictures of Ireland have been falsified, and difficult because the chronology of Irish development, in livelihood or architecture, is quite different from that of the English.

Englishmen, even English architects, cannot escape from the English nineteenth century. For four generations making money, efficiency in business, and the exploitation of industrial resources, have dominated the institutions and activities of England. Ireland skipped those generations. By doing so it has both gained and lost.

To the visitors the gains will be most obvious. The Ireland of 1830 has remained unsubmerged by industrialism. In Dublin and in the country houses there are still preserved the most civilized arrangement of living which the British have ever reached. One says British advisedly. All the Georgian and early Victorian work in Dublin is an interpretation and not a copy of its prototype. But all was influenced, if not paid for, by that Anglo-Irish who gave attention to the art of living gracefully even if the source of their incomes is now considered reprehensible.

Nor was this high standard confined to houses and official buildings. The same care was applied to much of the countryside. The eighteenth-century interest in landscape was applied to a country which is never abrupt and to an atmosphere which is never clear, and subsidiary buildings in roughcast or stucco are placed in it in a way which now seems wonderful to the English. In Ireland even Victorianism never became shoddy. There is space to see buildings, materials can be distinguished from one another. Pre-war Irish building was sometimes eccentric, but it never lacked character.

After seeing these things and sighing over them the English architects will wonder what is going to happen next.

Ireland has now been standing on her own feet for nearly twenty years, and controls, amongst other things, the use of her own countryside. Industry, unemployed, foreign markets—all the worries of the English have now crossed the Irish Sea. Ireland now confronts development.

There are good and bad signs of what will happen next. There is plenty of space ; the development which stopped in 1830 can begin again in the 1930's with electricity and the motor-car on top and none of the mess which makes clearing up England next door to impossible.

So far the simpler things have been well done. The roads are efficient (including the best-lighted half-mile in the British Isles near Dun Laoghaire) and the single-floored houses which are now being built in rural areas are unpretentiously good. Electricity appears to be available in rural Ireland to a far greater degree than in England.

It is in town planning and the design of large modern buildings that visitors may feel misgivings. Ribbon development now menaces the outskirts of Dublin ; and too many new buildings have a hurried look which is out of place in the Irish landscape. A neo-Hibernian stylism, which was perhaps a natural result of the new independence of the country, seems, fortunately, on the decrease. But no more coherent expression has yet appeared.

English visitors will hope that these faults are temporary. When the damage was done to English towns, the need for forethought in building development was not recognized. Now it *is* recognized that forethought in building development of every kind is a necessity—if a country is to be fit to live in. Ireland has the benefit of this discovery without the disadvantage of the experience which led to it. Will she make use of it ?

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NOTES & TOPICS

DUBLIN

I HAVE been allowed to read Mr. Betjeman's article on Dublin in this issue. I might have known how thorough and accurate his summary of Dublin's architectural beauties would be. Though an old resident in Dublin I can add little to it, and can indeed imagine no better guide for the visitor to carry about with him.

*

To evoke the atmosphere of Dublin, which is much of its charm, is a particularly hard thing to do. James Joyce has tried; but his Dublin, though authentic, is only a fragment. The Abbey Theatre realistic drama misses it by a mile. It is partly architectural, partly climatic—Dublin's luminous weather is unique—and quite indefinable.

*

Some of Dublin's more obvious charm is due to its being just the right size. You can easily get out of it. By taking a ten-minutes' ride in a tram you are in the foothills of the Wicklow Mountains—though Dubliners seldom do. The hills are always empty. Sometimes they seem to come so near as to close the vista of a central city street.

*

One recommendation I would make to visitors: cross from Liverpool—not because the boats are more comfortable, but because you arrive almost in the middle of Dublin instead of away in Kingstown. There are very few capital cities (Leningrad is one) where you can land in their heart straight from the sea. You sail in the early morning into Dublin Bay, one of the most beautiful in the world, and thence right up the Liffey to disembark on the North Wall only a little way below the Custom House.

*

Two additions I feel inclined to make to Mr. Betjeman's recommendations. To see still another perfect piece of Georgian town-planning, visit the terraces of houses along the canal, at the end of Baggot Street, either side of Macartney Bridge and elsewhere; and if (as you should do) you make the expedition to Marino to see Sir William Chambers' Casino, continue past Clontarf to Howth. Howth head is the lump of rock that forms the north point of the crescent of Dublin Bay. On the far side is Howth Harbour, a charming, small, nautical place. It was constructed by Sir John Rennie, and improved after Rennie's death in 1821 by Telford, as it was intended to be the new port for the Holyhead packet; but the harbour would silt up, and the service was soon discontinued and transferred to Kingstown. Like many Irish institutions, Howth Harbour is most beautiful in gentle decay.

FIGURES AND

Three reporters and 91 members—including three women—attended the R.I.B.A. on Monday to hear the results of the annual elections. This figure is probably inaccurate. I made the count myself.

. . . MORE FIGURES

The total number of voting papers received was 2,621: Fellows, 632; Associates, 1,399; and Licentiates 590. Of Fellows' papers 110, of Associates 38, and of the Licentiates 15 were invalid. A total of 163..

RESULTS

Mr. Edwin Stanley Hall is the unopposed successor to Mr. Goodhart-Rendel. Mr. Easton recently took over the Presidency of the A.A. Mr. Robertson is at present the only non-Presidential member of the team. The other results are given elsewhere; salaried architects won four of the seven seats in the Fellow class; one (out of three) in the Associate; and the only seat in the Licentiate class.

HANDBOOK NO. 5

This famous document has now made its appearance.* In 1935 a committee of architects and engineers was set up to advise the Government on problems relating to A.R.P. and buildings.

*

Amongst other work the committee prepared a report on structural A.R.P. and submitted it to the Home Office. For three years this report, pursued by questions in the Commons, came near publication and then disappeared again in a very mysterious way. But here it is at last.

*

It is not light reading—indeed, for many architects its formulæ may make it extremely formidable. The opening chapters describe the effects of various types of bombs with great fullness, although in view of the present "blast-proof" shelter policy, these are of largely theoretical interest as regards executing that policy. For making a case for stronger shelters in certain places, however, they are obviously of first importance.

*

Later chapters deal with sizes of shelters and entrances, ventilation, suggestions for new buildings and suggestions for existing buildings.

*

The Handbook has an air of realism about it which

* A.R.P. Dept. Handbook No. 5. *Structural Defence.* H.M.S.O. Price 2s.

some previous publications lacked ; for instance, it makes no bones about high-explosive being the real danger.

WORLD'S FAIR

I don't know if the photographs which illustrated Mr. Gloag's article (in last week's JOURNAL) on the World's Fair are at all representative from an architectural point of view. If so, his statement that the Fair is the best he has ever seen, better than Glasgow, Stockholm, Brussels or Paris, is astonishing.

*

Bigger, certainly; more ingenious, perhaps ; but surely not so well designed ? There seems to be a few distinguished buildings, mostly the foreign pavilions, but the rest appear to be oppressively modernistic, and hopelessly out of scale, a series of rounded shapes as soft and unformed as the face of a young novelist.

*

Nor are they helped by the slickly flowing fins which American designers affectionately apply to everything from typewriters to ferryboats, and which have by the frequency and in consequence of their use become by now meaningless. The sculpture illustrated is second-rate, and there seems none of the gay informality of Paris, nor the light-hearted precision of Stockholm and Zürich. I am judging, however, from photographs. Mr. Gloag has been to the Fair (or says he has). He has seen Democracity and the Aquacade. Possibly he has talked even with Mr. Grover Whalen or Norman-Transitional-Decorated Bel Geddes. " Here's smartness indeed," as Keats is reported to have said on drinking his first glass of spirits.

FUTURAMA

Smash bit of the Fair so far is the General Motors exhibit : " Futurama." This is a magnificently detailed model of America in 1960, covering 35,700 sq. ft. and taking 15 minutes to view from moving armchairs. Mr. Gloag, so far as I can remember, omitted to describe it in his article last week.

*

Seated in perfect comfort, and with an unseen individual guide describing the scenes in front of you—conversationally through a miniature loud-speaker at your ear—you glide past the enlivened terrains and rehabilitated cities of 1960. By some uncanny synchronization of sound and movement, your neighbour is being told about *his* bit while you are being told about *yours*.

*

Roads, as might be expected, are given emphasis in all that you see. But in every scene, so far as I can tell from the excellent photographs of them in *Life*, there seems to be an imaginative and not quite impossible realization of our present frustrated aims in regional planning.*

*

And having got this inspiring bird's-eye view of progress, you step down from your chair and, passing through a double door, behold ! . . . you are actually in a life-size street† of Mr. Geddes' model of 1960, with a life-size cinema and life-size General Motors.

*

Fantastic ? Over a million have paid to see it already. . . . Don't let's talk, yet awhile, of architectural publicity and public relations.

* Master planner, the Bel Geddes.
† Illustrated last week.

THE BUILDING SOCIETIES BILL

The Government's little contribution to the problem of jerrybuilding, which is known as the Building Societies (No. 2) Bill (Miss Ellen Wilkinson having got in first) is proceeding on its way. As the Committee stage takes place " upstairs," it is getting less than its due measure of publicity.

*

This is a pity, for there is some entertainment to be obtained from watching the Government's endeavours to conceal, beneath the Parliamentary draftsman's sound and fury, its belief that all will be well once the societies have been relieved of their anxiety as to the legality of the " builders' pool," on which Mrs. Borders so unkindly cast some doubt.

*

In resisting, one by one, the amendments moved by Miss Wilkinson and others who have tried to get some protection for the house-purchaser, the Government has not really been helped by those building society spokesmen —on both sides of the Committee—who protest at the " indignity " of having to contract out of the only warranty which the Bill puts upon societies—that the purchase price is reasonable.

*

It was exhilarating to hear the learned Solicitor-General explaining that the " whole structure " of clause 4, which the draftsman had entitled " Provisions as to warranties by societies," made it plain that there was to be no warranty, but that if you didn't take the appropriate steps, you would nevertheless be caught up in a warranty.

*

After the building society supporters—and none more eloquently than those on the Labour benches—had agreed that the " small man " should be protected, they have been quick to add that this is not the occasion on which anything can be done about it, and that the responsibility is certainly not theirs. And, with a pious reference to the National Housebuilders' Registration Council, there's another problem solved.

GRIM PROSPECT

My misgivings about the future of riverside pubs are apparently shared by a columnist in a national daily. More significant is an invitation which has arrived inviting me to join a boatload of socialites who intend to visit the pub mentioned in these notes last week. I have declined, with a thousand apologies.

ASTRAGAL

CIVIL DEFENCE

The JOURNAL *will publish during the next few weeks a Supplement to Civil Defence 1 and 2 (June 1 and 8 issues) in which Messrs. Samuely and Hamann will review the contents of Handbook No. 5, " Structural Defence," as well as any modifications in the Civil Defence Bill between the Committee Stage and its passing into law.*

NEWS

POINTS FROM THIS ISSUE

BUILDING INDUSTRIES NATIONAL COUNCIL

The Council has appointed a panel under the Chairmanship of Mr. H. J. Holloway (of Messrs. Holloway Brothers), fully representative of all sections of the building group of industries and local authorities, to prepare a Code of Practice governing the construction of reinforced concrete buildings. The panel comprises :—Mr. R. V. Chate, M.INST.C.E., Mr. G. P. Clingan, F.I.A.S., A.M.I.STRUCT.E.§ Colonel F. Falkner, C.S.I., O.B.E., Mr. H. Halliday, F.C.I.S., Major V. Lefebure, Mr. H. E. Steinberg, M.INST.C.E., Mr. A. H. Telling, Mr. C. Roland Woods, M.B.E., LL.B.

The Council feels that the publication of such a Code, applicable throughout the country, will meet a long-felt need in the industry, and will be of particular utility in the provinces.

The Code will largely be based on requirements in London and the work of the Building Research Station, and will incorporate the relevant British Standard Specifications. It will, in due course, be published in the Council's series of national Codes of Practice, of which those already issued relate to the installation of lifts and escalators, roof tiling with plain tiles, and the laying of magnesium oxychloride flooring.

ROME SCHOLARSHIP

The designs submitted in the final competition for the Rome Scholarship in Architecture will be on exhibition at the R.I.B.A., 66 Portland Place, London, W.1, between the hours of 10 a.m. and 8 p.m. (Saturday, 10 a.m. and 5 p.m.) from July 20 to 28, 1939, inclusive.

This year the subject for the competition was "A National Aeronautical Club." Fourteen students, from the following schools, were admitted to the competition : School of Architecture, Edinburgh College of Art ; Leeds School of Architecture, Leeds College of Art ; Liverpool School of Architecture, University of Liverpool ; School of Architecture, Architectural Association, London ; Bartlett School of Architecture, University of London ; School of Architecture, Victoria University, Manchester ; School of Architecture, King's College, University of Durham, Newcastle-upon-Tyne ; and School of Architecture, Polytechnic, Regent Street, London.

CLEANING OF BUILDINGS

Further successful trials have been made with a new fine spray process for cleaning buildings, states the annual report of the Building Research Board for 1938 (H.M. Stationery Office, price 3s. 6d.). It has been employed, for example, in cleaning the screen of the Admiralty in Whitehall and the Central Telegraph Office. The report continues :—

"The advantages claimed for the spray method are that carvings can be completely cleaned, however intricate the design, that delicate surfaces can be cleaned without causing the slightest damage, and that the work is so easy as to avoid any temptation to use alkaline detergents or other harmful chemicals for reducing the labour involved.

"There are disadvantages. Local authorities raise objection if water is allowed to run over the pavements in busy thoroughfares : there is some risk of spoiling internal decorations through water penetration. Simple precautions can be taken to minimise these inconveniences. Unlike steam-cleaning or hand-scrubbing with water, the method would doubtless be awkward to operate from cradles ; scaffolding is more convenient.

"Certain brown stains, not peculiar to this process, due to the effect of tars, which developed particularly on the Admiralty Screen, disappear in time."

CORRECTION

In last week's issue of the JOURNAL the British Pavilion at the New York World's Fair was attributed to Stanley Hall, John Easton, Howard Robertson and Harold Barrett. This is not accurate. The British Pavilion was designed by Stanley Hall & Easton and Robertson and Harry Barrett was the supervisor of construction.

THE ARCHITECTS' DIARY

Thursday, June 22

R.I.B.A., 66 *Portland Place, W.1. Exhibition of the collection of Architectural Drawings and Water-colours by John Sell Cotman, bequeathed to the R.I.B.A. by the late Mr. Sidney Kitson, F.R.I.B.A.* 10 *a.m. to* 8 *p.m. (Saturdays* 10–5). *Until June* 28. *Also, Conference in Dublin. See page* 1073.

HOUSING CENTRE, 13 *Suffolk Street, S.W.1. An Exhibition of Aerial Photographs. (Good and Bad Planning, Preservation and Despoliation, Survey Work, etc) Until June* 24.

INSTITUTION OF ELECTRICAL ENGINEERS. *Summer Meeting at the North-West Centre, Midland Hotel, Manchester Until June* 23.

SCHOOL OF PLANNING AND RESEARCH FOR NATIONAL DEVELOPMENT, 7 *Bedford Square, W.C. Open Forum Meeting. "Our National Characteristics." By J. M. Blackburn.* 8.30 *p.m.*

INSTITUTE OF LANDSCAPE ARCHITECTS. *At 66 Portland Place, W.1. Exhibition : "Garden and Landscape." Until July* 1. 10 *a.m. to* 8 *p.m. (Saturday,* 10 *a.m. to* 5 *p.m.).*

Saturday, June 24

DESIGN AND INDUSTRIES ASSOCIATION. *Visit to Sweden. Until July* 7.

Tuesday, June 27

INSTITUTION OF CIVIL ENGINEERS. *Gt. George Street, S.W.1. "Air Raid Precautions : the Work of the Military Engineer in War." By Brigadier C. A. Bird.* 6 *p.m.*

HOUSING CENTRE. *Luncheon. "Urban Development : Cottages or Flats?" By Elizabeth Denby.* 1 *p.m.*

LONDON SOCIETY. *Visit to the Institut Français, Queensberry Place, S.W.7.* 3 *p.m.*

Wednesday, June 28

HOUSING CENTRE. *An Exhibition specially designed to be of interest to School Children visiting the Centre. Until July* 29.

NEWS IN BRIEF

● The Department of Scientific and Industrial Research has just issued a booklet (H.M. Stationery Office, price 6d.) entitled "Strength Tests of Structural Timbers. Part 4. The Development of a Minimum Structural Grade for Redwood."

● The Architectural Association's excursion this year will be to Switzerland for thirteen days, from Saturday, July 22, until Thursday, August 3. The cost, including rail, coach and steamer fares, hotel accommodation, meals on train, etc., will be about £22 10s. Full details of the excursion are obtainable from Mr. H. J. W. Alexander, Secretary, A.A., 36 Bedford Square, W.C.

● The annual exhibition of the work of students of the Liverpool School of Architecture is to be opened at the Walker Art Gallery, Liverpool, on Friday, June 30, by Dr. G. S. Gordon. The exhibition will be open to the public from July 1 to 22, between the hours of 10 a.m. to 6 p.m. (Sundays, 2 p.m. to 5 p.m.).

● Mr. Robert W. Paterson, A.R.I.B.A., informs us that since March, 1939, he has been in private practice on his own account and in his own name solely at Royal Chambers, 45A The Promenade, Cheltenham, Glos. Tel. No. 4197.

● In a communication sent to local authorities the Minister of Health, Mr. Walter Elliot, explains that it will be their duty in the event of war to furnish returns giving particulars of property in their area which has been damaged by enemy action. The return is required in connection with claims for compensation for war damage and in consideration of questions of emergency repairs to housing accommodation and other essential buildings.

● Mr. W. B. Rolfe, L.R.I.B.A., has taken into partnership Mr. C. A. Crozier Cole, A.R.I.B.A., and the practice will be continued at the present under the style of Rolfe and Crozier Cole, 1 Belmont, Bath, Somerset. Tel. : Bath 3004.

● The Seventeenth International Congress for Housing and Town Planning is to be held at Stockholm from July 8–15. The official travel agents for the Congress are : The American Express Co., 6 Haymarket, S.W.1, from whom full details of routes, etc., are obtainable.

OBITUARY

The death took place on June 16 at Sambrook, Shropshire, of Sir George Washington Browne, R.S.A., LL.D.EDIN., HON.R.A., at the age of eighty-five. He was the first architect to become President of the Royal Scottish Academy, an office he held from 1924 to 1933.

Sir George was born in Glasgow in 1853 and received his early training in that city. His architectural education was acquired at the Royal Academy Schools, London ; he won, in 1878, the R.I.B.A. Pugin Scholarship. Returning to Scotland, he entered into partnership with Dr. Rowland Anderson, afterwards joining Mr. J. M. Dick Peddie, and the firm erected many banks and insurance buildings. The Edinburgh Public Library was the work of Sir George alone, as was also the Sick Children's Hospital, Edinburgh, erected about 1892. He designed the Scottish National Memorial to King Edward VII at Holyrood Palace, unveiled by King George V in 1922, and several other war memorials in Scotland. In the competition for the new St. Paul's Bridge over the Thames his design was placed first. In connection with that work he was appointed principal architect, but the outbreak of war postponed the carrying out of the scheme. Sir George was elected an Associate of the Royal Scottish Academy in 1892 and was raised to the full membership in 1902. He became a Fellow of the R.I.B.A. in 1924 and retired from practice in 1934.

He was also the author of several works, including "The Planning of Public Libraries" and "Pugin Studentship Drawings."

COMPETITION NEWS

DURESCO COMPETITION

The Silicate Paint Co. invite students, apprentices and operatives of the painting and decorating trades and architectural students to enter for a competition for a colour scheme for a study, bedroom or living room. Prizes offered are : 1st, £6 6s. ; 2nd, £4 4s. ; 3rd, £3 3s. ; 4th, £2 2s. ; 5th, £1 1s. Assessors : Messrs. F. R. Yerbury, Duncan Miller and John Millman. Last date for applications : July 10. Latest date for submission of designs : August 15. Full details of the competition are

obtainable from the Silicate Paint Company, Charlton, S.E.7.

WATFORD FIRE STATION

The competition for a new fire station at Watford has been thrown open to *all* registered architects. Details of this competition were given on page 1024 of last week's issue.

MEN'S CLUB, CWM

Information has now been received from the Secretary of the Cwm Working Men's Club and Institute that the proposed competition for the alterations to the Club has been abandoned.

R.I.B.A.

ELECTIONS

At a general meeting of the Institute held on Monday last, the results of the annual elections to the Council were made public.

Mr. E. Stanley Hall, M.A. (CANTAB.), was elected President.

Below is a list of the new Council :—

Past Presidents : Mr. H. S. Goodhart-Rendel ; Mr. Percy E. Thomas, O.B.E., HON. LL.D. (Cardiff).

Members of Council : Patrick Abercrombie, M.A. (LIVERPOOL) ; Victor Bain (Leeds) ; P. J. Bartlett (Nottingham) ; A. C. Bunch (Warwick) ; C. Cowles-Voysey ; C. Lovett Gill ; Stanley Hamp ; G. Noel Hill (Manchester) ; Charles H. Holden, HON. LITT.D. (MANCHESTER) ; T. Cecil Howitt, D.S.O. (Nottingham) ; L. H. Keay, O.B.E. (Liverpool) ; Edward Maufe, A.R.A., M.A. (OXON) ; J. Nelson Meredith (Bristol) ; Howard M. Robertson, M.C., S.A.D.G. ; C. G. Stillman (Chichester) ; John Swarbrick (Manchester and London) ; E. P. Wheeler ; and G. Grey Wornum.

Associate Members of Council : W. Naseby Adams, DIP.ARCH (LIVPL.) ; Percival C. Blow (St. Albans) ; Wesley Dougill, M.A., B.ARCH. (LVPL.) (Liverpool) ; R. A. Duncan ; W. G. Holford, B.ARCH. (LIVPL.) (Liverpool) ; R. D. Manning ; C. A. Minoprio, M.A., B.ARCH. (LIVPL.) ; Norval R. Paxton, M.C. (Leeds) ; and E. Berry Webber.

Licentiate Members of Council : Stanley A. Heaps, C. B. Parkes (Birmingham) and S. Lunn Whitehouse (Birmingham).

Representatives of Allied Societies in the United Kingdom or the Irish Free State.

(1) *Six Representatives from the Northern Province of England :* S. W. Milburn, M.C. (Northern Architectural Association) ; C. G. Agate (Manchester Society of Architects) ; H. A. Dod, M.A. (LIVPL.) (Liverpool Architectural Society) ; Cecil Leckenby (York and East Yorkshire Architectural Society) ; F. L. Charlton (West Yorkshire Society of Architects) ; W. G. Davies (Sheffield, South Yorkshire and District Society of Architects and Surveyors).

(2) *Five Representatives from the Midland Province of England :* H. G. Wicks, M.C., T.D. (Birmingham and Five Counties Architectural Association) ; A. F. Bryan (Leicester and Leicestershire Society of Architects) ; H. F. Traylen, F.S.A. (Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects) ; A. E. Eberlin, M.C. (Nottingham, Derby and Lincoln Architectural Society) ; T. G. Scott, M.C. (East Anglian Society of Architects).

(3) *Six Representatives from the Southern Province of England :* R. F. Wheatly (Devon and Cornwall Architectural Society) ; C. W. Pike (Wessex Society of Architects) ; E. A. L. Martyn (Berks, Bucks and Oxon Architectural Association) ; A. E. Geens (Hampshire and Isle of Wight Architectural Association) ; H. P. G. Maule, D.S.O., M.C. (Essex, Cambridge and Hertfordshire Society of Architects) ; John L. Denman (South-Eastern Society of Architects).

(4) *Four Representatives of Allied Societies in Scotland* (nominated by the Council of the Royal Incorporation of Architects in Scotland) : J. R. McKay (Edinburgh) ; G. G. McLean, O.B.E. (Glasgow) ; T. F. Maclennan (Edinburgh) ; R. M. Mitchell (Perth).

(5) *One Representative of Allied Societies in Wales* (nominated by the Council of the South Wales Institute of Architects) : C. F. Bates (Newport, Mon.).

(6) *Two Representatives of Allied Societies in Ireland :* Harry Allberry (Royal Institute of the Architects of Ireland) ; J. H. Stevenson (Royal Society of Ulster Architects).

Representatives of Allied Societies in the British Dominions Overseas (nominated by the Council of each of the following) : Royal Architectural Institute of Canada : H. L. Fetherstonhaugh : Representative in the United Kingdom : E. Stanley Hall, M.A. (OXON).

Royal Australian Institute of Architects : A. S. Hook, A.R.C.A. (LOND.) ; Representative in the United Kingdom : Mr. W. H. Ansell, M.C.

New Zealand Institute of Architects : Representative to be nominated ; Representative in the United Kingdom to be nominated.

Institute of South African Architects : R. F. R. Day ; Representative in the United Kingdom : E. Berry Webber.

Indian Institute of Architects : E. C. Henriques, J.P. ; Representative in the United Kingdom : A. J. A. Illingworth.

Representative of the Architectural Association (London) : J. Murray Easton.

Representative of the Association of Architects, Surveyors and Technical Assistants : Roderick C. Fisher.

Chairman of the Board of Architectural Education : Hubert Lidbetter.

Chairman of the R.I.B.A. Registration Committee : T. A. Darcy Braddell.

Chairman of the R.I.B.A. Official Architects' Committee.

Representative of the R.I.B.A. Salaried Members' Committee.

Chairman of the Allied Societies' Conference, Vice-President : C. G. Soutar.

A.B.S. DANCE AT THE R.I.B.A.

The R.I.B.A. Dance Club is to hold a dance in aid of the Architects' Benevolent Society on Friday, June 30, from 9 p.m. to 1 a.m. Already there has been a considerable demand for tickets, and it appears likely that the dance will be an outstanding social event of the year. Tickets are obtainable only through members who, it is hoped, will do their best to support their own charity. It is suggested that a member in every office might undertake to sell tickets ; these are obtainable from Mr. R. W. Robertson at the R.I.B.A., price 10 shillings each, including refreshments. Members are asked to bring parties of friends or, if unable to come themselves, to pass on their tickets to others.

LONDON ARCHITECTURE MEDAL

The London Architecture Bronze Medal for this year has been awarded to Mr. G. Grey Wornum, F.R.I.B.A., for the new Central Depot of the City of Westminster in Gatliff Road. This building garages and services the vehicles of the Highways Department and is the centre for the disposal of Westminster's house refuse. It is a severely simple building of steel and concrete, faced with white bricks and blue tiles.

STUDENTS OF ARCHITECTURE AND THE MILITARY TRAINING ACT

The R.I.B.A. Emergency Panel has been authorised by the Ministry of Labour to make the following statement :—

(1) Full-time students now in Schools of Architecture will be permitted to postpone their liability to be called up for military training until a date not later than one month after the conclusion of their course of study as approved by the school authorities. Any student who wishes to obtain such a postponement should make application on a form to be obtained from the local office of the Ministry of Labour, and will be required to have the form certified by the school authorities, stating :—

(*a*) That he is a full-time student, and

(*b*) The date on which his approved course of study is due to terminate.

The form of application should ordinarily be forwarded to the address given, not later than 14 days after the date of the applicant's registration.

Postponement will only be granted for periods of one year at a time, and application must be made annually for renewal of postponement.

Students in those schools of architecture which provide only for the Intermediate Examination and who, at the conclusion of the present school course desire to proceed to another school for full-time training in preparation for the Final Examination may be granted postponement for the whole period of their full-time training in both schools.

(2) Postponement will also be granted to students entering full time schools of architecture in September or October, 1939, but they will not be required to apply for postponement until they reach the age at which they would become liable to register for training.

(3) Those proceeding to schools of architecture after October, 1939, will not be given permission, otherwise than on grounds of hardship, to postpone their military training.

It is, however, proposed to grant permission to anticipate liability for military training in order to enable men to undergo their military training before proceeding to a full-time school of architecture. Those who intend to become full-time students and who desire to anticipate their military training should apply as early as possible to the local office of the Ministry of Labour on a special form which will be provided. It is recommended that wherever possible an application for anticipation of military training should be supported by a statement from the authority of the school to which the man intends to proceed.

It has been decided that where military training is anticipated, training may not commence before the applicant reaches the age of 17½.

(4) Students in evening schools, part-time schools or preparing themselves privately for their professional examinations may apply for postponement of military training, and such applications will be referred, if necessary, to the Military Training (Hardship) Committees. Applications should be made through the local office of the Ministry of Labour when the age for registering is reached. An application for postponement must be made on the form supplied for the purpose, and should, where possible, be supported by a statement from the school authorities or some other responsible person.

Students in the above class may also apply for permission to anticipate their military training, such application being made in the same way as that for postponement.

EXHIBITIONS

[By D. COSENS]

THE late Sydney Kitson bequeathed a large part of his fine collection of the works of John Sell Cotman to the R.I.B.A., and these, the architectural drawings and watercolours, are on view at the Institute until June 28. Certainly this bequest would have gratified Cotman highly, for his admiration for architects and the Institute was great.

The present exhibition shows one facet only of a painter whose work was very varied in character and quality, but this, the one which is perhaps of greatest interest to architects and the least familiar to the general public, is superbly illustrated.

Cotman's work is of necessity uneven. Temperamentally erratic, forced by poverty and lack of appreciation into teaching and developing a formula for his pupils to copy, he is at times dull and uninspired ; at others he comes near, but I think never equals, Crome, his great contemporary of the Norwich school. Whether it is in his paintings or his drawings his fondness for charm and the picturesque, and his unwillingness to sacrifice either, leaves his

work, so full of promise, a little too finished and expressionless. This pursuit of pictorial qualities and its weakness runs through all Cotman's work—rarely, if ever, can he forget it. Yet all is so perfectly accomplished that one is almost deceived.

This exhibition at the R.I.B.A. shows both the best, and in sheer technical perfection the dullest, of the work of this very fine draughtsman. Those who have time to look through the books of etchings will find some pleasant things there, particularly in "Liber Studiorum," where some of his small landscapes and studies (17, 18, or 19, for instance) have a vitality that is lacking in a great deal of his work. As a draughtsman he can be magnificent. "Near Whitby" (24), "Salle House, Norfolk" (43), "Howland Church" (3), "Ruins behind the Free School, Thetford" (45), are beautiful drawings. "Plaistow Place, Kent" (4), with its too studious use of watercolour, has all the carefully arranged charm that is Cotman's limitation.

On the whole this exhibition, interesting as it is, tends to confirm the view that Cotman was a brilliant draughtsman, an arranger of dramatic and picturesque incidents with a clever understanding of the use of broad flat washes of colour, rather than the great neglected artist so extravagantly claimed by many of his admirers.

The catalogue to the exhibition contains an excellent foreword to both Cotman's life and work, and to the Kitson Collection.

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The Lefèvre exhibition of French painting is of a remarkably high standard. The highest lights are Cézanne's superb "Montagne Sainte Victoire," and Seurat's "Port en Bessin." From either of these pretty well everything about painting and composition might be learnt. Both are infinitely painstaking researches, and diametrically opposite to the direct, intuitive painting of Van Gogh. The surprises of this collection are, first, Van Gogh's portrait of a remarkably unattractive infant, in which he insists, with his usual complete certainty, on what he sees, forcing one into immediate agreement with his interpretation. Secondly, for those to whom Corot means the misty, vaporous paintings of his later years, his "Port de Rouen." There is also his very beautiful small canvas "Quai de Treport," painted at the height of his powers, a very fine Courbet, "Rochers au Bord de la Mere," Fantin Latour's "Marguerites," an early and significant Pissarro, and several magnificent Renoirs, of which "Coco et Gabrielle" is particularly charming. Altogether forty-one paintings, and only one, Gauguin's "La Montagne Sacrée" would one wish elsewhere. Compare the inherent paganism of Renoir, descendant of Rubens, and Delacroix, with this would-be-pagan gone native.

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Architectural Drawings and Watercolours by John Sell Cotman, R.I.B.A. Until June 28.

Milestones in French Painting. Lefèvre Galleries, 1A King Street, St. James's. Until June 24.

LETTERS

A. R. P.

SIR,—In the preparation of our notes on the Government's policy for A.R.P. structures in the JOURNAL for June 1 and 8, there were a few points of which we would have liked to treat more fully, but which, for considerations of space and because they were more of academic than of practical interest, had to be given in a somewhat condensed form.

In his letter in the June 8 issue, Mr. Hodgson has drawn attention to two of these points, and we are pleased to have this opportunity of enlarging upon them, and particularly upon the second.

In regard to the first matter, namely, that of the velocity of falling debris, it would seem that Mr. Hodgson has read into the text something which was not, in fact, intended. It is appreciated that there are many ways in which a building may collapse, whether that collapse be partial or entire. However, the questions whether collapse starts in the lower storeys or whether it is caused, for example, by a piece of dislodged masonry penetrating from the upper floors, or whether such a falling mass would actually cause the collapse of the building at all, have no bearing on the argument put forward in paragraph 7 of the comments on the Code. The aim there was merely to show that the effects of falling debris inside a building are best resisted by having the roof of a shelter near to the soffit of a floor above rather than at such a distance below that recovery of the kinetic energy dissipated in penetrating the floor can take place by the increase in velocity of the then freely falling material.

In this connection it might be added that the velocity at any height of a falling body has, for simplicity, been shown in Fig. 24 (p. 930) as obeying a "straight line" formula, whereas in actual fact (ignoring the resistance of the air) the curve of the velocity is a parabola of which the formula is $v=\sqrt{2gh}$, "g" being the acceleration due to gravity and "h" being the height of the fall. If this more correct formula is applied, it will be found that yet greater weight is given to the argument advanced.

The second point, intensity of debris loading, is the more important, and we are grateful to Mr. Hodgson for his comments on this problem.

In an ordinary structure, that is to say, a structure not specially designed or strengthened to afford a certain degree of protection against the effects of bombs, there is a very definite need for observing a certain factor of safety; and for reliable materials which are consistent in their behaviour, its value is usually about three or four when measured as the proportion of ultimate to working loads. In practice, however, there are frequently other actions than that of the ultimate collapse which must be regarded as "failure," and if the factor of safety is based on the loads causing that "failure" it is found to be in the order of only $1\frac{1}{2}$ or 2.

For instance, if some materials are stressed beyond a certain limit (well below the ultimate stress of the materials) excess deformation may take place, causing as a consequence the objectionable conditions of sagging, cracking, jamming of windows and doors and permitting of the entry of moisture. Further, there must be adequate resistance to repeated accidental overloading of the structure.

Obviously, if a portion of a building is designed to resist the collapse of the superstructure, the secondary effects of excess deflection, cracking, etc., are of little significance in that portion, provided, of course, that they are in no way dangerous to the occupants. Moreover, repeated overloading cannot take place, for the superstructure can collapse only once.

All these considerations justify the lowering of the factor of safety to such limits as those generally accepted for special loadings on other types of structures, as, for instance, against maximum overturning moments, etc., and thus it will be seen that stresses even up to twice the normal values might be justified.

The factor of safety can be lowered in two ways:—

(i) by increasing the permitted stresses or

(ii) by decreasing the design loads.

In order to have been scientifically correct, the Code perhaps should have made it clear that a reduced factor of safety might be assumed, and accordingly have increased the debris loadings to their probable actual values and at the same time have given the increased working stresses. Instead, what has been done is that normal working stresses have been retained and that loadings, which might be considered to be lower than those actually likely to apply in many cases, have been set out to be used in conjunction with the normal stresses. This method of dealing with the problem although, as shown above, not scientifically correct, has certain practical advantages.

When these points are realized, it will be agreed generally that the loadings suggested in the Code are reasonable, particularly as the results will be the same as those for debris loads as high as 800 lb. per sq. ft. in certain cases (and 1,200 lb. per sq. ft. for the conditions which we suggested in paragraph 9 on page 933).

It would be definitely unreasonable, having once adopted the method of approach suggested in the Code, to make any further reductions in the strengths of the members, and for that reason special attention has been drawn to the matter where it seemed to be necessary, as for instance in regard to the lateral stiffening of strengthening beams in paragraph 27, page 970, and to strutting in paragraph 27, page 975, and in paragraph A.10 on page 990. It must be borne in mind that allowance is already made in the suggested loadings, and that no further reductions should be made in the construction which, therefore, should be carried out to a standard at least as high as that adopted in normal structures.

It is understood that further tests have already been carried out by the A.R.P. Department, and we have been informed that the results of those tests have confirmed the values given in the Code; the actual test results, however, have not been published.

FELIX S. SAMUELY
CONRAD W. HAMANN

WORKING DETAILS : 757

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

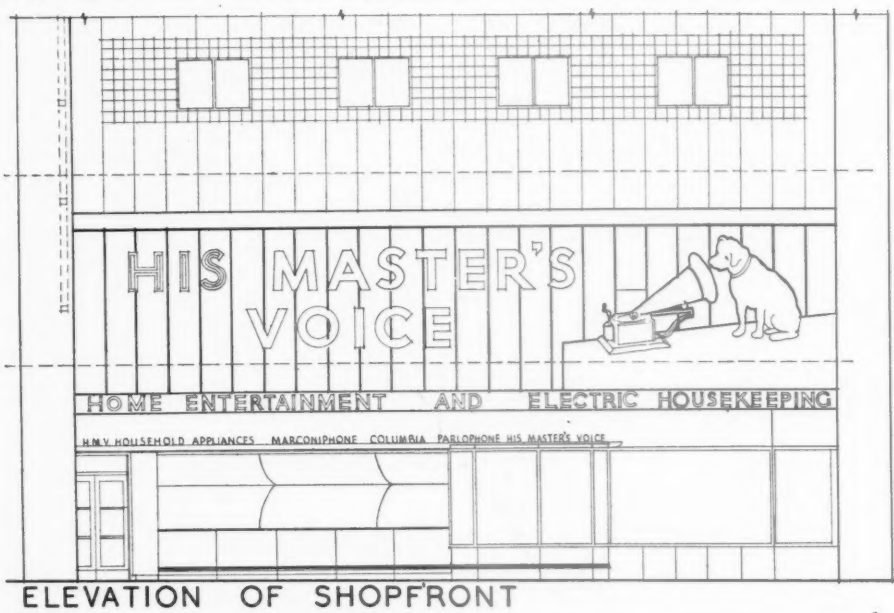
The external wall to the main elevation is of reinforced concrete faced with black granite, long stretches of glass bricks interspaced with small metal windows being used to insulate the building from external noise.

On the ground floor, the showcases are set back at a splayed angle from the main façade, allowing easy circulation to the entrance. There is also an octagonal island showcase. At first floor level on the main elevation a large publicity sign, outlined in neon, is fixed to a curved fascia of lead coated sheet steel. The fascia, which forms a screen to the first floor television demonstration studios, is lit from below by concealed trough lighting.

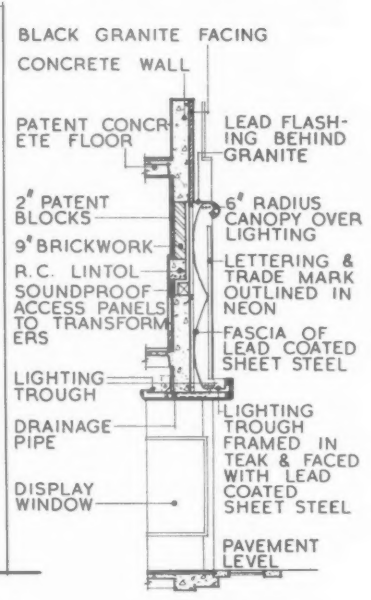
Details are shown overleaf.

WORKING DETAILS : 758

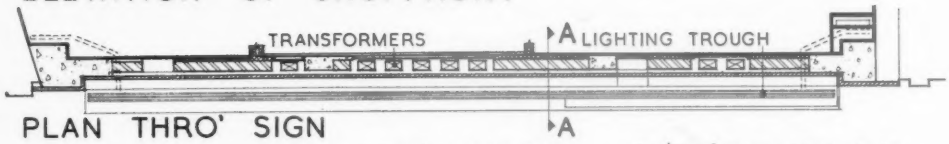
SHOPFRONT • H.M.V. SHOWROOMS, OXFORD STREET, W.1. • JOSEPH EMBERTON



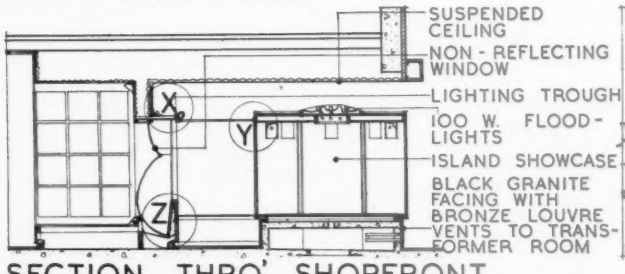
ELEVATION OF SHOPFRONT



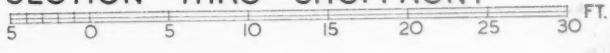
SECTION A-A

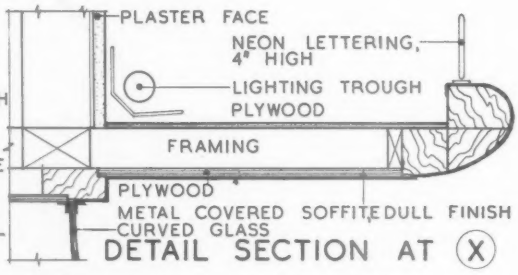


PLAN THRO' SIGN

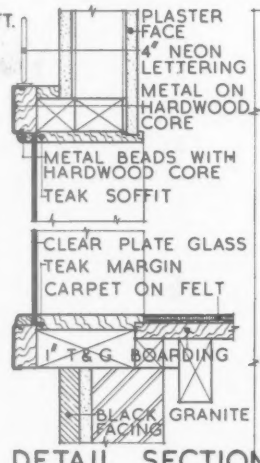


SECTION THRO' SHOPFRONT

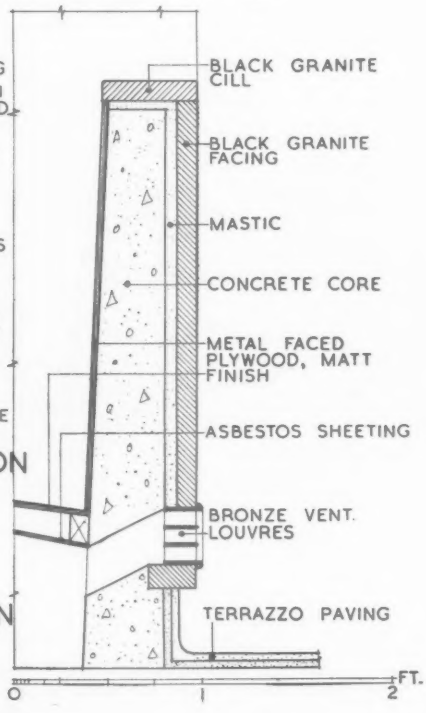




DETAIL SECTION AT (X)



DETAIL SECTION AT (Y)



DETAIL SECTION AT (Z)

KEY PLAN

Details of the shopfront illustrated overleaf.

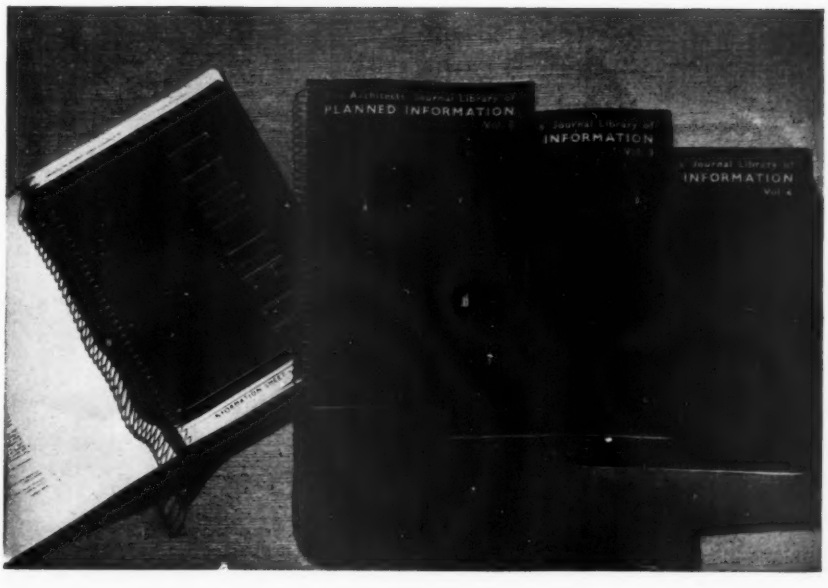
The Architects' Journal Library of Planned Information

INFORMATION SHEET
SUPPLEMENT

SHEETS IN THIS ISSUE

739 Plan Elements

740 Timber Construction



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701 : Tile Hanging
702 (420 revised) : Fixing Insulating Board
703 : Sheet Metals
704 : Plan Elements
705 : Metal Work
706 : Plan Elements
707 : Furniture Layout
708 : Plan Elements
709 : Flue Construction
710 : Natural Lighting
711 : Glass and Glazing
712 (109 revised) : Quarry Tiles
713 : Glass and Glazing
714 : Metalwork
715 (106 revised) : Hot Water Radiators (Pressed Steel)
716 : Furniture Layout
717 : Metalwork
718 : Flooring Materials
719 : Plumbing
720 : Water Heating
721 : Wall Facing Materials and Wallboards
722 : Roofing
723 : Metalwork
724 : Timber Construction
725 : Sanitary Fittings
726 : Metalwork
727 : Waterproof Jointing and Bedding
728 : Timber Construction
729 : Steelwork
730 : Wall Facing Materials and Wallboards
731 : Metalwork
732 : Concrete Construction
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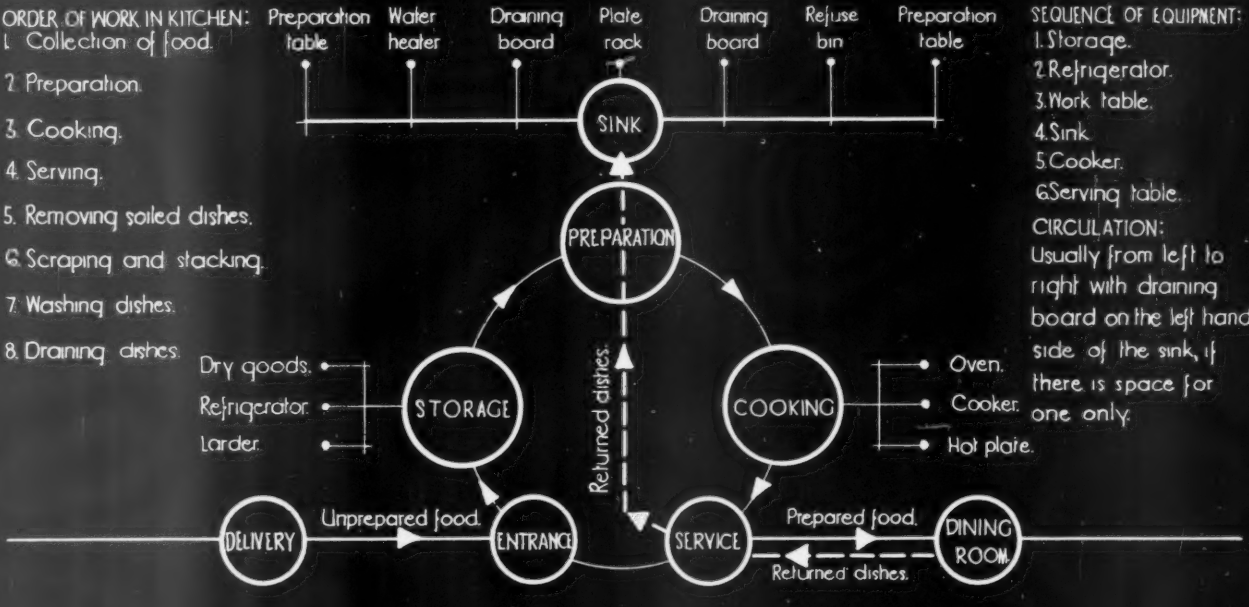
734 : Metalwork
735 : Plumbing
736 : Structural Steelwork
737 : Structural Steelwork
738 : Metalwork

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

DIAGRAMMATIC SCHEDULE OF ELEMENTS OF A TYPICAL DOMESTIC KITCHEN :

ORDER OF WORK IN KITCHEN:
1. Collection of food.
2. Preparation.
3. Cooking.
4. Serving.
5. Removing soiled dishes.
6. Scraping and stacking.
7. Washing dishes.
8. Draining dishes.

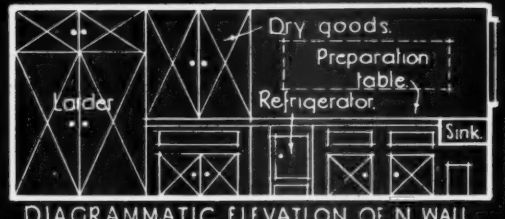


SEQUENCE OF EQUIPMENT:
1. Storage.
2. Refrigerator.
3. Work table.
4. Sink.
5. Cooker.
6. Serving table.

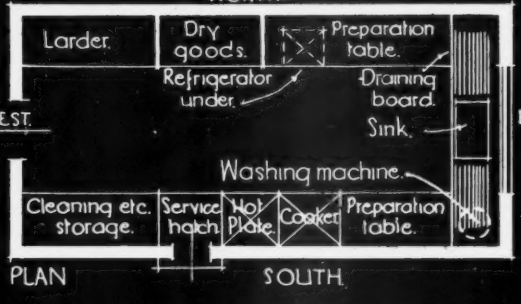
CIRCULATION:
Usually from left to right with draining board on the left hand side of the sink, if there is space for one only.

PLAN AND ELEVATIONS OF A TYPICAL DOMESTIC KITCHEN SHOWING LAYOUT OF UNITS :

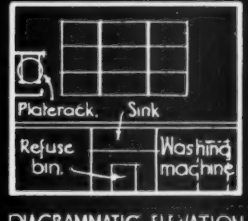
PLANNING PRINCIPLES:
1. Avoid miscellaneous traffic through kitchen work-areas.
2. Non-working areas should be segregated from working areas.
3. Equipment should be organised into work centres.
4. Equip each work centre for storage of utensils etc.
5. The number of doors should be limited to two.
6. Wherever possible continuous work tops should be used to simplify cleaning.
7. U-shaped plan minimizes steps between all centres and concentrates traffic at the open end of the kitchen.



DIAGRAMMATIC ELEVATION OF N. WALL.

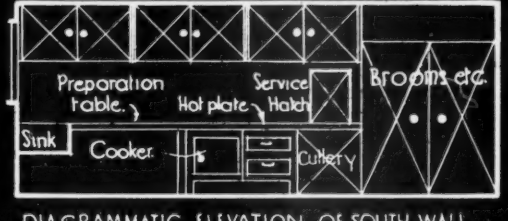


DIAGRAMMATIC ELEVATION OF WEST WALL.



DIAGRAMMATIC ELEVATION OF EAST WALL.

WINDOWS.
Normally the window is over the sink, and where the plan permits, it is desirable to have a window in the north wall over the preparation table.



DIAGRAMMATIC ELEVATION OF SOUTH WALL.

UTENSIL STORAGE
Preparation – Basins for mixed preparation before cooking.
Cooking – Frying pans & broilers etc. heated before adding food.
Service – Service dishes, platters, plates & cutlery etc.

INFORMATION SHEET : ANALYSIS OF PLAN REQUIREMENTS : Nº 4 : DOMESTIC KITCHENS.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1.

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET
• 739 •
PLAN ELEMENTS

Subject : Domestic Kitchens

General :

This Sheet sets out in diagrammatic form the basic elements of the domestic kitchen, their arrangement as work centres, their constituent parts and their proper functions in relationship to each other.

The object of kitchen planning is to arrange the sequence of work centres and the relationship of equipment so that there is the minimum unnecessary circulation in the work of preparation, cooking and serving.

The proper segregation of operations provides the best solution to this problem, and this segregation is achieved by analysing the various operations carried out, and so arranging them that they shall be as self-contained as possible, and efficiently equipped with all the necessary apparatus.

Work Centres :

The diagram on this Sheet indicates a segregation of the work into four sections :

(*a*) Storage.
(*b*) Preparation of food before cooking.
(*c*) Cooking.
(*d*) Service.

This diagram is based on the general assumption of a left-to-right rotation. This is most usually found satisfactory both from the point of view of the relationship of the kitchen plan to the remainder of the building, and for the normal right-handed worker.

General Plan :

A narrow U-shaped plan with a minimum dimension between the preparation surfaces on either side of 4 ft. 6 in. is found to be usually the most satisfactory arrangement, and it is recommended that any excessive width should be avoided. For the small domestic kitchen a centre table is not recommended, and the combination of working tables against the walls and a small sitting area for a maid, if one is employed, is more satisfactory than the use of a centre table in the actual working area.

(A) Storage :

(a) *Larder.*—This should be as near as possible to the service entrance, and should be used entirely for perishable materials. It should not be combined with (b), and should have definite provision for ventilation.

(b) *Dry Store.*—This should be a separate unit, but provision for ventilation need not be considered to the same extent as in the larder.

(c) *Refrigerator.*—This should be situated as near as possible to the preparation table, and it is usually found satisfactory to place it under the table itself.

(d) *Storage of Cutlery, Crockery and Household Goods.*—These utensils should generally be stored as near as possible to the work centre with which they are concerned, and it is therefore desirable to provide storage for the cutlery next the service hatch. The storage of household materials such as soap, brooms, mops and other cleaning equipment should be as far off the normal preparation circulation as possible, and this may be obtained by cupboards near the ceiling in certain instances, and by cupboards on the opposite side of the service circulation to that of the preparation.

(B) Preparation :

The equipment for the cleaning, washing and general initial preparation of food consists of a suitable area of table, draining board and sink. Whenever possible, it is advisable to provide two draining boards in the kitchen plan in order that one may be reserved for the preliminary preparation and the other for later stages. The sink can then act as a separation between the two stages. The second table between the right-hand draining board and the cooker can be reserved for pastry-making and other similar operations.

(C) Cooking :

Ovens, boiling and frying plates, grills, boilers and so forth, may be heated by a variety of fuels, but the service provided is frequently the same. Immediately to the right of the cooking unit a hot-plate and dish warmer is desirable, and this should be next to the service hatch or service entrance to the dining-room.

(D) Service :

The service should be so arranged that it interferes as little as possible with the preparation circulation, and if an additional sink can be provided for washing up this is highly satisfactory. In the smaller type of kitchen, however, it is usually impossible to avoid a certain amount of cross-circulation because of the necessary distance between the service hatch and the sink, and the return flow of dishes to be washed coming from the dining room.

Orientation :

The precise orientation of the kitchen plan will, of course, vary in most instances, but north or east is generally the most satisfactory.

Common Dimensions of Fittings

Ceiling height (min.)	8′ 0″
Door and window height	6′ 8″
Door width	2′ 8″
Stove area	3′ 6″ × 2′ 4″
Refrigerator area	3′ 3″ × 2′ 0″
Sink length (average)	1′ 10″
Draining board lengths (average)	2′ 6″, 3′ 6″
Height of work surface	2′ 9″
Height of work surface for person seated	2′ 1″

Cupboards

Base section—	
Height	2′ 9″
Depth	1′ 10″
Length	1′ 8″, 3′ 2½″, 4′ 9″
Upper section—	
Depth	12½″
Length	1′ 8″, 3′ 2½″, 4′ 9″
Clear height above table top between base and upper section	1′ 3″

Movable Table

Height	2′ 1″
Length	3′ 0″
Depth	1′ 8″

Shelves

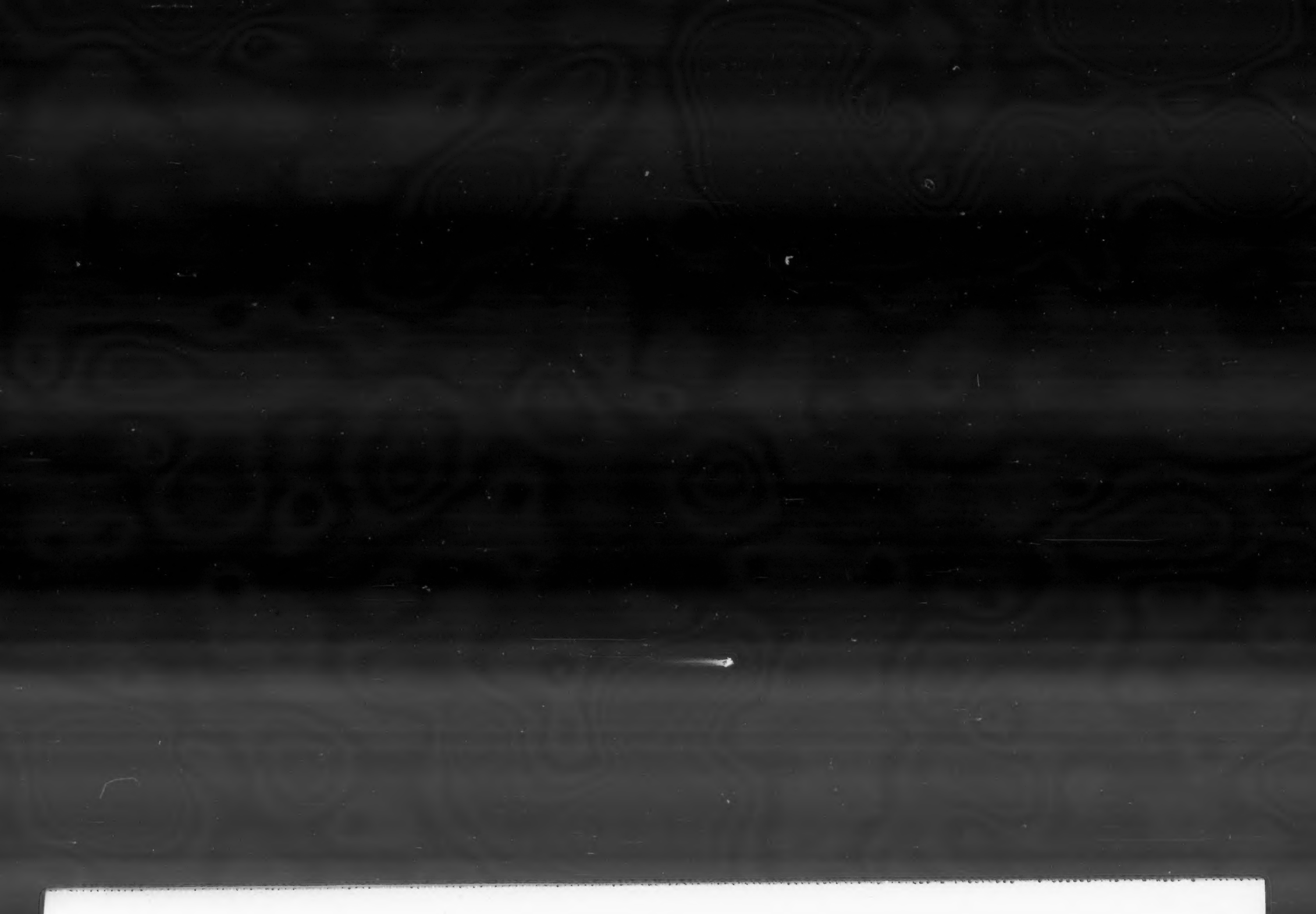
In dish cabinets, depth	1′ 0″
Over sinks and work tables	3″ to 9″

Drawers

Average height overall	4½″
Maximum depth for cutlery	14″

Previous Sheets :

The first three Sheets in this series are Nos. 704 (bedrooms), 706 (petrol-filling stations), and 708 (small shops).



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THE DETERMINATION OF SIZE & SPACING FOR JOISTS, ETC. OF GRADED TIMBERS

The following table & printed clauses are quoted from the L.C.C. regulations for the use of timber & represent the method laid down for determining the size & spacing of joists, etc. of graded timber, if full computations are not made. See also clauses given on the back of this sheet.

(1) The minimum depth of any such timber for any pre-determined breadth and spacing shall be determined in the following manner :—

(*a*) The spacing factor shall be ascertained by dividing the clear spacing by the breadth of the timber.

(*b*) The spacing factor shall be located in the appropriate column of Table IV or Table V, as the case may be, or, if there be no such spacing factor in the Table, the next higher spacing factor in the Table shall be located. In no case shall the spacing and the breadth be such that the spacing factor exceeds the maximum shown in the Table.

(*c*) The length of the timber shall be divided by the number in the column headed "*l*/*d*" in the Table set opposite the appropriate spacing factor.

The dimension so obtained shall be the minimum depth of such timber permitted under this Section of these by-laws.

(2) The maximum clear spacing for any such timber of pre-determined dimensions shall be determined in the following manner :—

(*a*) The length of the timber shall be divided by the depth.

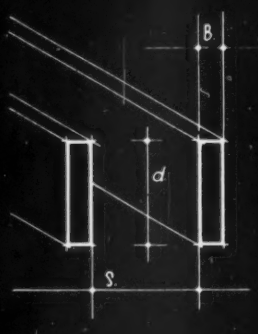
(*b*) The number corresponding with the quotient so obtained under (*a*) shall be located in the column headed "*l*/*d*" in Table IV or Table V as the case may be.

(*c*) The breadth of the timber shall be multiplied by the spacing factor set out opposite such number in the appropriate column of the Table.

The dimension so obtained shall be the maximum clear spacing permitted under this Section of these by-laws.

TABLE V. *Spacing in relation to dimensions of grade* 1,200 *lb. f. timbers supported at both ends.*

l/d.	SPACING FACTORS. (i) Rafters, purlins and ceiling joists.	(ii) Joists to flat roofs.	(iii) Binders to flat roofs.	(iv) Joists and binders to residential floors.	(v) Joists to offices above entrance floor.	(vi) Binders to offices above entrance floor.	(vii) Joists to offices on and below entrance floor and to retail shops and garages for private cars of not more than 2½ tons net weight.	(viii) Binders to offices on and below entrance floor and to retail shops and garages for private cars of not more than 2½ tons net weight.	(ix) Joists and binders to corridors and landings.	(x) Joists to workshops and factories and garages for motor vehicles other than private cars of not more than 2½ tons net weight.	(xi) Binders to workshops and factories and garages for motor vehicles other than private cars of not more than 2½ tons net weight.	(xii) Joists and binders to warehouses, book stores, stationery stores and the like.	*l*/d.
5	...	...	...	...	...	...	...	...	...	...	...	16½	5
6	—	—	—	—	—	—	—	—	27½	19	23½	13½	6
7	—	—	50	—	43	—	—	—	23	16	20	11½	7
8	71½	31½	44	24½	37½	22½	24½	20	14	17½	10	8
9	63	28	39	21½	33	19½	21½	18	12	15	8½	9
10	57	25	35	19½	30	17½	19½	16	11	13½	7½	10
11	51½	22½	31½	17½	27	16	17½	14½	10	12½	7	11
12	47	20½	29	16	24½	14½	16	13	9	11	6	12
13	40	17½	24½	13½	21	12	13½	11	7½	9½	5	13
14	34½	15	21	11½	18	10½	11½	9½	6	8	4	14
15	29½	12½	18	9½	15½	9	9½	8	5½	6½	3½	15
16	26	11	15½	8½	13½	7½	8½	7	4½	...	...	16
17	23	9½	14	7½	11½	6½	7½	6	4	...	...	17
18	20	8½	12	6½	10	5½	—	5	—	...	...	18
19	16½	7	10	5	8½	4½	—	4	—	...	...	19
20	14½	6	8½	4½	7	4	—	—	—	...	...	20
21	12	5	7	...	6	...	...	...	...	...	...	21
22	10½	4	6	...	—	...	...	...	...	...	...	22
23	9	—	5	...	—	...	...	...	...	...	...	23
24	7½	—	4½	...	—	...	...	...	...	...	...	24
25	6½	—	3½	...	—	...	...	...	...	...	...	25
26	6	...	...	...	...	...	...	...	...	...	...	26
27	5	...	...	...	...	...	...	...	...	...	...	27
28	4½	...	...	...	...	...	...	...	...	...	...	28
29	4	...	...	...	...	...	...	...	...	...	...	29



Given thickness (B) & spacing (S) to find the minimum permissible depth :

1. Calculate the spacing factor = S/B
2. Locate this factor in the appropriate column in the table
3. Locate the l/d figure opposite this factor
4. Minimum permissible depth = $\frac{\text{Length}}{\text{l/d figure located as above}}$

Given thickness (B) & depth (d) to find the maximum permissible spacing :

1. Divide length by depth l/d.
2. Locate this figure in the l/d column.
3. Locate the spacing factor opposite in the appropriate column.
4. Maximum permissible spacing = B × spacing factor located above.

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INFORMATION SHEET

• 740 •

TIMBER CONSTRUCTION

Subject : The determination of size or spacing of joists, etc. of graded timbers.

The table and printed matter on this Sheet, and the quotations given below are taken from the *by-laws made by the London County Council in pursuance of the London Building Act (Amendment) Act, 1935, for the use of timber in the construction and conversion of buildings*, which came into force in 1938 and to which reference should be made for the full text.

The by-laws are in four sections and a schedule.

SECTION I.—Requirements for all timbers. This section deals mainly with the application of the by-laws, quality of timber, minimum thickness, and joints.

SECTION II.—Rules for calculations when the sizes and spacing of timbers are not determined under section III. This section sets out the loads which must be allowed and the maximum stresses which are permitted when full computations are made, and is given on Sheet No. 724.

SECTION III.—Rules for the determination of the size and spacing of timbers when loads and stresses are not calculated under section II. This section, the first part of which is given on Sheet No. 728, sets out methods of determining sizes and spacing without full calculations of stresses.

SECTION IV.—General. This section deals mainly with notices and penalties and the duties of the district surveyor, and is quoted in full below.

SCHEDULE.—The schedule deals mainly with the measurement of grain and knots and with the grading rules for "grade 1,200 lb. f." timber. It is quoted in full below.

Graded Timbers :

In using the table given on this Sheet for the determination of the size and spacing of timbers where the loads and stresses are not calculated under Section 2, reference should also be made to the rules quoted on the back of Sheet No. 728.

SECTION IV.—General. It shall not be lawful to convert a building or any part thereof in such manner that such building or part of a building when so converted will not be in conformity with these by-laws.

Before any building or part of a building is converted, notice in writing of such proposed conversion shall be given to the district surveyor by the owner or occupier of the building or part of the building in question.

For the purpose of securing the due observance of the provisions of these by-laws, it shall be the duty of the district surveyor to survey any building or work affected thereby and he may require the builder to supply him with all such plans, calculations or other particulars and samples of timber as he may reasonably require.

All work affected by any of the provisions of these by-laws shall be carried out to the satisfaction of the district surveyor in a proper and workmanlike manner.

Every person who contravenes or fails to comply with any of the provisions of these by-laws or of any requirement made thereunder or in pursuance thereof shall be deemed to have committed an offence against these by-laws and shall be liable on summary conviction to a penalty not exceeding the sum of fifty pounds and a daily penalty not exceeding ten pounds.

SCHEDULE

The number of annual rings per inch shall be ascertained in the following manner :—

The measurement shall be made at each end of the piece on a measuring line three inches long in the direction of the radius of the rings.

In the case of a boxed-heart piece, the measuring line shall extend over grain which is representative of a fair average of the section. When in such a piece the least dimension is six inches or less, the line shall begin at and extend from a point at a distance of one inch from the pith. Where in such a piece the least dimension exceeds six inches, the measuring line shall begin at, and extend outwards from, a point at a distance from the pith equal to one-quarter the least dimension of the piece.

In the case of a piece without pith, the centre of the measuring line shall be at the centre of the end of the piece.

The width of a knot shall be ascertained in the following manner :—

The knot shall be measured on that face of the piece in which the area of the knot is greater.

The width shall be taken as the average of its greatest diameter and its least diameter, except that where a knot occurs on the angle of a piece, the width of such knot shall be taken as the distance of such angle (measured on the adjacent face or faces) from the most remote part of such knot.

Grading rules for "grade 1,200 lb.f." timber

Every piece shall be sound and free from defects except as specified in this schedule and shall be of such grain as not to have less than four annual rings to the inch and shall be free from spiral or diagonal grain having an inclination to the direction of the length exceeding one-in-ten except when such spiral or diagonal grain is so disposed as not to impair the strength of the piece.

Knots shall be sound and free from rot.

A tight knot shall not exceed in diameter one-fourth the greater transverse dimension of the piece unless so situated as not to impair the strength of the piece. In addition to the foregoing where such knot is enclosed within the thickness of the piece its width shall not exceed one-third the thickness of the piece.

A loose knot or knot-hole shall not exceed in width one-half the greatest width permitted in the case of a tight knot, unless so situated as not to impair the strength of the piece.

A knot cluster or a knot-hole cluster shall be measured as a single unit.

Pitch pockets shall not exceed eight inches in length nor shall they exceed one-eighth inch in width.

Sapwood shall be not more than slightly discoloured.

The depth of torn grain shall not exceed one-sixteenth of an inch.

The length of an end split shall not exceed the width of the piece. If there be more than one split in the same end then the sum of their lengths shall not exceed the width of the piece.

Checks shall not be such as to impair materially the strength of the piece.

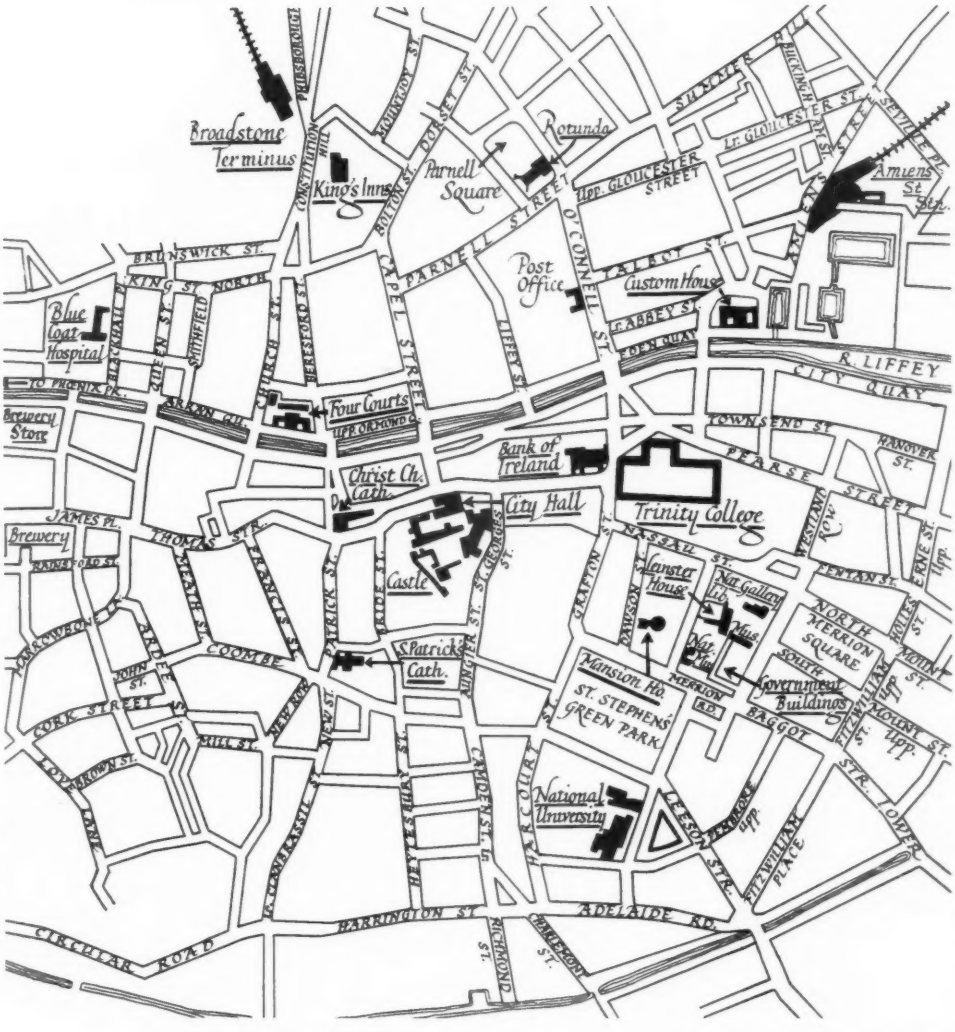
Wane, if on one angle of a piece not exceeding four inches in thickness, shall not exceed half an inch in width by one-third the length of the piece, and if on more than one angle, the total width and the total area shall not exceed that amount. Wane, if on one angle of a piece exceeding four inches in thickness, shall not exceed in width one-eighth of the thickness of the piece nor in length one-third of the length of the piece, and if on more than one angle, the total width shall not exceed one-eighth of the thickness of the piece and the total area shall not exceed that of one-eighth of the thickness by one-third of the length of the piece.

Previous Sheets :

The minimum loadings and maximum stresses permissible in the design of timber floors are set out on Sheet No. 724, and the table for the determination of size and spacing of joists, etc., of ungraded timbers is given on Sheet No. 728.

R.I.B.A. CONFERENCE, DUBLIN

Yesterday the R.I.B.A. Conference opened in Dublin when an informal reception was held at the Mansion House. On this and the following pages we print the programme of the Conference, details of the post-conference tours, an illustrated article on Dublin, by Mr. John Betjeman, and photographs, plans and descriptions of new buildings in the city.
On the right is a street map of Dublin showing the principal thoroughfares and places of interest.



THURSDAY, JUNE 22

11 a.m. to 12.30 p.m. An inaugural meeting will be held at the Mansion House, Dublin. Presentation of address by learned societies. Addresses by Mr. H. S. Goodhart-Rendel, President, R.I.B.A., and Mr. J. J. Robinson, President, R.I.A.I.

Lunch. Members and guests will make their own arrangements for lunch.

3.30 p.m. Centenary Conference photograph at Lord Iveagh's garden, 80 St. Stephen's Green (entrance Earlsfort Terrace), by kind permission of Lord Iveagh, and

3.45 p.m. to 6 p.m. Garden party.

7.30 p.m. for 8 p.m. Centenary Conference banquet at the Mansion House. The guests will be received by the President of the Royal Institute of the Architects of Ireland and the President of the R.I.B.A. Cost of dinner (exclusive of wines and cigars): 17s. 6d. Evening dress, decorations, Presidential badges.

Note.—Members of the Conference may bring guests to the banquet without payment of the Conference membership fee, provided the guests are not taking part in any other Conference function. The issue of tickets for guests under this arrangement will, however, be provisional on accommodation being available after all demands for seats for Conference members have been met.

FRIDAY, JUNE 23

10.30 a.m. to 12 o'clock. Paper to be read by Mr. C. H. Aslin, F.R.I.B.A., Borough Architect, Derby, at 8 Merrion Square North, Dublin, on "The Work, Duties and Responsibility of the Official Architect."

12 o'clock to 2.15 p.m. Members and guests will make their own arrangements for lunch.

2.15 p.m. to 6 p.m. *Alternative half-day tours.*

Tour No. 1. Headquarters—Trinity College—Bank of Ireland—St. Patrick's Cathedral. Guide: Mr. Harry Allberry, F.R.I.A.I., A.R.I.B.A. Cost per head, including tea, 7s.

Tour No. 2. Merrion Square South—Christ Church Cathedral—St. Michan's Church—Four Courts—Zoological Gardens. Guide: Professor R. M. Butler, M.ARCH., F.R.I.A.I., F.R.I.B.A. Cost per head, including tea, 7s.

Tour No. 3. Merrion Square South—Dublin Castle—City Hall—War Memorial Park. Guide: Mr. J. H. Webb, F.R.I.A.I. Cost per head, including tea, 7s.

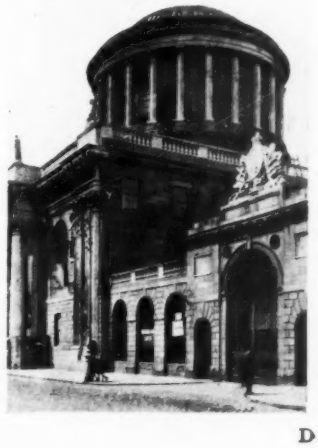
Tour No. 4 Headquarters—New National Maternity Hospital—Hospitals' Trust Headquarters—Royal Dublin Society's Showgrounds and Headquarters. Guide: Mr. R. C. Keefe, M.R.I.A.I., L.R.I.B.A. Cost per head, including tea, 7s.

Tour No. 5. Merrion Square South—Dublin and Wicklow Mountains and Coastal Scenery taking in Dundrum, Stepaside, Golden Ball, Enniskerry, Bray, Ballybrack, Killiney, Vico, Dalkey, Dun Laoghaire. Guide: Mr. F. G. Hicks, F.R.I.A.I., F.R.I.B.A. Cost per head, including tea, 7s.

9.15 a.m. to 6.15 p.m. *Alternative whole-day tours*

Tour No. 6. Merrion Square South—Dun Laoghaire—Dalkey—Vico—Ballybrack—Bray—Glen o' Downs—Walpole's Gardens—Laragh (lunch at Laragh House Hotel)—Glendalough—Greystones (tea at the Grand Hotel)—Bray—Merrion Square South. Guide: Mr. H. G. Leask, M.R.I.A.I. Cost per head, including lunch and tea, 15s.

Tour No. 7. Merrion Square South—Chapelizod—Strawberry Beds—Lucan—



Celbridge — Straffan — Clane — Palmerstown House—Naas (lunch at Nas na Riogh Hotel)—Russborough House — Liffey Hydro-electric Scheme, Poulaphouca (tea) — Blessington — Tallaght—Merrion Square South. Guide: Mr. Manning Robertson, M.R.I.A.I., F.R.I.B.A., M.T.P.I. Cost per head, including lunch and tea, 15s.

Tour No. 8. Merrion Square South — Howth —Swords — Luttrellstown House — Lucan Demesne — Lucan (lunch at Spa Hotel)—Castletown House — Carton (Duke of Leinster's residence) (tea) — Lucan — Chapelizod — Merrion Square South. Guide: Mr. H. V. Millar, M.R.I.A.I., A.R.C.S.C.I. Cost per head, including lunch and tea, 15s.

9 p.m. to 3 a.m. Centenary Conference dance at Lord Iveagh's House.

SATURDAY, JUNE 24

11 a.m. Visit to Guinness's Brewery.

POST-CONFERENCE TOURS

For those wishing to prolong their visit the following alternative four, five, six and seven day tours are suggested:

Leaving Merrion Square South, Saturday, June 24, by motor coach, 10.30 a.m.

SOUTHERN TOURS

Tour A. Four days. Dublin to Killarney *via* Curragh, Kildare, Port Laoighise, Limerick, Castleisland. Killarney to Cork *via* Windy Gap, Kenmare, Glengarriff, Snave Bridge, Pass of Keimaneigh, Inchigeela, Blarney. Returning *via* Fermoy, Cashel, Port Laoighise.

Tour B. Five days. Dublin to Thurles *via* Dun Laoghaire, Dalkey, Killiney, Glendalough, Avoca, Woodenbridge, Carlow, Castlecomer. Thurles to Cork *via* Holycross, Cashel, Tipperary, the Gap of Knockmealdown Mountains, Fermoy. Cork to Killarney *via* Blarney, Pass of Keimaneigh, Snave Bridge, Glengarriff, Kenmare, Windy Gap. Return *via* Killarney, Castleisland, Adare, Limerick, Port Laoighise, Kildare.

Tour C. Six days. Dublin to Killarney *via* Kildare, Limerick, Castleisland. Killarney, Killorglin, Glenbeigh, Cahirciveen, Waterville, Sneem, Parknasilla, Kenmare, Windy Gap. Killarney to Cork *via* Kenmare, Glengarriff, Snave Bridge, Pass of Keimaneigh, Inchigeela, Blarney. Returning Cork, Tramore, Waterford, Enniscorthy, Woodenbridge, Avoca, Glendalough, Killiney, Dun Laoghaire.

Tour D. Seven days. Dublin to Tramore *via* Dun Laoghaire, Killiney, Avoca, Woodenbridge, Waterford. Tramore to Cork *via* Youghal, Midleton. Cork to Killarney *via* Blarney, Pass of Keimaneigh, Snave Bridge, Glengarriff, Kenmare, Windy Gap. Killarney to Galway *via* Castleisland, Limerick, Ennis, Lahinch, Cliffs of Moher, Lisdoonvarna, Oranmore. Galway to Galway *via* Spiddal, Maam, Leenane, Kylemore Abbey and Lough, Clifden, Oughterard. Returning *via* Oranmore, Athenry, Ballinasloe, Athlone, Mullingar, Maynooth, Lucan.

NORTHERN TOURS

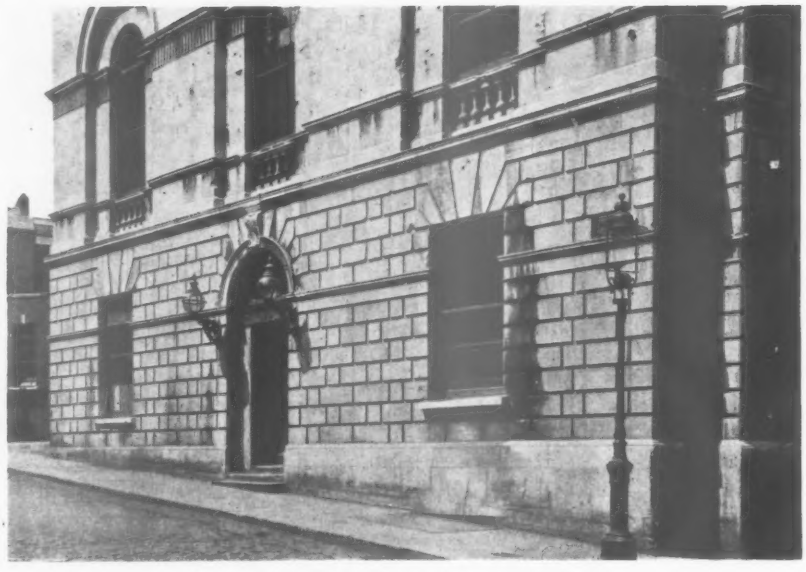
Tour E. Four days. Dublin to Belfast *via* Tara, Drogheda, Monasterboice, Dundalk, Newry, Rostrevor, Newcastle, Downpatrick, Killyleagh. Belfast to Portrush *via* Larne, Glenarm, Carnlough, Cushendall, Ballycastle, Giant's Causeway. Portrush to Killadeas *via* Coleraine, Limavady, Londonderry, Barnesmore Gap, Donegal and Lough Erne. Returning *via* Lough Erne, Clogher, Armagh, to Dublin.

Tour F. Six days. Dublin to Belfast *via* Tara, Drogheda, Monasterboice, Dundalk, Newry, Rostrevor, Newcastle, Downpatrick, Killyleagh. Belfast to Portrush *via* Larne, Glenarm, Carnlough, Cushendall, Ballycastle. Portrush to Londonderry *via* Coleraine, Limavady and visiting Buncrana, Carndonagh, Malin Head, Culdaff, Moville. Londonderry to Killadeas *via* Letterkenny, Rosapenna, Creeslough, Barnesmore Gap, Donegal, Ballyshannon, Belleek, Lough Erne. Killadeas, motor launch Lough Erne, drive Belleek, Bundoran, Sligo, Lough Gill, Manorhamilton, Upper and Lower Lough Macnean, Belcoo, Lough Erne and back to Killadeas. Returning *via* Lough Erne, Clogher, Armagh, to Dublin.

DUBLIN:

I: THE PAST

[*By JOHN BETJEMAN*]



Newcomen's Bank: County Treasurer's Office.

STAGE Oirishmen often refer to "Dear Ould Dirty Dublin." It is a bit dirty, but its face is improved by the dirt. The granite washes whiter by contrast, the Custom House and the Four Courts sail above the Liffey and stand out from the brown dirt of the town. For Dublin dirt is brown. The brownish-red bricks of these huge Georgian squares and these diminishing streets seem to have been washed with Guinness. The effect is healthily dirty. There is none of that awful green dirt which eats into the New Regent Street, London. Dublin's architectural beauty—and I think it has the finest public buildings in these islands—is improved by the people and their shops. You should walk into the poorer shopping streets on the north side of the town (the less fashionable side) and notice the little rosaries, and sacred lamps and religious pictures for sale mixed up among sweets, sweep-tickets and balls of string. You should go down a decayed street of former grandeur such as Henrietta Street and look into what once were sumptuous halls with carved wood balusters. The fanlight over the door is broken; the balusters have gone for firewood; only the plasterwork remains. Nuns and priests walk about. Tough-looking business men suddenly pull out a rosary. You are in a Christian country. Money is not a standard of values. Barefoot children swing on delicate ironwork. Whiffs of Guinness and whisky stream from the hundreds of pubs. There is no speed, hardly any jazz-modernistical, plenty of horses and stable smells, and all the time you are aware of the purple Wicklow mountains brooding over the south and the endless little grass hills, beech-planted demesnes, crumbling walls, lakes, and turf-stacked bog which make the scenery of inland Ireland away to the West. You are in a town far more different from London than London is from Paris, and far more foreign.

There is not much difficulty in seeing into Dublin's buildings: none of the business of "Have you got written permjssion?" and furtive and enormous bribes. Porters, caretakers or bank directors themselves will gladly show you round and agree with what you say. There is no question that the Dublin public is more aware of good Georgian architecture than are English people.

The best way of seeing Dublin is from an outside car. They are getting scarce, for taxis are driving them off the streets, but there are generally a few at College Green. Up on the hard seat, rolling over cobbles and through huge squares, you might be driving through one of Malton's coloured aquatints. The car is just the right height off the ground for viewing a street façade; it lifts your eyes above the horror of the few modernistical shop-fronts that there are, but it does not take you out of the life of the street as a tram or bus. Indeed, you will be stigmatized as a tourist for travelling in an outside car. But it is worth the shame. The pace is such that you can admire proportion and detail.

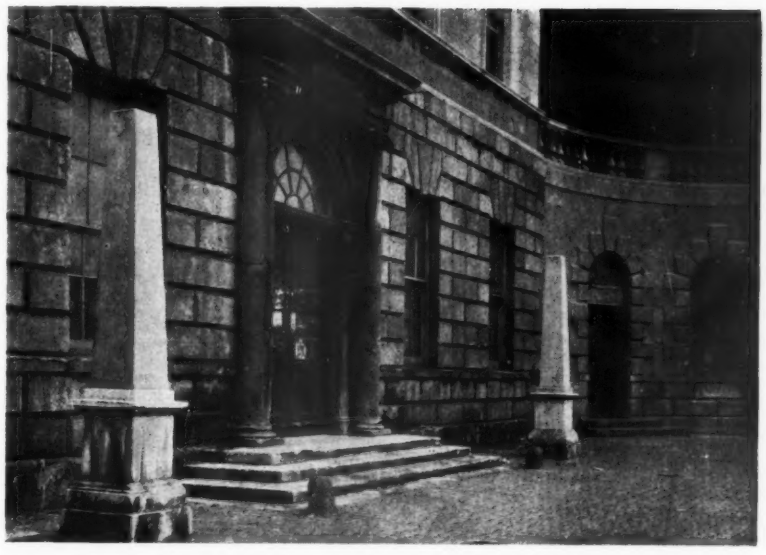
Dublin is primarily a Georgian town, built in the English manner. Its street architecture is mostly brown-red brick ; its streets are wide, and its front doors are among the wonders of the world for the diversity of their delicate design and for their fanlights. It was, of course, a medieval city, but the older architecture of Ireland need not concern us. The inevitable Celtic knots, of the interesting early Christian architecture of Glendalough, is having its vogue. It is "national" : round towers, twisted cables, reminiscences of the decorative initials of the Book of Kells appear in stained glass, calendars, pub decorations, stamps, art tea places, posters, cartons, freizes, mouldings, churches and chapels, until one wishes that this Celtic Byzantine had never been rediscovered. It is archæological, not architectural. The nearest large example of it is at Glendalough. Then there is Irish Gothic which does not follow the rules of Perp., Dec., E.E. and Trans. ; which is austere and rather exciting, and its roof lines prickly with stepped battlements. St. Patrick's is a good example. But Christ Church cathedral was utterly over-restored by Guinness and other munificence in the last century. Dublin is primarily a Georgian town.

People will tell you to see the Book of Kells and St. Patrick's. See them last. The Book of Kells is worth seeing for the magnificent eighteenth-century Library of Trinity College, in which it is kept. The roof of the Library is well-designed Victorian work. Every architect should see Dublin's three great interiors : (1) The Parliament House (now the Bank of Ireland, on College Green), with its House of Lords by James Gandon (1785), containing the best Waterford glass chandeliers in existence. (2) The chapel of the Rotunda Hospital (architect, R. Cassels, 1757), with a plaster ceiling coloured and in high relief. (3) The passage behind the throne room in Dublin Castle—c. 1740, architect unknown.

I would add a fourth to this list in the Chapel Royal (1807–14) at the Castle, which is an amazingly delicate and slenderly-proportioned piece of Perpendicular Revival by Francis Johnston, quite eclipsing the Gothic Revival pioneer work in England. The corbels are Baroque and by a sculptor called Stewart.

Apart from these interiors there is the Royal Exchange (finished 1779) by Thomas Cooley ; the Rotunda Concert Room (1785) ; the College of Surgeons on St. Stephen's Green (c. 1780) ; Trinity College Library (1732), already mentioned, and other public buildings too numerous to mention. The private houses in Dublin, where they have not become tenements, all have delicate plaster ceilings and wooden balusters.

The finest exteriors are Custom House (1781–89), James Gandon, gutted inside ; Kilmainham Hospital (1680–84), by an architect named Roberts and



Charlemont House : the Municipal Art Gallery

Guinness's Old Brewery

Henrietta Street

Castle-Coole

Carton, south façade, the seat of the Duke of Leinster

Castletown Mansion

King's Inns

The Custom House

wrongly ascribed to Wren; the Four Courts (1776–1800), by T. Cooley and James Gandon, gutted inside like the Custom House and Post Office during "the troubles"; the Post Office (1815–17), by F. Johnston; St. George's Church (1802), by F. Johnston; St. Stephen's Church (1825), by J. Bowden, which makes a handsome termination to one side of Merrion Square; the Inns of Court (1802), by Gandon and Baker; the Bluecoat Hospital (1773–77), by Thomas Ivory; the Provost's House, Trinity College (c. 1760); the pro-Cathedral, a Doric exterior and interior of great simplicity (1816–19), by R. Morrison and Taylor.

The best square in Dublin is Merrion, and we must all hope that the project to build a Cathedral in its great open spaces will come to nothing. The unbelievable spaciousness of this square will be ruined. Next in magnificence come Mountjoy and Fitzwilliam Squares.

Dublin has beautiful railway stations, except for Amiens Street and Westland Row, which are the only two stations that English visitors see. The Broadstone (1846–47), now disused, is by J. S. Mulvany, the editor of Gandon's biography. It has a long Ionic colonnade of granite. Kingsbridge (1845-46)

is by Sancton Wood, who built much of Bayswater. The station has delicate detail, an imposing outline and satisfactory proportion ; it is of granite and in a Renaissance style, typical of the large-hearted extravagant planning of the great days of the railways. The granite staircase of Harcourt Street Station (1858–59), by G. Wilkinson, should be ascended to see a covered terminus which looks exactly like an 1860 lithograph.

Dublin's two great monuments are pure Greek. The Nelson Pillar (1808), by W. Wilkins, is, I think, the best work of that scholarly man, and the incised lettering on its plinth should put every modern letterer to shame. The Phœnix Park obelisk (1817), by Sir Robert Smirke, is a towering commemoration of Wellington.

There is one outlying masterpiece which is worth the journey through dreary suburbs and unpromising surroundings. This is the Casino at Marino, by Sir William Chambers, and known to every architectural student—on paper. It is a small garden building with a few living rooms, furnished by Chambers for an Irish peer to look across Dublin Bay. It was smashed up inside during the troubles, but has been most sympathetically restored by the Irish Government. As an essay in proportion and detail, it must be one of the best small buildings in the world. Once you forget its surroundings, it fills your eye, and you come away with the impression that you have seen something as large as the whole, glimmering water front of Somerset House, as scholarly and chaste in its detail as a church by the younger Dance.

The majority of Dublin's architecture falls into two groups, north and south of the Liffey. An outside car tour of the north is the best start, over O'Connell Bridge (notice the Four Courts, Custom House, and cast-iron footbridge), down dull O'Connell Street, commercial Renaissance of post-war design, stopping at the Rotunda Hospital, then up and to the right into

Broadstone Station. The main front

Leinster House, Kildare Street. Main front facing on to Leinster Lawn and Merrion Square

The Casino, Marino

Another view of Leinster House facing on to Kildare Street

Mountjoy Square, on to St. George's Church, then turn west to the Black Chapel (strange 1830 Gothic and terrifying) to Henrietta Street. Here walk up and through the King's Inns and see Broadstone Station beyond the railings. Back to College Green via Kingsbridge Station.

The tour of the south bank should include St. Stephen's Green (commercialized), Merrion Square, Leinster House, Fitzwilliam Square, the Castle, and Trinity College and the Bank of Ireland.

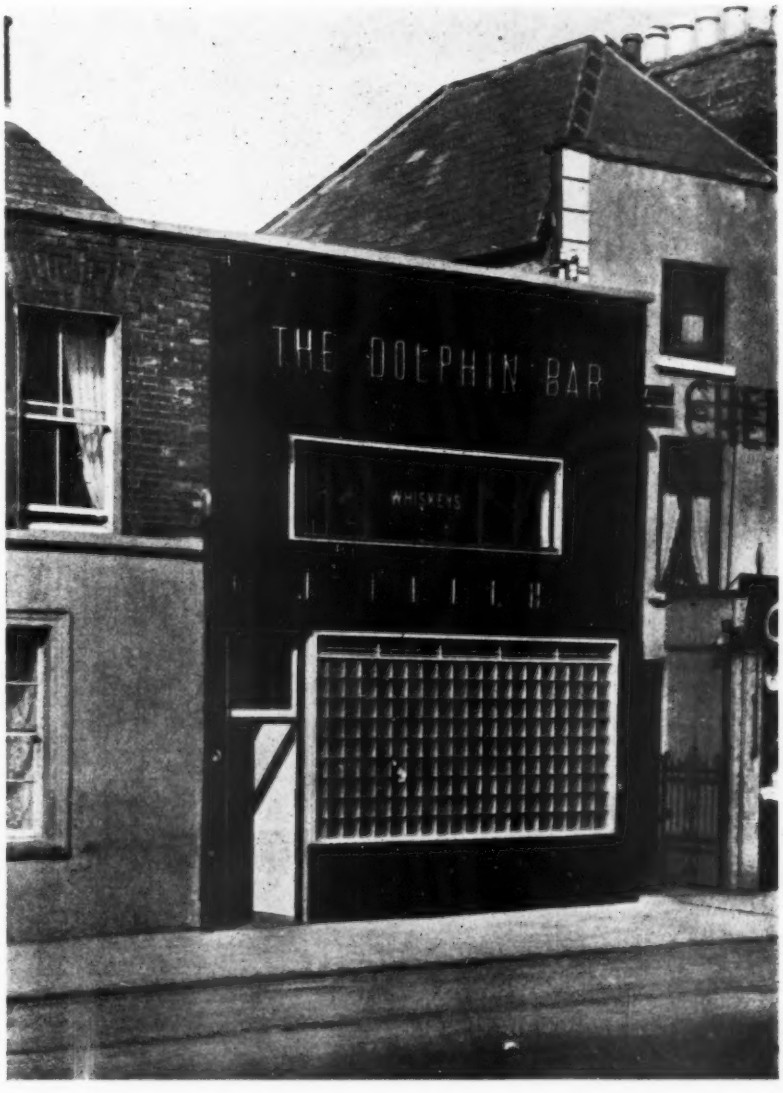
You will have noticed that there are three distinct styles of Georgian Dublin : Richard Cassells, Thomas Ivory and their contemporaries built in an English solid Queen Anne manner, generally using heavy granite and limestone dressings to brick walls. Then came Sir William Chambers, who worked on Trinity College and inspired Cooley and Gandon. The style of Sir William Chambers and the principles of his civil architecture are better exemplified in Dublin than in any other city. The Greek influence of Wilkins and Smirke came out in Francis Johnston (the only Irishman among the eighteenth and early nineteenth century architects), and this architect was a successful exponent of Romantic Perpendicular.

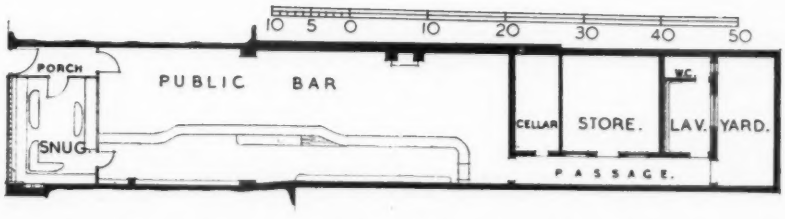
A great family of Dublin architects, though not comparable with the men I have mentioned, was the Deane family. The first Sir Thomas Deane was a Venetian Gothicist ; he did the Kildare Street Club, as well as the University Museum, Oxford. The next Sir Thomas was less Gothic but still Venetian, and died in 1899, having designed the commendable National Gallery and Science and Art Museum with his son, the last Sir Thomas, who died in 1933 after being in an Irish branch of Sir Aston Webb's office. Each of these Deanes, even the first, seems to have been aware of Georgian Dublin and to have respected it. They justify George Moore's remark that there was no nineteenth century in Ireland : it jumped straight from the eighteenth to the present.

And modern architecture in Dublin is not a quarter as debased as its English counterpart. There are speculative villas ; there is much jazz-modern and a certain amount of good modern on the outskirts, especially in hospital building. But, somehow, even the worst is not so offensive as, let us say, Metroland. This is because there is not much red brick, hardly any pink roof ; because slate and grey and white prevail. Certainly, the council estates and the new small-holdings in the country consist of inoffensive boxes of rooms. Ireland is not over-populated. She is rich and intelligent. There is too much room for a lot of harm to be done : but no one will deny that there is much repulsive speculation. A Dubliner faced with this accusation can tell you to go and see Belfast. Don't.

DUBLIN:
2 : THE PRESENT

DOLPHIN BAR • *BY J. M. BRENNAN*



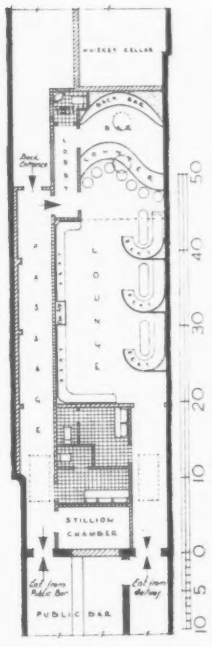


GENERAL—*Reconstruction of a public-house for members of the working-classes. The original house was small and the parlour and stores were inadequate. Requirements included a new front and windows to stores not to overlook adjoining properties.*

CONSTRUCTION AND FINISHES—*Steel-frame construction. Walls, concrete. New roofs, timber, flat with felt and tarmac finish. Internal walls, plastered and painted in oils. External facing to shop front, vitrolite glass on ½ in. sheeting and battens ; vitrolite fixed to sheeting with mastic. Lettering metal, galvanized and stove enamelled pale green. Window surrounds, red deal painted pale green. Steel window painted dark green, also architrave and frame to front door.*

COST—*Shop front : £360. New parlour and stores, etc., £965.*

LOUNGE BAR, WATERLOO HOUSE • *BY F. J. RYAN AND B. O'CONNOR*



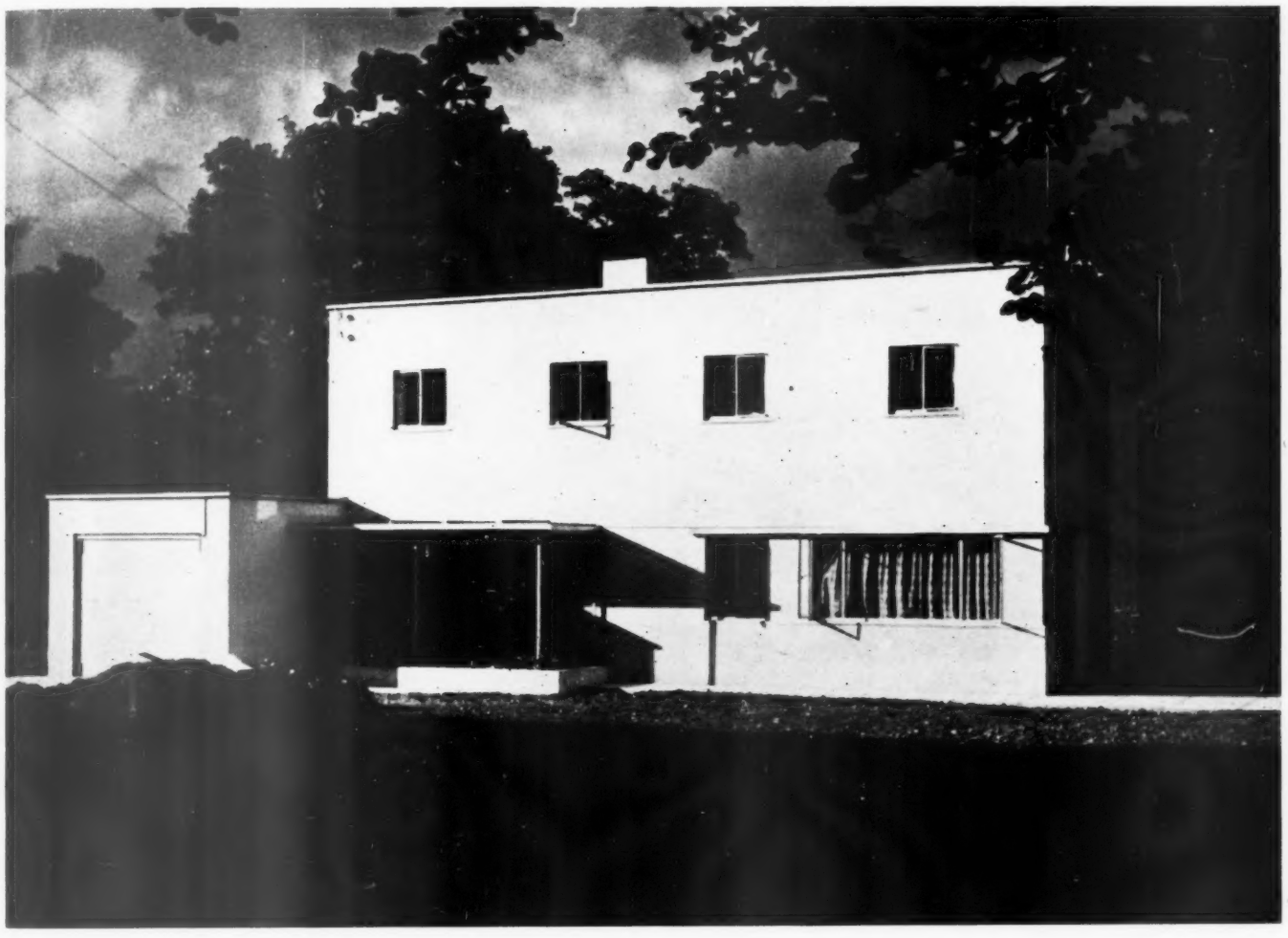
GENERAL — *New lounge bar, Waterloo House, Upper Baggot Street.*

CONSTRUCTION AND FINISHES — *Walls, reinforced concrete. Roof, flat: timber joists, boarding, felt, 2 in. tarmacadam; lead gutters. Floors, "sandwich" type, 4 in. concrete on hardfilling layer of asphalt, 2 in. fine concrete screeded; covered with linoleum.*

Internal walls of breeze finished in "nap" finish, distempered cream. Oak dado, 3 ft. 6 in. high, carried round curved seats and bar counter. Murals, depicting Dublin types, with a skyline of well-known Dublin buildings, executed in sepia line and faintly shaded. Artist, D. V. Rushton.

Ceiling, finished in hardwall plaster, painted light terra-cotta. Floor, dark blue lino. Upholstery, special shade of light blue.

HOUSE NEAR STILLORGAN • *BY FREDERICK MacMANUS*



GENERAL — *The site is a sloping one on a main country road with views to the north-east overlooking Dublin Bay.*

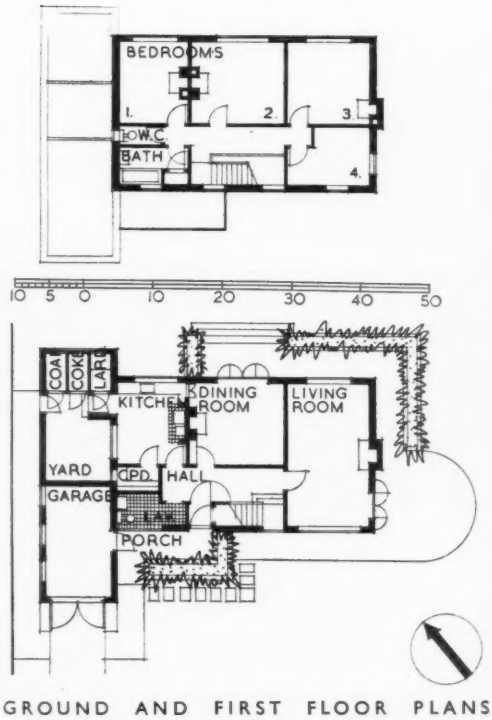
CONSTRUCTION AND FINISHES— *Suitable facing bricks being difficult to obtain the walls and partitions were constructed of concrete blocks. These blocks were machine-made on the site, the size of the blocks being 18 × 9 × 4½ ; 11 in. cavity wall construction was employed for the external walls.*

Floors and roof construction, timber joist construction. Windows generally, steel casements.

Exterior walls finished in ivory cullamix, scraped texture rendering. Concrete piers between living-room windows finished with frost-proof eggshell glazed tiles, turquoise green colour.

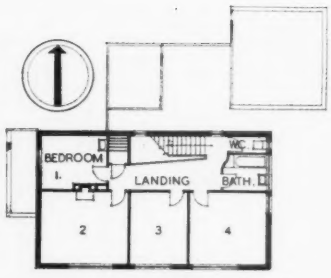
Exterior paintwork to metal windows and doors, pale turquoise green.

Exposed concrete surfaces finished with ivory coloured stone paint.

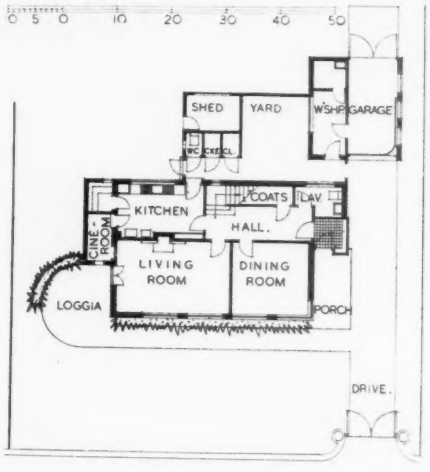


GROUND AND FIRST FLOOR PLANS

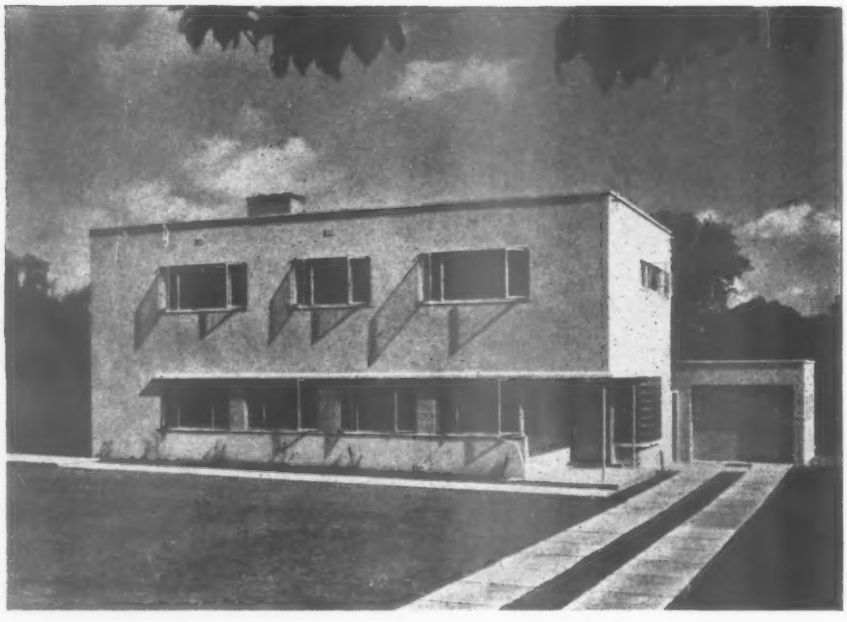
HOUSE AT BLACKROCK



FIRST FLOOR PLAN

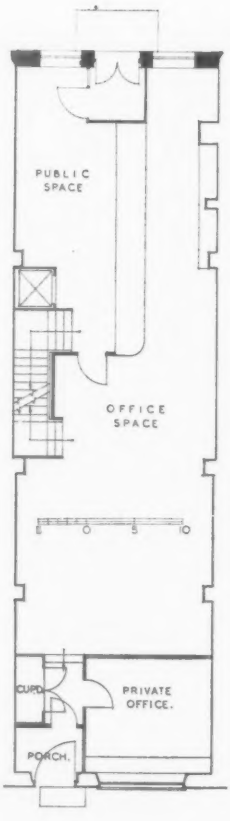


GROUND FLOOR PLAN



South-east front

INSURANCE OFFICES • *BY JOSEPH V. DOWNES*

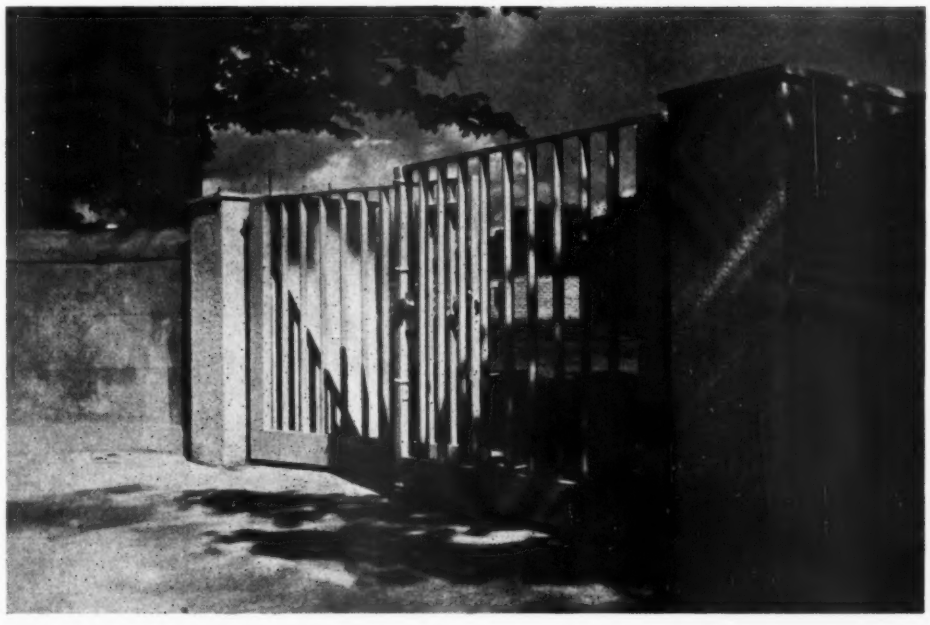


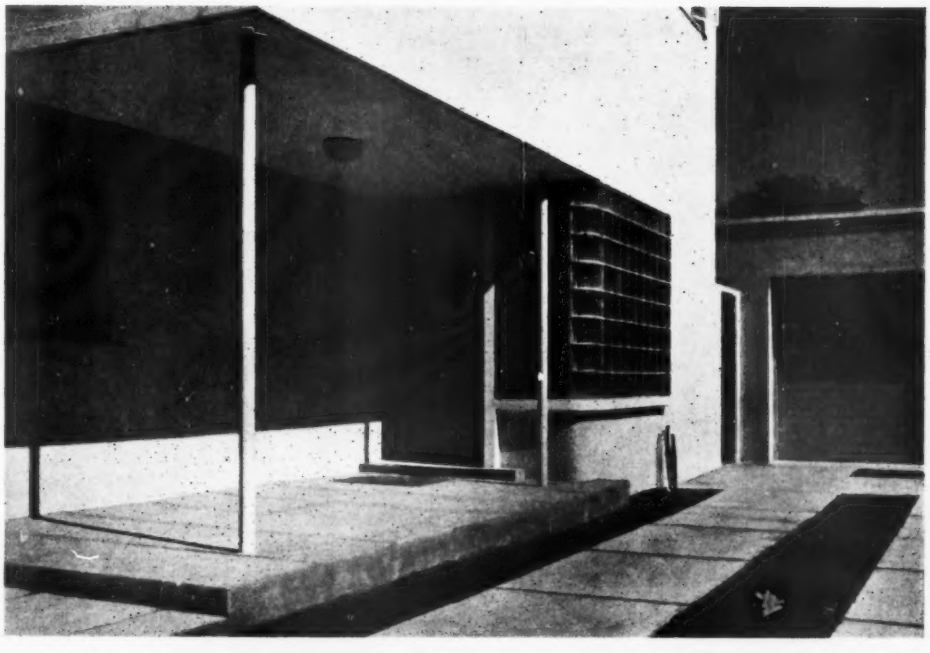
GENERAL—*Reconstruction job consisting of a new frontage to Downe Street, general replanning of the interior, including the installation of lift, new floors, stairs, etc., and new office fittings.*

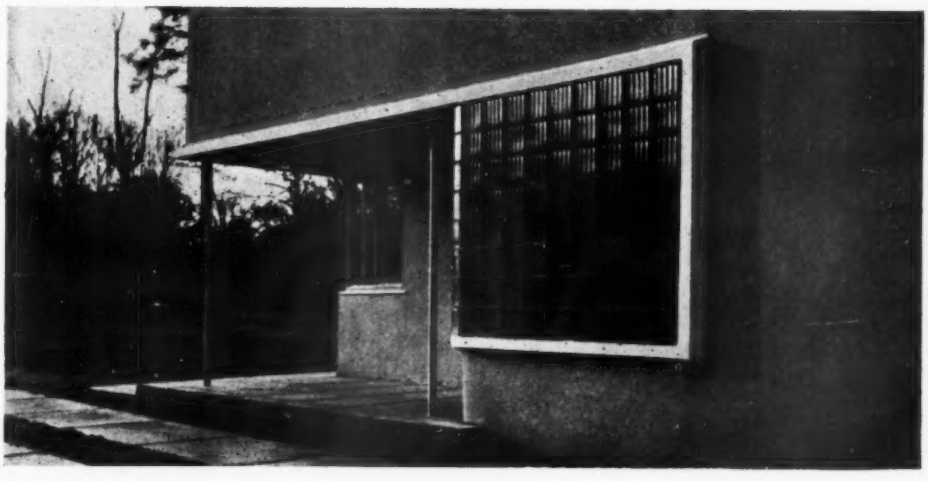
FINISHES — *Green-yellow and brown bricks from Athy, co. Kildare. Panels between windows and surround to door in black tiles relieved with thin gold bands. Steel windows and lettering, painted bright green.*

COST—*£3,664 16s.*

BY FREDERICK MacMANUS







GENERAL—*Client, who previously lived in large, old and badly-planned house, desired a smaller one, capable of being managed by one maid. The reception-rooms were to be of medium size with a good entrance hall and staircase, living-rooms and bedrooms to have southerly aspect. As the client desired to reside in the same neighbourhood, which was an old-established district, the only suitable site obtainable was the portion of the grounds of an old villa. This site had a frontage of 80 ft. to the roadway, which was lined with trees. Owing to the aspect of the site it was necessary for the main rooms to face the roadway and for privacy the house was set back 80 ft. In order to reserve as much of this portion of the site for lawns and gardens the drive and entrance were planned at the east side of the house with the hall, staircase and kitchen to the back of the north side.*

CONSTRUCTION AND FINISHES—*Suitable facing bricks being difficult to obtain the walls and partitions were constructed of concrete blocks. These blocks were machine-made on the site, the size of the blocks being 18 by 9 by 4½ in.; 11 in. cavity construction was employed for the external walls.*

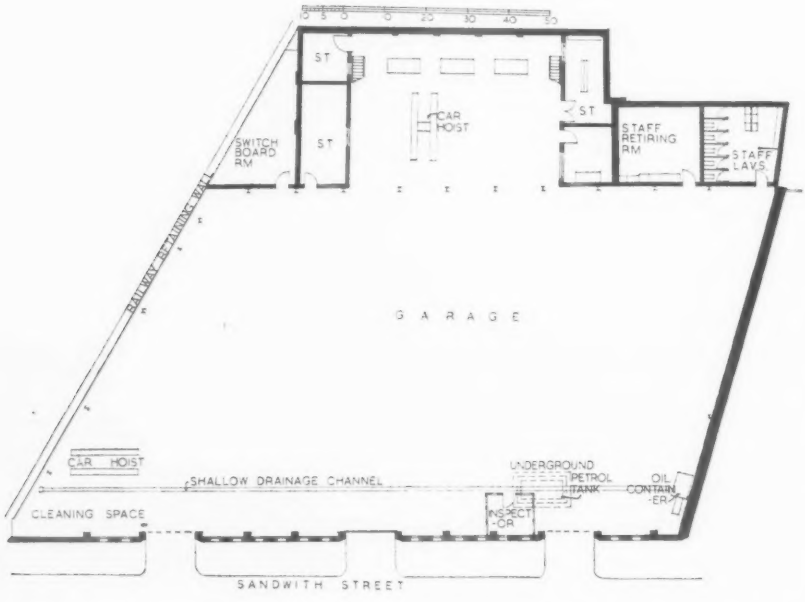
Reinforced concrete was employed for the continuous beam over the ground floor living-room windows and porch soffite, and loggia screen wall. The projecting nib of the reinforced lintol was carried round to form a frame for the glass brick window to the entrance lobby. Floors and roof construction, timber joist construction. Windows generally, steel casements. Window to staircase, glass bricks.

Concrete piers between living-room windows finished with frost-proof eggshell glazed tiles, turquoise green colour.

Exterior paintwork to metal windows and doors pale turquoise green. Exposed concrete surfaces finished with ivory coloured stone paint.

Top, entrance gates; centre and right, details of entrance.

GARAGE • *BY J. M. FAIRWEATHER (OFFICE OF PUBLIC WORKS)*



GENERAL—*A garage to house about 50 Post Office vans with repair workshops, stores, messroom and sanitary accommodation.*
PLAN—*P.O. vans to be housed in such a manner as to permit access and egress of any van without disturbing the remainder. The servicing and repairing not to interfere with ordinary parking of the vans. Petrol filling under full control of responsible official. Partitioning off workshops from garage to be possible.*
CONSTRUCTION AND FINISHES—*The site is made ground over alluvial soil and the loading under all main supports was taken at ½ ton per sq. ft. This necessitated two-tier grillages under stanchions of main roof. Filler walls of stock bricks. Facing to street, over-burnt bricks. Roof, concrete covered with a special composition of cold bitumen and asbestos fibre about ¼ in. thick. All roof lights, teak. Metal windows and metal roller shutter doors. Floors, concrete. Main garage distempered direct on brickwork. Offices and stores cement rendered and distempered. Walls and floors of sanitary blocks in terrazzo.*

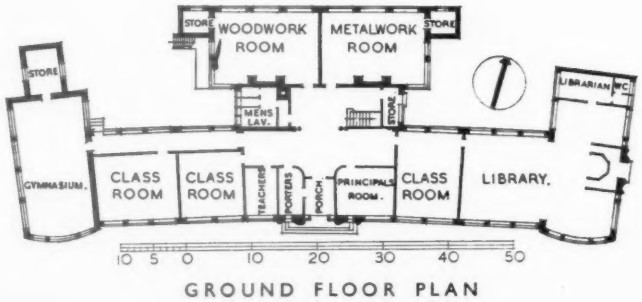
TECHNICAL INSTITUTE • *BY ROBINSON*

The main front.

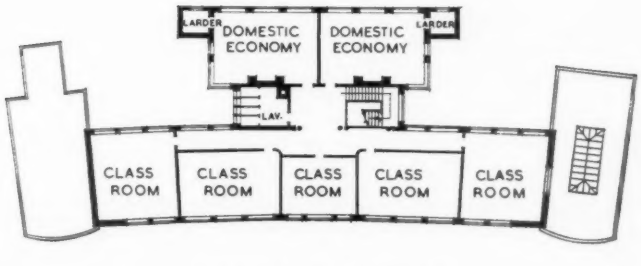
AND KEEFE

GENERAL — *A technical institute serving a suburb on the north side of Dublin; in addition a branch public library for the use of the surrounding neighbourhood was required.*

CONSTRUCTION AND FINISHES— *Reinforced concrete. The walls generally at the front are faced with special sand-faced multi-coloured bricks incorporating herringbone pattern. The window mullions, base and main entrance surrounds are faced in Wicklow granite. Roof and floors are hollow tile construction, the floors of classrooms and corridors being covered with cork composition. Internal walls, concrete block.*

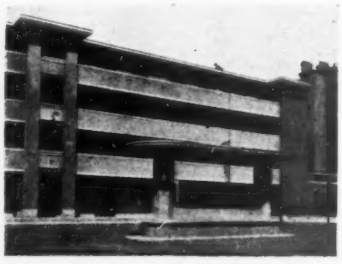


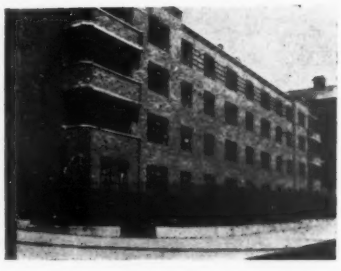
GROUND FLOOR PLAN

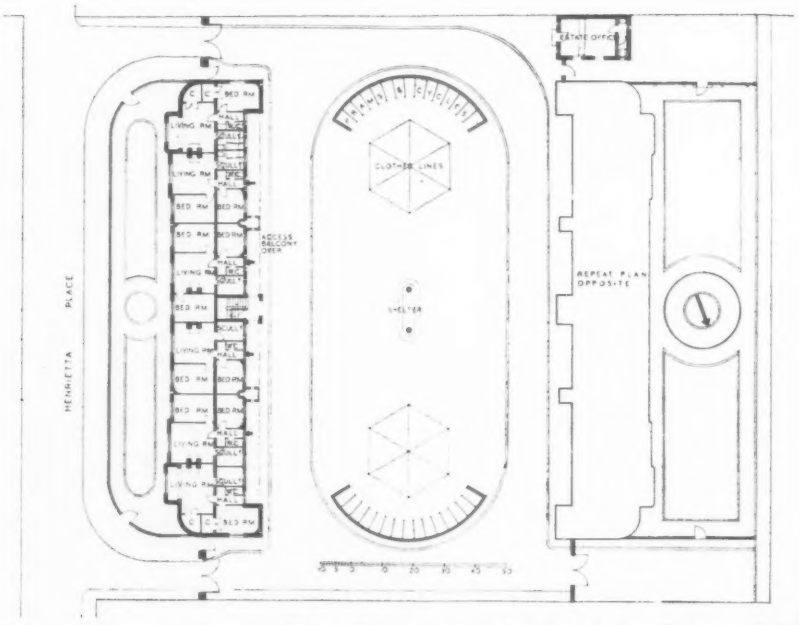


FIRST FLOOR PLAN

WORKING-CLASS FLATS • *BY H. G. SIMMS*





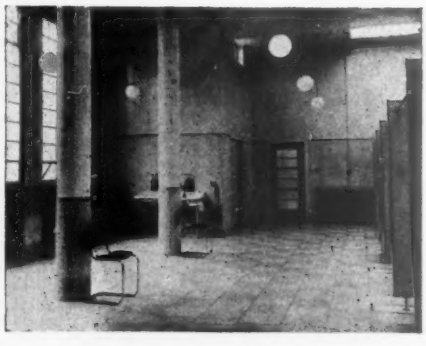


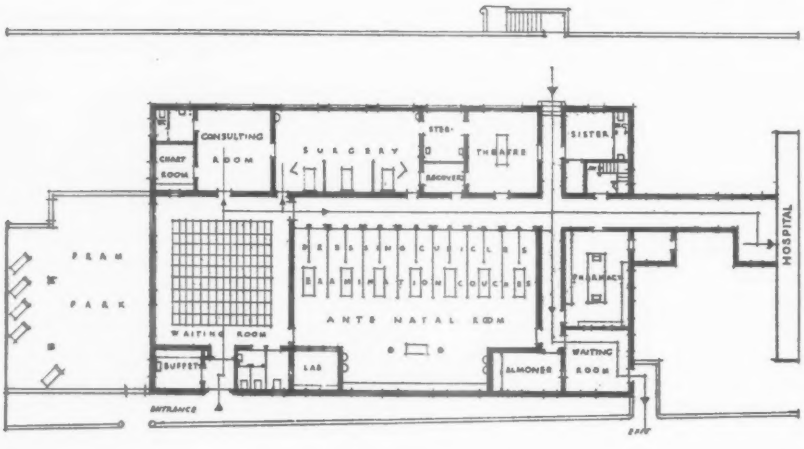
GENERAL—*Flats in Henrietta Street to facilitate slum clearance. The two blocks are planned on similar lines, each having a central staircase giving access to the balcony approaches to the flats. Accommodation: 48 flats—16 two-room, 24 three-room, 8 four-room.*

CONSTRUCTION AND FINISHES—*Weight-carrying walls either in brick or concrete supporting R.C. floors and flat roofs. The spinewall is of concrete, 9 in. thick. Floors are covered with t. and g. flooring nailed to breeze laid upon the reinforced concrete. Partitions are of concrete. Elevation treatment consists of Ballingshellic brick up to the plinth course pointed in black cement, and on the end curve walls above, but pointed in white cement. The remainder of the front elevation is in grey stocks (overburnt). Windows, steel casements.*

COST.—*£28,000. Price per ft. cub., 1s. 6d.*

OUT-PATIENTS' DEPARTMENT, ROTUNDA HOSPITAL • *BY F. G. HICKS*



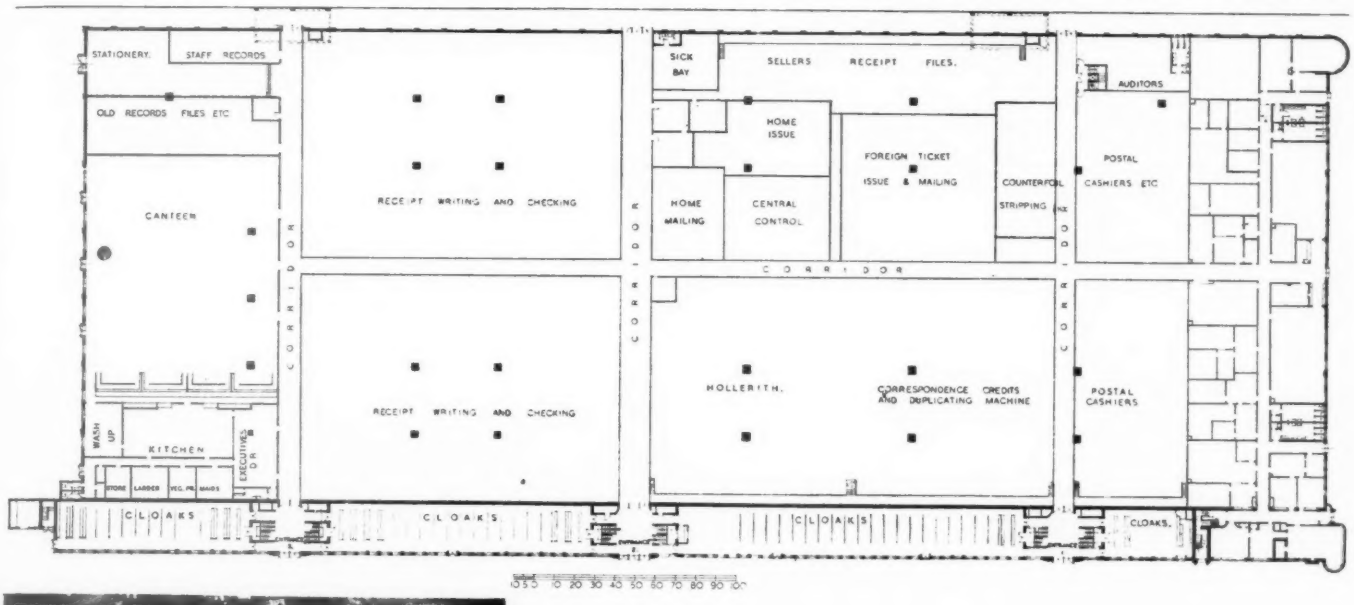


GENERAL—*For the pre-natal and post-natal examination and treatment of maternity cases.*

SITE—*Site adjacent to the main hospital building to which the new work was to be connected by corridor.*

CONSTRUCTION—*14 in. walls. Reinforced concrete flat roof. Elevational treatment to approval of city architect.*

IRISH SWEEPSTAKE BUILDING • *BY ROBINSON AND KEEFE*



GENERAL—*The group of buildings for the Hospitals' Trust, Ltd., at Ballsbridge provides accommodation for working space and canteen accommodation for a peak staff of about 4,000 workers, with a suite of offices for the administration and management staff.*

A large transformer station and central switch control room has been erected to the south-east of the main block. The canteen is arranged on the cafeteria principle, and provides seating for 1,000 diners. A long service counter and cash desk has been provided to the west of the canteen adjoining the kitchen unit, and the staff pass along the counter selecting their dishes, for which they pay at a cash desk, as they pass into the dining space. The executive dining room is arranged on the same principle, with a cafeteria counter for the executive staff.

CONSTRUCTION AND FINISHES—*Walls generally are constructed of mass concrete reinforced. The floors of the sanitary annexe are of hollowcast construction, in reinforced concrete. The roof of the working space is supported on a light steel framework, covered with steel decking, with one layer of insulation outside, and another inside the building. The outside surfaces are protected with rubber composition. The north lights consist of patent glazing, in which plenum release vents are provided at suitable points. The main floor of the working space and canteen is finished in teak wood block flooring on reinforced concrete. Under-floor ducts throughout are lined with cork insulation to prevent heat loss. Floors and staircases to the entrance halls are covered with rubber tiling. The kitchen floor, passages and surrounding offices are tiled.*

The roofs of the sanitary annexe and plenum chambers are covered with asphalt. Internal finish to the walls generally is plaster, painted, and the walls of the kitchen unit and some of the lavatories are tiled.

The boiler house is also built of concrete, and the roof is of steel decking supported on a steel framework. The boiler house chimney is built of brick. Externally, all concrete walls are plastered in coloured cement.

The treatment of the grounds, railings and general surroundings is at present under consideration.

The area occupied by the buildings is practically 4 acres.

Top, aerial view ; centre, west front ; left, staff at work.

PRICES

On the following pages appear *(a)* Prices for Measured Work, Part II; *(b)* Prices for Approximate Estimates.

★ IMPORTANT NOTE

The prices given below are for work executed complete and are for an average job in the London Area; all prices include overhead charges and profit for the General Contractor.

The prices given in italics are for "Materials Only" and represent the cost of the materials included in the measured rates. They are based on the prices given in "Current Market Prices of Materials" with the addition of 10 per cent. for overhead charges and profit.

The cost of labour (including its proportion of overhead charges and profit) can be ascertained by subtracting the prices in italics from the prices in heavier type.

The complete series of prices consists of four sections, one section being published each week in the following order :—

1. Current Market Prices of Materials, Part I.
2. Current Market Prices of Materials, Part II.
3. Current Prices for Measured Work, Part I.
4. A.—Current Prices for Measured Work, Part II.
   B.—Prices for Approximate Estimates.

PART 4

CURRENT PRICES FOR MEASURED WORK—II

BY DAVIS AND BELFIELD

JOINER

Deal Flooring

		1″	1¼″
Plain edge flooring in batten widths	per square	37/5 *27/5*	47/5 *36/5*
Ditto tongued and grooved ditto ..	per square	41/– *30/–*	51/6 *39/6*
T. & G. B.C. Pine rift flooring in narrow widths	per square	56/4 *43/–*	—

Wood Block Flooring, laid herringbone, 100 yards and up

D.G. and T.G. kiln dried, 2 block border, laid in hot mastic composition on cement screed, including 2 feet run of straight cutting per yard super, and wax polishing at time of laying.

		1″ nominal	1¼″ nominal
Burma teak	per yard super	12/1	16/3
Canadian maple	per yard super	10/4	11/11
25-30 per cent. quart Austrian Oak	per yard super	11/7	14/8
Plain American Oak (no selection made for sap) ..	per yard super	10/6	—
Gurjun	per yard super	12/2	13/1

JOINER—(*continued*)

		1″ nominal	1¼″ nominal
Pitch Pine (50% rift sawn)	per yard super	10/6	12/4
Ditto (100% ditto)	per yard super	12/1	14/2
British Columbian Pine ..	per yard super	8/5	8/11
Deal, 100 per cent. rift sawn	per yard super	8/8	10/1
Jarrah	per yard super	10/9	—
Additional straight cutting	5½d. per foot run		

Secret Nailed Tongued and Grooved Strip Flooring, fully Desiccated, including Polishing

		1″ nominal	1¼″ nominal
		£ s. d.	£ s. d.
Austrian Wainscot Oak ..	per square	8 18 6	10 12 7
Plain Japanese Oak ..	per square	7 10 8	9 2 2
Plain American Oak ..	per square	7 7 0	9 3 9
Pitch Pine	per square	7 0 6	8 15 7
British Columbian Pine ..	per square	4 14 6	5 7 7
Canadian Maple	per square	6 19 1	8 10 7
Burma Teak	per square	8 18 6	10 17 4
English Oak	per square	10 4 9	12 15 11
Gurjun	per square	6 19 1	8 10 7
Jarrah	per square	6 13 10	8 6 5

CURRENT PRICES

BY DAVIS AND BELFIELD

JOINER

Wall Linings

$\frac{5}{8}$″ Deal tongued and grooved V-jointed Matching in narrow widths .. .. per square	**29/4**	*18/3*
$\frac{1}{4}$″ (6 mm.) Birch (B) Plywood and fixing to walls per square	**35/7**	*25/8*
$\frac{3}{16}$″ Asbestos cement sheets butt jointed per foot super	–/**4**	–/$2\frac{1}{4}$
$\frac{1}{8}$″ Fibre board and fixing to walls per yard super	**2/11**	*2/4*
Deal battens as grounds plugged to brickwork per foot super	–/**1**$\frac{1}{2}$	–/*0*$\frac{1}{2}$
2″×$\frac{3}{4}$″ wrot and chamfered fillets .. per foot run	–/**1**$\frac{3}{4}$	–/*0*$\frac{3}{4}$
2″×$\frac{1}{2}$″ wrot and moulded ditto .. per foot run	–/**1**$\frac{3}{4}$	–/*0*$\frac{3}{4}$

Skirtings

	Deal	Austrian Oak
1″ stock chamfered or moulded 4″ high, fixed to and including grounds and backings planted on per foot run	–/**3**$\frac{1}{2}$	–/**10**$\frac{1}{2}$
	–/*2*	–/*7*$\frac{1}{4}$
Add for plugging to brickwork .. per foot run	–/**0**$\frac{1}{2}$	–/**0**$\frac{3}{4}$

Fitted ends on hardwood price as 4″ of skirtings, mitres as 6″.

Fitted ends, etc., on deal skirting included in price per foot run.

Casements and Fanlights

	1$\frac{1}{2}$″		2″	
Deal stock moulded sashes divided into squares with glazing bars per foot super	**1/4**$\frac{1}{2}$	–/*4*$\frac{1}{4}$	**1/5**$\frac{1}{2}$	–/*5*
Add for hanging casements (butts measured separately) .. .. each	**1/9**		**2**/–	

Cased Frames and Sashes

Deal cased sashed frame, including 2″ double hung stock sashes, with 6″×3″ Oak cill and brass axle pulleys, sash line and weights, average 15 feet super per foot super	**3/9** *1/7*

Doors in Deal

	$\frac{3}{4}$″	1″
Matchboarded, ledged and braced door per foot super	**1**/–	**1/2**
	–/*4*$\frac{3}{4}$	–/*5*$\frac{3}{4}$
	1$\frac{1}{2}$″	1$\frac{3}{4}$″ 2″
Framed, ledged and braced door, filled in with matchboarding .. per foot super	**1/7**$\frac{1}{2}$	**1/10** **2/1**
	–/*6*	–/*6*$\frac{1}{2}$ –/*8*$\frac{1}{2}$
Ditto garage doors in pairs per foot super		**1/10**
		–/*5*$\frac{1}{2}$
Labour rebated and beaded meeting styles, per foot run		–/**1**

	4-panel	
1$\frac{1}{2}$″ square framed, both sides per foot super	**1/8**	–/*7*$\frac{3}{4}$
2″ ditto .. .. .. per foot super	**2**/–	–/*9*$\frac{3}{4}$
1$\frac{1}{2}$″ bead butt panels one side, but square the other .. .. .. per foot super	**1/9**	–/*7*$\frac{3}{4}$
2″ ditto .. .. .. per foot super	**2/2**	–/*10*$\frac{1}{2}$
1$\frac{1}{2}$″ moulded both sides .. per foot super	**2**/–	–/*9*$\frac{1}{2}$
2″ ditto .. .. .. per foot super	**2/4**	–/*11*$\frac{1}{4}$
For fixing only, stock or p.c. doors, allow per foot super	–/**2**$\frac{1}{2}$	

Doors in Hardwood

Austrian quartered oak:
Labour, 2 × as much as deal.
Materials, 3$\frac{1}{4}$ × ditto.
Labour and materials, 2$\frac{1}{2}$ × ditto.

Cuban mahogany:
Labour, 3 × as much as deal.
Materials, 4$\frac{1}{2}$ × ditto
Labour and materials, 3$\frac{1}{2}$ × ditto

Teak:
Labour, 3 × as much as deal
Material, 3$\frac{1}{2}$ × ditto
Labour and material, 3$\frac{1}{4}$ × ditto

Deal stock glazing beads, mitred and bradded per foot run	–/**1**$\frac{1}{2}$	–/*0*$\frac{1}{2}$
Ditto and fixed with brass cups and screws per foot run	–/**3**	–/*1*

Window and Door Linings

	1″	1$\frac{1}{4}$″	1$\frac{1}{2}$″
Deal linings, 6″ wide, tongued at angles and planted on including backings per foot run	–/**6**$\frac{1}{2}$	–/**7**$\frac{1}{4}$	–/**8**$\frac{1}{4}$
	–/*2*$\frac{3}{4}$	–/*3*$\frac{1}{4}$	–/*4*
Add for plugging to wall .. per foot run	–/**0**$\frac{1}{2}$	–/**0**$\frac{1}{2}$	–/**0**$\frac{1}{2}$
Add for rebating .. .. .. per foot run	–/**0**$\frac{1}{2}$	–/**0**$\frac{1}{2}$	–/**0**$\frac{1}{2}$
Add for $\frac{3}{4}$″×1$\frac{1}{2}$″ stock Deal stop planted on per foot run	–/**1**$\frac{3}{4}$	–/**1**$\frac{3}{4}$	–/**1**$\frac{3}{4}$
	–/*0*$\frac{3}{4}$	–/*0*$\frac{3}{4}$	–/*0*$\frac{3}{4}$
Deal window board 9″ wide, with rounded nosing, tongued at back and on and including bearers plugged to brickwork per foot run	–/**9**$\frac{1}{2}$	–/**10**$\frac{3}{4}$	**1/0**$\frac{1}{2}$
	–/*4*$\frac{1}{4}$	–/*5*$\frac{1}{4}$	–/*6*$\frac{1}{4}$
1″ Deal scotia mould .. .. per foot run		–/**1**$\frac{3}{4}$	
		–/*0*$\frac{3}{4}$	

JOINER—(*continued*)

	1″	1$\frac{1}{4}$″	1$\frac{1}{2}$″
Austrian quartered oak linings 6″ wide tongued at angles and planted on including backings per foot run	**1/2**$\frac{1}{2}$	**1/5**$\frac{1}{2}$	**1/8**$\frac{1}{4}$
	–/*8*$\frac{1}{4}$	–/*10*$\frac{1}{4}$	*1/0*$\frac{1}{2}$
Add for plugging to brickwork .. per foot run	–/**1**	–/**1**	–/**1**
Add for rebating .. .. .. per foot run	–/**1**	–/**1**	–/**1**
Add for $\frac{1}{2}$″×2″ Austrian quartered oak stop planted on .. .. .. per foot run	–/**3**$\frac{1}{4}$	–/**3**$\frac{1}{4}$	–/**3**$\frac{1}{4}$
	–/*1*$\frac{1}{4}$	–/*1*$\frac{1}{4}$	–/*1*$\frac{1}{4}$

Austrian quartered oak window board 9″ wide, with rounded nosing tongued at back and on and including bearers plugged to brickwork per foot run **1/9** **1/11**$\frac{1}{2}$ *1/0*$\frac{3}{4}$ *1/3*$\frac{3}{4}$

1″ Austrian quartered oak scotia mould per foot run	–/**3**$\frac{1}{4}$
	–/*1*$\frac{1}{4}$

Window and Door Frames

	Deal	Austrian Quartered Oak
4″×3″ door frames .. .. .. per foot run	–/**9**$\frac{1}{2}$	**2/2**
	–/*4*$\frac{1}{2}$	*1/4*$\frac{1}{4}$
4″×3″ window frames .. .. per foot run	–/**11**$\frac{1}{2}$	**2/6**
	–/*4*$\frac{1}{2}$	*1/4*$\frac{1}{4}$
4″×3″ transomes and mullions .. per foot run	**1/3**$\frac{1}{2}$	**3/2**
	–/*4*$\frac{1}{2}$	*1/4*$\frac{1}{4}$
6″×3″ door cill, sunk weathered twice throated and grooved for water bar (measured separately) per foot run	—	**3/5**$\frac{1}{2}$
		2/0$\frac{1}{2}$
6″×3″ window ditto .. .. per foot run	—	**2/9**$\frac{1}{2}$
		2/0$\frac{1}{2}$
Add or deduct for variation in sectional area per square inch .. .. .. per foot run	–/**0**$\frac{3}{8}$	–/**1**$\frac{3}{8}$
Add for each labour, for chamfer, bead or rebate, etc. .. .. per foot run	–/**0**$\frac{1}{2}$	–/**1**
Add for each moulding .. .. per foot run	–/**0**$\frac{1}{4}$	–/**1**$\frac{1}{2}$

Architraves

	Deal	Japanese Oak
1″×3″ stock chamfered or moulded architraves, including mitres on softwood, planted on per foot run	–/**3**	–/**7**$\frac{1}{2}$
	–/*1*$\frac{1}{4}$	–/*4*$\frac{1}{2}$
Mitred angles on oak price as 6″ of architrave.		
Add for plugging to brickwork .. per foot run	–/**0**$\frac{1}{2}$	–/**0**$\frac{1}{4}$
Add for narrow splayed grounds .. per foot run	–/**1**$\frac{1}{2}$	–/**1**$\frac{1}{2}$
	–/*0*$\frac{1}{4}$	–/*0*$\frac{1}{4}$

Shelving

	Deal	Austrian Quartered Oak
Slat shelving of 1″ × 2″ spaced $\frac{3}{4}$″ apart per foot super	–/**9**	—
	–/*3*$\frac{3}{4}$	
1″ shelving .. .. .. per foot super	–/**10**	**2/2**$\frac{1}{2}$
	–/*5*	*1/4*$\frac{1}{4}$
1$\frac{1}{4}$″ ditto .. .. .. per foot super	**1/0**$\frac{1}{2}$	**2/8**$\frac{1}{2}$
	–/*6*$\frac{1}{4}$	*1/8*$\frac{1}{2}$
1″ cross-tongued shelving .. per foot super	**1**/–	**2/6**$\frac{1}{2}$
	–/*5*$\frac{1}{2}$	*1/5*$\frac{1}{2}$
1$\frac{1}{4}$″ ditto .. .. .. per foot super	**1/2**$\frac{1}{2}$	**3/0**$\frac{1}{2}$
	–/*6*$\frac{3}{4}$	*1/9*$\frac{1}{4}$
1″×2″ chamfered bearers planted on per foot run	–/**2**$\frac{1}{2}$	–/**5**$\frac{1}{2}$
	–/*0*$\frac{3}{4}$	–/*2*$\frac{3}{4}$
Add if bearers plugged to brickwork per foot run	–/**0**$\frac{1}{2}$	–/**0**$\frac{1}{2}$

Teak Draining Boards and Twice Oiling

1$\frac{1}{4}$″ Moulmein cross-tongued fluted draining board fixed to slight falls .. per foot super	**3/9**	*1/11*$\frac{1}{2}$
$\frac{1}{2}$″×2″ rounded rim bedded in white lead and screwed to edge of draining board per foot run	–/**6**$\frac{1}{2}$	–/*2*$\frac{1}{4}$
$\frac{1}{2}$″×4″ rounded skirting fillet ditto per foot run	–/**8**$\frac{1}{2}$	–/*3*$\frac{3}{4}$

Staircases

	Deal	Austrian quartered Oak
1$\frac{1}{4}$″ treads and 1″ risers .. per foot super	**2**/–	**4/6**
	–/*9*	*2*/–
2″ strings, fixed .. .. per foot run	**1/9**$\frac{1}{2}$	**4/6**$\frac{1}{2}$
	–/*7*$\frac{1}{2}$	*2/8*$\frac{1}{2}$
Housing treads and risers to strings .. each	–/**9**	**1/6**
3″×2$\frac{1}{2}$″ Moulded handrail .. per foot run	—	**1/6**$\frac{1}{2}$
		–/*10*$\frac{1}{2}$
1$\frac{1}{4}$″×1$\frac{1}{2}$″ square balusters 2′ 6″ long .. each	–/**10**	**1/9**
	–/*2*	–/*5*$\frac{1}{2}$
4″×4″ Newels with chamfered edges and fixing per foot run	**1/4**$\frac{1}{2}$	**3/2**
	–/*8*$\frac{1}{2}$	*1/11*

CURRENT PRICES

BY DAVIS AND BELFIELD

Ironmonger, Steel and Ironworker, Plasterer and External Plumber

IRONMONGER

Fixing only

4″ Butt hinges to softwood	per pair	1/–
4″ ditto to hardwood	per pair	1/4
16″ T. hinges to softwood	per pair	1/6
48″ Collinges patent gate hinges to softwood	per pair	7/6

		Softwood	Hardwood
6″ Cabin hooks	each	–/7½	–/10
Hat and coat hooks	each	–/3	–/4
Cupboard knobs	each	–/3	–/4
Night latches	each	1/6	2/–
Thumb latches	each	1/6	2/–
Letter plate and knocker, including perforation in door	each	2/6	3/4
Barrel or tower bolts	each	–/10	1/1
Flush bolts	each	1/6	2/–
Rim locks and furniture	each	2/–	2/8
Mortice ditto	each	3/–	4/–
Rebated ditto	each	3/6	4/8
Grip handles	each	–/6	–/8
Cupboard locks	each	1/–	1/4
Spring catches	each	–/10½	1/1½
Casement fastener	each	1/–	1/4
Ditto stays	each	–/10	1/1
Sash fastener	each	–/8	–/11

STEEL AND IRONWORKER

(For Rainwater Goods—*see* "Plumber.")

Steelwork

		£	s.	d.
Basis for plain rolled steel joists	per ton	16	17	0
		14	*2*	*0*

Fabricated Steelwork

		£	s.	d.
Joists cut and fitted	per ton	20	0	6
Stanchions, ordinary sections with riveted caps and bases	per ton	23	10	6
Stanchions, compound	per ton	25	11	6
Plate girders	per ton	27	19	6
Framed roof trusses, 25′ 0″ span	per ton	30	4	6
Ditto ditto 60′ 0″ span	per ton	28	5	0

Wrot Iron Work

Simple balusters and handrail fixed (excluding mortices, etc.)	per cwt.	56/–
Bolts and nuts fitted	per cwt.	45/– *38/6*

Galvanized Corrugated Sheeting

		20 B.G.	22 B.G.
Sheeting in 3″ corrugations and fixing on wood framing with screws and galvanized embossed curved washers including laps	per square	52/3 *42/3*	46/1 *36/8*
Ditto fixed to steel framing	per square	60/1 *47/7*	54/7 *42/1*

PLASTERER

Lime and Sirapite Plastering

		Per yard super	In narrow widths per foot super
Expanded metal lathing		1/8 *1/1½*	–/3
1″ × 3/16″ sawn laths		–/9½ *–/5*	–/1½
Render and set in lime and hair		1/8 *–/6½*	–/3¼
Render, float and set in lime and hair		2/– *–/8¾*	–/3¾
Plaster, float and set ditto on lathing (measured separately)		2/1½ *–/9½*	–/4
Render and set with Sirapite		1/9½ *–/8*	–/3½
Plaster, float and set ditto on lathing (measured separately)		2/3 *–/10¾*	–/4
Skimming coat Sirapite		1/5½ *–/4½*	
⅜″ thick plaster board fixed including covering joints with scrim cloth		2/– *1/2½*	

PLASTERER—(*continued*)

Keenes

	Per yard super	In narrow widths per foot super
Cement plain face on and including a backing of Portland cement and sand	2/6 *–/8½*	–/5 —

Mouldings and Labours

		Lime and Sirapite	Keenes
Plain cornices and mouldings 6″ girth	per foot run	–/9½ *–/1½*	–/11 *–/2*
Labour arris, quirk or throat	per foot run	–/1½	–/1½
Ditto rounded angle	per foot run	–/2	–/2
Ditto staff bead	per foot run	—	–/7½

Mitres price as 12″ of moulding, stopped ends as 6″, and rounded angles as 18″.

Portland Cement and Sand (1 : 3)

		½″	¾″
Screeds to floors for wood or tiles	per yard super	1/2½ *–/4¼*	1/4 *–/6½*
Screeds for tiling, etc., on walls	per yard super	1/4 *–/4½*	1/6 *–/6¾*
Renderings to walls—one coat float finish	per yard super	1/6 *–/4½*	1/8 *–/6¾*
Plainface	per yard super		2/– *–/6¾*

Coloured Cement Plainface

Cullamix No. 2 or 3 cream, on and including water repellent cement and sand backing	per yard super	3/10 *1/9*
Snowcrete mixture on and including ditto	per yard super	3/10 *1/8¼*
Snowcrete and white silica sand on and including ditto	per yard super	3/4½ *1/3½*

For keyed bricks or hacking face of concrete, to form key for plastering, see "Bricklayer."

Wall Tiles, Commercial Quality

6″ × 6″ × ⅜″ ivory or white	per yard super	16/– *11/3*
Extra for rounded edge tiles	per yard run	1/1¾ *1/0¾*
6″ × 6″ × ⅜″ coloured enamel bright glazed	per yard super	21/3 *16/6*
Extra for rounded edge tiles	per yard run	–/4 *–/3*
6″ × 6″ × ⅜″ eggshell gloss enamelled	per yard super	22/1 *17/4*
Extra for rounded edge tiles	per yard run	–/4 *–/3*

EXTERNAL PLUMBER

Lead

	Flats	Gutters, Flashings, etc.	Stepped Flashings	Soakers, cut to size
Milled sheet lead and labour per cwt.	39/6 *26/–*	40/7 *26/–*	41/9 *26/–*	34/4 *26/–*

Bedding edges in white lead	per foot run	–/2
Lead wedgings to flashings	per foot run	–/1½
Ditto to stepped flashings	per foot run	–/2
Dressing 6-lb. lead over glass and glazing bars	per foot run	–/3½
Copper nailing	per foot run	–/1½
Close ditto	per foot run	–/2
Bossed ends to rolls	each	–/7½
Extra labour dressing through shoots and into rainwater heads	each	3/–
Ditto to cesspools, including extra solder	each	5/3

CURRENT PRICES

BY DAVIS AND BELFIELD

EXTERNAL AND INTERNAL PLUMBER

EXTERNAL PLUMBER—(*continued*)

Cast Iron Rainwater Goods

Rainwater Pipes fixed to brickwork.

		3″	4″
Round pipes	per foot run	1/6½	3/4
		1/1¾	*1/5½*
Extra for bends	each	2/4	2/11
		1/6	*2/1*
Ditto 6″ offset	each	2/4	2/11
		1/4	*1/11*
Ditto single branches	each	2/10	3/8
		1/10	*2/8*
Ditto shoes	each	2/4	3/–
		1/7	*2/–*
		3½″ × 3½″	4″ × 3″
Square and rectangular pipes ..	per foot run	3/1	2/10
		2/6¼	*2/3*
Extra for elbows (fitted)	each	6/6	5/11
		5/3	*4/8*
Ditto single branches	each	6/7	6/3
		5/1	*4/9*
Ditto shoes	each	7/2	6/6
		6/1	*5/5*

Gutters fixed to fascia.

		4″	5″	6″
Half-round gutters ..	per foot run	1/1	1/2½	1/7½
		–/9	*–/10*	*1/2½*
Extra for angles	each	1/9	2/–	2/6
		1/–	*1/2¼*	*1/8*
Ditto nozzles	each	1/7	1/10½	2/3
		1/–	*1/3*	*1/7*
Ditto stop ends	each	1/0½	1/3	1/4½
		–/8¼	*1/–*	*–/10¾*
Ogee gutters	per foot run	1/2	1/4	1/8¼
		–/10	*–/11½*	*1/3¼*
Extra for angles	each	1/9	2/1½	2/3
		1/–	*1/4*	*1/5*
Ditto nozzles	each	1/8½	2/2¼	2/5
		1/1½	*1/7*	*1/9*
Ditto stop ends	each	1/1¾	1/4½	1/7½
		–/9½	*1/–*	*1/2½*

INTERNAL PLUMBER

Lead Pipes

Service.

		½″	¾″	1″	1¼″
Pipes laid in trenches ..	per foot run	–/10¾	1/2¾	1/9¼	2/4½
		–/6¾	*–/10¾*	*1/3¾*	*1/8½*
Add if fixed on walls ..	per foot run	–/1¾	–/2	–/2½	–/3¾
Ditto if in short lengths ..	per foot run	–/1	–/1	–/1½	–/2
		1½″	2″	2½″	3″
Pipes laid in trenches ..	per foot run	3/0½	4/0¾	—	—
		2/2¼	*3/0¾*	—	—
Add if fixed on walls ..	per foot run	–/5	–/6	—	—
Ditto if in short lengths ..	per foot run	–/3	–/4	—	—

Distributing.

		½″	¾″	1″	1¼″
Cold water pipes fixed to walls	per foot run	–/11	1/–	1/7	2/1¾
		–/5½	*–/8¼*	*–/11¼*	*1/2¼*
Add if in short lengths ..	per foot run	–/1	–/1	–/1½	–/2
		1½″	2″	2½″	3″
Cold water pipes fixed to walls	per foot run	2/5½	3/5¾	—	—
		1/3	*2/0¼*	—	—
Add if in short lengths ..	per foot run	–/3	–/4	—	—

Waste and Warning.

		½″	¾″	1″	1¼″
Waste and overflow pipes fixed to walls	per foot run	–/8	–/10¼	1/2½	1/8¼
		–/3½	*–/5½*	*–/7½*	*–/9¾*
		1½″	2″	2½″	3″
Waste and overflow pipes fixed in short lengths ..	per foot run	2/2¾	2/9¾	—	—
		1/1¼	*1/5¼*	—	—

Soil and Ventilating

		3½″	4″	4½″
Pipes fixed, including lead tacks	per foot run	4/3½	5/4½	6/5½
		2/7½	*3/5½*	*4/3½*

		1½″	2″	2½″	3″	3½″	4″	4½″
Bends ..	each	1/6	2/–	2/9	3/9	4/3	4/6	5/6

		½″	¾″	1″	1¼″	1½″	2″
Soldered joints to fittings	each	1/9	2/–	2/3½	2/7	2/10½	3/5
		–/6	*–/9*	*1/–*	*1/3*	*1/6*	*2/–*
Soldered branch joints (price as largest branch) ..	each	1/11	2/2	2/5½	2/9	3/0½	
			–/6	*–/9*	*1/–*	*1/3*	*1/6*

		2″	2½″	3″	4″	4½″
Soldered branch joints (price as largest branch) ..	each	3/7	4/–	4/7	5/7	6/1
		1/6	*2/4*	*2/10*	*3/9*	*4/2*

Wrap small pipes with hair felt .. per foot run –/6 –/3½

INTERNAL PLUMBER—(*continued*)

Drawn Lead Traps

	1¼″	1¼″ 3″ deep seal	1½″	1½″ 3″ deep seal	2″	2″ 3″ deep seal
P. Traps 6 lb. with cleaning eye and two soldered joints .. .. each	7/3	7/9½	8/4	8/11	10/5	11/–
	4/–	*4/6½*	*4/10*	*5/5*	*6/8*	*7/3*
S. ditto .. .. each	7/7	8/2	8/10	9/4	11/1	11/8
	4/4	*4/11*	*5/4*	*5/10*	*7/4*	*7/11*

Brasswork (Best Quality)

		½″	¾″	1″
Brass screwdown stop cocks including two soldered joints	each	7/5½	9/10	13/7
		4/11½	*7/4*	*11/–*
Ditto, including two red lead joints for iron	each	5/6	6/6½	9/6
		4/–	*4/10½*	*7/8*
Ditto, including one soldered and red lead joint	each	6/4	7/5½	11/10
		4/4	*5/4½*	*9/7*
High pressure Portsmouth pattern ball valve with flynut and union and one soldered joint	each	8/3	11/–	18/10
		5/6	*8/4*	*15/11*
Ditto, including red lead joint for iron	each	6/9	9/–	15/9
		4/10	*6/9*	*13/4*

		2″	4″
Brass thimble and soldered and cement joints	each	5/1	9/–
		2/11	*6/–*
Ditto, with solder and caulked lead joints	each	5/8	10/1
		3/5	*6/4*

Fixing Only (Connections to Pipes measured separately)

24″ × 18″ × 6″ sinks including taps, etc., and pair of brackets cut and pinned to brickwork	each 6/–
24″ × 18″ lavatory basins ditto	each 6/6
W.C. suite comprising pan and trap, seat, W.W.P. and brackets	each 10/6
Baths, including taps, etc., and setting in position ..	each 10/6

Screwed and Socketed Galvanized Steam Quality Steel Tubes and Fittings

Pipes up to and including 1½″ include short running lengths, sockets, connectors, elbows, bends, fire bends; Tees and Diminishing Pieces enumerated.

Distributing.

		½″	¾″	1″	1¼″	1½″	2″
Pipes fixed to walls	per foot run	–/10½	–/11½	1/3½	1/10½	2/4½	3/–
		–/5	*–/6*	*–/8*	*–/11*	*1/2¼*	*1/6¾*
Ditto in short lengths, fittings, etc., measured separately	per foot run	–/10¾	–/11½	1/4	1/10¾	2/5½	3/1¼
		–/4¼	*–/5*	*–/6¾*	*–/9¼*	*1/0¼*	*1/3¾*

Extra for

Firebends	each	–/4	–/6	–/9	1/3	1/6	2/–
Bends	each	1/2	1/5	1/9	2/6	3/1	4/9
		–/7½	*–/10*	*1/1½*	*1/10*	*2/3*	*3/7*
Round elbows ..	each	1/4½	1/7	1/9½	2/3½	2/9½	4/5
		–/10	*1/–*	*1/2*	*1/7½*	*1/11½*	*3/3*
Square ditto ..	each	1/3½	1/5½	1/8	2/2	2/7½	4/1½
		–/9	*–/10½*	*1/0½*	*1/6*	*1/9½*	*2/11½*
Tees	each	1/6	1/9½	2/–	2/6	3/0½	4/9
		–/10½	*1/1½*	*1/3½*	*1/9*	*2/1½*	*3/6*
Crosses	each	2/9	3/2	3/10	5/–	6/–	9/1
		1/11	*2/3*	*2/10*	*3/9½*	*4/6½*	*7/3*
Diminishing pieces	each	–/10	–/11	1/2	1/6	1/11	2/8
		–/4½	*–/5*	*–/6½*	*–/8½*	*–/11*	*1/4½*
Caps	each	–/7	–/8½	–/10	1/1½	1/5	2/1
		–/3½	*–/4½*	*–/5½*	*–/8½*	*–/10½*	*1/4½*
Plugs	each	–/6	–/7	–/8½	–/10	1/1	1/6½
		–/3	*–/3½*	*–/4½*	*–/5½*	*–/7*	*–/10½*

Cast Iron Waste, Soil and Vent Pipes

		2″	3″	4″	5″	6″
L.C.C. pipes in 6′ 0″ lengths fixed to brickwork ..	per foot run	1/9	2/0½	2/6½	4/5	5/4
		1/3	*1/5*	*1/10½*	*3/8*	*4/4*
Extra for bends	each	3/11	4/10	6/7	9/4	12/8
		2/3	*2/10*	*4/2*	*6/5*	*9/–*
Ditto single branches ..	each	5/9	6/7	7/9	8/7	10/7
		2/11	*3/2*	*3/7*	*3/6*	*4/3*
Ditto swannecks 6″ projection	each	4/5	6/5	8/5	12/5	16/11
		2/3	*3/10*	*5/4*	*8/9*	*12/3*
Extra for access door or any fitting	each	6/9	6/9	7/3	8/6	8/6

CURRENT PRICES

BY DAVIS AND BELFIELD

INTERNAL PLUMBER, GLAZIER AND PAINTER

INTERNAL PLUMBER—(*continued*)

Zincworker

		13 G.	14 G.	15 G.	16 G.
Rolled sheet zinc on flats	per foot super	-/7¾	-/8½	-/9½	-/10
Ditto in gutters, cover flashings, etc.	per foot super	-/8½	-/9	-/10	-/10½
Ditto in stepped flashings	per foot super	-/10½	-/11	1/-	1/0½
Labour and risk dressing over glass	per foot run	-/4¼	-/4¼	-/4¼	-/4¼
Capped ends to rolls	each	-/2¼	-/2¼	-/2¼	-/2¼
Extra labour to cesspools ..	each	2/7½	2/7½	3/2	3/2

Copperworker

Distributing.

	½"	¾"	1"	1¼"	1½"	2"
Solid drawn copper tube fixed to walls per foot run	-/9	-/11	1/4½	1/9½	2/4	3/1¼
	-/5¼	-/7	-/10¾	1/1	1/3½	1/11¼
Add if in short lengths per foot run	-/0¾	-/0¾	-/1	-/1½	-/2	-/2¼

Fittings for copper tubes

		½"	¾"	1"	1¼"	1½"	2"
Compression type							
Straight couplings	each	1/9½	2/4	2/11½	3/8	5/-	7/-
		1/2½	1/8	2/2½	2/10	4/1	6/-
Obtuse elbows ..	each	2/8	3/1	4/4	5/4	8/7	11/4
		2/-	2/4	3/6	4/5	7/7	10/3
Tees	each	3/-	3/5½	5/1	7/2	10/10	15/1
		2/3	2/7½	4/2	6/2	9/9	13/11
Crosses	each	4/-	4/6½	6/4½	7/10	12/9	17/5½
		3/2	3/7½	5/4½	6/9	11/7	16/2½
Reducing couplings	each	—	2/2	2/11½	3/8	4/11½	7/-
		—	1/6	2/2½	2/10	4/0½	6/-
Bends	each	2/4½	2/10	3/11½	4/11	8/-	11/7
		1/8½	2/1	3/1½	4/-	7/-	10/6
Brass stopcocks ..	each	5/2½	7/4½	10/4	18/-	24/6	40/4
		4/0½	6/0½	8/10	16/4	22/8	38/4
Capillary type							
Straight couplings	each	1/7	2/-	2/9½	3/5	4/4	5/9½
		-/9	1/-	1/7½	2/1	2/10	4/1½
45° Elbows ..	each	2/6½	3/2½	4/2	5/3½	7/4½	10/5½
		1/7½	2/1¼	2/11	3/10½	5/9¾	8/8½
Tees	each	2/9¼	3/2	4/7½	6/4	8/6	12/-
		1/9¼	2/-	3/3½	4/10	6/10	10/2
Crosses	each	3/4	3/9	5/6½	7/7	10/6½	14/9
		2/3	2/6	4/1½	6/-	8/9½	12/10
Reducing couplings	each	—	1/7¾	2/0½	2/7½	3/5½	5/0½
		—	-/7¾	-/10½	1/3½	1/11¼	3/4½
Bends	each	2/10¼	3/5	4/7½	6/-	8/10	11/11
		1/11¼	2/4	3/4½	4/7	7/3	10/2
Pillar tap connections	each	2/0½	2/9½				
		1/2½	1/9¼				

		24 G.	23 G.
Rolled sheet copper on flats ..	per foot super	1/5	1/7
Ditto in gutters, cover flashings, etc.	per foot super	1/6	1/8
Ditto in stepped flashings ..	per foot super	2/1½	2/4½
Labour and risk dressing over glass ..	per foot run	-/4¼	-/4¼
Capped ends to rolls	each	-/3¼	-/3¼
Extra labour to cesspools	each	3/8	3/8

GLAZIER

Sheet Glass (Ordinary Glazing Quality)

18 oz. clear sheet and glazing to wood, sprigged and with back and front putties, to all normal sizes not exceeding 60" in length or 40" wide	per foot super	-/6¼
24 oz. ditto	per foot super	-/7¾
32 oz. ditto	per foot super	-/11½
Obscured ground sheet glass, net extra to above prices	per foot super	-/1¾
⅛" figured rolled white glass and glazing to wood with beads (measured separately)	per foot super	-/10½
Ditto, normal tints, ditto	per foot super	1/2¾
Hammered double rolled cathedral white ditto	per foot super	-/10
Ditto, normal tints, ditto	per foot super	1/1¾
Add for glazing into metal frames (ordinary rebates)	per foot super	-/1⅛
Ditto, metal sashes with ferroput ..	per foot super	-/2¼
Ditto, solid metal casements and screw beads	per foot super	-/2¼
Wash leather strip or similar material and bedding edge of glass	per foot run	-/3½

Glazing only, thick drawn sheet glass, polished plate or wire polished plate for all normal sizes. (For prices of glass see materials section and add profit, say 10 per cent.) per foot super -/6¼

PAINTER

Whitening, Distempering and Painting (on new Plastered Walls)

Twice distempering white ..	per yard super	-/4½	-/1
Ditto, in common colours ..	per yard super	-/7	-/3½
Add for stippling	per yard super	-/2	—
Preparing and painting two coats of undercoating and one coat of enamel	per yard super	1/9	-/8

Preparing and Painting Two Coats of Oil Colour on Ironwork after fixing

General surfaces	per yard super	1/-	-/1
Perforated landings and staircases both sides (one side measured)	per yard super	2/6	-/8
Pipes, bars, balusters, etc., not exceeding 3" girth	per yard run	-/1¾	
Metal window frames	per yard run	-/2¾	
Eaves gutters	per yard run	-/7½	
2" Rainwater pipes	per yard run	-/3	
4" ditto	per yard run	-/6	
Squares one side	per dozen	1/9	
Large ditto	per dozen	2/3	
Extra large ditto	per dozen	3/-	
Edges of casements	each	-/3	

Painting on New Woodwork

		Knot, prime, stop and paint three coats oil colour		Add or deduct for each coat more or less	
General surfaces ..	per yard super	2/-	-/8	-/6	-/2
Fascias and soffites	per yard super	2/6	-/8	-/7½	-/2
Fillets, skirtings, etc., not exceeding 3" girth	per yard run	-/3	—	-/0¾	—
Ditto, not exceeding 6" ..	per yard run	-/5½	—	-/1¼	—
Ditto, not exceeding 9" ..	per yard run	-/7	—	-/1¾	—
Ditto, not exceeding 12" ..	per yard run	-/9	—	-/2	—
Squares one side	per dozen	3/6	—	-/9	—
Large ditto	per dozen	4/6	—	1/-	—
Extra large ditto ..	per dozen	6/-	—	1/4	—
Edges of casements	each	-/6	—	-/1½	—

Sundries

Twice creosoting woodwork ..	per yard super	-/6	-/2
Twice limewhiting brickwork ..	per yard super	-/4½	-/0½

		Sizing	Staining	Once Varnish
General surfaces ..	per yard super	-/2	-/4½	-/6
		-/¾	-/1½	-/2½
Wax polishing	per foot super		-/4½	
Body in and French polish on hardwood surfaces	per foot super		1/-	

Writing

Plain letters or figures, two coats, 2" to 12" letters	per dozen inches in height	1/10½
Ditto, shaded ..	per dozen inches in height	2/6
Plain gold, 2" to 12" letters	per dozen inches in height	2/6
Ditto, 12" to 24" ..	per dozen inches in height	3/9

Gilding

		Single Gold	Double Gold
Preparing and gilding in best oil gold	per foot super	5/3	8/4
Ditto in matt or burnished gold	per foot super	7/4	11/6

Paperhanging

	On walls		On ceilings	
Preparing new plastered walls for papering per piece (60 feet super)	1/4	-/5¼	1/5½	-/5¼
Pasting and hanging only.				
Plain lining paper per piece (60 feet super)	1/4	-/1½	1/8	-/1½
Common printed papers per piece (60 feet super)	2/-	-/1½	2/6	-/1½

APPROXIMATE ESTIMATES

★ ON this and the three following pages the JOURNAL's section of Approximate Estimates is published for the seventeenth time.

There is nothing revolutionary about the idea—its usefulness lies in its efficiency as a time-saver in calculating the approximate price of work to which the cubing system cannot be applied.

In brief, an Approximate Estimate in considering a roof, converts the several units of pricing involved into a common unit of price per square yard, and then adjusts the price to cover sundry labours. By this means several stages of calculation are saved by the estimator in a hurry.

• *The following composite prices are for work executed complete and should be used for the preparation of Approximate Estimates only.*

FOUNDATIONS

		Thickness of walls 9″	11″ Hollow	13½″
• Excavation in clay soil for foundations 2′ 6″ deep to walls, including stock brickwork in second stocks cement mortar 1 : 3 up to 6″ above ground and horizontal double slate damp-proof course with external facings p.c. 100/– and pointing	*per yard run*	25/1	28/3	35/4
• Ditto, in ordinary soil ditto	*per yard run*	23/10	27/1	33/9

EXTERNAL WALLS

• External walls in Fletton brickwork in cement mortar 1 : 3 including three coat lime plaster and twice distempering one side and facings p.c. 100/– in Flemish bond, joints raked out and pointed with a neat struck weathered joint, the other	*per yard super*	19/4	19/1	24/9
• Ditto, including Keenes cement plain-face and three coats oil colour one side and ditto	*per yard super*	21/–	20/9	26/5
• Ditto, including internal fair face, flush jointed one side and ditto	*per yard super*	17/7½	17/4½	23/0½
• For variation of 10/– per m. in p.c. of facings in Flemish bond (stretcher in cavity work) ...	*per yard super*	–/9	–/6½	–/9

APPROXIMATE ESTIMATES—(*continued*)

INTERNAL WALLS AND PARTITIONS

		2″	3″	4½″	9″
• Breeze partitions set in cement mortar or Fletton brick walls and including three coat lime plaster and twice distempering both sides	*...per yard super*	9/11	11/1	11/1	16/7
• Ditto, built fair and flush jointed both sides	*...per yard super*	—	—	7/8½	13/2
• Ditto, including Keenes cement plain-face and three coats oil colour both sides	*...per yard super*	13/3	14/5	14/6	19/11

GROUND FLOORS

• Solid ground floor construction including 9″ excavation, 4″ bed of hardcore, 6″ concrete 6 : 1 surface bed, finished with 1½″ granolithic paving trowelled smooth	*per yard super*	9/10
• Ditto, finished with ¾″ cement and sand 1 : 3 screed and wood block flooring or paving p.c. 10/– yard	*per yard super*	18/2
• Ditto, finished with 2″ × 2″ sawn floor fillets and floor clips and 1″ deal tongued and grooved flooring, batten widths	*per yard super*	12/11½
• Ditto, finished with floor fillets as before and 1″ (nominal) oak tongued and grooved narrow widths strip flooring polished at time of laying	*per yard super*	25/2½
• Sleeper wall ground floor construction, including 15″ excavation, 4″ bed of hardcore, 6″ concrete 6 : 1 surface bed, sleeper walls 12″ high, built honeycomb, 4½″ slate damp-proof course, 4½″ × 3″ fir plate, and 4″ × 2″ sleeper joists and 1″ deal tongued and grooved flooring in batten widths	*per yard super*	15/3
• Ditto, with 1″ nominal oak tongued and grooved narrow widths strip flooring polished at time of laying	*per yard super*	27/6

UPPER FLOORS

		With 7″ Joists	With 9″ Joists	With 11″ Joists
• Wood construction including 2″ fir joists on 4″ × 3″ fir plates and herring-bone strutting with three coat lime plaster and twice distempering white to soffite and 1″ deal tongued and grooved flooring in batten widths	*per yard super*	12/–	13/2	14/3
• Ditto, with 1″ nominal oak tongued and grooved narrow widths strip flooring polished at time of laying	*per yard super*	24/3	25/5	26/6
• 5″ thick concrete 4 : 2 : 1 reinforced with fabric suitable at 13′ 0″ spans for carrying ¾ cwt. per ft. super, with two coat lime plaster and twice distempering white to soffite and 1″ Kara Sea deal 100 per cent. rift sawn block flooring wax polished at time of laying ...	*per yard super*			25/7
• Ditto, with 1″ nominal 25/30 per cent. quartered Austrian oak block flooring polished at time of laying	*per yard super*			28/8

APPROXIMATE ESTIMATES—(*continued*)

FLAT ROOFS

		Using 7″ Joists	Using 9″ Joists	Using 11″ Joists
• Wood construction including 2″ fir joists on 4″ × 3″ fir plates and herring-bone strutting with three coat lime plaster and twice distempering white to soffite and best natural rock asphalt roof finish ...	*per yard super*	18/5	19/5	20/6
• 5″ Thick concrete 4 : 2 : 1 reinforced with fabric (suitable at 13′ 0″ span for carrying 40 lbs. per ft. super) with two coat lime plaster and twice distempering white ditto	*per yard super*			22/7

PITCHED ROOFS

• Bangor Countess 20″ × 10″ slating, laid to 3″ lap fixed with zinc nails, including 2″ × 1″ battens, ¾″ roof boarding and 4″ × 2″ rafters (measured on slope)	*per yard super*	13/1
• Westmorland Random green slates No. 1 best 24″ to 12″ long proportionate widths ditto	*per yard super*	17/2
• Machine-made tiles 10½″ × 6½″ laid to a 4″ gauge, fourth course nailed with galvanized nails ditto	*per yard super*	11/6
• Hand-made sand faced tiles ditto ditto	*per yard super*	12/3
• Slate ridges, including cuttings and 1½″ × 9″ deal ridge	*per yard run*	9/10½
• Half-round ridge tile ditto	*per yard run*	7/7
• Slate hips, including cuttings, lead soakers, and 1½″ × 11″ deal hips	*per yard run*	12/5½
• Hip tiles, including cuttings and 1½″ × 11″ deal hips	*per yard run*	14/–
• Lead valley gutter to slated roof, including cuttings and 1½″ × 11″ deal hips	*per yard run*	18/5
• Purpose-made valley tiles, including cuttings and 1½″ × 11″ deal hips	*per yard run*	13/7

DOORS

		Partitions or Walls				
		2″	3″	4½″	9″	13½″
• 2″ flush door p.c. 29/– 2′ 6″ × 6′ 6″, including deal frames or linings, ironmongery p.c. 15/– and simple architraves both sides, all painted	each	100/–	101/5	96/3	100/10½	106/10½

WINDOWS

Prices are for normal size, including suitable ironmongery, glazing with clear sheet glass and painting.

• Standard metal casements with fixed lights	*per foot super*	2/5
• Ditto, with average proportion of opening lights	*per foot super*	3/10
• Standard metal casements in wood frames with fixed lights	*per foot super*	4/–
• Ditto, with average proportion of opening lights	*per foot super*	4/11
• Standard industrial type sashes with fixed lights	*per foot super*	2/2
• Ditto, with average proportion of opening lights	*per foot super*	3/6
• Solid deal frames and 2″ casements	*per foot super*	5/0½
• Deal cased frames and double hung sashes	*per foot super*	4/10½

NOTE.—Standard wood surrounds to metal windows can be obtained at a cheaper price than that given for wood frames above.

APPROXIMATE ESTIMATES—*(continued)*

STAIRCASES

• Deal 9′ 0″ high, including half space landing, newels, balusters and handrail	*each*	£23	10 0
• Austrian oak ditto	*each*	£44	5 0
• Precast concrete ditto	*each*	£32	15 0

DRAINS

		Ordinary Soil	*Clay Soil*
• Manhole, 2′ 3″ × 1′ 6″ × 2′ 0″ deep, including excavation, 6″ (6 : 1) concrete bottom, one brick sides 3rd stocks in cement mortar with brown glazed half-round straight main channel and one brown glazed branch channel, including benching, sides rendered in cement and sand (1 : 3) and a 24″ × 18″ black single seal cast iron manhole cover and frame, weight 0 cwts. 3 qrs. 0 lbs.	*each*	£3 12 6	£3 15 6
• Manhole 2′ 3″ × 3′ 9″ × 4′ 0″ deep ditto including six branches	*each*	£7 2 0	£7 6 6

		Clay Soil		*Ordinary Soil*	
		4″	6″	4″	6″
• British standard quality stoneware drain pipes laid on and including 6″ thick concrete bed flaunched up both sides of pipe and excavating average 2′ 6″ deep	*per foot run*	2/5	3/0½	2/3	2/10½
• Ditto, but excavating 4′ 0″ deep	*per foot run*	4/1½	4/9	3/7½	4/3
• Cast iron drain pipes in 9′ lengths and laying in trench including 6″ concrete bed and excavating average 2′ 6″ deep	*per foot run*	4/8	6/6½	4/6	6/4½
• Ditto, average 4′ 0″ deep	*per foot run*	6/4½	8/3	5/10½	7/9

PATHS AND DRIVES

• 2″ finished gravel paths, including 6″ excavation, and 4″ bed of hardcore and edging boards	*per yard super*	5/3
• 7½″ finished gravel drive, including 6″ excavation, 6″ bed of hardcore and edging boards	*per yard super*	6/9
• 2½″ Tarmacadam drive including ditto	*per yard super*	7/10

FENCES

• Cleft chestnut pale fence 4′ 0″ high	*per foot run*	-/10
• Deal weather boards, including posts, arris rails and gravel boards creosoted, 5′ 0″ high	*per foot run*	2/9½
• Ditto, in English oak throughout	*per foot run*	3/10½

The four sections on PRICES published in the issues of May 11, 18, 25 and this week together complete the PRICES SUPPLEMENT. Next week the FIRST SECTION—PRICES OF MATERIALS, PART 1—will be repeated with items revised according to market quotations.