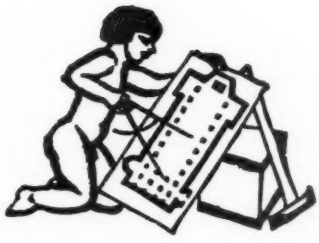
BRITISH LION FOR NEW YORK

Mr. Barney Seale at work on the Royal Lion which is to decorate the British Pavilion at the New York World Fair. Messrs. Easton and Robertson are the architects for this building. The lion is 16 ft. long and will occur three times on the elevation of the building at approximately 30 ft., 60 ft. and 90 ft. from the ground.

FITNESS

A statue in the courtyard of the Stadium, Aarhus, Denmark



FOUR BADLY-NEEDED CHANGES

SEVERAL letters published in the JOURNAL in recent weeks have suggested that the competition system is due for an overhaul. This is also the opinion of the JOURNAL ; and we believe the first stage of reform is for all architects to make sure they understand present defects and their causes. For the competition system is a complex, temperamental affair.

In an ideal world most architects would agree that a large number of building schemes of every kind should be thrown open to competition ; and that every competitor ought to submit the solution which he thinks the best in every way. The only fault in these first principles is that they have proved impracticable.

Clients, either as individuals or as a committee, like building to start at once when they decide to build. Delay of any kind they do not understand ; delay of eighteen months seems simply ludicrous. This is the first cause of faults in the competition system.

Because of it competitions are almost wholly confined to public buildings. Municipal buildings, relieved by an occasional school, hospital or town-planning layout, dominate the competition system.

Second cause of failure is the liking of promoters for dealing with a ingle person in everything connected with their building scheme. If they cannot themselves choose their architect and what he shall build, they like to be sure that the man who does choose their architect fully understands their views. This is a natural attitude, and seemed such a reasonable compromise that the profession could not well refuse to agree to it when it was first suggested. But it has three potential drawbacks : it establishes the single assessor as the rule ; it demands an assessor experienced with committees, urbane and reassuring—but not necessarily a good judge of competition schemes ; it tends to bias the assessor in favour of those schemes which embody the promoters' desires.

From this domination by municipal schemes, the whole competition system has come to reflect the views of the business men who sit on building subcommittees. These worthy men love grandeur and pomp and symmetry. Twenty years ago the majority of architects liked the same thing. Today the majority of architects have different ideas of grandeur, different ideas about the office accommodation which is good enough for local government officials. But the competition system does not reflect this change.

It is still possible to submit in open competition (with trifling alterations) the plans with which Ralph Knott won the London County Hall a generation ago—and, quite possibly, to win with them again. When one thinks of the hundreds of architects who have trudged around that dreary maze of ill-lighted confusion, this standstill in competition design becomes almost incredible.

At present a great number of architects shrug their shoulders over competitions. They say that no one is forced to compete, that everyone who wants to win picks a good precedent, trims it to suit the assessor, and grins at success or failure.

In the JOURNAL's view this attitude is fatally short-sighted. Not all the public have failed to see the changed conditions for which contemporary architecture must cater. And when the more alert section sees the results of modern competitions acclaimed as the best the profession can do, *it* shrugs its shoulders, too ; and in a country whose sporting instincts if nothing else would seem to ensure interest in open competitions, the profession's biggest publicity weapon is almost wholly a flop.

Architects can only get this state of affairs altered by exerting themselves. Municipal competitions—the most frequent kind—now draw only fifty to one hundred competitors, and three months' work by about five hundred men and women is devoted not to advancing architectural design, but to an involved patternmaking which is fast becoming " a perfectly legitimate minor art, like pokerwork or building ships in bottles."

The JOURNAL has suggested four remedies for this present situation. The scale of drawings could be fixed at sixteenth as a maximum, with thirty-second for large schemes. Schedules of cost should be kept to a minimum and a quantity surveyor called in to price the first half-dozen schemes. Assessors belonging to each main school of thought on matters of design should be appointed in rotation. And every year one " non-competing " architect should be appointed to an important assessorship.

These reforms are simple, just and could be carried out at once.

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

NOTES & TOPICS

RESERVED FOR WHAT ?

THERE is no answer yet to the President's question about the reservation of architects—"Reserved for What?" Something like two-thirds of all registered architects have returned their index cards, but no one I have met has any idea what is to be done with us.

*

Every one of us, I fancy, will hope that this will not go on until one more opportunity is missed. Architects, for once, have the chance to be *first*.

*

And if we know—as we ought to be able to know—what jobs will be available for us in an emergency our usefulness will be immeasurably increased.

VIGILANCE COMMITTEE

In case readers have forgotten :

*

1, R.I.B.A. President Goodhart-Rendel demanded a vigilance committee to vet designs for important buildings. 2, Astragal said committee consisting of whom? Architects ineligible ; live-wire laymen, such as Georgian Group? 3, Georgian Group chairman Lord Derwent said difficult to vet modern buildings until some sort of standard established. He would accept for standard : B.B.C., Imperial Airways, Scarborough Hospital, Radio City, Battersea Power Station, Underground Building, R.A.F. aerodromes. 4, Astragal, puzzled, said : would this standard satisfy other eminent laymen. Decided to find out. Invited readers to nominate for vigilance committee laymen in whom they would have confidence. 5, readers sent in names of 61 men, 2 women. 6, *A.J.* Editor, at Astragal's request, asked above 63 for six recent buildings they approved of.

*

First of all, any enquiry of this sort invariably reveals the astonishing mobility of the *haut monde*. Readers who followed every stage of my correspondence with Lord Derwent will remember that one could never tell whether he would write next from St. Moritz or Monte Carlo* ; and now Lord Leverhulme's Secretary writes that he is in India ; Mr. Cronshaw of the I.C.I. is on the point of leaving for the Continent (but promises to reply later), and Sir Alexander Gibb is away too.

*

I have drawn one or two other blanks, including a charming letter from Mrs. Paul Robeson, who says :

"Mr. Robeson has asked me to thank you for your letter. He hasn't the faintest idea about buildings, I'm afraid, and isn't even interested in them. So he really could not do justice to your suggestion. He joins me in sending his greetings and regrets."

*

Several others (including Lord Horder and the Dean of Liverpool) write to say that they need time to think it over and will write later. I am grateful to them. Mr. Herbert Morrison regrets that he is too busy to comply.

*

So much for the negative side. On the positive side we find Mr. J. M. Keynes wonderfully faithful to Bloomsbury, though to a Bloomsbury strangely different from the one he has been associated with for so long. He writes : "In my opinion the new buildings of the University of London are the outstanding architectural success of recent times." But Mr. Clive Bell, who I shall come back to next time, forsakes Bloomsbury for Palermo Post Office, which he considers the best building he has seen in the functional style.

*

Mention of Palermo drew my attention to an unfortunate oversight (the results of which appear in several other replies). The Editor did not ask specifically for English buildings, although as the purpose of the inquiry is to establish a standard by which proposed buildings in this country could be judged, those are the only ones that are relevant. Some people in composing their replies have obviously felt over-awed at the thought of having to cover the whole world, while others have gone straight for Radio City (alias Rockefeller Centre), New York. The popularity of this last puzzles me greatly. I should have thought, whatever its merits, that they had very little connection with the qualities ordinary English buildings need to have, but it heads the lists of Dr. Julian Huxley, Harry Strauss, M.P., and Rebecca West.

*

Dr. Huxley in a very painstaking and knowledgeable letter also gives the New York Medical Centre, the Van Nelle factory, Rotterdam, the Underground Building and stations, some of the new pithead baths, London University, Bexhill Pavilion, the Berlei factory on the Great West Road, the A.S.C. Laboratories on the Bath Road beyond Slough, the Comet Inn at Hatfield and Highpoint number two. He adds :

"Might I suggest . . . a parallel list of prominent modern buildings which people thought did *not* come up to proper modern standards? It would be all too easy to compile—but might make too much bad blood!"

*

Rebecca West, after Radio City, lists Battersea Power Station, the Washington Bridge, New York, Finsbury

* Lord Derwent's letter this week (see p. 527) is from the Grand Hotel, Rome.

" The new buildings of the University of London are the outstanding architectural success of recent times."—J. M. Keynes.

Health Centre, Peter Jones's store, and the Bexhill Pavilion. She also says, " Some of the factories on the Great West Road strike me as very handsome indeed," and adds :

" I except Broadcasting House with a certain sense of guilt. It fulfils one purpose of modern architecture—it looks good from many angles. But I feel it has sacrificed its good name by decorating itself with poor sculpture. Surely outsides aren't keeping pace with insides. The insides of many stores, such as Derry and Toms, seem to me beautiful in their sense of height and space."

*

Harry Strauss's list, besides Radio City, is London University ; the House of German Art, Munich ; Shakespeare Memorial Theatre, Stratford-on-Avon ; Battersea Power Station ; the Curzon Cinema.

More next week.

GOLDEN GATE

Fairs are usually remembered (says *Time*) for (1) their effect on contemporary architecture, (2) their naughtiest exhibits, and (3) their deficits. Thus Wembley would be remembered for (3), Gothenberg for (1), while San Francisco is in the ranking for (2).

*

For those who are wondering whether San Francisco is worth the trip from the New York Fair, I append *Time's* short-list of marvels.

A. Sally Rand's troupe of cow-girls, wearing boots but no saddles on a " DNUDE* Ranch " behind plate glass.

B. Waxwork : " Stella," famed bar-room nude of the 1915 Exposition, who curves and glows and actually " breathes " (by virtue of a string attached to the back of her belly, pulled gently at intervals).

C. The Rocket Ship space gun, which gives customers the illusion of being shot beyond the stratosphere.

D. The Midget Village, all in scale for 124 Singer midgets.

E. The Atom Smasher, a working model of Ernest O. Lawrence's Cyclotron, which is so potent it could not be shown at the fair for fear of sterilizing all who came near it.

*

Remembering that you can see as well the world's longest bridge, the answer seems to be : worth the trip.

* Portmanteau word : nude + dude — Dude means beginner, neophyte, novice. Meaning of nude is, I believe, widely understood.

MR. WALKER WANTS TO KNOW

Mr. Winston Walker, spearhead of the movement for R.I.B.A. reform, has had his programme disclosed in the columns of the *Architect and Building News*. Mr. Walker is the brother of Myerscough Walker, the well-known perspective artist, but is no relation to Mr. Raymond Walker, the cement and concrete consultant architect, or Mr. William Walker, the Olympia clown. He is at present said to be in the architectural department of the Air Ministry. His proposals are suitably blunt for these days of ultimatums.

*

The first is that Associates should be more generously represented on the R.I.B.A. Council. The second is that non-payment of subscription should not automatically deprive anyone of membership. The third is that the R.I.B.A. should maintain a licensed bar for the use of members and their guests. Mr. Walker also suggests that architectural events are so fully covered by the professional press that the *R.I.B.A. Journal* should cease publication in its present form, and become a quarterly devoted entirely to Institute affairs. Lastly, as Mussolini has in Signor Gayda his foghorn, the R.I.B.A. should have a public relations officer.

*

These are the planks upon which Mr. Walker's campaign rests. Even our joiner friend from Ireland will agree that they make a sound platform. Mr. Walker has forgotten to add, but it is presumably to be understood, that if the R.I.B.A. accept these terms their autonomy will henceforth be respected.

RUSSELL SQUARE

The north side of Russell Square is being demolished without a word of protest from anybody, though one or two papers have played the old " homes of the great in bygone days " theme song. The square was many years ago " improved " by the Duke of Bedford's agent, who glued on terra-cotta trimmings, vaguely suggestive of some Renaissance original.

*

Roger Fry, in his still delightful *Architectural Heresies of a Painter*, points out that this exactly suited the people who wanted to live there. " Anyone in the know would have despised these façades, not because of their inherent beastliness, or from any greater æsthetic sensibility, but simply because he would have known that they were ' not the thing,' but bad copies of what had been the thing." But why (still on Russell Square) all this squaring of nice easy corners and these far too solid brick islands and gardens. The present one-way traffic scheme needs two permanent policemen to control the resultant chaos.

THIS WEEK'S FRAGRANT THOUGHT

" He who has laid up no materials can produce no combinations."—*Discourses of Sir Joshua Reynolds.*

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

HOUSING CONSULTANT FOR PADDINGTON

The special housing committee of the Paddington Borough Council has decided to recommend the Council to appoint Miss Elizabeth Denby as housing consultant in connection with the Clarendon Street redevelopment area scheme at an inclusive fee of 500 guineas.

MANAGEMENT OF L.C.C. HOUSING ESTATES

The Housing and Public Health Committee of the L.C.C. announced at Tuesday's meeting of the Council that it has reviewed the system of management of the Council's housing estates in the light of representations that a higher proportion of women estate managers trained in the Octavia Hill or other kindred system should be employed. It has also considered certain views on the subject in a report issued by a subcommittee of the Central Housing Advisory Committee of the Ministry of Health.

Under the Octavia Hill system, women estate managers who have received special academic and practical training, exercise all the functions of estate management and combine with them work of social welfare and advice and guidance to tenants.

The Committee, while acknowledging the success of the Octavia Hill system when applied to working-class dwellings previously subject to bad management, is doubtful whether it possesses any advantage over the Council's system, which has been evolved as the result of long experience to suit the variety of conditions obtaining on the Council's estates. It does not regard it as essential that rent collection should be combined with other functions of estate management and work of social welfare. Although it recognizes that women of personality and experience prove efficient in estate management, it does not accept the theory that women are, by reason of their sex, more suitable than men for this work and it sees no reason to suggest a radical change in the Council's system of management, in which women may, and do already, participate.

At the same meeting the General Purposes Committee report recommended the Council to place on record its high appreciation of the services of Mr. E. P. Wheeler, F.R.I.B.A., who, on April 10, 1939, retires from the office of architect to the Council and superintending architect of metropolitan buildings. Mr. Wheeler has been in the Council's service over forty years and has occupied his present position since 1935.

THE ARCHITECTS' DIARY

Thursday, March 30

R.I.B.A., 66 *Portland Place, W.1. Exhibition of Road Architecture.* "*The Need for a Plan.*" *Last day.* 10 *a.m. to* 8 *p.m.*

INSTITUTION OF STRUCTURAL ENGINEERS, YORKSHIRE BRANCH. *At the Hotel Metropole, Leeds.* "*Heating and Ventilating in the Queen's Hotel, Leeds.*" *By Dr. Oscar Faber.* 7 *p.m.*

INSTITUTION OF CIVIL ENGINEERS, *Gt. George Street, S.W.1. (Road Engineering Section).* "*Some Problems in Road Construction.*" *By A. H. D. Markwick.*

NORTHERN POLYTECHNIC, E. *Annual speech night and exhibition of students' work.* 7 *p.m.*

SOCIETY OF ANTIQUARIES, *Burlington House, W.1.* "*Excavations at Leicester.*" *By K. M. Kenyon.* 8.30 *p.m.*

LONDON SOCIETY. *Visit to the Marylebone Health Centre, Lisson Grove, N.W.1.* 3 *p.m.*

HOUSING CENTRE, 13 *Suffolk Street, S.W.1. Camps Exhibition. Until May* 6. 10 *a.m. to* 5 *p.m. Saturdays:* 10 *a.m. to* 12 *noon.*

Friday, March 31

ARCHITECTURAL ASSOCIATION, 36 *Bedford Square, W.C.* "*Regional Planning in the British Isles: The Influence of Material on Design.*" *By S. E. Dykes Bower.* 8.30 *p.m.*

LIVERPOOL ARCHITECTURAL SOCIETY. *Annual Dinner. At the Adelphi Hotel, Liverpool.*

INSTITUTION OF STRUCTURAL ENGINEERS, MIDLAND COUNTIES BRANCH. *At Leicester.* "*Specifications and Estimating for Arc Welding.*" *By S. M. Reisser.* 7 *p.m.*

INSTITUTION OF SANITARY ENGINEERS. *At Carton Hall, S.W.1.* "*Concrete Practice.*" *By R. C. Blyth.* 6.30 *p.m.*

Monday, April 3

R.I.B.A., 66 *Portland Place, W.1. Presentation of the Royal Gold Medal for Architecture to Percy Thomas, O.B.E., P.P.R.I.B.A.* 8.30 *p.m.*

CHARTERED SURVEYORS' INSTITUTION, *Gt. George Street, S.W.1.* "*Air Raid Precautions.*" *By T. E. Scott.* 6.30 *p.m.*

Tuesday, April 4

BUILDERS' CLERKS' BENEVOLENT INSTITUTION. *Annual Dinner. At the Holborn Restaurant, W.C.2.* 7 *p.m.*

INSTITUTION OF STRUCTURAL ENGINEERS, YORKSHIRE BRANCH. *Annual Meeting. At the Hotel Metropole, Leeds.* 7 *p.m.*

HOUSING CENTRE, 13 *Suffolk Street, S.W.1. Tuesday luncheon:* "*The London Gardens Society.*" *By K. M. England.* 1 *p.m.*

Wednesday, April 5

INSTITUTION OF HEATING AND VENTILATING ENGINEERS. *At the Institution of Mechanical Engineers, S.W.1.* "*Natural and Artificial Seasoning of Timber.*" *By E. H. B. Boulton.* 7 *p.m.*

INSTITUTION OF STRUCTURAL ENGINEERS, LANCASHIRE AND CHESHIRE BRANCH. *At the Constitutional Club, Manchester. Annual Business Meeting.* 7 *p.m.*

WORSHIPFUL COMPANY OF CARPENTERS, *Carpenters' Hall, E.C.* "*Joints in Carpentry and their Practical Application to Structures.*" *By R. V. Boughton.* 7.30 *p.m.*

THE TITE PRIZE FINAL COMPETITION

In the United Kingdom 227 competitors took part in the preliminary competition for the Tite Prize. The following have been selected to take part in the final competition :—

Miss Betty C. Benson (Department of Architecture, Sheffield University) ; Mr. Donald F. Bussey (Birmingham School of Architecture) ; Mr. Alex Daykin (Department of Architecture, Sheffield University) ; Mr. Thomas D. Gedrych (Welsh School of Architecture) ; Mr. G. B. Griffiths (Birmingham School of Architecture) ; Mr. R. H. Harvey (Birmingham School of Architecture) ; Mr. William Hood (School of Architecture, King's College, Newcastle-upon-Tyne) ; Mr. John M. M. Jenkinson (Department of Architecture, Sheffield University) ; Mr. Victor Knight (School of Architecture, The Polytechnic, Regent Street, London) ; Mr. T. L. Marsden (School of Architecture, Victoria University, Manchester) ; Mr. J. E. Murray (Glasgow School of Architecture) ; Mr. J. R. Oates (Department of Architecture, Sheffield University) ; Mr. B. D. Palmer (Birmingham School of Architecture) ; Mr. Andrew Renton (School of Architecture, Edinburgh College of Art) ; Mr. William Smith (School of Architecture, King's College, Newcastle-upon-Tyne) ; Mr. Harold C. Thomas (School of Architecture, The Polytechnic, Regent Street, London) ; Mr. John Wilkinson (School of Architecture, Manchester Municipal School of Art).

HOUSING

Mr. Walter Elliot, the Minister of Health, speaking last week at a luncheon of the National Federation of Housing Societies, said house building had been going on at a yearly rate of 330,000, and he was glad that there was no sign of any appreciable diminution of that rate. The total number of houses built since the war was now approaching the figure of four millions, and we should soon be entering on the fifth million. A quarter of a million unfit houses had been demolished or closed, and over eleven hundred thousand people had been moved from slums to new dwellings. 20,000 houses had already been built to abate overcrowding.

9,000 ON THE R.I.B.A. REGISTER

Mr. H. S. Goodhart-Rendel, speaking at the annual dinner of the South Wales Institute of Architects, said that the profession had been classed by the Government as a reserved occupation. The work required of them would include the design and superintending of military buildings and hospitals and salvage and demolition work in time of emergency.

It was essential that the Government should be able to put the right man in the appropriate place, and for that purpose the Institute began last September the compilation of an architects' register and promised the Home Office it would soon be ready. The register now contained about 9,000 names, but it needed several thousand more before that promise could be kept. He hoped architects would round up defaulters.

BUILDING CENTRE CAMP COMPETITION

The Directors of the Building Centre invite designs for a camp suitable for use as a residential school for 400 children between the ages of five and fifteen years, to be used (a) *by education authorities for children transferred periodically from town schools ;* (b) *as a holiday camp for children in the same category as above ;* (c) *as an evacuation camp in time of emergency for children in the same category as above. The first premium offered is £200 and further prizes of £100 may be awarded in one or more instances at the discretion of the assessors.*

Conditions may be obtained on application to Mr. F. R. Yerbury, The Building Centre, 158 New Bond Street, W.1, price 2s. 6d. post free. Designs must be delivered to the Building Centre, addressed to Mr. F. R. Yerbury, not later than 6 p.m. on Tuesday, May 16. No questions will be answered.

NEWS IN BRIEF

● The decision regarding the proposed building of offices in Portland Place now rests with the Ministry of Health. Last week the

The end wall of Pilkington's new showrooms at St. Helens. It is faced with black vitrolite in large panels. The large-scale mural, designed by Sigmund Pollitzer, has been carried out by the shaded sandblast process, and afterwards treated with silver bronze.

adjourned inquiry was concluded at St. Marylebone Town Hall.

The inquiry resulted from an appeal by Lord Midleton against the refusal of the London County Council to allow the development of 34 Portland Place as office premises.

● The Stoke-on-Trent Corporation has appointed Professor Abercrombie and Mr. Holliday to prepare a scheme for the planning of the civic centre.

● Mr. Frank Lloyd Wright's "Watson" lectures on Organic Architecture are to be given at the R.I.B.A. on May 2 ("The Idea"); May 4 ("The Movement"); May 9 ("The Scene at Present"); May 11 ("The Future"). The first will be at 5.30 p.m., and the succeeding three at 8.30 p.m.

● The Cambridgeshire County Council has appointed Mr. W. H. Wingate, F.R.I.B.A., to the position of County Architect. Mr. Wingate has been chief assistant to the Somerset County Council since 1924.

● Mr. E. A. L. Martyn has been nominated for the presidency of the Buckinghamshire Society of Architects.

● More houses were completed by local authorities in Scotland last month than in the month of February in any year since the inception of the Housing Acts in 1919. Returns received by the Department of Health for Scotland show that during February Scottish local authorities completed the erection of 1,664 houses, four of which were of timber construction. This is an increase of 212 as compared with February, 1938.

The returns received by the Department show that the Scottish Special Areas Housing Association, Limited, at the end of February had 884 houses in course of construction (280 of timber and 604 of concrete), and that work was still to be begun on 2,658 houses, of which 368 will be erected in timber and 2,290 in concrete.

● Two weeks have passed since Team Valley Trading Estate accepted the wager of a Czecho-Slovakian who challenged the North-East to build a 21,000 sq. ft. factory in the record time of 48 days. The "stake" put up by Mr. M. Sigmund, the factory owner, was up to £60 a year additional rent.

The estate authorities are now very strong

Three views of Pilkington's new showrooms at St. Helens: top, the end wall (see page 521); centre, the bathroom section. The walls are lined with large panels of ivory vitrolite—the decorative panel over the bath being the same material with sandblast lines painted in two colours—a deep blue and white. The shaped pilasters are faced with champagne vitroflex in 2 in. by ½ in. units—a few lines of ivory opal vitroflex being inlaid in the pilasters on the left. The semi-circular step to the bath is composed of pressed ivory vitrolite floor tiles, and the rest of the floor pressed clear glass tiles, dull grey silvered and fixed in cement. Bottom, a close-up of the dressing-table in the bathroom section. The top of the dressing-table is of inch-thick silvered polished plate with a satin finished face. The curved base is faced with ivory opal vitroflex in 2 in. by ½ in. units, and the shaped pilasters above with champagne (mirror) vitroflex. The floor is of pressed clear glass tiles, dull grey silvered. Architect for the showrooms: Kenneth Cheeseman.

favourites in the race, and on Saturday last, after 18 working days, all outside brickwork was completed, the whole of the roof covered in and 50 per cent. of the factory floor laid, while installation of heating and lighting was begun. It is estimated that the original date of May 15 for the installation of plant will be anticipated by about four weeks. This should constitute a world record.

● The Health Congress at the Royal Sanitary Institute is to be held at Scarborough from July 3 to 8. Among the subjects to be discussed are evacuation schemes and the health and sanitary problems arising therefrom, modern school design, planning and development of roads, and the municipal engineer and public health.

● Westminster Hospital has been promised a gift of £25,000, one-quarter of the sum needed to complete its rebuilding fund. The donor is Mr. Bernard Docker, the chairman.

The Hospital is striving to complete the entire cost of rebuilding by April 20, the day upon which the King, accompanied by the Queen, will open the new main building.

Mr. Docker's gift brings the fund within £40,000 of the total required.

EXHIBITIONS

[*By D. COSENS*]

THERE is a great similarity in the work which John Riddle and Ben Matthews are showing at the Bloomsbury Gallery, and they both acknowledge a common master in Cézanne. John Riddle is, perhaps, the more versatile of the two and his present exhibition, chiefly of recent paintings of the south of France, shows a marked advance on anything he has previously exhibited. This is particularly apparent in his very exhilarating and dynamic treatment of " Cassis Bay," which has a spontaneity new to his work and in which he is clearly seeing things quite freshly and enjoying himself in painting them..

Ben Matthews' work, also of the south of France and in the same idiom, generally shows greater assurance in design and in the control of spatial relationships. His " Landscape near Toulon " and his " Landscape at Port-Issol " are particularly successful.

The work of both these painters is very sincere, the result of much patient observation and a real love of painting. There are no fashionable tricks and each work is carefully and consistently thought out.

●

Renoir is a hard master. There is no shorthand for his statements of form and solidity in terms of colour or for his impressions of space and distance, and the work of his latest disciple, Joan Souter-Robertson, at the Storran Gallery lacks the draughtsmanship and control that united his rather florid pictorial elements into magnificent definitions of space and atmosphere, and miraculously kept them free from vulgarity almost to the end. Without Renoir's rosy spectacles, which are by no means the same thing as Renoir's vision, she certainly has the ability to see and paint very well indeed, but what Miss Souter-Robertson or any other painter sees clearly for himself today is so very much more interesting to us all than a pastiche on something seen by someone else a long time ago, however seriously it may be executed.

●

John Riddle and Ben Matthews. Bloomsbury Gallery, 24 South Molton Street. Until April 1.

Joan Souter-Robertson and Henning Nyberg. Storran Gallery, 5 Albany Court Yard, Piccadilly. Until April 6.

FRENCH INSTITUTE

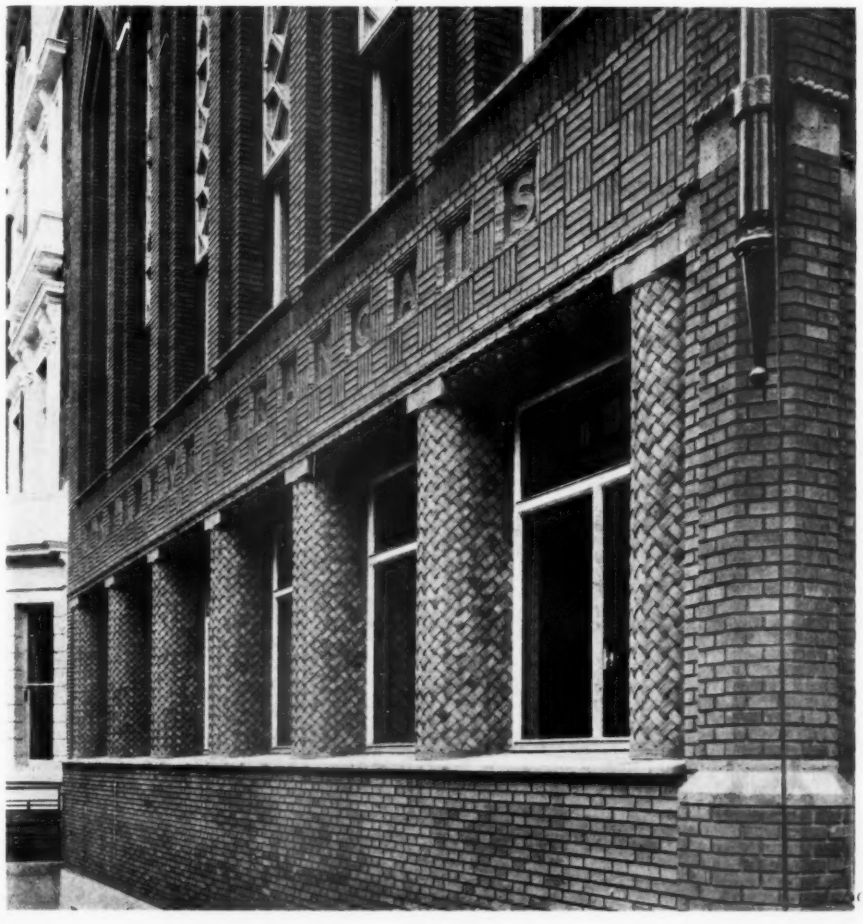
QUEENSBERRY PLACE, SOUTH KENSINGTON

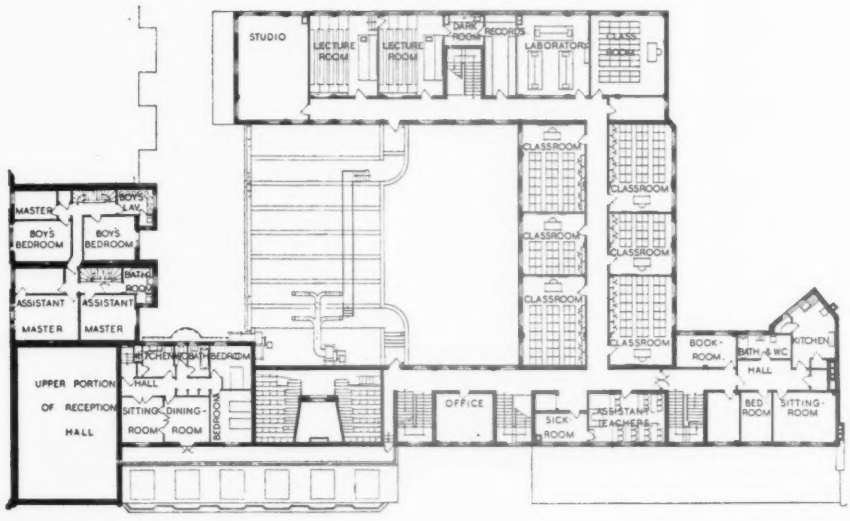
ARCHITECT FOR FIRST SECTION: A. J. THOMAS

ARCHITECT FOR SECOND SECTION: PATRICE BONNET

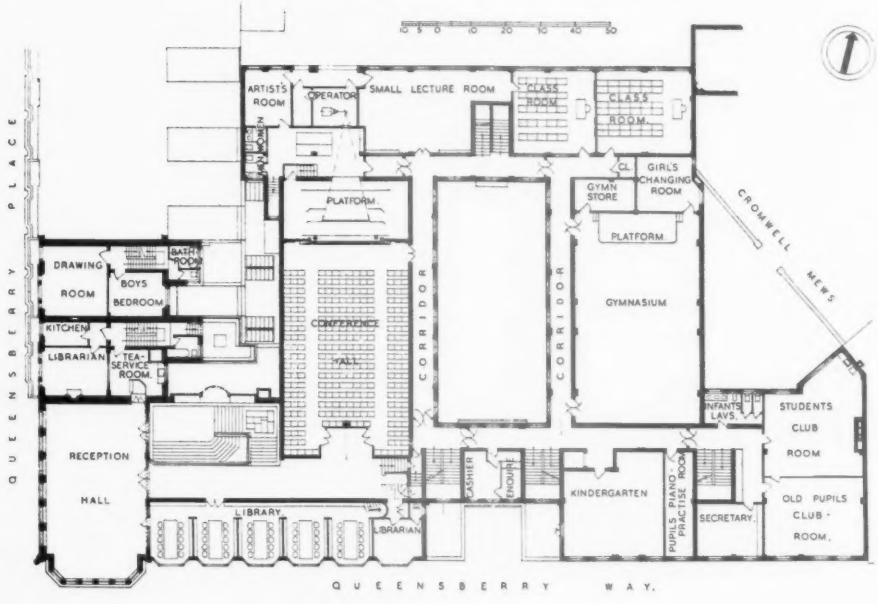
GENERAL AND SITE— *The French Institute in Queensberry Place, South Kensington, which was opened by President Lebrun on Tuesday of last week, has been designed in two sections. The first section, used for educational purposes, has been occupied for more than two years and is the work of Mr. A. J. Thomas. It consists of four- and in part five-storey blocks built round an internal courtyard. Incorporated in this section are Nos. 13 and 15 Queensberry Place, which have been remodelled internally as quarters for resident students. The second section, just completed, was designed by M. Bonnet, Architect in Chief to the French Government, who was invited to add a reception suite of French character.*

Above, the fronts to Queensberry Place (left) and Queensberry Way; below, the Queensberry Place elevation.

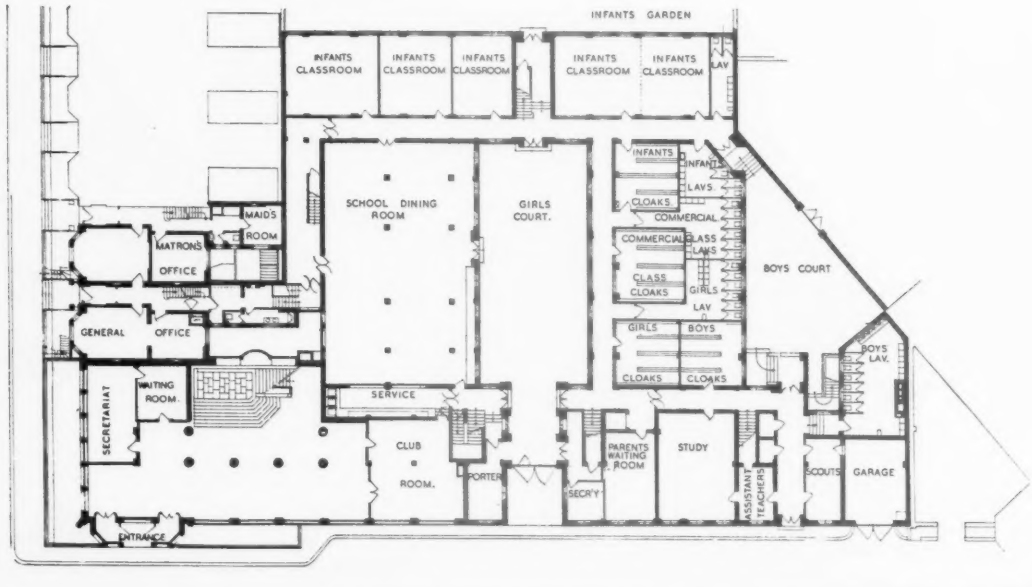




THIRD FLOOR PLAN

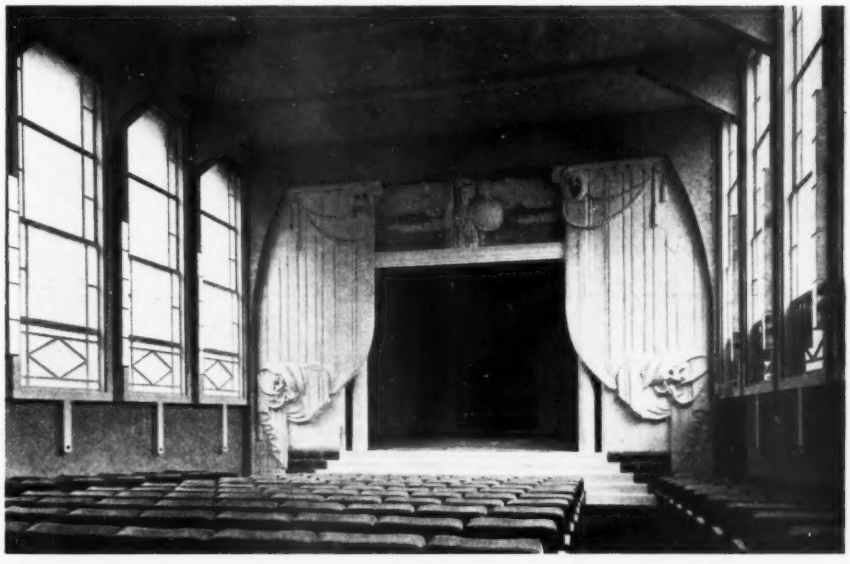


FIRST FLOOR PLAN



GROUND FLOOR PLAN

FRENCH INSTITUTE, SOUTH KENSINGTON • ARCHITECT FOR FIRST SECTION: A. J.

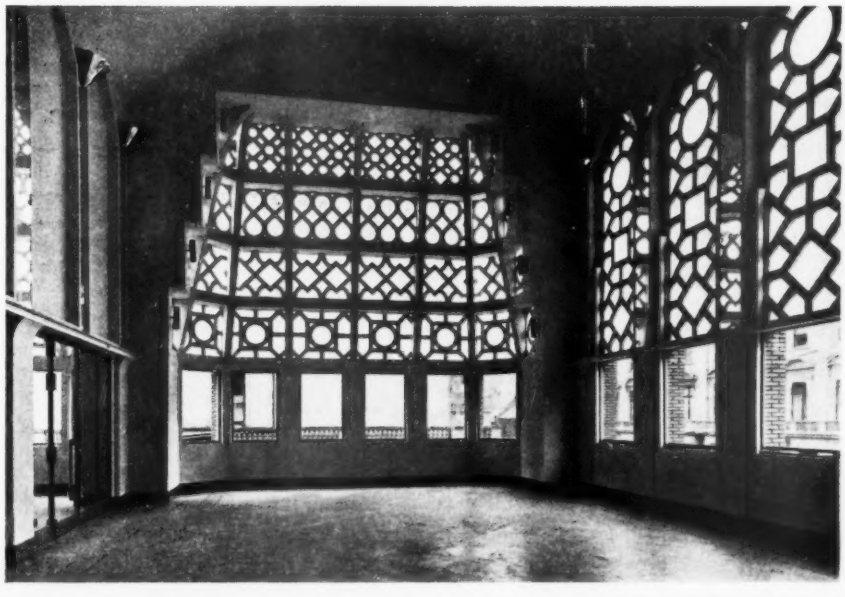


FIRST SECTION

PLAN—*This section of the building includes class-rooms, lecture rooms, laboratories, gymnasium, art studio, commercial students' class-rooms, and students' club-room, kitchen and dining-room, and residential quarters for teachers and domestic staff, etc. The gymnasium is over the cloak rooms on the first floor, and occupies the height of two storeys, with an open arcade on the courtyard side allowing extra light to reach the gymnasium from windows, and providing a balcony from which spectators may watch. Separate entrances are provided for students, infants, and parents and staff.*

CONSTRUCTION AND EXTERNAL FINISHES—*The general construction is of reinforced concrete, for which French cement and steel bars were used, tested to the British standard. The walls are faced with 2 in. silver grey bricks, with red quoins and arches, together with Portland stone plinth, string courses and door-ways. The covered main entrance in Queensberry Way, of Portland stone, has large wrought-iron gates.*

INTERIOR FINISHES—*Finishings throughout this part of the building have been chosen with a view to reducing maintenance costs. All class-room and upper corridor floors are covered with thick linoleum on a cork underlay, the principal rooms with oak wood blocks, and the ground floor corridors and cloakrooms with tiles. Walls and floors of kitchens, dining room and lavatories are covered with tiles of French manufacture.*



SECOND SECTION

PLAN AND FINISHES—*The second section consists of an entrance hall and offices on the ground floor, cloak-room accommodation in the basement, and on the first floor a large reception room, library and conference hall to seat 400 persons. It occupies the corner of the site bounded by Queensberry Place and Queensberry Way. The architect for this section was instructed to use French materials.*

The sculpture is the work of M. Gaumont.

Top, the conference hall ; centre, the reception hall ; bottom, the entrance hall.

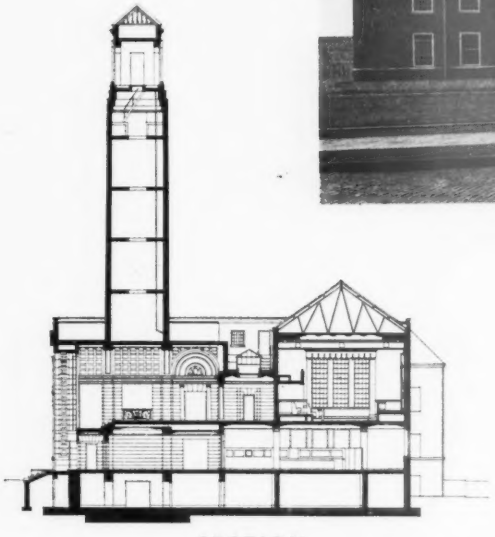
The general contractors were Kirk and Kirk, Ltd., in association with the Société de Construction Baffrey-Hennebique, of Paris ; for list of sub-contractors, see page 549.

PLAN

A. J. THOMAS ; ARCHITECT FOR SECOND SECTION : PATRICE BONNET

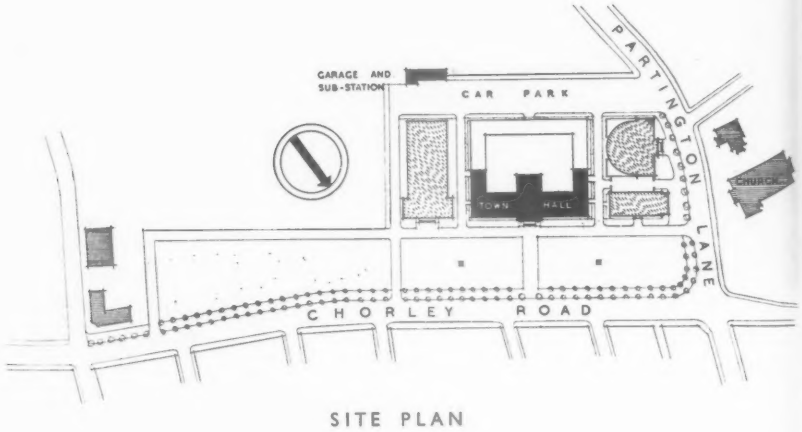
MUNICIPAL BUILDINGS, SWINTON

DESIGNED BY PERCY E. THOMAS



SECTION

Above, the main front; below, left, the members' room; right, the Mayor's Parlour.



SITE PLAN

AND PENDLEBURY

AND ERNEST PRESTWICH

GENERAL—*The Town Hall is the first of the group of buildings intended to be erected on the site. Within the near future it is intended to proceed with the Public Library and Electricity Showrooms and Offices. Space has been reserved on the site for a future Assembly Hall.*
PLAN—*Three floors. First floor : Council suite and Town Clerk's department. Ground floor : Departments of the Borough Treasurer, Surveyor, Medical Officer, Education and Housing. Basement : Stores, staff rooms, kitchens, caretaker's flat, heating installation, etc.*
CONSTRUCTION—*Special precautions were taken in the construction on account of the liability of the site to subside through mining operations. The building rests on a 2-ft. thick concrete raft reinforced both directions with old tram rails at 2 ft. centres. Walls are of solid brick, external walls being 18 in. thick.*
EXTERIOR FINISHES—*Sand-faced bricks with ½-in. cream-coloured flush joints and Portland stone. The roof is of Italian tiles.*
INTERIOR FINISHES—*Entrance hall : Staircase hall, walls and floor of reconstructed marble with fibrous plaster ceiling. Columns in black and gold Scagliola marble. Council Chamber : Walls covered with woven fabric on 1-in. absorbent asbestos felt, with hardwood dado. Woodwork throughout is in Australian walnut with bands of macassar and ebony. Seating is upholstered in hide. Floors are covered with close-fitting grey carpet. Curtains and behind Mayor's chair in blue velour with coat of arms in old gold. Committee rooms, Mayor's parlour, members' room and Town Clerk's office : Walls are panelled in Australian walnut, and floors are covered with grey carpet with parquetry border. Ceiling has a fibrous plaster cornice with central panels of committee room ceilings of spray asbestos for acoustic purposes. Offices : Floors are of cork and walls of plaster with rough finish. Woodwork, including furniture, is oak stained and wax-polished grey in colour.*
Above, the main entrance.
The general contractors were J. Gerrard and Sons, Ltd. ; for sub-contractors, see page 549.

LETTERS

LORD DERWENT
DENZIL NIELD, A.R.I.B.A.
JOHN E. YERBURY
E. M. ACKERY
"SALARIED ARCHITECT"
RAM

Vigilance Committee

SIR,—Since my willingness to play the scapegoat in this matter of opinions on modern buildings has been, as I see from your number for March 9, a most fruitful sacrifice, perhaps I may just be allowed to say, with regard to my own fateful choice of buildings :

(1) That, as far as Broadcasting House is concerned, I deplore its site, but continue to think it an original and interesting piece of architecture.

(2) That I would prefer to expunge Radio City, since it seems irrelevant to drag in America in this connection (however anxious we may be to drag her in in others).

(3) That I had thought of withdrawing Scarborough Hospital, but that since I see the choice is to be extended to cover England as a whole, I much prefer to maintain it.

DERWENT

Roma.

The Borders Case

SIR,—The Borders case has brought the "jerry building" question to a head. Ellen Wilkinson's Bill seems to be one solution ; doubtless there are others, all of which we can be sure the Building Societies will find a method of circumventing. There is one other solution which seems to me obvious, and yet I have not seen it suggested elsewhere. Why cannot the existing machinery of the National Housebuilders' Registration Council be made use of, and money only lent by Building Societies for houses holding the Certificate of the N.H.R.C. ?

Surely this scheme, which was introduced some time ago, deserves much more support from architects, or do they consider that they are being done out of fees ? The letter from the Secretary of the N.H.R.C. in the R.I.B.A. Journal recently would seem to suggest so.

DENZIL NIELD

London.

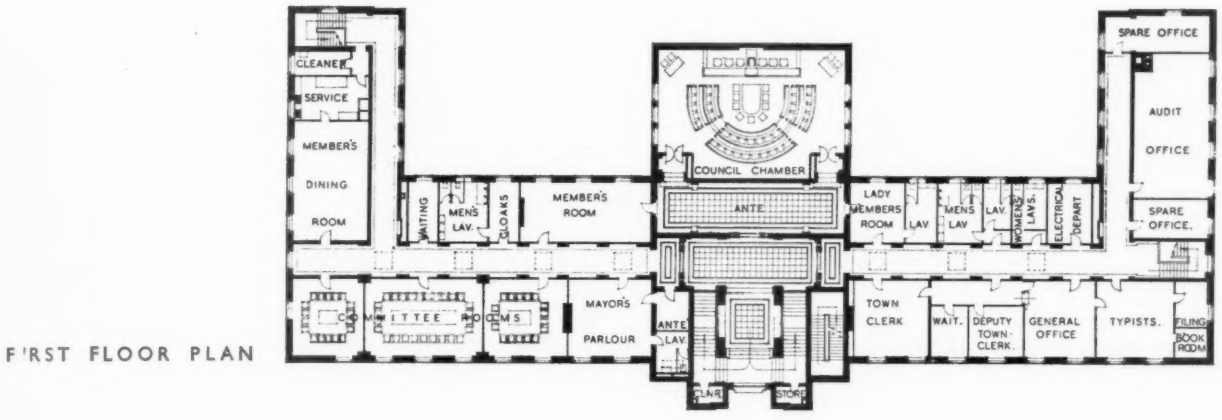
"Why, It Might Mean a Fuss"

SIR,—I have read your editorial with interest, and recognize the fact that you are anxious to help the architectural profession to express itself in national affairs.

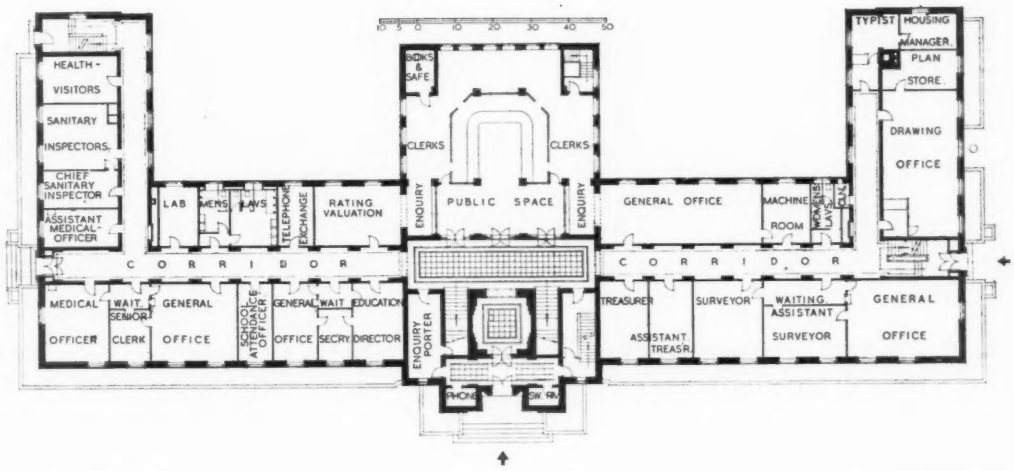
In your last issue you say, members

Continued on page 529

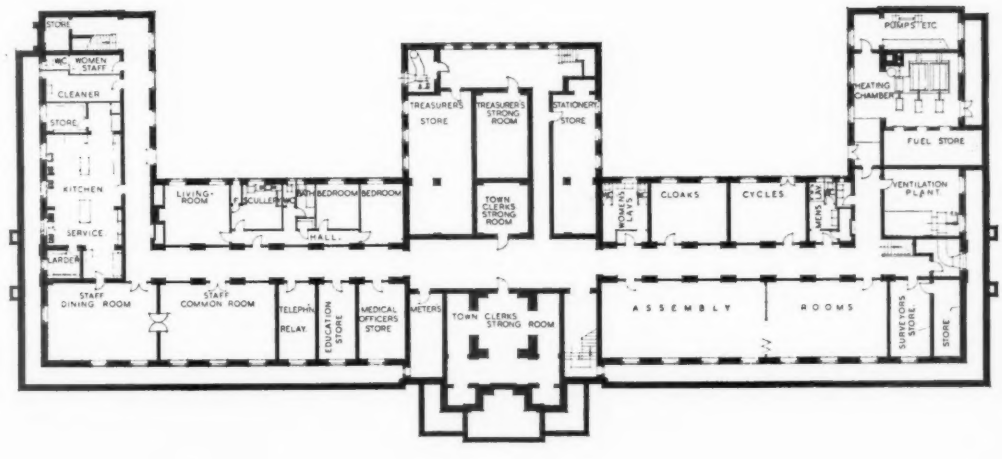
Above, the Council Chamber; below, left to right, the staircase hall; the main corridor; and another view of the Council Chamber.



FIRST FLOOR PLAN



GROUND FLOOR PLAN



BASEMENT PLAN

of the R.I.B.A. are too lazy to do anything to force the Institute to influence public opinion, by formulating a policy for the country from the professional viewpoint.

"Important contemporary events," you say, "are controversial; they 'even' have a political aspect.

Damn it, Sir, they are all politics from beginning to end.

At the moment the majority of the Council, and probably the majority of the members, believe in the Prime Minister and support the Government, and are not prepared to do anything to weaken the position of either by advocating a policy which is not consistent with that of the Home Office.

In time of crisis the majority of architects will rush round looking for jobs, *as architects*; not as citizens; and since the Home Office will have a say in the placing of "jobs as architects," the R.I.B.A. is doing its best to be in the running on behalf of its members.

I do not think "the public is waiting anxiously for the guidance which only the architectural profession can give" and I am sure *the policy* towards A.R.P., with reference to *deep shelters*, is not connected in the public mind with the architectural profession.

Policy is a matter for the Government, and so long as the docile public is content with the present Government, we shall not have proper protection, since such protection would leave the Government without its chief source of power over the public—Fear.

The R.I.B.A. cannot do anything as an Institution so long as the majority in the country is content to keep the Jitterbugs in power; all the R.I.B.A. can do, looking for jobs, is to offer their services to the Government.

You write—"The Council, the Public Relations Committee, and the A.R.P. Committee of the R.I.B.A. must make up their minds."

In reply to this, I would suggest that the A.R.P. Committee has done valuable work, and the Public Relations Committee and the Council have published it in the JOURNAL, and have arranged educational lectures for members of the R.I.B.A.

The answer to the insurance company which enquires what is the *policy* of the architectural profession, is, I think, that about 60 per cent. support the Government, and 40 per cent. think the Government ought to be impeached.

If you ask what do architects think on the question of deep shelters, the answer would be, those who know anything about the matter think we ought to have them; but the majority don't think at all, and have no views outside their own concerns.

In questions of political policy, architects are a rather insignificant section of the public, and those who, in times of crisis, rush about looking for jobs *as architects*, ought not to be encouraged.

It seems to me that the worth of the architect as a citizen can be to some extent gauged by the support which is *not given* to the A.B.S.

JOHN E. YERBURY

London.

Crematoria

SIR,—Mr. Hugh Quigley, in his reply to "Astragal's" notes on this subject, omitted to refute the statement that only one out of forty-eight recent crematoria has been fired by electricity. As a matter of fact, there are in use or under construction in this country seven electric cremation furnaces, all of which have been installed quite recently.

Of these furnaces, one is installed at Harrogate, two at Croydon, one at Pontypridd, one at Honor Oak, and two at Mortlake with space for future extension to three. It is interesting to note that the second furnace at Croydon was installed as a result of the success of the first furnace.

Mr. Quigley states in his letter that electricity in crematoria is a failure, but the information given above does, I think, go to show that this is very far from being the truth. In fact, it rather looks as if Mr. Quigley has replied rather too quickly and not sufficiently accurately.

E. M. ACKERY

London.

Stay North, Young Man

SIR,—From the letters of your correspondents "Bloomsbury" and "I'm Telling You," and previous letters under the heading "Stay North, Young Man," it appears that at present some A.R.I.B.A.'s are finding difficulty in obtaining positions.

I sympathize with "Bloomsbury" because his statements are often true of the money-grabbing architect who is certainly out to get his "pound of flesh."

As regards the argument of "I'm Telling You," it is obvious that this A.R.I.B.A. has become embittered towards his more successful, unqualified architect brethren. He mentioned, sarcastically, the "precious office experience" of these latter men. I am sure many qualified and unqualified architects have found that the word "precious" is, indeed, very correct and no doubt "I'm Telling You" will also find so in years to come.

As a last resource for either of the correspondents "Bloomsbury" and "I'm Telling You," or even other readers searching for a position, there are temporary positions in Government departments at salaries from £4 to £8 per week. The work is dull, repetitional, and uninteresting, being connected with the ever-changing policy of A.R.P., and includes such work as the erection of concrete-roofed boxes for the stout-hearted British public and similar confidence-inspiring erections.

From a monetary point of view (providing one stands out for the maximum salary) and for a change of scenery, the prospect might be considered fairly, at least by "I'm Telling You"—providing, of course, that he can hide his architectural inspirations.

In conclusion, it appears that the higher salaries are not given according to work to be carried out, but according to abilities, experience, and qualifications, and the action which is necessary is to stand out for the salary you think you are worth!

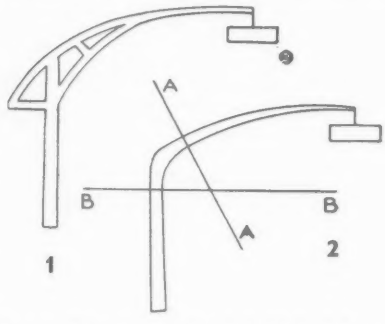
"SALARIED ARCHITECT"

Lighting Standards

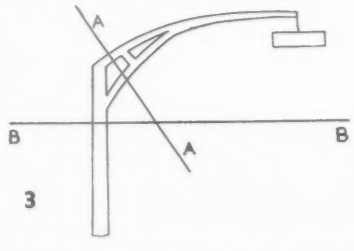
We published last week a letter from "Ram" in which he discussed the moments about points A and B in accompanying diagrammatic drawings of lighting standards. We regret that these points A and B were incorrectly indicated in the illustrations reproduced. The letter is therefore reprinted below with the illustrations corrected. —Ed. A.J.

SIR,—I enjoyed the letter by "Right Will Prevail," in your issue for March 16. He criticizes M. M. for his lack of intelligence, while he displays his own complete absence of this all important quality by his own remarks on stresses and strains. First of all, the "bobtail" in question (see Fig. 1) has a negligible weight in comparison with the cantilever arm and its hanging lamp. Its centre of gravity is considerably nearer to the column than that of the combined arm and lamp. Therefore, the product of the load and distance for the former is very much less than that for the latter. In other words, the counter moment produced by the "bobtail" is negligible.

Perhaps your correspondent means stresses and strains when he says so, and is not referring to moments. Let us therefore consider these stresses and strains. Fig. 2 shows a simple cantilever



form of lamp standard (which I hope M. M. will approve). The moment at A is much the same as that at B. Assuming that the sectional areas are the same, the section at B has to be more strongly reinforced than that at A, because B has to withstand a direct force due to the weight of the lamp, etc., in addition to the moment. Now let us look at Fig. 3 (this is M. M.'s ideal shape).



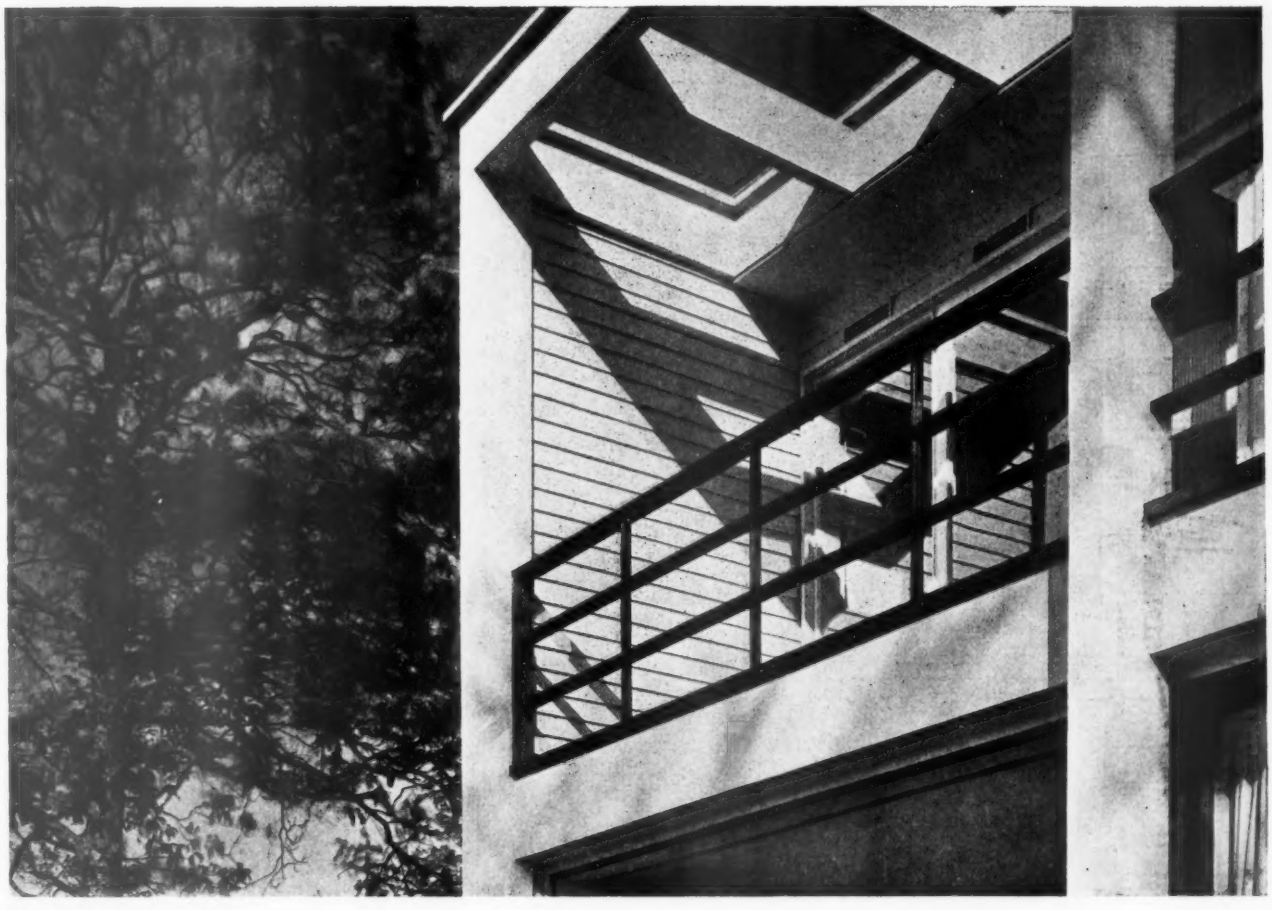
We have now provided a stronger and more rigid cantilever arm at the support A but still retain the same section as before at B. Therefore the weakness is in the column (comparatively speaking, of course). We have seen that the addition of a bobtail has little effect on the moments and does not strengthen the column at B. I would suggest that for structural efficiency the ingenious device shown in Fig. 4 be adopted. (Fig. 4, reproduced last week, showed a circular counter-weight attached to the bobtail in Fig. 1). By suitable counterbalancing no primary moments would be induced in the column at the top.

I will follow the true spirit of the correspondence by signing my letter with a *nom de plume*. But "Right Will Prevail" has a sporting chance to know who is the man who dares to put him in his place. With his vastly superior intellect he can deduce it.

London. RAM

WORKING DETAILS : 737

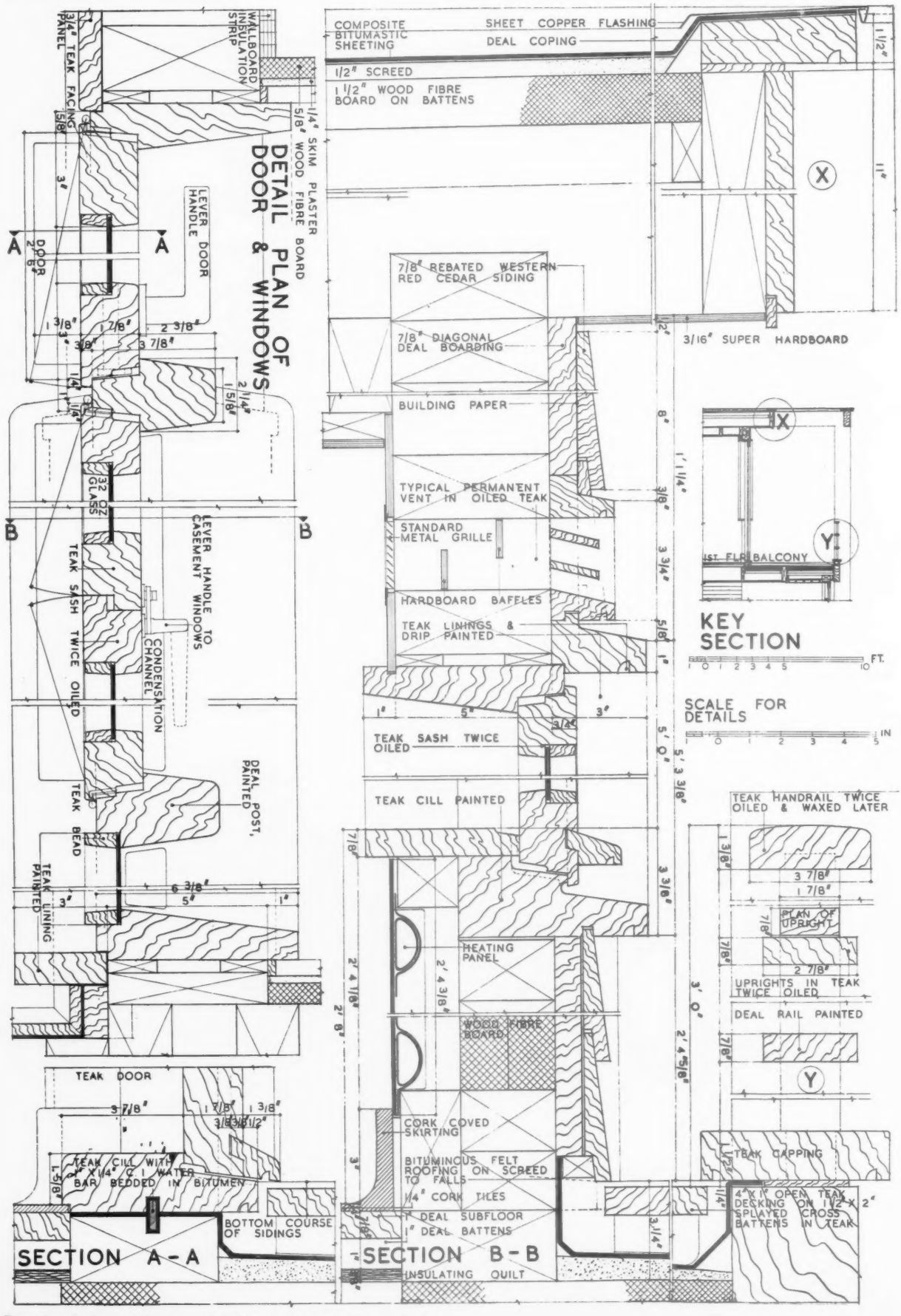
WINDOWS AND BALCONY • HOUSE NEAR HALLAND, SUSSEX • SERGE CHERMAYEFF



The balcony runs the whole length of the south front of the house at first floor level, with access on to it from all bedrooms. The balcony deck, in order to make it usable immediately after rain, is finished with teak slats, allowing the water to run away beneath them. The balcony has a sealed and waxed teak balustrade, with coping and slat deck removable in sections on bituminous felt roofing. The structural frame members are of jarrah, painted. Windows and door frames and linings are in teak, painted, over which are wood louvre ventilators for permanent ventilation, baffled in the wall thickness against direct draught and whistle.
The roof is covered with bituminous felt roofing, laid to a single fall on screeded 2-in. insulating material. Details are shown overleaf.

WORKING DETAILS : 738

WINDOWS AND BALCONY • HOUSE NEAR HALLAND, SUSSEX • SERGE CHERMAYEFF



Details of the windows and balcony illustrated overleaf.

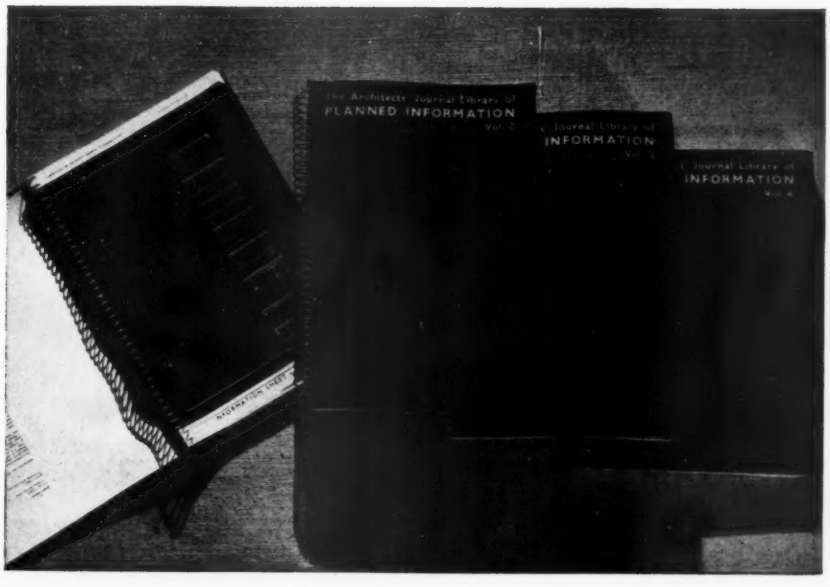
The Architects' Journal Library of Planned Information

INFORMATION SHEET
SUPPLEMENT

SHEETS IN THIS ISSUE

717 Metalwork

718 Flooring Materials



All the Information Sheets published in The Architects' Journal Library of Planned Information since the inception of the series to the end of 1938 have been reprinted and are available in the four volumes illustrated here. Price 21s. each.

Sheets issued since index :

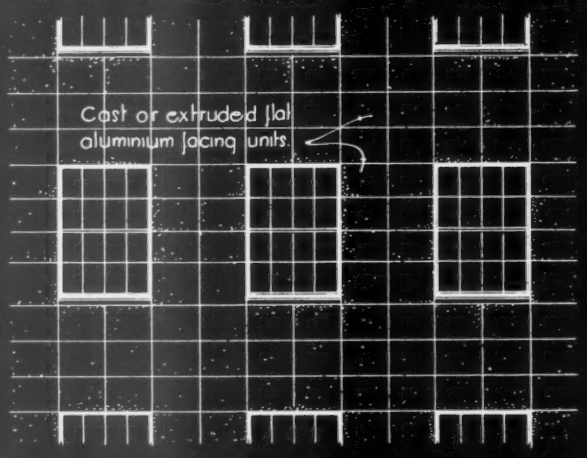
701 : Tile Hanging
702 (420 revised) : Fixing Insulating Board
703 : Sheet Metals
704 : Plan Elements
705 : Metal Work
706 : Plan Elements
707 : Furniture Layout
708 : Plan Elements
709 : Flue Construction
710 : Natural Lighting
711 : Glass and Glazing
712 (109 revised) : Quarry Tiles
713 : Glass and Glazing
714 : Metalwork
715 (106 revised) : Hot Water Radiators (Pressed Steel)
716 : Furniture Layout

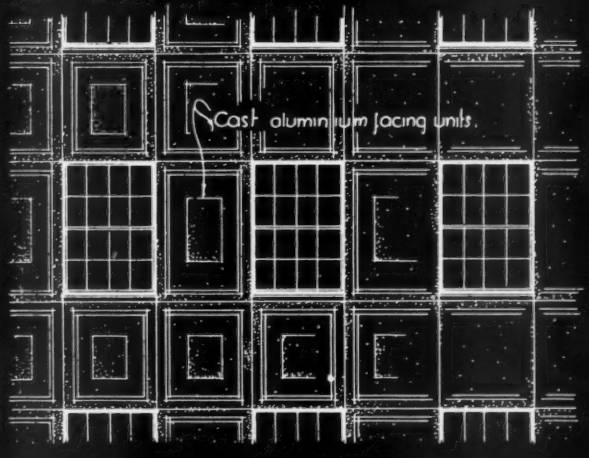
858

858.

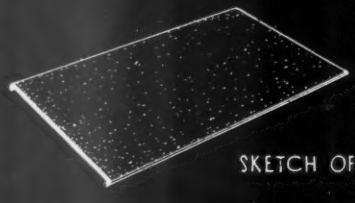
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

TYPES OF ALUMINIUM UNIT FOR EXTERNAL FACING WORK

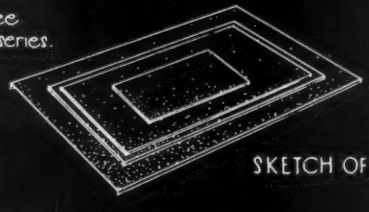




for typical fixing details see Information Sheet No 13 of this series.



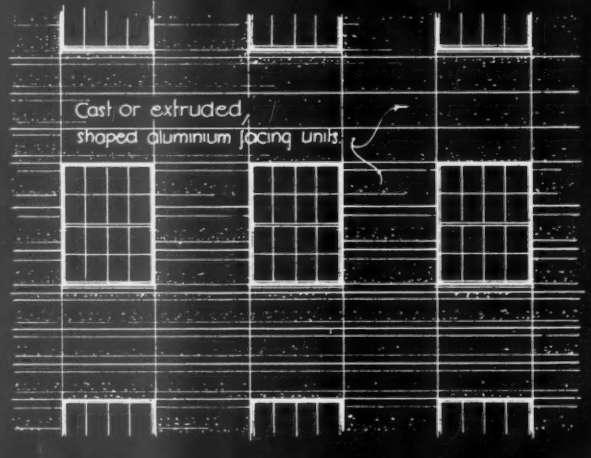
SKETCH OF UNIT.

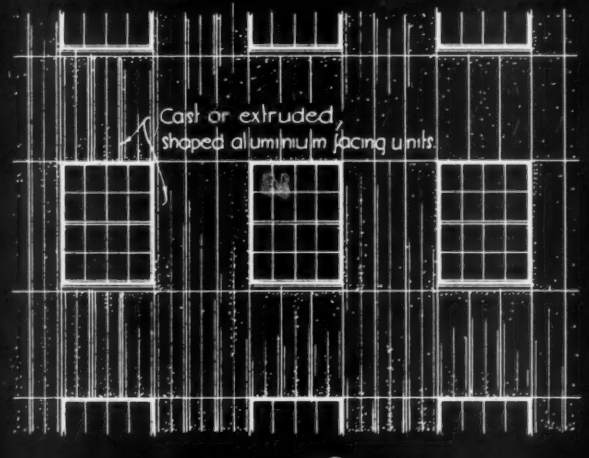


SKETCH OF UNIT.

(A.) FLAT MEMBERS : suitable only as
(a.) Cast units normally up to 4'.0" wide by 5'.0" long
or (b.) Extruded units up to 12" wide by any length.

(B.) COFFERED OR PANELLED MEMBERS : suitable only as Cast units normally up to 4'.0" wide by 5'.0" long.





SKETCH OF UNIT.

SKETCH OF UNIT.

(C.) SHAPED MEMBERS RUNNING HORIZONTALLY : suitable only as
(a.) Cast units normally up to 4'.0" wide by 5'.0" long.
or (b.) Extruded units up to 12" wide by any length.

(D.) SHAPED MEMBERS RUNNING VERTICALLY : suitable only as
(a.) Cast units normally up to 4'.0" wide by 5'.0" long.
or (b.) Extruded units up to 12" wide by any length.

Information from the Northern Aluminium Company Limited.

INFORMATION SHEET : ALUMINIUM : No 12, FACING OF BUILDINGS.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1 *Ora. A. Boyne.*

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 717 •

METALWORK

Subject : Aluminum Wall Facings

Fabrication and Design :

The influence of the method of fabrication is a vital factor in the design of aluminum facings and it is essential that the characteristics of each method should be taken into consideration before even the general lines of the designs are determined.

The general characteristics of the products of two methods of fabrication have been described in previous Sheets and more particularly in Sheets Nos. 669 (Spandrels) and 714 (Pier Casings).

Only those characteristics which have a direct influence on the size, shape and design of facing units are considered below.

Flat Facing Units :

Facing units with flat surfaces are, owing to the reflections, liable to appear uneven and " wavy " when fixed in large areas unless the units are absolutely true. This is particularly so if a polished or smooth surface is used. For this reason it is recommended that flat units should be made only in thick material. The minimum thickness for any given size of unit can only be determined when all the factors are known.

Such units are best produced either by casting or by extrusion.

Thinner material produced either by extrusion or rolling is more economical in metal and can be fabricated with a dead-true surface, but in practice it is found that this material is likely to develop small deflections before, during, or after erection ; the varying reflections are then likely to give the finished work a wavy and uneven appearance.

Panelled Units :

Panelled units cannot be produced by extrusion, but only by casting.

Cast panelled units are usually relatively thick ($\frac{3}{8}$ in. to $\frac{5}{8}$ in., according to size), and are capable of all kinds of relief decoration and surface texture.

Shaped Units :

This term is intended to cover units which are shaped in cross section, but straight in long section. This type of unit permits the use of thin material because the section shape provides the strength and rigidity required.

The section shape need not be particularly coarse or bold ; sufficient rigidity is obtained even with the smallest ribbing, corrugation or shallow curvature. Units of this kind may be produced in thin material by extrusion. The extrusion process is limited to units 12 in. wide or less, and does not permit any variation of shape at the ends.

Aluminium Alloys :

The selection of the best alloy for any particular work and for the process to be used is of great importance, since each alloy is designed to emphasize particular characteristics. The various alloys in general use for architectural metal work have been described briefly in Sheet No. 492 (No. 1 of this series).

Finishes :

The surface finishes which may be used on cast and extruded aluminium have been described briefly on Information Sheet No. 505 (No. 4 of this series) ; in addition to these finishes, great variety in surface *texture* is possible, in cast aluminium work, by the normal technique of casting.

Previous Sheets :

Previous Sheets of this series are :—
No. 492 : Sheet, plate and coil sizes (No. 1).
No. 501 : Working, joining and bending (No. 2).
No. 504 : Basic and special extruded shapes (No. 3).
No. 505 : Typical extruded sections (No. 4).
No. 506 : Typical extruded sections (No. 5).
No. 661 : Casement window sections (No. 6).
No. 669 : Window spandrels and cills (No. 7).
No. 673 : Handrails and railings (No. 8).
No. 680 : Aluminium paint (No. 9).
No. 686 : Cast and extruded grilles (No. 10).
No. 714 : External pier casings (No. 11).

Issued by : The Northern Aluminium Co., Ltd.
Address : Bush House, Aldwych, London, W.C.2
Telephone : Temple Bar 8844

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EFFECT OF VARIOUS AGENCIES ON FLOORING MATERIALS :

FLOORING MATERIALS	Heat and light.	Water.	Alkalies.	Weak acids.	Common salt.	Sulphate salts.	Mineral oils and greases.	Animal and vegetable oils and fats.	Sugar (hot solutions).	Milk.
Wood	Shrinkage	Swelling. Coloured extracts leached from oak	Strong alkalies destroy all woods. Some wood, particularly oak, discoloured by any alkali. Weak alkalies cause pick-up of grain in resinous woods	Cause pick-up of grain and gradual hydrolysis when dilute. Strong acetic acid has marked corrosive effect	Swelling and pick-up of grain, particularly in resinous woods	Neutral salts have no action. Acid salts as for dilute acids	Oil absorbed. No chemical action by hydrocarbons but acid impurities have same effects as for mineral acids	Oils and fats absorbed. No appreciable chemical action except for solvent effect on minor components	No appreciable chemical deterioration	No appreciable chemical deterioration
Rubber	Hardens and gets more brittle	None	Resistant	Resistant	None	None	Softened	Softened	Probably soften	
Linoleum sheet	Hardens and cracks	None	Attacked	None	—	—	—	—	—	—
Linoleum cork tiles	Hardens and cracks	Little	Attacked	None	—	—	—	—	—	—
Portland cement concrete and mortar finishes	Shrinkage	Slight swelling	None	Attacked	None except for very strong solutions	Attacked	None	Attacked	Attacked	Attacked
Aluminous cement concrete and mortar finishes	Shrinkage	Slight swelling	Attacked	More resistant than Portland cement to dilute solutions	None	None	None	Little action if free acids not present in appreciable amounts	More resistant than Portland cement	More resistant than Portland cement
Clay tiles	None	None	Possible risk of deterioration owing to crystallisation of salts if tiles very porous	None	As "Alkalies"	As "Alkalies"	None	None	None	None
Marbles and hard limestones	None	None	Little or none	Attacked	Possible crystallisation effects	As "Common Salt"	None	None	None	As "Weak Acids"
Sandstones	Shrinkage may occur	None	Possible risk of deterioration owing to crystallisation of salts	Calcareous sandstones affected. Others not affected	Possible crystallisation effects	As "Common Salt"	None	None	None	As "Weak Acids"
Asphalt	Softening if temperature too high for grade used	None	Little or none	Affects normal asphalts, acid resisting or "chemical" asphalt with inert filler, e.g., slate dust, required	None	None	Softens. Coal tar pitch products more resistant	As "Mineral Oils"	Softening	Softens. "Chemical" asphalt with inert filler and granite aggregate preferable
Magnesium oxychloride	Liable to crack and buckle owing to dehydration	Must be protected by wax or oil. Not suitable under continuously wet conditions	As "Water"	Attacked unless adequate protection by wax	As "Water"	As "Water"	Not harmful	Not harmful	—	—
JOINTING MATERIALS										
Portland cement	As under flooring materials, but attack proceeds more slowly. Joints should be as thin as possible									
Aluminous cement										
Bituminous mastics	Slight softening. Joints apt to protrude as ridges	None	Little or none	None if filler is inert, e.g., asbestos or slate dust	None	None	Softens. Coal tar pitch products more resistant	As "Mineral Oils"	Slight softening	Slight softening
Glues	Used for sticking linoleum to base. Under damp conditions subject to softening and growth of moulds								Are not usually subjected directly to agencies enumerated above	
Rubber solutions and latex	Used for sticking rubber or linoleum to base. Moisture causes deterioration of bond									
Drying oils	Used as a thin paste (like a paint) for sticking linoleum to base. Moisture may have destructive effect									

NOTE.—Dashes are inserted where material is not normally used under type of exposure indicated.

Extract from "Floors for Industrial Purposes" by R. Fitzmaurice, B.Sc., Assoc. M. Inst. C.E., & F. M. Lea, D.Sc., F.I.C., and published by permission of the Institution of Structural Engineers and the Institution of Chemical Engineers

INFORMATION SHEET : EFFECT OF VARIOUS AGENCIES ON FLOORING MATERIALS
SIR JOHN BURNET TAIT AND LORNE, ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1

THE ARCHITECTS' JOURNAL
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INFORMATION SHEET

• 718 •

FLOORING MATERIALS

Subject : Effect of various agencies on flooring materials

General :

The table given on this Sheet is taken by permission from a paper read before the Institute of Chemical Engineers and the Institute of Structural Engineers by R. Fitzmaurice, B.Sc., and F. M. Lea, D.Sc., and refers particularly to agencies affecting floorings for industrial purposes.

Wear and Abrasion :

Resistance to wear and abrasion is an important factor in all industrial floors, especially where hard-tyred vehicles are used or heavy objects handled on the floor. Hard-tyred trollies without provision for steering, which must be skidded around turns, are particularly severe upon floor surfaces.

Hardness and Slipperiness :

For a great deal of industrial work maximum hardness is desirable in the floor finish, but many such finishes are either slippery in themselves and/or liable to become so when worn, polished, wet or when they otherwise acquire a surface coating.

Noise :

"Surface noisiness, as opposed to transmission of noise through the whole floor system, depends upon the particular conditions in the building. It can be estimated comparatively for different kinds of finish sufficiently well for most ordinary purposes. It may be assumed that the resilience of the surface is the main factor in reducing noisiness in floors. Rubber, cork, rubber-bitumen and linoleum all give a useful reduction in noise level, and soft woods a slight reduction. With footsteps, hard woods can be as noisy as bare concrete or tiles. If a space is left between the boards and the supporting concrete the noise may be accentuated a little, and it is better, for this reason, either to bed boarding hard down to the concrete or to provide acoustic absorbent in the interspace." (Quoted from the paper referred to above.)

Chemical Attack :

The table given on this Sheet is some guide to the resistance of various flooring materials to chemical attack, but the flooring for any given case must be considered in relation to the exact conditions under which it will be used, including the types of chemical attack involved, temperature, amount of moisture likely to be present, amount of wear likely to develop, etc., etc., because one factor may serve to accentuate or reduce the effect of another. For example, normally slow chemical attack may be accelerated considerably if the surface is also subject to continuous physical wear.

Maintenance :

Care must be taken that the maintenance treatment (polish, fillers, hardeners, etc.) do not accentuate slipperiness. In some cases a flooring may be preferred which, although it has not high resistance to wear and abrasion, is capable of being replaced readily.

Waterproofing :

It is frequently desirable (particularly where aggressive chemicals are present) that the flooring should be waterproof to protect the floor structure and particularly the reinforcement (if any) from corrosion. Since it is difficult to obtain all the requirements in one flooring material, it is frequently necessary to provide the waterproofing medium separately as an underlay (e.g. asphalt) under the flooring.

HOUSE, NEWTON ROAD, PADDINGTON

DESIGNED BY DENYS LASDUN

PROBLEM AND SITE—*On the north side of a residential street (Newton Road) off Westbourne Grove, Paddington. The plans as originally submitted to the London County Council included a maximum set-back of the house on the site. The original plans were however refused, alignment with the house immediately on the east being requested, as well as preservation of as many trees as possible. This siting would have meant loss of more trees than that suggested by the architect, and on this ground and on the grounds that no consistent building-line existed in the street and that the height of the new house justified a deep set-back, the scheme was re-submitted. After five months' delay it was eventually accepted with a set-back a little less than the original one.*

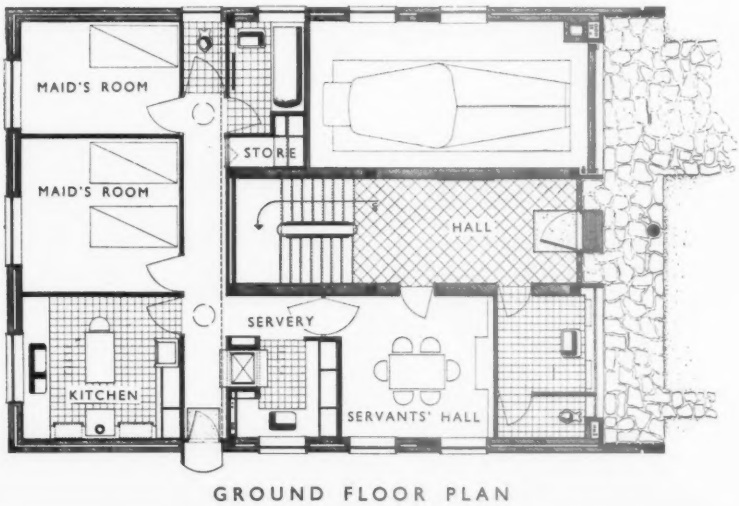
Above, the main front.

The general contractors were Leslie Bilsby, Ltd.; for list of sub-contractors see page 549.

E

PLAN—*The service quarters, which are all on the ground floor, are isolated in order to make in effect a self-contained flat. A garage is also included inside the house on this floor. The living-rooms are all on the first floor, the dining-room at the back being served direct by lift from the servery adjoining the kitchen. Bedrooms occupy the second floor and a studio the whole of the top floor: the latter has a covered terrace overlooking the front. In the basement are the heating chamber and storage space.*

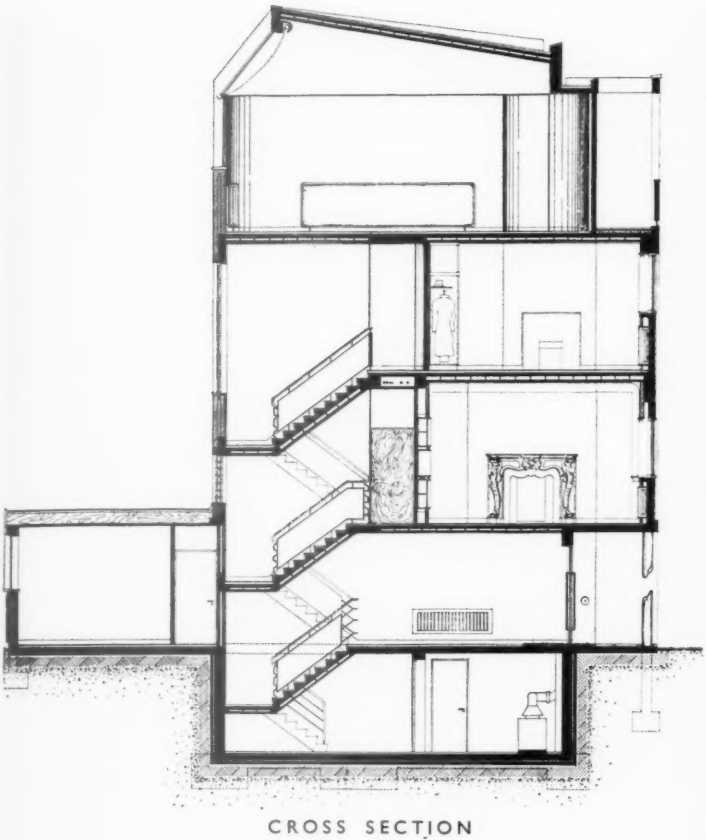
CONSTRUCTION AND EXTERIOR FINISHES—*A framework of reinforced concrete with 11½-in. cavity walls. The floor beams have extra reinforcement that reduces their dimensions and allows them where necessary to be housed within the depth of the slab. The façade is entirely of reinforced concrete,*



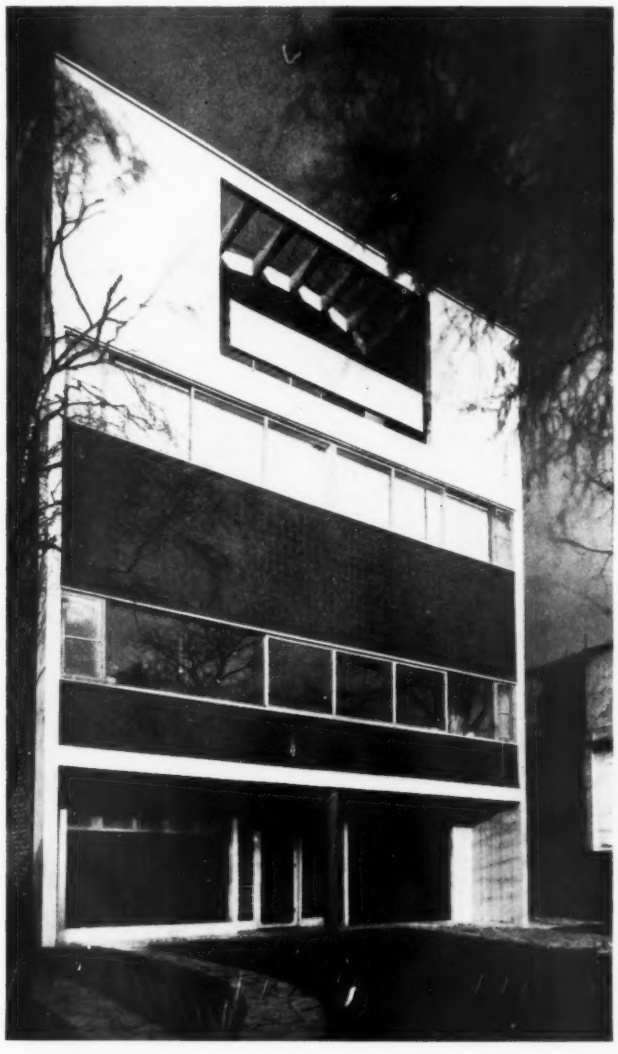
GROUND FLOOR PLAN

FIRST FLOOR PLAN

HOUSE IN PADDINGTON • BY DENYS LASDUN

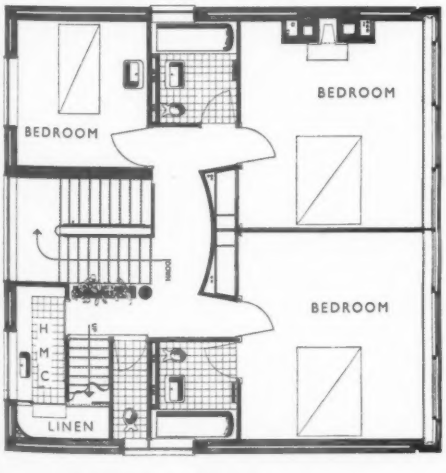


CROSS SECTION

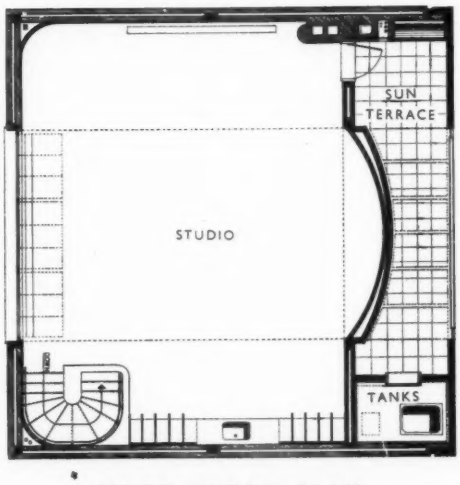


the walls, which are insulated with cork, being part of the structure. The facing tiles are laid on a ¾-in. bed of waterproof cement, and have a slot left round their margins to allow for movement. Similarly, the brick flanking walls are separated from the reinforced concrete façade by a 3-in. bituminous expansion joint, to allow for movement. The basement is entirely of reinforced concrete. The centre column is stippled rough ochre ; the main door, of terracotta, has a satin chrome handle and letter box ; the garage doors are glossy chocolate brown. The Dutch tiles have a chocolate matt surface. The top portion of the building is R.C. *painted white.*

Facing page : a night view of the main front ; above, a general view of the main front.



SECOND FLOOR PLAN



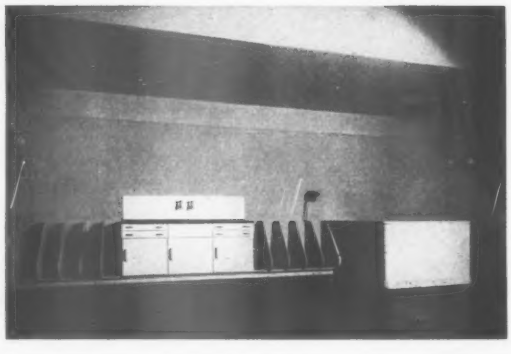
THIRD FLOOR PLAN

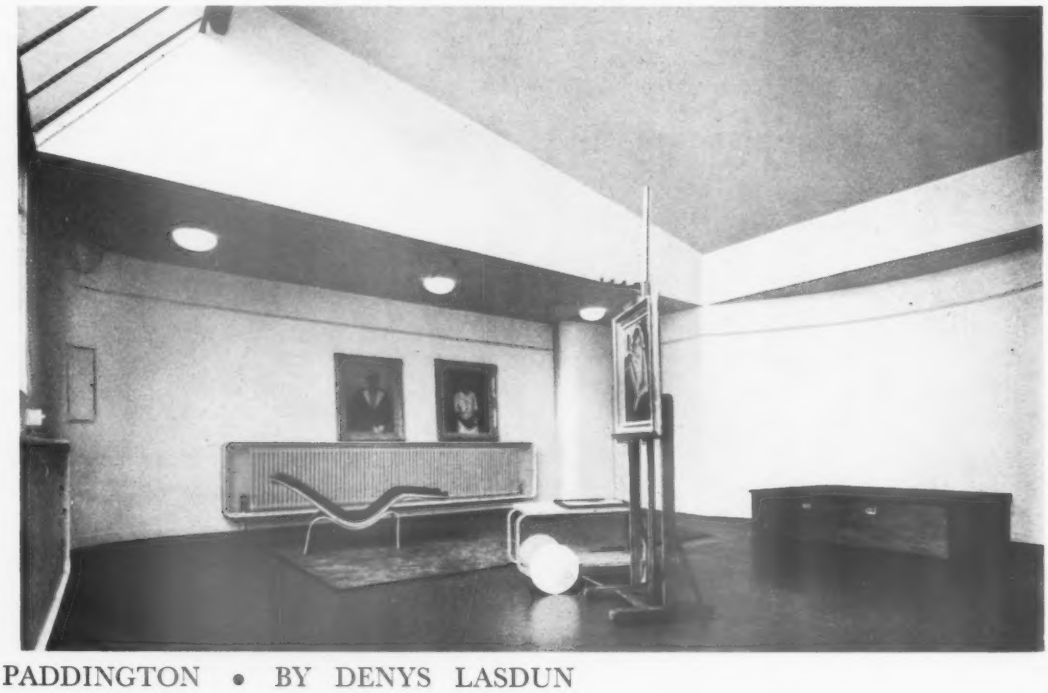
Scale in feet
0 5 10

HOUSE IN PADDINGTON • BY DENYS LASDUN

INTERIOR FINISHES—*The principal rooms have been designed as a background to a collection of antique furniture of various periods.*

Above, the two staircases linking ground and first floors and first and second. They are designed with solid balustrades consisting of painted panels with metal tube supports above and below and a hardwood handrail. Right, the picture-storage racks arranged on either side of the sink cupboard in the studio. Below, the studio. Facing page : the living-room, furnished entirely with modern furniture (bottom), except for the built-in Victorian fireplace, and furnished with antique furniture of various periods, the latter state being the one for which the room was designed by the architect.





HOUSE IN PADDINGTON • BY DENYS LASDUN

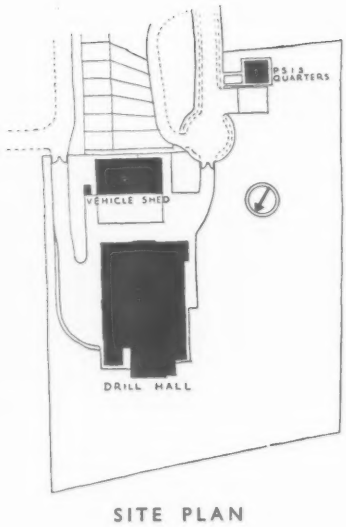
Above and below: same scene, two types of decoration

R.E. (T.A.) HEADQUARTERS, EWELL, SURREY

BY J. HATCHARD SMITH AND SONS

PROBLEM—*Headquarters for the 318th (Surrey) Anti-Aircraft Company, R.E. (T.A.).*

Top, from the south-east; below, from the south.



SITE PLAN

BOOKS

DISCUSSIONS

[*By THOMAS SHARP*]

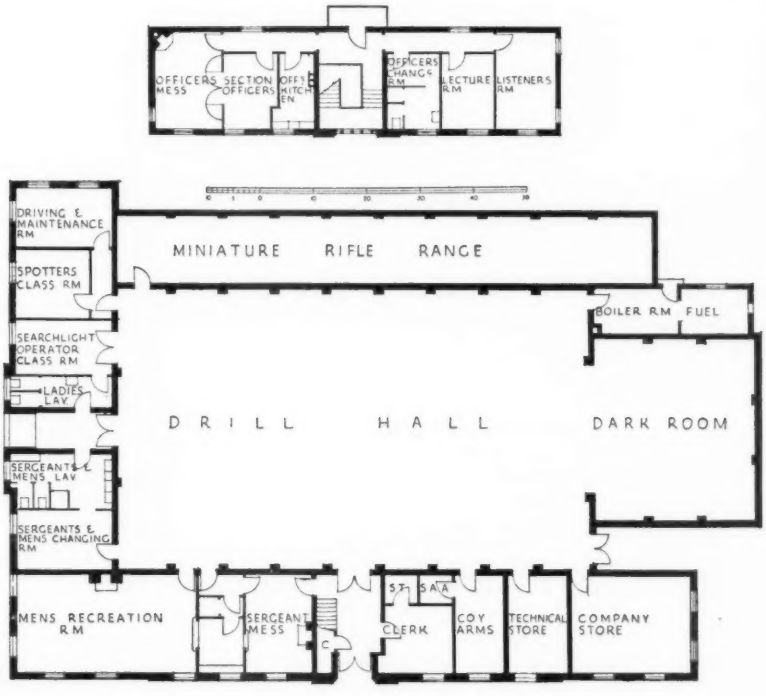
British Roads. By Geoffrey Boumphrey. Nelson: Price 2s.
The Changing Village. By F. G. Thomas. Nelson: Price 2s.

MESSRS. NELSON'S *Discussion Books* are an excellent little library "designed for intelligent citizens who wish to make themselves acquainted with what is going on in the modern world." These two recent additions to the series are of special interest to intelligent citizens who are architects as well, for though neither of them deals with that "architecture" which used to mean a building drawn first on a piece of virgin paper, then erected as a separate entity on a piece of not quite so virginal land, they both deal with the physical background, the sociological currents, the factors of national development from which true living architecture can never be divorced; from which, indeed, it springs. (But all the same it is time Messrs. Nelson included a book on modern architecture in their series.)

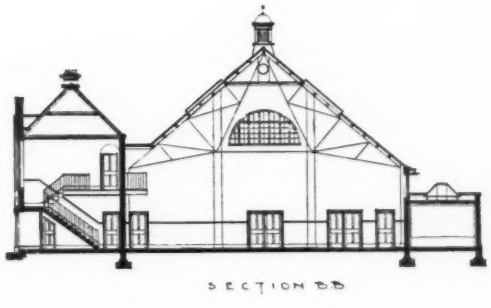
As a book intended to stimulate discussion Mr. Boumphrey's is perhaps the less successful. Three-quarters of it recounts the history of British roads from the earliest times. Pre-historic roads, Roman roads, medieval roads, coach roads. All of this is interesting enough, and, of course, as one expects from its author, it is well written in a direct and forthright style; there may be plenty of points in it for discussion among specialist historians, and Mr. Boumphrey is at pains here and there

R.E. (T.A.) HEADQUARTERS, EWELL, SURREY

BY J. HATCHARD SMITH AND SONS



GROUND AND FIRST FLOOR PLANS AND SECTION



SITE—*On an open site, the building was planned to arrange an easy access for the large lorries from the south-east entrance, which is controlled by the P.S.I.'s lodge.*

CONSTRUCTION—*External walls of 11½-in. cavity brickwork. The floors are patent hollow block slabs, the drill hall roof is supported on steel trusses; roofs are finished with hand-made sandfaced tiles.*

EXTERNAL FINISHES—*The buildings are finished with sandfaced bricks and tiles, all windows having wood sashes. The regimental crest is carved in stone over the two entrance doorways.*

INTERNAL FINISHES—*All walls have painted dadoes, distempered above except for the officers' mess, which is panelled in oak, and the sergeants' and men's recreation room which has an oak-panelled dado. The floors are covered with boarding on fillets in cement, with wood blocks to corridors, while the staircases are of fireproof construction with granolithic finish.*

SERVICES—*Heating is by a low-pressure hot-water system. Hot water is also obtained from the coke boiler. The officers' mess, instructor's cottage, sergeants' and recreation rooms have coal fires.*

COST—*Main building, vehicle sheds, £16,515 18s. 2d; P.S.I.'s cottage, £820.*

The general contractors were Walker (Tooting), Ltd.; for list of sub-contractors, see page 550.

to point a text as to the futility of regulating the traffic to suit the roads instead of building the roads to suit the traffic. But one reader, at least, would have preferred to sacrifice most of this for a more thorough discussion of modern roads. For there is a lot that needs discussion there, and in the too short space he has allowed himself, Mr. Boumphrey cannot really discuss; he can only dogmatize.

Everyone must agree that there is a vast amount of work to be done to bring our road system up to efficient modern standards, and that for this far bolder and more imaginative plans are necessary than any that seem to be contemplated at present in official quarters. But is the case for the construction of *thousands* of miles of entirely new motorways quite so simple as its advocates would like to make out? Is it mere feeble conservatism to suggest that some of the admired features of the German autobahnen (and why is the much earlier American contribution to modern road design so persistently ignored?) are just too confoundedly clever for words, cleverness for cleverness's own sake? Is the fifty times more expensive and more complicated T-junction which Mr. Boumphrey illustrates so very much superior (save in a few exceptional cases) to the simple roundabout? I am not sure myself; it may be; but this is one of the numerous points one would have been glad to see thoroughly discussed; and it is because such matters are not discussed that one feels some disappointment with Mr. Boumphrey's book.

Mr. Thomas, on the other hand, ranges over his wide and much less specific subject with a wealth of

stimulating ideas and in a real spirit of discussion. He, too, begins, as anyone describing the changing village must indeed begin, with a consideration of modern roads and road transport in their effect on contemporary life. "Road development," he says, "at the moment is hastening the disintegration of village life with minimum compensation." It is, however, the means, not the cause, of this disintegration; and, controlled and directed, this development which is now a negative influence might become an important element in the structure of a new rural society.

From this beginning Mr. Thomas passes on to discuss numerous other facets of the rural problem: the application of new methods of farming and of the more efficient organization of agricultural industry; the impact of urban ideas on the mentality of the villager; the possibilities of the closer communication of town and village and of the provision of arrangements for a fuller and more satisfying village social life. And he deals with a host of other subjects besides. It is astonishing how Mr. Thomas has been able to cram so much of vital interest and importance into so small a space. He is never merely provocative, as it must be a temptation to be with so much to say in a comparatively small book. He is essentially reasonable yet lively and stimulating. In short, this is an excellent book.

MAKING OURSELVES UNNECESSARY

[*By M. BUNNEY*]

Plan Your House To Suit Yourself. By Tyler Stewart Rogers. Charles Scribner's Sons. Price 12s. 6d.

THE author of *Plan Your House To Suit Yourself* has attempted the impossible task of teaching the client all there is to know about building a house. After outlining the ways in which the project may be launched, from the purchase of a ready-made home to one the design and construction of which is handled by an architect, the author surveys the whole gamut of things necessary for a house with an American thoroughness that is bewildering.

As a matter of course, the architect-designed house is preferred to all others. But so thoroughly has the author treated his subject that for a client who takes the book seriously an architect is well-nigh superfluous; he is, in fact, best out of the way altogether. We have all met the client who knows just enough to make the job a nightmare from start to finish.

The author has contrived to collect in one book a lot of useful information for the architect himself, as well as nearly 300 pages of chatty commentary on house-design for the client. Apart from the numerous diagrams and illustrations, which are generally competent, some inventories are included for the architect to try on his client at the start of a job. The typical ones shown, however, are so thorough as to be almost confusing. The proper completion of them in the time usually at the architect's disposal would be impossible.

In spite of information sheets and planning notes, nothing quite like this book has yet appeared in this country. Although of American origin, it should have some value for architects over here. Some of the author's opinions, indeed, though controversial, deserve some sympathy. In particular, this is true of his vision of the "true sleeping room" of the future which would be "probably windowless and completely air-conditioned," so that "hay-fever and asthma sufferers would find it a heavenly retreat from irritation," and "those who snore would be effectively isolated."

CABINET WORK

Modern Cabinet Work. By Wells and Hooper. Batsford. Price 25s.

LIKE all standard books from Warner and Martin or Liddell and Scott to Jaggard and Durry, this book has been carried through the years by the momentum of its initial thoroughness and authoritative weight. One can hardly blame the authors for sitting back on their labours, and avoiding the task of revision when at last it was needed. But at the same time if it is done it ought to be done properly. A "modern" dust-jacket, a few photographs of the earlier works of contemporary designers and a chapter on plywood are really not enough—so long as it is dealing with the practical matters of setting out, joints and the use of tools, it is admirably lucid and direct, but the designs which form the illustrations are frankly terrible. Outside a university lodging, or an Atlantic liner, I don't think I have ever seen an uglier collection of furniture. It is regrettable (and quite unnecessary) that students at technical institutes, for whom this book has largely been written, should be given such examples to imitate or admire. H. C.

ROMANESQUE

The Romanesque Architecture of the Order of Cluny. By Dr. Joan Evans. Cambridge University Press. Price £3 3s.

THE author's main purpose in writing this book would seem to have been to establish the authenticity or otherwise of a Cluniac style of architecture, deriving from the monks of Cluny as other styles derived from the almost contemporary Cistercians or the later Jesuits. The task so undertaken was certainly a difficult one, so difficult indeed that final conclusions were hardly to be expected. Her researches have, however, resulted in a work of great archæological interest, which adds considerably to the existing accumulation of knowledge of the plans, the plan development, and the architectural forms of the Romanesque style. She has demonstrated convincingly that the work of the Benedictines and of others was influenced to a great extent by the Cluniac branch.

Dr. Evans has given attention to such controversial matters as the origin of the bell tower and of the cloister. Her opinions on these and other points are stated with engaging authority, and without over-emphasis.

References at the foot of almost every page, introducing the conclusions of very many historians and archæologists, give weight to Dr. Evans's text, and show the thoroughness of her method.

The book contains two hundred and sixty illustrations, including reproductions of photographs, lithographs, in addition to maps and many apposite drawings interspersed in the text.

G. E. C.

LAW REPORTS

ALLEGED DAMPNESS OF HOUSE

Ogilvie v. *Beazley.—Chancery Division. Before Mr. Justice Simonds*

IN this action Mrs. A. M. Ogilvie sued Mrs. M. I. Beazley for rescission of a contract to purchase a house and for a declaration that she was entitled to the return of her deposit and legal expenses incurred, alleging misrepresentation in regard to the house.

It appeared that plaintiff was interested in a property known as Barn Court, Sholing, near Southampton, which was the property of Mrs. Beazley. The premises were leasehold. Mrs. Ogilvie's case was that at an interview with Mrs. Beazley she was assured that the house was bone dry. Mrs. Ogilvie was anxious on the matter, as she had a small daughter. The property was put up for auction, and Mrs. Ogilvie became the purchaser at £775 in November, 1937. She paid a deposit of £77 10s., and instructed her solicitors to investigate the title. Later, she discovered that the house was damp. She thereupon consulted her solicitors and ultimately brought her action. She now claimed a rescission of her contract to purchase, the return of her deposit, and £20 legal expenses.

Mrs. Beazley, by her defence, denied that she made any representation as alleged, and pleaded that the premises were not structurally damp. On the ground of the failure of Mrs. Ogilvie to complete the purchase of the property within a reasonable time, she counter-claimed for forfeiture of the deposit, and a sum as damages for alleged breach of contract by Mrs. Ogilvie.

Mr. Fay appeared for the plaintiff, and his expert witness was Mr. J. Sanders, F.R.I.B.A.

Mr. Tanner represented the defendant, and he called as his experts, Mr. W. H. Saunders, M.I.S.E., F.I.A.A.S., and Mr. W. C. Matthews, F.S.I.

His lordship, after hearing the evidence, said this action largely depended upon the evidence, and whose evidence he accepted.

On this point he preferred the version given by Mrs. Ogilvie to that of the defendant. Mrs. Ogilvie's evidence and that of her expert witness, Mr. Sanders, pointed to the house being very damp. The experts had examined the house late in 1938, but he had had no evidence as to the state of the house in the early part of that year. He came to the conclusion that Mrs. Ogilvie was entitled to succeed, and he gave judgment for her in her claim with costs. The defendant's counter-claim would be dismissed with costs.

BUG INFESTATION IN TIMBER

Darnton v. *S. H. Development Trust, Ltd. King's Bench Division. Before Mr. Justice Stable*

THIS was an action by Mr. P.C. Darnton against defendants, S. H. Development Trust, Ltd., to recover damages in respect of an infestation of bugs in his flat at Fitzjames Avenue, West Kensington, of which plaintiff was a tenant and the defendants his landlords.

It appeared that before plaintiff took possession of the flat, he desired to have the hot water pipes in the maid's bedroom boarded in, and his case was that he arranged with the manager of the flats that the defendants' contractors should do the work. This was done, and plaintiff paid for it. Plaintiff duly took possession, and on his return from his holiday, he found there were bugs in the flat. An inspection followed, with the result that it was concluded that the bugs and their eggs were in the boards around the hot water pipes. The boards were fumigated and scraped, but without result, and in the end they had to be taken away and burned.

Mr. Hollis, who appeared for the plaintiff, said his client's case was that the defendants had failed to destroy the boards, as he directed, when it was found that they were the source of the trouble. He contended that the defendants had been guilty of a breach of warranty or contract in supplying bug infested boards for the job.

Defendants denied that they had been guilty of any breach of warranty or contract or that any order was given by plaintiff for the destroying of the boards.

Mr. Duveen, who represented the defendants, argued that the defendants' contractors could not, in the circumstances of the case, be said to be agents of the defendants, and that it therefore followed that the defendants owed no duty to plaintiff in the matter.

His lordship held that the plaintiff had not proved that any contractual obligation rested on the defendants as to the boards put around the hot water pipes. He was not satisfied that the bugs were in the boards, as they did not infest brand new timber, such as was used on this job. He did not find there was any contract as alleged for the destruction of the boards when the trouble was first discovered, but merely a sensible arrangement to deal with the matter. He found in favour of the defendants, and entered judgment for them with costs.

Announcement

Mr. F. Clive Grimwade, F.S.I., F.I.A.S., informs us that his practice has been amalgamated with that of Mr. S. James Ainsley, F.I.A.S., of 44 Catherine Place, S.W.1. They are now practising together as quantity surveyors under the style and title of Grimwade and Ainsley at 21 Catherine Place, Westminster, London, S.W.1. Telephones: Victoria 2421 and 6967.

TRADE NOTES

[*By PHILIP SCHOLBERG*]

Electric Fires

SINCE the days of the first Ferranti parabolic reflector, electric fires have become more and more elaborate and prices often seem to be based more on the amount of trimmings and applied art provided than on the actual heating capacity of the fire. The sketch at the head of these notes shows a one-kilowatt fire with an adjustable parabolic reflector. One has seen fires looking very much like this produced by different manufacturers, but it seems to me that a price of 27s. 6d. retail is a good deal less than many manufacturers would ask for the same thing. This fire is made by British National Electrics, who have several other good simple designs, mostly at low prices. There is, for example, a two-kilowatt portable fire set in a perfectly plain flat panel with a lifting bar handle at the top, this model retailing at 57s. 6d. Almost the same model, but with a "glowing coal effect giving a very realistic reproduction of a flickering fire" costs 88s. 6d. Other manufacturers have even more elaborate flickering effects with colour-changing systems and pressed patterns with fleur-de-lys or Mickey Mouse in relief. It is easy to criticize electric fire design, and the manufacturers can easily retort that architects are too fussy and anyway the public likes artificial coal. Quite; but so many good designs are now plastered with nonsense, that early models, made popular by architects in the first place, are no longer available. So we must shout while there is still time. British National have nothing very elaborate in the way of applied art, but a little simple subtraction will show that even this adds quite considerably to the price while it can add nothing noticeable to the amount of heat emitted, unless it is possible to argue that the human skin is capable of detecting the 40 or so extra watts used to produce the flicker, when the total load of the fire is 2,000 watts. This firm also makes electric cookers and grillers in various sizes, and all their prices are generally quite low. Many of their models are very reasonably designed and should be of interest to all architects who believe that selling price should bear some fairly simple relation to production costs.—(*British National Electrics, Ltd., Newarthill, Motherwell, Lanarkshire.*)

Stainless Steel Lavatory Basins

Last week I referred to a stainless steel lavatory basin produced by Benham and Sons, Ltd. I have now discovered that rather similar units are produced by Alfa-Laval and are made in several different types at prices varying from £4 10s. (this without taps) to £7 7s. for the type with a more elaborate waste arrangement and a splash back. Continuous runs of basins are also available in lengths up to nearly 20 ft., this length containing ten basins. There are also rectangular units with the basins arranged back to back for use in hospitals and institutions. All basins are pressed from 18/8 nickel-chromium-steel and are seamless and satin finished.—(*Alfa-Laval Company, Ltd., Great West Road, Brentford.*)

Window Cleaning

The solution of the window cleaning problem in a large building is not really as easy as it looks. Centre-pivoted casements in theory allow the window to be swung completely round so that the outside glass can be cleaned from the inside of the building, but there is the difficulty that the window itself may not be at all easy of access if the floor is covered with office desks or factory machinery. Cleaners can also climb through the window and secure themselves with a belt, but even here there are certain limiting factors, and if the floor to ceiling height exceeds 10 ft. it is virtually impossible to clean the whole window. Most large factories use a cradle suspended from a continuous track at roof-level, but Henry Hope and Sons maintain that experienced men must be kept for this work, and they also suspect that many windows are left dirty when, if the system in use were a simple one, the windows would be cleaned more often and there would be a resultant saving in lighting costs. They have therefore introduced a continuous window-cleaning balcony which is illustrated on page 548. The cost of these balconies would, I imagine, be fairly considerable, but once they were installed it would be possible to employ entirely unskilled labour for cleaning, and the men using them would be perfectly safe. One has only to read a few Home Office accident reports to realize that there are far more accidents with cleaners' and painters' cradles than there should be. Workmen very possibly cannot tell by looking at a rope when it is becoming unsafe, and they are also naturally reluctant to apply for new gear because they feel that they may be suspected of being bad workmen if they

Continuous window-cleaning balcony described on the previous page

use too much material.—(*Henry Hope and Sons, Ltd., Halford Works, Smethwick, Birmingham.*)

Refrigerating Machinery

It is with a certain amount of surprise that one realizes that refrigeration has only been commercially possible during the last fifty years, the first cargoes of frozen mutton being shipped from Australia to this country in the early eighties of the last century. Sterne & Co., of Glasgow, have just sent me a series of their catalogues and booklets, from which I gather that they have been in the refrigerating industry since the very early days, while their latest effort is the plant in the new Cunarder *Mauretania* now building at Birkenhead. This firm, however, does not confine itself to ship work, but provides plant for cold stores of all kinds, skating rinks and ice factories, as well as producing a whole range of self-contained refrigerators for use in houses and shops. Domestic models run from 3·3 cub. ft. to 8·1 capacity, prices from £30 9s. to £68 5s. Models for different types of shop are made in all sizes and to suit all trades.

●

One or two points crop up in connection with ice making which seem to me of interest. Ice made from pure water will be perfectly tasteless and colourless, but, however pure the water may be, the ice will be white and opaque owing to the presence of entrapped bubbles of air. If the ice is to be perfectly transparent then the water must be agitated during the freezing process. This is generally done by blowing air through it, though even with this method there will almost certainly be an opaque core in the block unless the water is exceptionally pure. Clear ice is no better, as ice, than the opaque kind, but if customers are really fussy they may be satisfied if the water is emptied from the core of the block before it is finally frozen ; if a fresh supply of water is then put in the resultant block will be clear right through.

●

As a natural result, I suppose, of their refrigerating work, this firm also makes air-conditioning plant, in fact they seem to do all the jobs which can be connected with the idea of cooling in any form. I should have been interested to see sections of typical ice rink floors both permanent and temporary. To produce a system of cooling is comparatively simple, but it is by no means easy to design a structural base which will not crack under temperature movements. I assume that Sternes know the answer ; judging by the amount of work they have done they are bound to. Maybe they dont want to give too much away.—(*L. Sterne & Co., Ltd., Crown Iron Works, Glasgow, N.W.*)

More A.R.P.

Luncheon last week with the Cement and Concrete Association was both diverting and instructive. Viscount Wolmer made a speech introducing the concrete pillbox which the Association has built on a site in Chelsea, and said that " if every Englishman is to do his duty he must be able to feel that he has made safe the lives of those nearest and dearest to him as far as lies within his power." Lord Wolmer was followed by Sir Alexander Rouse of the A.R.P. Committee of the Home Office, who didn't quite seem to agree. Explaining that he hadn't known he was going to make a speech he took the opportunity to explain about deep shelters, of which he disapproved on the grounds that the whole population would retreat into them on the outbreak of war and would then stay there until the other side had won. He approved of a reasonable degree of protection, but " not too much," and described the Anderson shelter as having withstood " more than might be expected." So whatever one's private opinions may be it seems that the Home Office is gradually making up its mind about what it means by civil defence, and it may be assumed that the official solution of the problem will be compulsorily applied to all authorities and private owners, and there will be little opportunity for architects to evolve original constructional methods.

●

The Chelsea pillbox is splinter and blast proof, in Lord Wolmer's words, " all that the average, or indeed any but the longest private purse, can afford." The Cement and Concrete Association is developing this shelter in a very sensible way, for they will supply complete constructional drawings of the shelter and they have made arrangements with the various associations supplying aggregates and with the timber interests, and these two groups are prepared to supply the appropriate aggregates and to hire shuttering. The standard shelter accommodates six or seven people, but the same basic unit can, of course, be used for larger shelters. Cost should be about £40. It is suggested that these shelters could be used as tool-shed or garden stores or for any other handy purpose during times of peace. It is only fair to add that if householders take advantage of the additional storage space at their disposal they will almost certainly find that their rates have been increased.—(*The Cement and Concrete Association, 52 Grosvenor Gardens, London, S.W.1.*)

Manufacturers' Items

We have received from Turners Asbestos Cement Co. Branch of Turner and Newall, Ltd., the first of a series of booklets which is to deal with the manner in which architects, builders and others, have solved difficult or unusual problems in constructional work by the use of asbestos-cement. Each of these little booklets will show how a difficulty has been overcome by the architect and manufacturer collaborating to produce a special component, or in some cases, to utilize a standard product in an unusual way. Each booklet will be complete in itself and will contain a full description with all the technical data relevant to the problem with which it deals. The booklets are given reference numbers for classified filing which is bound to increase their usefulness. Copies will be sent post-free upon request.

●

Samples are one of the many evils of an architect's job. If they are large they take up too much room. If they are small they can never be found at the right moment.

The Adamite Company, Ltd., of Manfield House, Strand, W.C.2, have found an excellent solution to the problem—at any rate as far as Alundum mosaics, tiles and aggregates are concerned—a miniature Alundum tile surrounded by a complete range of Alundum mosaics and aggregates, mounted on a solid backing, the whole being only five inches by four inches. Incidentally, besides being a complete colour chart, it makes an excellent paper weight and knife sharpener.

●

In its latest publication the Clay Products Technical Bureau has added to its series on brickwork and tiling a bulletin on the larger aspects of this subject : " The Economy of Brick Construction."

The strong tendency in recent years to use all-brick construction, or a form of mixed construction, where not long ago frame construction would have been followed is particularly significant in this connection. The reasons for it are examined here, especially in relation to multi-storey buildings, and a clear case made for the superior economy of all-brick construction.

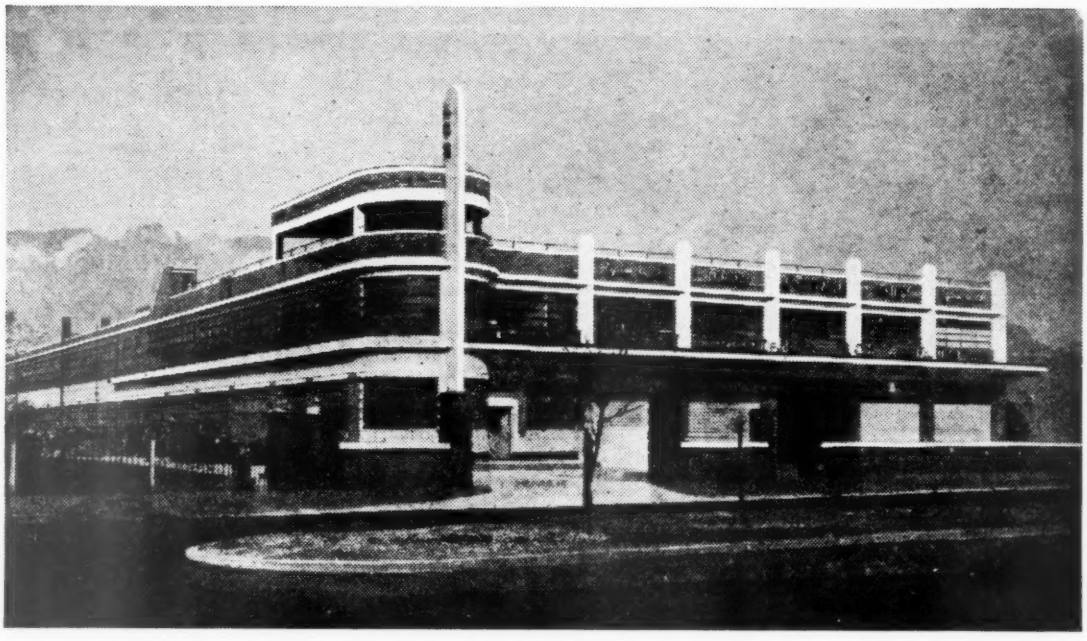
The buildings illustrated are of various representative types—flats, schools, hospitals, libraries, etc.—and though it was not possible in every case to obtain examples which had been costed for alternative forms of construction, the figures given for those that were bear out the generally held opinion that for most buildings up to five and six storeys in height load-bearing brick construction has everything to recommend it.

Incidentally, it is interesting to note that a common secondary reason given for the use of all-brick construction in several of these buildings was its great merit in reducing sound transmission.

●

Among recent contracts for which the Trussed Concrete Steel Co., Ltd., have been appointed the reinforced concrete engineers, are the following :—

Newton Abbot : Electricity Testing Depart-



The London Co-operative Society's new laundry, Eastern Avenue, North Romford, which was opened on March 4.

ment for the Borough of Torquay. Architect: J. C. Beare, A.R.I.B.A. Contractors: Messrs. P. W. Wickins and Son, Ltd.

Hayes (Middlesex): Extensions for Hayes Cocoa Co., Ltd. A reinforced concrete frame building.

Torquay: St. Martin's Church at Barton. Architect: N. F. Cachemaille Day, F.R.I.B.A. Contractors: Messrs. Vanstone and Sons, Torquay.

London: Premises at 34 New Street, Westminster, including basement for A.R.P. Architects: Messrs. Harrison, Barnes and Hubbard, F./A./A.R.I.B.A. Contractors: Messrs. P. C. S., Ltd., London, S.W.1.

Yeovil: New dairy for the Yeovil Co-operative Society, Ltd. Architect: L. G. Ekins, Esq., F.R.I.B.A. Construction by the Society's own building department.

London: Offices at No. 11 Bruton Street, W.1. A reinforced concrete frame building. Architect: D. Hamilton, Contractors: Messrs. Mullen and Lumsden, Ltd.

Liverpool: Flats at Westmoreland Place and Date Street, for the Liverpool Housing Committee. Architect: L. H. Keay, O.B.E., F.R.I.B.A. Contractors for Date Street: Messrs. J. Doyle, Liverpool.

Richmond (Yorks): Martins Bank, Ltd. Architects: Messrs. Bromley, Cartwright and Waumsley, A./L.R.I.B.A. Contractors: Messrs. Speechley and Smith, Richmond.

Leeds: The Trussed Concrete Steel Co., Ltd., are responsible for the construction of the reinforced concrete for a new garage at Leeds for Messrs. Tate of Leeds, Ltd. This building is reinforced concrete framed with Diagrid floors and roof to the design of Diagrid Structures, Ltd. Architect: Victor Bain, F.R.I.B.A. General Contractors, Messrs. Harrison & Co. (Leeds), Ltd.

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The series of advertisements by W. T. Henley's Telegraph Works Co., Ltd., which told pictorially the story of raw materials used in electric cable manufacture has been attractively reproduced in booklet form. Copies may be obtained from Henley's at Holborn Viaduct, London, E.C.1. Ask for Booklet No. 441.

Obituary

The death took place recently of Mr. Ernest Lefeaux, A.M.I.E.E., Manager of the North Woolwich Works of W. T. Henley's Telegraph Works Co., Ltd. Mr. Lefeaux joined the firm in 1901. During his long association with the electrical industry, he served on many committees, particularly those of the British Engineering Standards Association and the British Electrical and Allied Industries Research Association.

THE BUILDINGS ILLUSTRATED

THE FRENCH INSTITUTE (pages 523-525). Architect: A. J. Thomas. General contractors: Kirk and Kirk, Ltd. (1st contract) and Société de Construction Baffrey (2nd contract). Specialists, sub-contractors and suppliers included: G. B. Furnishers, Ltd., blinds, curtains and carpets; Art Pavements and Decorations, Ltd., Biancola; W. Lusty and Sons, Ltd., cinema chairs; Paul and Moore, and Joseph Kaye and Sons, Ltd., door locks and furniture; Higgins and Cattle, Ltd., electrical engineers; Stevens and Adams, Ltd., oak floors; North British Rubber Co., rubber floors; James Clark and Sons, glazing; Richard Crittall & Co., Ltd., heating engineers; R. Cattle, Ltd., joinery; B. Holden & Co., linoleum; Plaster Decoration Co., Ltd., plaster and grano work; Stic B Paint Co., Ltd., painting; Stitson, White & Co., Ltd., plumbing; Nine Elms Stone Masonry Works, stonework; Scaffolding (Great Britain), Ltd., scaffolding; Camden Tile and Mosaic Co., Ltd., tiling; John Gibbs, Ltd., metal windows; Richard Brown (Marble), Ltd., marble; Helical Bar and Engineering Co., Ltd., reinforced concrete floors; Horsley, Smith & Co. (London), Ltd., and Hollis Bros. & Co., Ltd., wood block floors; W. R. Howard and Partners, steel; Waygood, Otis & Co., Ltd., and Hammond and Champness, Ltd., lifts; J. M. Newton and Sons, Ltd., glass and glazing; Salter, Edwards & Co., Ltd., asphalte; Stirling and Johnson, Ltd., slating; H. W. Parker & Co., Ltd., metal handrails; W. A. Telling, Ltd., plastering; F. and E. Eastman, Ltd., tiling; Cork Insulation Co., Ltd., cork insulation; Crittall Manufacturing Co., Ltd., windows; Mattozene, Ltd., backboards; Luxfer, Ltd., pavement lights, etc.; Wm. Knight & Co., Ltd., stonework; Lenscrete Ltd., roof lights; Birmingham Guild, Ltd., staircases; James Gibbons, Ltd., cloakroom fittings; Spencer, Heath and George, Ltd., gymnasium fittings; Réunies des Glaces, glass; Civet Pommier & Co., Ltd., and Marbres des Boullonais, marble paving; Ets. Borderel and Roberts, wrought iron doors; Somme, Hacquard & Co., bookstacks; Comptoir Française d'Exportation de Glaces, mirrors; Bull Motors (branch of E. R. & F. Turner, Ltd., Bull super silent motors.

SWINTON AND PENDLEBURY TOWN HALL (pages 526–529). Architects: Percy Thomas and Ernest Prestwich. General contractors: J. Gerrard and Sons, Ltd. The sub-contractors and suppliers included: Allied Guilds, Ltd., cast stone; Ascog, Ltd., electric fittings; Bellman, Ivey and Carter, Ltd., Scagliola columns; Best and Lloyd, Ltd., electric fittings; Buckley Junction Brick Co., facing bricks; John Booth and Sons (Bolton), Ltd., strong-room doors; British Reinforced Concrete Co., Ltd., fabric reinforcement to road; James Cadman and Sons, Ltd., plasterers; Conway & Co., tiling and terrazzo and marble; Cork Insulation Co., Ltd., cork floor tiling; J. Duckett and Son, Ltd., larder cupboard in caretaker's flat; J. C. Edwards (Ruabon), Ltd., quarry tiles; Engineering Service, Ltd., electrical installation; Finnis and Ruault, roofing tiles; John Faulkner and Sons, Ltd., lightning conductor; General Electric Co., Ltd., electric water heater and cooking equipment; Gent & Co., Ltd., electric clocks; Richard Greenough, bronze mat frames; Haywards, Ltd., circular iron staircase, and roof lights; Wm. Higgin, Ltd., furniture; P. C. Henderson, Ltd., track for folding doors; Henry Hope and Sons, Ltd., metal windows; Hindshaw & Co., fibrous plaster work; Kingfisher, Ltd., hat and coat stands; W. and R. Leggott, Ltd., ironmongery; Limmer and Trinidad Lake Asphalt Co., Ltd., asphalt; Manu-Marble Co., Manumarble floor and wall lining; H. H. Martyn & Co., Ltd., metalwork and bronzework; Milner's Safe Co., Ltd., safes; Matthews and Yates, Ltd., ventilation; John Morris and Sons, Ltd., fire hose reels; Walter Macfarlane & Co., Ltd., rainwater goods; John Needham and Sons, Ltd., manhole covers; Newalls Insulation Co., acoustic material; Pilkington's Tile and Pottery Co., Ltd., wall tiles; William Potts and Sons, Ltd., tower clock; Rhodes, Brydon and Youatt, Ltd., pumps; Rhodes Chains, Ltd., sash window chains; Sankey-Sheldon, steel furniture; Saunders and Taylor, Ltd., heating; Shanks & Co., Ltd., sanitary fittings; J. T. Smith, common bricks; H. Tyson Smith, stone carving; Thornton & Co., stonework; Siemens Bros. & Co., Ltd., telephone apparatus; Trafford Park Steel Warehouse, Ltd., steelwork; Triplex Foundry, Ltd., grate in caretaker's flat; Troughton and Young, Ltd., electric fittings; Trussed Concrete Steel Co., Hy-rib lathing; Wm. Wadsworth and Sons, Ltd., service lift; Waring and Gillow, Ltd., curtains and carpets; Edward Wood & Co., Ltd., and R. W. Whittle, Ltd., steelwork.

HOUSE IN NEWTON ROAD, PADDINGTON (pages 539–543). Architect: Denys Lasdun. Quantity surveyor: Cyril Sweett. Consulting engineers: Felix J. Samuely and Conrad W. Hamaan. General contractors: Leslie Bilsby, Ltd. The sub-contractors and suppliers included: F. Bradford & Co., Ltd., reinforced concrete; Matthew Hall & Co., Ltd., heating, hot water; Mortimer, Gall & Co., Ltd., electrical work; Williams and Williams, Ltd., windows; G. Stephenson & Co., Ltd., cork

flooring: Martin Van Straaten & Co., external tiling; Stic B Paint Sales, Ltd., external painting; Joseph Chater and Sons, Ltd., sanitary fittings; Lift and Engineering Co., Ltd., service lift; Frazzi, Ltd., Paropa roofing; Shutter Contractors, Ltd., garage roller door; J. D. Beardmore & Co., Ltd., ironmongery; Joseph Avery & Co., Ltd., sun blinds; Troughton and Young, Ltd., electrical fittings; Bratt Colbran, Ltd., fireplace interior; James Clark and Son, Ltd., Insulight glass brick panels; James Carter & Co., garden. Furniture for special photographs lent by Messrs. Isokon, Finmar, Gordon Russell and Leslie Bilsby, Ltd.

DRILL HALL, VEHICLE SHED AND P.S.I.'S QUARTERS, 318TH (SURREY) ANTI-AIRCRAFT COMPANY, R.E.(T.A.) (pages 544-545). Architects: J. Hatchard Smith and Sons. General contractors: Walker (Tooting), Ltd. Subcontractors and suppliers included: Limmer and Trinidad Lake Asphalt Co., Ltd., asphalt; Dorking Brick Co., Ltd., bricks; Empire Stone Co., Ltd., artificial stone; Measures Bros. (1911), Ltd., structural steel; London Concrete Construction Co., Ltd., fireproof floors; W. T. Lamb and Sons, tiles, roofing felt and brick fireplaces; Wotton and Sons, metal casements, lantern and rooflights; Fretwell Heating Co., central heating; Wandsworth and District Gas Co., gas cookers; Buchanan and Curwen, Ltd., electric wiring and electric light fixtures; Greenwood's Ventilating Co., ventilation; W. N. Froy and Sons, sanitary fittings; Comyn, Ching & Co. (London), Ltd., door furniture and window furniture; O'Brien, Thomas, & Co., Ltd., sliding door; Eclair Doors, Ltd., Eclair doors; Alfred Brookes Theatrical Supplies, Ltd., dark-room curtains; Gypsum Mines, Ltd., Sirapite plaster; George Wright (London), Ltd., metalwork; Alfred Odoni & Co., cycle stands; Art Metal Construction Co., steel cupboards.

IN PARLIAMENT

MR. TEMPLE MORRIS asked the Minister of Health what exact use was being made of architectural advice in connection with the construction of evacuation camps.

Mr. Elliot said that work on the construction of such camps had not yet been undertaken, but the Government had taken every advantage of advice both from the architectural staffs of the departments concerned and from outside sources in connection with the preliminary work on camps.

Sir George Mitcheson asked the Chancellor of the Exchequer if he would institute inquiries for the purpose of ascertaining to what extent the recent decline in building plans approved by the local authorities was attributable to uncertainties in respect of the scheme of war-risk insurance.

Sir J. Simon said that the decline in the cost of building plans approved by local authorities dated from the high level of 1936 and it was clear that the risk of damage in a possible future war could be only one of several factors which had caused the decline. The 1938 figure, though lower than in the three previous years, was higher than in any year before 1934 and nearly 50 per cent. higher than the average of 1924 to 1929. The figures for individual months were not very important, but in fact the cost of plans approved in February, 1939, was about £2,000,000 greater than in January, 1939, and about £500,000 greater than in February, 1938. In all the circumstances he did not think that any useful purpose would be served by instituting the inquiries suggested.

BUILDING NEWS

LONDON

BATTERSEA. *A.R.P. Shelters.* The B.C. is to construct A.R.P. shelters at a cost of £25,000.

COULSDON. *Flats, etc.* Plans passed by the U.D.C.: Four flats, Chipstead Valley Road, Morgan, Baines and Clerk; five houses, Oaks Road, Kenley, Mr. L. Martin Holman; six houses, 15-18 Ridgemount Avenue, and 7 and 8 Marlpit Lane, Sinden, Tompkins and King; two houses, 61-62 Thornton Crescent, Mr. J. Nunn; three houses, Canon's Hill, H. Miller & Co.; house, Bradmore Way, Turner, Robinson & Co., Ltd.; eight houses, St. Andrews Road, Mr. W. H. Gorham; bungalow, Bradmore Way, Lovatt and Shaw.

FINCHLEY. *Flats.* Mr. F. D. Gascoigne has prepared a scheme for the erection of 99 flats in Moss Hall Grove, Finchley.

PROVINCES

ASPULL. *Clinic.* The Lancashire C.C. has purchased a site at Aspull for a clinic.

BIRKENHEAD. *Extensions.* The Birkenhead Education Committee has approved plans for extensions to the Holy Cross R.C. School.

BIRKENHEAD. *Houses.* The Corporation is to erect 54 houses in Bedford Avenue.

BIRKENHEAD. *Flats.* The Corporation is to erect 42 flats in Helmingham Road.

BIRKENHEAD. *Development.* The Leverhulme Investment Trust, Ltd., are to develop land at Landican, Birkenhead.

BIRMINGHAM. *Extension.* The Birmingham Education Committee is to enlarge Cockshut Hill School, at a cost of £29,200.

BIRMINGHAM. *Church.* The Corporation has sold a site for a Roman Catholic Church on the Quinton Estate, to the Roman Catholic Church authorities.

BLACKHALL. *Cinema.* Messrs. W. L. Grant, Ltd., are to erect a cinema near Elm Avenue, Blackhall.

BRADFORD. *School.* The Bradford Education Committee has acquired land at Haycliffe Lane for the erection of a new Grange High School for Boys.

BRADFORD. *Shops.* Mr. A. Needham is to erect shops and business premises in Farfield Grove, Buttershaw, Bradford.

BRADFORD. *School.* The Bradford Education Committee has selected land at Long Lane for the erection of a new Belle Vue High School.

BRISTOL. *Clinic.* The Corporation is to erect a clinic in Claremont Street.

BRISTOL. *Branch Library.* The Corporation has selected a site on the Hillfields Park Estate for a branch library.

BROCKHURST. *School.* The Essex Education Committee has approved plans for the erection of a junior school in Buckhurst Way, at a cost of £13,275.

CHESTERFIELD. *Garage and Motor Showroom.* The Corporation has sold land fronting Beetwell Street between Hipper Street for the erection of a garage and motor showroom to Messrs. Boult and Clough.

COVENTRY. *School.* The Coventry Education Committee has obtained sanction for a loan of £55,886 for the erection of a secondary school at Stoke Park.

DARTFORD. *Houses.* Messrs. J. Franklin & Co. (Erith), Ltd., have prepared a scheme for the erection of 334 houses off Princes Road, Dartford.

DUDLEY. *Church Hall.* The Corporation has sold a site on the Rosland Estate to the Rev. B. H. Green for the erection of a church hall for St. John's Church Council.

DUDLEY. *Extensions, etc.* Plans passed by the Corporation: Works extensions, Wolverhampton Road, for Messrs. T. Dudley and Sons, Ltd.; eight houses, New Village, for Mr. H. Stafford; four houses, Buffery Road, for Mr. E. Derby; house, Oakham Road, for Mrs. E. Jones; hotel, Hall Street, for Messrs. Fredk. Smith, Ltd.; works extensions, Pear Tree Lane, for Metallisation, Ltd.

DURHAM. *Hotel.* Messrs. Calders (Newcastle), Ltd., are to erect a hotel at Farewell Hall, Durham.

EASTHAMPSTEAD. *Houses.* The R.D.C. is to erect 36 houses in Chavey Down Road.

GREAT WAKERING. *Treatment Centre.* The Essex C.C. has purchased a site at Great Wakering for a combined treatment centre.

NEWTON-IN-MAKERFIELD. *Extensions.* The Lancashire Education Committee is to enlarge the Earlestown Central School, Newton-in-Makerfield, at a cost of £43,115.

ROMFORD. *Branch Library.* The Essex Education Committee has purchased land in Collier Row, Romford, for the erection of a branch library.

RYHOPE. *Bank.* Mr. C. Humble is to erect premises for Barclays Bank in Stockton Road, Ryhope Village.

STALYBRIDGE. *Municipal Offices Extensions.* The Corporation has asked Mr. Percy Howard, architect, to make suggestions for municipal office extensions.

STALYBRIDGE. *Housing.* The Corporation has approved the layout of the Besom Street housing site and requested the housing architect to obtain tenders for the erection of houses and also to prepare an estimate for the work by direct labour.

SUNDERLAND. *Swimming Bath.* The Sunderland Education Committee is to enlarge the Havelock senior school and provide a swimming bath, at a cost of £32,487.

SUTTON COLDFIELD. *Houses.* Plans passed by the Corporation: Two houses, Bedford Road, Mr. A. E. Rice; two houses, Boultbee Road A. H. Field & Co.; house, Corbridge Road, Mr. I. Rossborough; four houses, Darnick Road, R. W. Stanton, Ltd.; two houses, Lindridge Road, James and Son; eight shops and houses, Chester Road, Mr. F. M. Morris; 11 houses, Springfield Road, Shaw & Co.; eight houses, Walmley Road, Mr. A. P. Johnson.

TORQUAY. *Layout, etc.* Plans passed by the Corporation: Layout, Thatcher Rock Estate, off Ilsham Marine Drive, Peerless Property Co., Ltd.; two houses, 10 and 11 Parkhurst Road, Mr. H. Keen; bank, 145 Reddenhill Road, Lloyds Bank, Ltd.; bungalow, Nut Bush Lane, Mr. R. Atkinson; 12 houses, off Shiphay Lane, Mr. D. J. Woodhouse; six houses, Barton Hill Road, Mr. R. H. Stuckey.

WAKEFIELD. *Schools, etc.* Plans passed by the Corporation: Sunday Schools, Belle Isle Avenue, The Yorkshire Association of Baptist Churches; additions and alterations, Orchard Cottage, Barnsley Road, Dobson and Gighall; two houses, Thornes Road, Kay and Lunan; motor showroom, etc., Barnsley Road, The South Yorkshire Motors, Ltd.; house, Blenheim Road, Mr. W. H. Ogden; two houses, Farne Avenue, Mr. H. Walton; two houses, Woodthorpe Park, Mr. Ledgar Holdsworth.

WALSALL. *Housing Schemes.* The Corporation is to purchase 2 acres at Blackenhall Heath and 4 acres in Gower Street for housing schemes.

WASHINGTON. *Houses.* The U.D.C. is to erect 100 houses on the Heworth estate, at a cost of £42,740.

WOLVERHAMPTON. *Extensions.* Plans passed by the Corporation: Three houses, off Rupert Street, Jenks Builders, Ltd.; two shops and one house, Raynor Road, etc., and eight houses, Fallings Park Estate, Mr. M. A. Boswell; six houses, Fir Tree Road, Mr. O. W. Denning; extension to offices, Queen Street, Midland News Association, Ltd.; offices and factory, Williamson Street, B. J. Legge (Industries), Ltd.; 36 houses, Phœnix Street, Mr. J. Hodgkiss; extension to factory, Stewart Street, C. and B. Smith, Ltd.; 12 houses, Harrowby Road, Mr. L. T. Taylor; extension to works, Milston Road, Monmore Green, John Perks and Sons, Ltd.; two houses, Stafford Road, Bushbury Estate and Building Co.; extensions, Lichfield Street, Wolverhampton and District Co-op. Society; two houses, Evans Street, Mr. W. Howell.

PRICES

On the following pages appears Prices for Measured Work—Part I, with prices last published on March 2, brought up to date.

★ *ANSWERS TO QUESTIONS*

While the JOURNAL, *naturally, cannot presume to undertake the responsibilities of a quantity surveyor, it has arranged with the authors of this Supplement to answer readers' questions regarding any matter that arises over their use of the Prices Supplement in regard to their work, without any fee. Questions should be addressed to the Editor of the* JOURNAL, *and will be answered personally by Messrs. Davis and Belfield. As is the normal custom, publication in the* JOURNAL *will omit the name and address of the enquirer so that it is unnecessary to write under a pseudonym.*

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.

● *Prices are for work executed complete and are for an average job in the London Area ; all prices include for overhead charges and profit for the general contractor.*

PART 3

CURRENT PRICES FOR MEASURED WORK—I

BY DAVIS AND BELFIELD

PRELIMINARIES

Water for the works		1¼%
Third party and other insurances to persons and property, employer's liability, unemployment and Public Health insurances, and fire insurances (based on value of contract) ..		
Single scaffolding	per yard super	2/–
Independent scaffolding ..	per yard super	2/8

EXCAVATOR

		Ordinary Ground	Clay
Surface digging average 9″ deep and wheeling and depositing on spoil heap, not exceeding two runs	per yard super	–/9	1/1

EXCAVATOR—(*continued*)

		Ordinary Ground	Clay
Excavating not exceeding 5′ 0″ deep to form basement and getting out	per yard cube	1/11	2/10½
Ditto, exceeding 5′ 0″ deep and not exceeding 10′ 0″ deep	per yard cube	2/5	3/6
Excavating not exceeding 5′ 0″ deep to form surface trenches and getting out	per yard cube	2/7	3/10
Ditto, exceeding 5′ 0″ deep and not exceeding 10′ 0″ deep	per yard cube	3/7	5/0
Ditto, not exceeding 5′ 0″ deep to form basement trench excavation commencing 10′ 0″ deep, and getting out	per yard cube	3/4½	4/6
Returning, filling in and ramming around foundations	per yard cube	1/1	1/5

CURRENT PRICES

BY DAVIS AND BELFIELD

EXCAVATOR, CONCRETOR AND BRICKLAYER

EXCAVATOR—(*continued*)

	Ordinary Ground	Clay
Filling barrows and wheeling and depositing excavated soil not exceeding two runs per yard cube	1/1	1/5
Spreading and levelling from excavated heaps in layers not exceeding 12″ per yard cube	–/9	1/–
Filling into carts or lorries and carting away per yard cube	4/6	4/10
Planking and strutting to sides of basement, excavation, including strutting per foot super	1/–	–/9
Planking and strutting to surface trenches (both sides measured) .. .. per foot super	–/4½	–/3
Hardcore, broken brick, filled in under floors and well rammed and consolidated per yard cube	6/6	
Hardcore, broken brick, deposited, spread and levelled, and rammed to a true surface 6″ thick per yard super	1/4	

CONCRETOR

Foundations and Mass Concrete

Portland cement concrete 1 : 6 with unscreened ballast, in foundations and masses exceeding 12″ thick per yard cube	20/2
Ditto, 1 : 3 : 6, with one part of cement and three parts of sand and six parts of clean gravel per yard cube	20/9
Ditto, 1 : 2 : 4 with one part of cement, two parts of sand and four parts of ¾″ crushed graded shingle per yard cube	25/7
Add if mixed by hand labour .. per yard cube	2/–
Add if in foundations not exceeding 12″ thick per yard cube	2/3
Add for mechanical hoisting .. .. per yard cube	1/6
Add for hand hoisting per 10 feet .. per yard cube	2/3

Surface Beds

Portland cement concrete 1 : 6, bed 6″ thick, spread and levelled .. .. per yard super	3/10
Add or deduct for each inch over or under 6″ in thickness per yard super	–/5¾
Add for surface finished with spade face per yard super	–/3½
Add if laid in two layers with fabric reinforcement (measured separately) .. .. per yard super	–/3½

Upper Floors and Flats

Portland cement concrete 1 : 2 : 4 as before described, 6″ thick, packed around fabric reinforcement (measured separately) finished with spade face per yard super	5/3
Add or deduct for each inch over or under 6″ in thickness per yard super	–/7½

Casings

Portland cement concrete 1 : 2 : 4 as before, in encasing to steel joists .. .. .. per foot cube	1/3
Ditto, packed around rods (measured separately) in lintols, sectional area not exceeding 36 inches per foot cube	1/5½
Ditto, ditto, over 36 inches and not exceeding 72 inches sectional area .. .. .. per foot cube	1/4½
Ditto, ditto, over 72 inches and not exceeding 144 inches sectional area .. .. .. per foot cube	1/3½
Ditto, ditto, over 144 inches sectional area per foot cube	1/2½

Walls in Situ

Portland cement concrete 1 : 6 with unscreened ballast in 9″ walls packed around rods (m/s) per yard super	6/6
Ditto, in 12″ walls ditto .. per yard super	7/11

Reinforcement

½″ diameter and upwards mild steel rod reinforcement, cut to lengths, including bends and hooked ends and embedding in concrete lintols .. .. per cwt.	21/–
Under ½″ diameter, ditto .. .. .. per cwt.	22/6

Formwork

Close boarded formwork to soffites of floors and strutting up .. .. per yard super	3/9
Vertical formwork to sides of concrete walls, including struts, etc. (both sides measured) per yard super	3/–
Formwork to sides and soffites of concrete lintols and beams per foot super	–/6
Wrot ditto .. .. per foot super	–/7

BRICKLAYER

	Flettons £ s. d.	Second Stocks £ s. d.	Blue Staffordshire Wirecuts £ s. d.
Reduced brickwork in lime mortar 1 : 3 with ¼″ joints .. .. per rod	22 19 9	31 18 8	
Ditto, ⅜″ joints .. .. per rod	22 12 7	30 17 2	
Reduced brickwork in cement mortar 1 : 3 with ¼″ joints .. .. per rod	24 14 9	33 13 2	50 13 2
Ditto with ⅜″ joints .. per rod	24 13 3	32 16 11	49 4 9
Add if lime mortar hand mixed .. .. per rod	5/8	5/8	
Ditto cement mortar .. per rod	12/9	12/9	9/–
Half brick walls in lime mortar 1 : 3 ¼″ joints .. .. .. per yard super	5/1	7/–	
Ditto in cement mortar 1 : 3 .. .. .. per yard super	5/5½	7/5	11/1
Labour forming 2″ cavity to hollow walls including wall ties, etc. .. .. per yard super			9d

	£ s. d.
Add to the price of reduced brickwork for brickwork in underpinning .. .. per rod	4 0 0
Ditto, for brickwork circular on plan to flat sweep per rod	5 0 0
Ditto, ditto, to quick sweep .. .. .. per rod	10 0 0
Extra for internal fairface and flush jointing per yard super	1/1½
Extra for grooved bricks as key for plaster per yard super	3d.
Raking out joints ditto .. .. per yard super	4½d.
Hacking concrete ditto .. .. per yard super	6d.
Horizontal double slate damp-proof course 4½″ wide bedded in cement mortar .. .. per foot run	4d.
Ditto exceeding 4½″ in width .. per foot super	10d.
Vertical ditto .. .. per foot super	1/–
" Ledkore " (Grade B) D.P.C. .. per foot super	9d.
Plumbing angles .. .. per foot run	1d.
Rake out joints and point to lead flashings per foot run	2d.
Ditto stepped .. .. per foot run	3d.
Bedding door frames .. .. .. per foot run	1d.
Ditto and pointing one side .. .. per foot run	2d.
Ditto and pointing both sides .. .. per foot run	3d.
Parge and core flues .. .. each	4/–
Set and flaunch only chimney pots .. .. each	5/–
Hoisting and fixing metal windows size 3′ 6″ × 4′ including cutting and pinning lugs to brickwork and bedding frames in cement mortar and pointing in mastic on one side .. .. each	5/–
Ditto, including screwing to wood frame (measured separately) .. .. each	3/–

	9″ × 3″	9″ × 6″
Form opening for air brick including slate lintol and render around in cement and sand to 13½″ wall and build in Terra Cotta air brick each	2/6	3/3
Galvanized cast iron School Board pattern air bricks and building in .. .. .. each	9d.	1/3
Fixing only fireplace simple interior and surround each	27/6	

Partitions

	2″	2½″	3″	4″
Breeze set in cement mortar per yard super	2/11	3/5	4/1½	5/1½
Clay tile ditto .. per yard super	4/5	4/11	5/8	6/4½
Pumice ditto .. per yard super	4/6	5/2½	6/3	7/2
Plaster ditto .. per yard super	4/–	4/11	6/–	7/2
White glazed both sides best quality bricks, set in cement mortar and pointed in Parian cement per yard super	..	42/5		

Facings

Prices are extra over Fletton brickwork and are for raking out joints and pointing with a neat struck weathered ½″ joint in cement mortar. For raking joints and pointing in white cement add an extra 11d. per yard super to the following prices.

	Flemish Bond	English Bond	Stretcher Bond
Stock facings p.c. 93/– .. per yard super	4/11	5/4	4/1
Rustic Flettons p.c.70/6 .. per yard super	3/4	3/6	2/11
Blue pressed p.c. 180/– .. per yard super	11/7	12/11	9/1
Sand faced hand made reds p.c. 120/– per yard super	8/–	8/7	6/4
White glazed headers p.c. 470/– and stretchers 480/– .. per yard super	32/–	36/–	24/8
For a variation of 10/– per M. in p.c. of facing bricks size 8¾″ × 2⅝″ on face with ½″ joints add or deduct per yard super	9d.	10d.	6¾d.

CURRENT PRICES

BY DAVIS AND BELFIELD

BRICKLAYER, DRAINLAYER, ASPHALTER AND PAVIOR

BRICKLAYER—(*continued*)

Facings—(continued

		Rustic Flettons	Stock Facings	Sand Faced Hand Made Reds
Half brick wall stretcher bond in cement mortar built fair and joints raked out and pointed in cement mortar on one side	per yard super	8/7½	9/9½	12/–
Ditto and pointed both sides	per yd. super	10/6	11/8	13/10
One brick wall in cement mortar built fair and joints raked out and pointed in cement mortar on one side	per yard super	15/5	17/8½	22/1
Ditto and pointed both sides	per yd. super	17/3	19/6½	23/10
Half brick wall built in best quality white glazed one side bricks, stretcher bond, in cement mortar built fair and pointed in parian cement	per yard super			31/–
Ditto white glazed both sides and pointed both sides	per yard super			41/9
Labour and material in hand made sand faced red brick on end window head and pointing to face and 4½″ soffite	per foot run			1/3
Hand made, sand faced brick on edge coping including double course of tile creasing with two cement angle fillets to one brick wall	per foot run			2/3

DRAINLAYER

Excavate to form drain trenches for 4″ pipes and get out, including planking and strutting, filling in and ramming, and wheeling and spreading surplus.

Prices per 12″ average depth per foot run :	Ordinary ground	Clay
Trenches not exceeding 3′ 0″ deep	–/2½	–/3
Ditto, exceeding 3′ 0″ and not exceeding 5′ 0″	–/5½	–/7
Ditto, exceeding 5′ 0″ and not exceeding 10′ 0″	–/8½	–/9½

		4″ pipes	6″ pipes
6″ thick Portland cement concrete bed 6 : 1, 12″ wider than diameter of pipe, and flaunched halfway up sides of pipe	per foot run	–/8½	–/10
6″ ditto, and completely encasing	per foot run	1/7	1/11

Agricultural land drain pipes, laid complete with butted joints, exclusive of digging	2″	3″	4″	6″
per yard run	–/4	–/6	–/8	1/1

British Standard Quality Salt Glazed Socketed Stoneware Drainpipes and Fittings

	4″ pipes Over 2-ton lots	4″ pipes Under 2 tons, 100 pieces upwards	6″ pipes Over 2-ton lots	6″ pipes Under 2 tons, 100 pieces upwards	9″ pipes Over 2-ton lots	9″ pipes Under 2 tons, 100 pieces upwards
Pipes jointed in 1:1 cement and sand per foot run	1/1	1/3	1/7	1/10	2/8½	3/4
Extra for bends each	1/4	1/7	2/–	2/4	3/6	4/–
Ditto, single junction each	1/10	2/2	2/–	2/4	3/6	4/–
Trapped yard gulleys with galvanized iron gratings, and setting in concrete and jointing to drain each	9/–	11/6	13/–	14/–	19/–	22/–
Ditto, with horizontal back inlet each	10/6	13/3	14/6	15/9	20/6	23/9
Ditto, with vertical back inlet each	11/3	14/–	15/3	16/9	21/3	24/9
Intercepting trap with Stanford stopper and setting in manhole and making good each	20/6	24/–	25/6	29/–	—	—

Coated Cast Iron Socketed Drain Pipes

	4″	6″	9″
Pipes in 9′ 0″ lengths and laying in trench, including caulked lead joints per foot run	3/4½	5/1	8/11
Cutting and waste each	1/9	3/6	—
Extra for bends, including extra joints and cutting and waste on pipe each	10/8½	20/3½	58/6½
Ditto, junction ditto each	17/2	32/6	97/11
Intercepting trap each	48/2	78/1	180/–

DRAINLAYER—(*continued*)

	4″	6″	9″
H.M.O.W. large socket gulley trap with 9″ gulley top and heavy grating and one back inlet each	44/10½	78/8	—
H.M.O.W. gulley trap with 9″ inlet with high invert outlet for use with raising pieces each	33/5	48/–	—
4″ inspection chamber with one 4″ branch each		65/2	
4″ ditto with two 4″ branches one side each		97/9	
6″ ditto with one 4″ branch each		94/2	
6″ ditto with two 6″ branches one side each		138/3	
9″ ditto with one 9″ branch each		209/9	
9″ ditto with two 9″ branches one side each		321/5	

	White glazed	Salt glazed
4″ half-round straight main channel 24″ long each	5/10	2/1
Ditto, channel bends (ordinary) each	8/6	3/–
4″ Three-quarter round branch bends (short) each	8/6	6/9
Fixing only, manhole covers and frames, including bedding in grease and setting in cement mortar each		4/–

ASPHALTER

Various qualities of asphalte are marketed by different firms. The term "Best" is intended to imply the best quality produced by a single representative firm, and not necessarily the best or most expensive asphalte obtainable.

		Natural Rock Asphalte Best Quality	Natural Rock Asphalte Second Quality
Basement (Tanking).			
1½″ horizontal d.p.c. in three layers on concrete	per yard super	8/5	6/10
¾″ vertical ditto in three coats on brickwork or concrete	per yard super	11/6½	10/–
Double angle fillet	per foot run	–/6½	–/5½
Hard Graded Paving.			
1″ thick	per yard super	7/4	6/3½
¾″ thick	per yard super	6/3½	5/3½
½″ dampcourse finish, with smooth surface to receive lino or other floor covering		5/3	4/8½
Roofing (Flat).			
¾″ thick in 2 layers	per yard super	6/3½	5/3
1″ ditto	per yard super	7/4	6/3½
Extras.			
Felt supplied and fixed	per yard super	–/6½	—
Expanded metal reinforcement ditto	per yard super	1/0½	—
6″ skirting and fillet on brickwork	per foot run	1/0½	–/11½
6″ ditto on wood (reinforced)	per foot run	1/2½	1/1½
Nosing at eaves on lead apron (measured separately)	per foot run	–/3½	–/3½
Parapet outlets	each	4/2½	3/8

PAVIOR

		1″	1½″	2″
Granolithic paving	per yard super	2/7½	3/6	4/7
Add for dusting with carborundum powder	per yard super			–/9
Cement and sand paving (1 : 3)	per yard super	1/10	2/4½	—
½″ Jointless flooring, red, buff or brown, finished to a smooth trowelled surface, on concrete sub floors	per yard super			5/8
¾″ Ditto, in two coats on spade faced concrete or wood sub floors				6/7
½″ thick ditto, reinforced with laths and galvanised wire netting	per yard super			6/0½
Add for polishing	per yard super			–/6½
Terrazzo paving, white chips set in white cement, panelled into squares with 1½″ × ½″ deep ebonite strips, on and including cement and sand screed. Total thickness 1½″	per yard super			19/5
Ditto, but white chips set in grey Portland cement	per yard super			17/4
Terrazzo tiles, white chips set in white cement :— Size 9″ × 9″ × ¾″	per yard super			20/6
Size 12″ × 12″ × 1″	per yard super			18/8
Ditto, but white chips set in grey Portland cement :— Size 9″ × 9″ × ¾″	per yard super			18/11
Size 12″ × 12″ × 1″	per yard super			17/1

		⅛″	3/16″	¼″
Sheet rubber	per yard super	11/7	14/8	17/10
Rubber tiles	per yard super	13/8	16/10	19/11
		5/16″	⅜″	½″
Cork tiles, polished	per yard super	12/10½	11/–	10/–

CURRENT PRICES

BY DAVIS AND BELFIELD

MASON, SLATER, TILER AND ROOFER, AND CARPENTER

PAVIOR—(*continued*)

Hard red paving bricks laid flat (9″ × 4½″ × 2⅝″)	per yard super	9/–
Ditto, laid on edge	per yard super	11/9
	⅝″ thick	7″ ⅝ thick
6″ × 6″ best quality red quarry tiles	per yard super	10/– 11/–
6″ × 6″ best quality buff quarry tiles	per yard super	10/6 11/6
2″ Yorkshire stone paving, square joints and bedding	per yard super	22/–
2″ Finished path of coarse gravel finished with good binding gravel to slight camber	per yard super	1/7½
3½″ Path of clean hard clinker and 1½″ gravel finished to slight camber	per yard super	2/3
7½″ Carriage drive of 3″ clinker, 3″ coarse gravel and 1½″ binding gravel finished to slight camber	per yard super	3/9
2½″ Tar paving in two layers finished with Derbyshire spar	per yard super	4/9

MASON

		Bath	Portland
Stone and all labours of usual character, covering 7″ on bed, roughly squared at back, fixed and cleaned down complete	per foot cube	11/–	16/–

Yorkstone

		Thickness 3″	4″	6″
Templates tooled on exposed faces, sawn beds and joints, and set in cement mortar :—				
Size 9″ × 9″	each	1/8	2/3	3/4½
,, 14″ × 9″	each	2/7½	3/6	5/3
,, 18″ × 14″	each	5/3	7/–	10/6
,, 22½″ × 14″	each	6/6	8/8	13/–
,, 27″ × 14″	each	7/10½	10/6	15/9

Artificial Stone

In steps, copings, band courses, etc., per foot cube, from	9/–

Reconstructed Stone

In steps, dressings, band courses, etc., per foot cube	12/6

Slate

		1″	1¼″	1½″
Slate slabs, sawn to size, not exceeding 10 ft. sup. and planed, with rubbed face and fixing as shelving, etc.	per foot super	4/6	5/–	6/–
Ditto, not exceeding 20 ft. sup.	per foot super	5/4	5/10	7/–
Rubbed edges	per foot run	–/4½	–/4½	–/4½

SLATER, TILER AND ROOFER

Bangor and Portmadoc Slates

		20″ × 10″	16″ × 8″	24″ × 12″
Slates laid to a 3″ lap and fixed with zinc nails	per square	79/–	77/–	• 80/5

Old Delabole Slates

		20″ × 12″	16″ × 10″
Grey medium gradings	per square	86/–	84/6
Unselected greens (V.M.S.) (weathering greens and grey greens mixed)	per square	96/6	94/6

Randoms		No. 1 Gradings 24″/22″ to 12″/10″
Ordinary grey greens	per square	91/3
Weathering grey greens (V.M.S.)	per square	101/9
		No. 2 Gradings 24″/22″ to 12″/10″
Weathering greens (V.M.S.)	per square	107/–

Westmorland Green Slates

Randoms		Bests 24″ to 12″ long proportionate widths
No. 1 Buttermere, fine light green	per square	122/9
No. 2 Buttermere, light green (coarse grained)	per square	120/9
Do. 5 Buttermere, olive green (coarse grained)	per square	117/6
Broughton Moor light sea green, olive green, silver grey green and mixed shades	per square	127/6

SLATER, TILER AND ROOFER—(*continued*)

Tiles

Hand made sand faced 10½″ × 6½″ laid to 4″ gauge, fourth course nailed with galvanized nails	per square	65/–
Machine made ditto	per square	56/7

Pantiles

Berkshire hand made surface red laid dry,	per square	65/–
Bridgewater hand made red laid dry	per square	65/–
Bridgewater double Roman laid dry	per square	48/3

Sundries

Stripping, slating down to and including, 18″ × 9″	per square	4/6
Ditto smaller sizes	per square	6/–
Add for carrying down and stacking	per square	1/8
Ditto stripping battens down to and including 18″ × 9″	per square	1/4½
Ditto, ditto, smaller sizes	per square	2/3

Cedarwood Tiles

Canadian Cedarwood shingles laid to 5″ gauge	per square	47/4

Asbestos

Russet brown asbestos cement roofing tiles 15¾″ × 15¾″ laid diagonally with 2¾″ lap,	per square	38/–

CARPENTER

Centering

Turning piece to flat soffites 4½″ wide (For Formwork see "Concreter.")	per foot run	–/4

Fir Sawn and Fixed

Plates, dragon ties, sleeper joists and lintols, ground floor (4″ × 2″ and 4″ × 3″)	per foot cube	3/7
Floor joists (7″ × 2″)	per foot cube	4/1
Partitions (stud) (4″ × 2″ and 4″ × 3″)	per foot cube	4/10
Rafters and ceiling joists (4″ × 2″ and 4″ × 3″)	per foot cube	4/7
Purlins (6″ × 4″)	per foot cube	5/3
Hand labour wrot face	per foot super	–/2
Machine ditto	per foot super	–/1
Rebates, grooves, beads, chamfers and splays,	per foot run	–/1
1½″ × 9″ ridge	per foot run	–/6¾
1½″ × 11″ hips or valleys, including cutting ends of rafters against same	per foot run	–/8½
Extra labour trimming 6″ × 2″ floor joists around fireplace, including notching ends of joists at 14″ centres to trimmer joist 7′ 0″ long and two tusk tenons	each	6/–
Boring small hole per inch of depth	per doz.	–/6
Ditto large	per doz.	1/–

Deal Battening for Slates and Tiles

2″ × 1″ spaced for Countess (20″ × 10″) slates to 3″ lap	per square	10/3
2″ × 1″ ditto for Ladies (16″ × 8″)	per square	13/6
2″ × 1″ ditto for Duchess (24″ × 12″) ditto	per square	8/5
2″ × 1″ ditto for randoms 24″/22″ to 12″/10″	per square	11/6
1½″ × ⅝″ ditto for plain tiles (10½″ × 6½″) to a 4″ gauge	per square	13/7
1½″ × 1″ ditto for pantiles to approximately 11½″ gauge	per square	6/7

Roof Boarding

		⅝″	1″
Deal roof boarding in batten widths close jointed	per square	27/1	31/11
Ditto, prepared for patent flat roofing and including firrings to falls	per square	37/6	41/7
Small tilting fillet	per foot run		–/2
Large ditto	per foot run		–/4

Felt

Sarking or slaters felt, fixed with 2″ side laps and 6″ end laps	per yard super	–/10½
Roofing felt ditto	per yard super	1/1
Bituminous hair felt ditto	per yard super	2/–

Weather Boarding

Rough deal feather edge boarding in batten widths ½″ average with 1½″ laps	per square	29/–
Western Red Cedar ditto	per square	31/9

Fascia and Soffite Boards

1″ × 6″ deal splayed fascia fixed to rafter feet	per foot run	–/4½
1″ × 9″ deal soffite tongued both edges, including grooves	per foot run	–/7½

(*To be continued in next Issue*)

• Items marked thus have risen since March 2.