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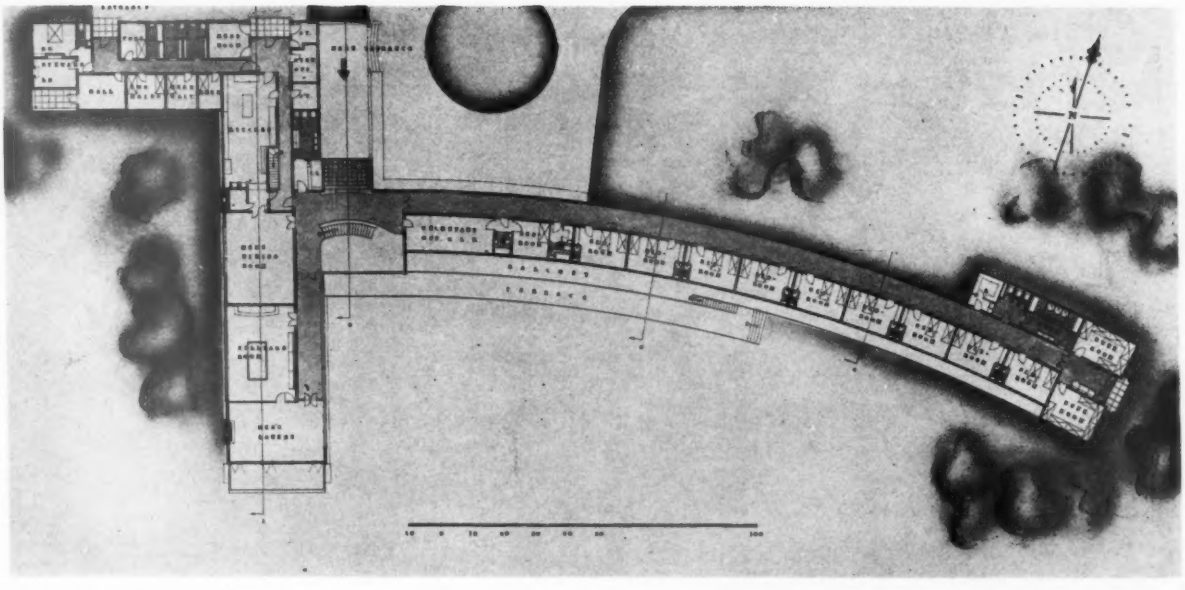
The Editor will be glad to receive MS. articles and also illustrations of current architecture in this country and abroad with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

THURSDAY, JULY 21, 1938 NUMBER 2270 : VOLUME 88

PRINCIPAL CONTENTS

STUDENTS' WORK, LIVERPOOL SCHOOL OF ARCHITECTURE

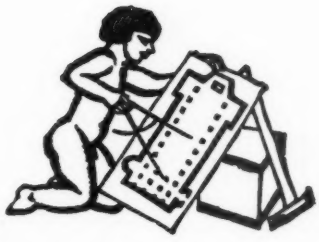


ON the right is a photograph showing Lord Allen of Hurtwood speaking at the official opening of the annual exhibition of the work of the students of the Liverpool School of Architecture. The exhibition closes on July 23. Above, a fifth year thesis design: A sailing club, Menai Bridge. By R. W. V. Board.

Further illustrations appear on page 135.

CIVIC OFFICES, SWINDON

The ante-room to the Council Chamber of the Civic Offices, Swindon. The carved stone panel on the right is one of two appearing in the ante-room and courtyard respectively. The architects are Messrs. Bertram, Bertram and Rice. Further illustrations appear on pages 117–120 of this issue.



PLANNING COMMISSION: 1

TWO years ago a special committee was appointed by the Town Planning Institute to investigate the question of a national survey and national planning. Approved by the Town Planning Institute's Council on May 20, 1938, the report of this special committee is now officially published and is open to public scrutiny.

The report is divided into three main parts: I.—History and Present Position of Planning. II.—The Need for National Planning. III.—Proposed National Planning Commission.

Part I, by outlining the brief history of administrative town planning as it has developed in successive Acts, helps to put the present situation in true perspective. The report describes the four salient characteristics of planning under the present system: *First*, a marked time-lag in the preparation of schemes resulting in action under the relatively weak interim powers available. *Second*, treatment of the process of planning as essentially a function of *local* government. *Third*, an increasing tendency towards joint committees and increase in the size of areas covered by planning resolutions, though the areas are geographically the result of accident rather than of forethought. *Fourth*, no place in planning law and little attention in practice to the *national* aspects of planning.

Part II of the report succeeds in making out a strong case for national planning. It maintains—

(*a*) that there *are* national aspects of planning urgently requiring comprehensive study, decision and action, in combination with the existing planning system, and

(*b*) that the system, as it is at present legally based and operated, is not only quite inadequate to deal with such national aspects, but also in many ways inadequate to deal effectively with the broader regional requirements into which the national aspects must often be merged, and through which they must largely be expressed and satisfied.

The kind of planning with which the report is concerned is defined as broadly limited to the development of the land, which should be allocated to its various uses "in an economic, healthy, convenient and seemly manner, satisfying as fully and fairly as possible the legitimate interests, needs, and aspirations of every kind of user, from the individual to the nation as a whole."

Yet the primary use of the land, its use for agriculture, cannot at present be planned for in any other than a negative way—by prohibiting its use for building development. Agriculture, apparently, is not regarded as "development," and consequently is given no protection against encroachment by other users. In the last ten years 460,000 acres of agricultural land has been lost to buildings, and in addition farming efficiency over wide areas has been damaged by sporadic development.

The report emphasizes the need, which should be obvious enough, for central machinery charged with examining the relevant facts and formulating a co-ordinated policy for agriculture, for transport, and for open spaces on a national scale—that is, for regional parks, coastal reservations, national parks—planned for the "health and physical and spiritual recreation of the people." In transport the danger is not so much lack of planning as a tendency towards compartmental planning. In the provision of regional and national parks the need is for guidance and financial assistance, from the centre, for local authorities controlling areas which by their nature are bound to be lowest in rateable value.

Government departments and statutory undertakings for public services are outside the present system of planning control. The report points out that local and national developments in these spheres are being pushed forward without due reference to general planning requirements or to each other.

The need for "positive central stimulus and direction" is strongly asserted once again in the discussion of location of industry and population, now under consideration by the Royal Commission on the Geographical Distribution of the Industrial Population, and described as the most important of all aspects of planning.

> On the one hand stand the unhappiness and poverty, the wastage of human energy and of fixed capital represented by the distressed areas, where industry has collapsed or declined, and remains insufficient; on the other stand the overgrowth, traffic congestion, labour shortage and other associated problems of Greater London and Greater Birmingham, where industrial growth is—absolutely or relatively—excessive.

A warning is given that—

> any remedy must involve some interference with the infinitely complex and remarkably sensitive machinery of industry.

and again, that

> local authorities are profoundly interested parties. They have to bear and struggle with a large share in the difficulties which beset their populations. Their ambition to grow in rateable value and importance is a vital driving force, blind and self-cancelling *as things are* without a national policy to control it, but capable of immense service *under planned central guidance*.

After an admirably lucid analysis of the present situation, in which facts and arguments build up a compelling case for additional central machinery, the report settles down, in its third and most constructive section, to make enlightened proposals for an advisory national planning commission.

The JOURNAL has persistently pointed out the need for central machinery of this kind, and on this page next week the Town Planning Institute's proposals for the organization of a national planning commission will be discussed.

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NOTES & TOPICS

A.A.'S RUTHLESS PURGE

ACCEPTING a challenge which I confess I do not understand, the Editor of the JOURNAL has handed me a letter which is printed in full below :—

The Editor,
"The Architects' Journal,"
9 Queen Anne's Gate, Westminster.

Dear Sir,

There must be many former students of the A.A. like myself feeling a sense of deep irritation and resentment at the stupid and frivolous comments of Astragal concerning the present state of affairs and which comments exceed the bounds of even tolerable humour.

There are no end of rumours afloat which creates the impression that all is not well in Bedford Square. Rumour is a dangerous jade and it is always advisable to give her a wide berth on points of detail. If one can concede to her any substance of truth it would appear that there are two factions seeking to decide future educational policy—the one faction representing men of experience who should be trusted to steer the ship and the other faction consisting of those who have little experience and yet think that they know what is best for them. Good sense and faith on the part of both parties could effect a compromise but efforts in this direction will not be assisted by facetious exhortations by Astragal to "come clean." Astragal should realize that there are a considerable number of old students who have a great affection, pride and loyalty for the School and its great tradition who are also watching developments and who would even, failing a compromise, welcome and support a strong and ruthless "purge" of all those elements which deliberately aim to prejudice the School beyond repair.

Finally, they are not likely to thank Astragal for not having the good sense and taste to remain quiet at least for the time being.

To prove that Astragal is not on the side of these elements I challenge you to publish this letter.

N. MARTIN-KAYE, F.R.I.B.A.
6 Clatterfield Gardens,
Westcliff-on-Sea.

*

To deal with this letter *seriatim* seems unnecessary, though it would be tempting to ask the writer to define what he means by (*a*) "those elements which deliberately aim to prejudice the school beyond repair"; (*b*) "men of experience who should be trusted to steer the ship"; and (*c*) a "strong and ruthless purge."

*

Mr. Martin-Kaye is, I believe, somewhat concerned with another school of architecture. His students are no doubt perfectly satisfied with the curriculum provided for them, but supposing they were not, would Mr. Martin-Kaye embark on a strong and ruthless purge; and if so what form would it take? Is there a rubber truncheon in the beak's desk, or just a bottle of castor oil in the bathroom cupboard? Come clean, Mr. Martin-Kaye.

END OF PORTLAND PLACE

After the War Portland Place was much as Nash and the brothers Adam had left it—of recent years, however, blocks of flats and offices have destroyed its skyline, though not entirely its magnificent proportions.

*

Architects can console themselves with the fact that their much-criticized building is the only one in the street to conform to the old height of the houses. It is soon likely to be the only one of that height left, as the news is announced of the demolition of the six pilastered houses adjoining the B.B.C., perhaps the most distinguished houses in the street.

*

They have been occupied for some time by B.B.C. staff, and are now to be replaced by an extension to the B.B.C. building. I understand that this is to be designed by the same architects, and will be an unaltered continuation of the existing façade. This should make a very unusual composition, but its inevitably weighty domination will, I am afraid, mark the end, in more senses than one, of what was one of the finest streets in London.

*

London is not alone in her losses. From Ireland comes the news of the demolition of the thirteenth century Timoleague Castle, County Cork. The protest by a member of the Cork Archæological Society was unavailing. When told of the demolition work he said: "I suppose it was necessary, but isn't it a great pity?" It is almost a scandal.

*

The castle, built in the Norman style, has been the scene of many battles, and was still in active use as recently as 1919, when a breach was blown in the walls by the I.R.A., attacking the British military. Not many castles, at any rate out of Ireland, can boast so many years of fighting service.

FLAMBOROUGH HEAD

In spite of letters of protest, plans for another thirty-four bungalows, a café, and a sweet kiosk were last week approved by the Bridlington Council for erection on Flamborough Head. The foundations of eight are already laid, and the walls are rising. Two members of the Preservation Committee had arranged to meet Mr. Medcalf, the builder, to discuss holding up the scheme, but I understand the meeting did not take place, and no arrangement has been made for another.

*

This method, so popular in international diplomacy, of prolonging negotiations until your opponent is confronted with a *fait accompli*, seems to be spreading very quickly. It is not surprising, as the results are nearly

Architect Glides To Fame

Film Cartoon Made In Spare Time

A LONDON architect is, in his spare time, an amateur Walt Disney. He writes the scenarios of his cartoon comedies, does every drawing himself, records them on reels of film by means of a multiplane camera, and clinches his versatility by processing the film himself.

The light of fame might never ve fallen on Mr. Lawrence Wrigh for the national gliding c at the London Gliding C ich he is a member. as made a film car "Cloud Cuckoo," premiere

From a recent issue of "The Daily Express."

always 100 per cent. successful, and there seems little chance of Flamborough Head being saved.

ARCHITECT GLIDES TO FAME

I assumed last week that Mr. Nicholson was the only architect who was also a sailplane king. Mr. Lawrence Wright now qualifies for the hall of fame as well, though the cutting (above) talks mostly about his film.

WANTED—AN ARCHITECT FOR AN AIRPORT

I spent last Sunday afternoon at Heston Airport, which is a scene of great activity these days.

*

The new Customs House and administration block have just been completed for the use of British Airways, who have recently transferred here from Croydon. The life, however, of these pleasantly designed buildings will be short. In two years the Air Ministry plan to demolish all the existing buildings to make way for a new airport, laid out on a much larger scale. Who is to be the architect of the new airport ? With the possible exception of Ramsgate, recent efforts in this country have not been very imaginative. Will London ever acquire so magnificent a range of buildings as can be seen at Frankfurt ?

TELL THIS TO THE FELLOWS AT THE CLUB

Mr. T. (you-can-be-sure-of) S. Eliot's recent joke at the Shell-Mex exhibition, when he stated that when asked what petrol was he always replied it was a kind of shell, has been capped by a foreman in the employ of a builder acquaintance.

*

When directed to construct a concrete wall, mixing his proportions with discretion, he is reported to have said that though he had not used this material before, he reckoned he would want about two hundredweight.

*

I expect it was the same foreman whose day sheet once read : "To unloading and fixing Iris Jay."

TRAMWAYS FOR HYGIENE

Far from scrapping its trams by degrees and substituting buses, as *most* progressive cities are trying to do, Liverpool has recently carried out considerable extensions and has replaced nearly all her cars by new streamlined models.

*

Ingenious arguments have been put forward in favour of trams—notably by secretaries of Tramway and Light Railway Societies: "The only efficient, safe and hygienic solution to the transport problem . . . . A tramcar is spared the vagaries of the human element for guidance ; its overhead wiring is negligible ; it is not dependent on imported commodities such as rubber and petroleum. Its life is thrice that of a trolley-bus and four or five times that of a petrol bus."

*

The citizens who proudly boast that Liverpool's tramway service is the finest in the world are apt to forget that while the *tram* is safe enough in its predestined grooves, the pedestrians who have to mount and dismount in midstream, and the motorists who have to dodge them, are *not* so safe. They also conveniently forget the thwarted traffic flow, the curse of rails on wet days, and the noise. And if they had ever tried to photograph a distinguished building on a tramlined street, they wouldn't say the overhead wiring is negligible.

STREAMFLOW

After the streamflow bicycle, what? This week's masterpiece was found in Cleveland Street, where a small ironmonger displays the sign "Streamlined Garden Tools." A fork, a spade, and one of those scimitar-shaped things you use for trimming the edges of grass paths. Only the fork showed any signs of style, and had been refined until it looked good for little more than toast ; the other two seemed not unnaturally indistinguishable from the unstreamlined model.

SHOULD WOMEN BECOME ARCHITECTS

The old silly season problem has cropped up once again, this time in a provincial journalist's interview with a woman architect.

*

We all know that only women architects really know how high to put the sink, and we have all wondered how they acquired this superior domestic knowledge, when all their time is spent in an office and not the home. Just that annoying instinct again, I suppose.

"TIMES" JOKE

TO THE EDITOR OF "THE TIMES"

Sir,—I wonder whether your correspondent Mr. J. A. Milne has noticed a queer collocation of words that caught my eye the other day as I was going down the Strand. A board on the north side of the new building on the site of the Adelphi bore two words in very large letters. The first was 'Adelphi' : below it was 'Gee.' Put a note of interrogation after the first and a note of exclamation after the second (which I understand to be the name of the contractor), and we have Mr. Milne's letter in an American nutshell.

I am, Sir, your obedient servant,

WHIZ

Note : The correspondent is misinformed. The style of the contractors is Gee, Walker and Slater ; the note of exclamation could not, therefore, be placed after 'Gee.' If it were thought advisable it could, however, be placed after Slater.

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

CROMWELL ROAD DEVELOPMENT COMPETITION

When the Ministry of Transport planned the proposed Cromwell Road extension as a new entrance to London, hardly any attention was paid to the re-development of the adjacent properties. An effort to remedy this defect has been made by the London Society, who invited two London Schools of Architecture and Town Planning to submit designs in competition for the re-development of the area through which the new arterial roadway will pass. On Wednesday next, July 27, at 4 p.m., Lord Esher is to present the prizes at the R.I.B.A., 66 Portland Place, W.1.

The two competing schools were the Department of Town Planning of University College School of Architecture and the School of National Planning and Research of the Architectural Association. Each school worked as a team, so that only two schemes were submitted, each consisting of a large number of drawings. A jury of assessors, consisting of Mr. Stanley Hamp, F.R.I.B.A., Mr. Percy W. Lovell, A.R.I.B.A., and Mr. H. G. Strauss, M.P., awarded the first prize of fifty guineas to the design submitted by the School of University College. The Architectural Association's school receives a second prize of twenty guineas.

The exhibition of designs will be open to the public, admission free, from Monday, July 25, to Friday, July 29, inclusive, 10 a.m. to 8 p.m., daily.

FILMS AT THE BUILDING TRADES EXHIBITION, OLYMPIA, 1938

A display of cinema films will again be given daily in the Cinema Hall at the forthcoming Building Trades Exhibition. Several short films showing the manufacture and use of interesting details of building constructions and the manufacture of various materials are being specially prepared for the exhibition.

UPMINSTER WINDMILL

Essex County Council has decided to purchase Upminster windmill, subject to the Commissioner of Works' confirming that it may be treated as an ancient monument. Other conditions are that the Hornchurch Urban Council agrees to provide funds to keep the windmill in a state of repair, and undertake the management of it.

SLUM CLEARANCE AND REHOUSING

The most recent figures from the Ministry of Health, showing the position of slum clearance and rehousing, are summarized as follows: During June local authorities declared areas comprising 2,105 houses representing the displacement of 8,041 persons, as compared with 4,709 houses and a displacement of 17,723 persons in May. The Orders submitted during June covered 2,319 houses and the displacement of 10,689 persons, as compared with 4,920 houses and the displacement of 16,563 persons in May. The Orders confirmed during June covered 5,480 houses and 23,245 persons, as compared with 4,956 houses and 17,897 persons in May. The total number of houses in confirmed Orders is now 196,250, involving the displacement of 833,153 persons.

The latest available figures for rehousing are those for May. At the end of that month there were as many as 73,270 houses under construction as compared with 71,854 at the end of April and 61,954 at the end of May last year. 7,795 houses were completed during May as compared with 7,352 during April and 5,904 during May, 1937.

THE ARCHITECTS' DIARY

Thursday, July 21

LONDON SOCIETY.—*Annual River Trip. From Henley to Windsor. Depart Henley, 3.15 p.m.*

ROYAL SANITARY INSTITUTE. *At Perivale Maternity Hospital, Western Avenue, Ealing. Discussion on "The Planning of Hospitals." Speakers: L. G. Pearson and James Ferguson. 2.30 p.m.*

ROYAL COLLEGE OF ART. *At the Lecture Theatre, Victoria and Albert Museum, S.W.7. Exhibition of Students' Work. Until July 30.*

POLYTECHNIC SCHOOL OF ARCHITECTURE. *At the Building Centre, 158 New Bond Street, W.1. Exhibition of Students' Work. Until August 26.*

Friday, July 22

ARCHITECTURAL ASSOCIATION. *Annual Prize Day. Speech by the Director, H. S. Goodhart-Rendel, and a criticism, with lantern slides, of the prize-winning students' work by Fernand Billerey. Exhibition of Students' Work to be opened by Viscount Samuel. 8 p.m.*

Saturday, July 23

LONDON SOCIETY.—*Visit to Dolphin Square, Grosvenor Road, S.W.1. 2.30 p.m.*

Tuesday, July 26

HOUSING CENTRE.—*The Tuesday Lunch. J. W. R. Porter on "The Housing Work of the L.C.C." 1 p.m.*

THE R.I.B.A. INTERMEDIATE EXAMINATION

The R.I.B.A. Intermediate Examination was held in London, Belfast, Edinburgh, Hull, Manchester, Newcastle and Plymouth, from May 20 to 26, 1938.

Of the 238 candidates examined, 97 passed and 141 were relegated. The successful candidates are as follows:

Abbott, Harold Dickinson; Adamec, Hynek (not a British subject); Adamson, Hamish Edgar Donald; Allerton, Kenneth; Bamber, Douglas Haig; Barbary, Peter John; Barrell, George Walter; Bowen, Stewart Powell; Boyt, Peter Fredric Nicholson; Brown, Sidney William; Budd, Francis Jesser; Cathery, Edmund Laurie; Cavanagh, Edmund John; Channing, Leslie Thomas; Coverdale, Frank Lawson; Crouchley, John Royston; Crowther, John; Darbison, Dennis; Davie, Eric Hill; Dobson, Roger; Drought, Arthur Benjamin; Duncan Jones, Anthony William Harness; Eaton, Thomas Charles Richard; Edwards, John Morton; Edwards, Percy Walter; Fairlamb, Bernard William; Fosbury, Ernest Arthur; Fox, Owen William; Freeman, Geoffrey Ernest; Godfrey, Walter Emil; Goldthorp, Joseph; Gomersall, Eric; Gotelee, Frederick Alan; Grierson, Colin; Halse, George Alexander; Hammond, Peter Douglas; Harrison, George; Harvey, Albert Edgar; Hill, Christopher Benson (Jnr.); Hodgson, Albert; Holbrook, Leonard Charles; Irwin, William Henry; Johnson, Sidney Arthur Ernest; Johnstone, Douglas Edward; Judson, Frederick Roy; Julius, George Leslie; Kinsman, Sidney John Charles; Kirby, George Alfred; Knapper, Charles; Knight, Frank Stewart; Launder, Victor Charles; Lawson, John Brodie; Leonard-Williams, David Haigh; Lever, Herbert; Levy, Albert Phineas; Lewis, David Hubert; Lewis, Hubert Roy; Lewis, Wilfred Stephen; Lister, Herbert Robert; Loasby, Eric; Lusty, Raymond Charles; Mabley, Philip John; Maidment, John Douglas; Moreton, John Loftus; Morris, William; Neaves, Leonard George; Parker, Charles Kenneth; Paul, Ernest Henry; Pearson, John Samuel; Poel, Stanley Bacon; Pooley, Frederick Bernard; Pratt, Harold James Cullerne; Raiker, William Gordon; Rexilius, Paul Hugo George; Roberts, Bertram James; Roberts, Jack; Ross, Hugh; Rowe, Geoffrey Arthur; Royle, Eric Vernon; Rusted, John Frederick; Samuel, Robert James; Selley, Frederick Arthur Mountford; Simpson, George Gregory; Smith, John; Steele, Walter George; Thomas, Herbert; Thomas, Rhys Bronwyn; Thorne, Frank Richard; Treleaven, Reginald Henry; Unsworth, Thomas Wilkinson; Ward, Robert Wakerley; Warren, Francis Bernard; Webster, Guy Everard; White, Harry Harmson; Whitehead, Alan; Wilkie, Robert Andrew; Woodward, Clifford.

EXHIBITIONS

[*By D. COSENS*]

CHIRICO'S recent paintings at the Lefevre, and the exhibition of Tanguy's work which has just come to an end at the Guggenheim Jeune, taken together, give some indication of the present position of surrealism. Tanguy, one of the finest surreal painters, treats his evocative landscapes without extravagance, and achieves his results by a perspective in which colour plays the largest part. He owes a great deal to both Chirico and Miro—to Chirico the space and distance of his pictures and to Miro the organic shapes of his design. He still finds complete expression in the surreal idiom.

Chirico foreshadowed surrealism as long ago as 1912 with his deserted colonnades. He is a painter from whom we have learned to expect very fine work, but his present experiment, largely influenced by Renoir, entirely lacks his usual force and clarity. At best it can be called transitional, an uncomfortable stage on the inevitable return to realism. For it seems certain that the realist tradition, long since dead and carefully embalmed in the hands of those who still follow it, is, whether we like the idea or not, about to revive in the hands of those who have fully analysed it in terms of abstraction and surrealism. The reaction has already set in. Those who deplore this tendency will find little compensation for the space and perspective and analytical accuracy of Chirico's earlier work in his paintings at the Lefevre.

●

Also at the Lefevre Galleries is an exhibition by Katherine Church, a promising artist whose work steadily improves. Her painting nearly always has the spontaneity of genuine experiment and genuine interest, and her colour is almost invariably good. Where occasionally it lacks subtlety this seems due rather to speed in execution than to any real lack of perception in the painter. Always it is ahead of her drawing which notably falls short in the figure in "Interior." She obviously owes a great deal to Frances Hodgkins, and her best work shows this influence strongly.

●

Robin Darwin's painting at Agnew's is very accomplished and very easy. But in spite of this indisputably successful exhibition, his best and most distinctive work still seems to be in his quick incisive line and wash drawings. These, of which "Stockholm" (15) is a fine example, are barely represented in this collection of his latest work, but it is to be hoped that he is not entirely deserting a medium in which he is so outstandingly successful in interpreting his subject for a larger canvas and a more ambitious and less satisfying result. He is one of the few painters who can deal briefly and without excess of detail with architectural subjects.

●

Chirico. Lefevre Galleries, 1a King Street, St. James'. Until July 30.

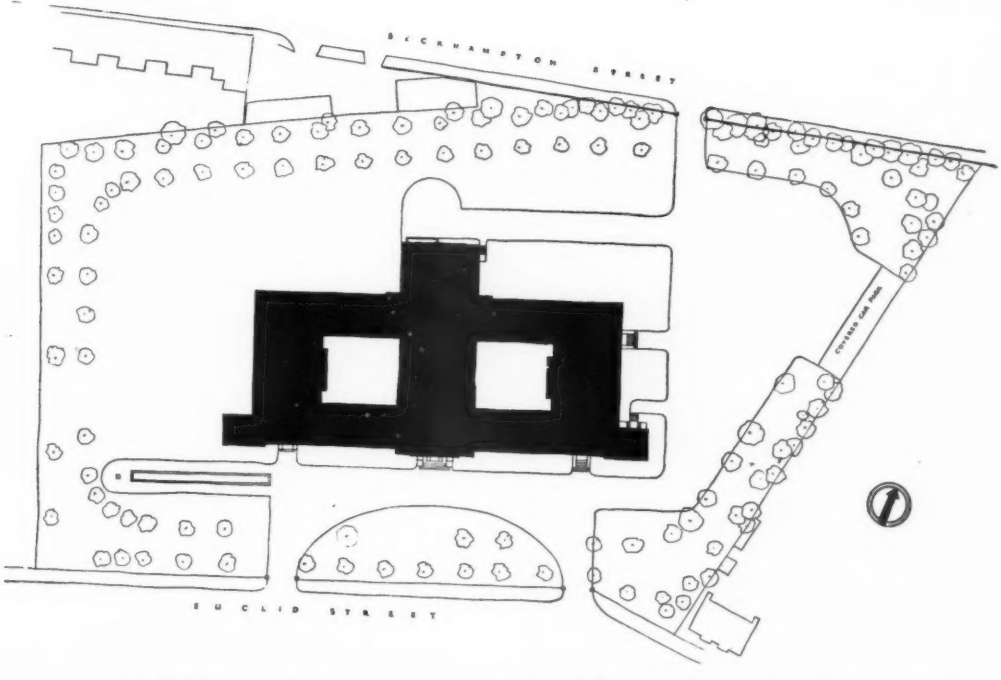
Tanguy. Guggenheim Jeune Gallery, 30 Cork Street.

Katherine Church. Lefevre Galleries. Until July 30.

Robin Darwin. Agnew's Gallery, 43 Old Bond Street.

CIVIC OFFICES, SWINDON

DESIGNED BY BERTRAM, BERTRAM AND RICE

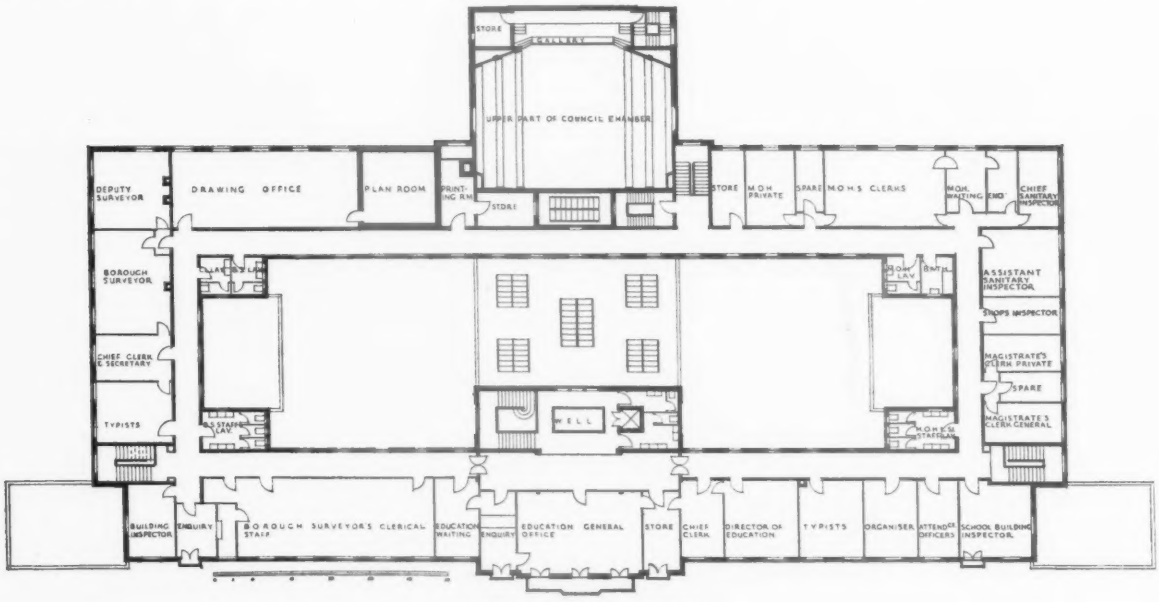


SITE PLAN

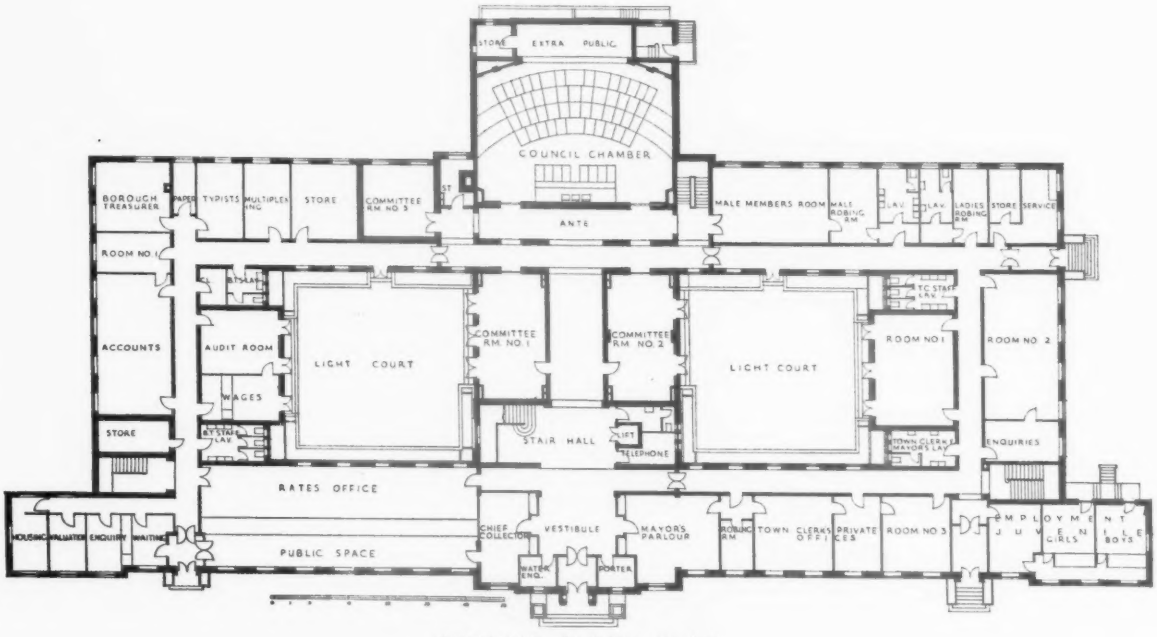
GENERAL—*The site is open and almost level, but the ground water level is only about 2 to 3 feet below the surface, thus necessitating a complete tanking for the whole basement. It was not possible to place the main axis on a road approaching the site, hence the building is sited to have the secondary entrances on the axes of the two roads which lead into Euclid Street (see Site Plan).*

Above, the main, south, front, facing Euclid Street.

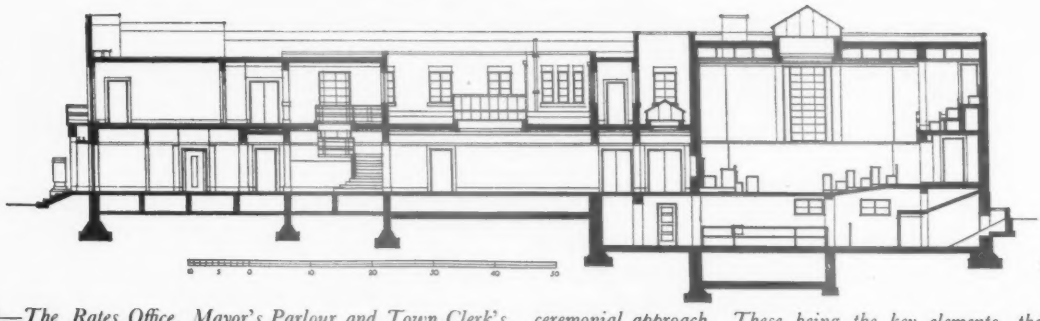
CIVIC OFFICES, SWINDON: DESIGNED



FIRST FLOOR PLAN



GROUND FLOOR PLAN



SECTION

PLAN—*The Rates Office, Mayor's Parlour and Town Clerk's Offices had to be arranged close to the main entrances, with the Council suite placed centrally and including some form of ceremonial approach. These being the key elements, the plan form was decided by them, and the remaining departments grouped on either side and rooms suited where necessary.*

BY BERTRAM, BERTRAM AND RICE

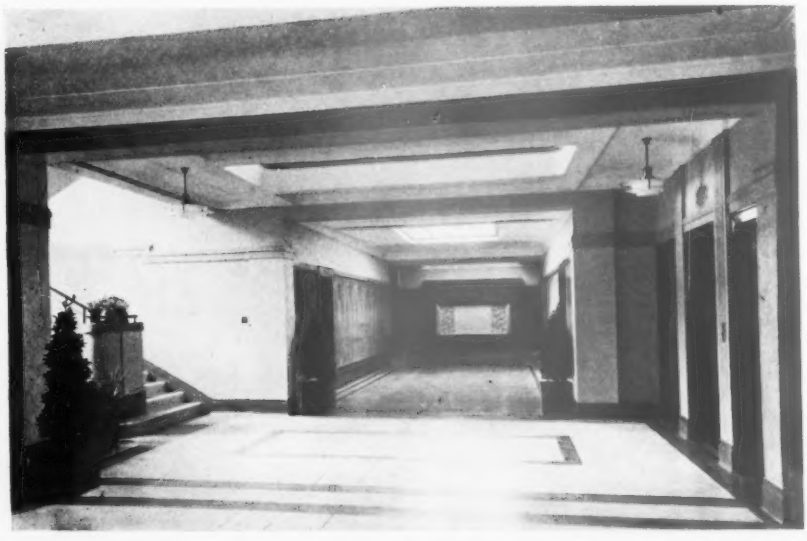
ELEVATIONAL TREATMENT—*Externally the treatment has been kept as simple as possible. Facings generally are in brick with stone plinth and coping. Stone architraves and balconies are used to emphasize the main and secondary entrances.*

CONSTRUCTION—*The construction generally is in 18-in. brick walls reduced to 13½ ins. for the first floor, and stone faced below the ground floor. Floors and roofs are of hollow-block construction. Steel framing has been used to the Council Chamber and in the main entrance. The internal divisions of the plan are almost entirely in plaster block, but the corridor walls throughout are of 9-in. brick to give support and to reduce the span of floors and roofs.*

Above, the main entrance.

CIVIC OFFICES, SWINDON

DESIGNED BY BERTRAM, BERTRAM AND RICE



INTERNAL FINISH — *The Council Chamber, Committee Rooms, Mayor's Parlour and Town Clerk's Office are panelled in French walnut, the furniture to these rooms being similar. Corridor floors are cork slab; staircases and entrance vestibules in terrazzo. The general offices and corridors are plastered and distempered. The flooring to the offices is wood block.*

HEATING — *The heating throughout is by low-pressure hot-water ceiling panels embedded in the concrete to the hollow-block floors, with insulation above. The Council Chamber and Committee Rooms are air-conditioned. Auxiliary heating is by electric fires, although one or two chief officers' rooms have been provided with coal fires. The general service ducts are formed under the corridor floors.*

Top, the main entrance hall; left, two views of the Council Chamber; above, a Committee Room.

LETTERS *FROM* READERS

Astragal's Dead Cat

SIR,—Anent Astragal's dead cat and the three old ladies weeping over it, in the Bristol conference hall, *after* the conference, the "Orb" is not quite clear. At first I thought it was the dead body of "Functionalism in architecture," the old ladies being Astragal, Prof. C. R. and the Editor, *Country Life* (the only mourners surviving) weeping over it, but afterwards I saw it was the dead body of the "respect the British public used to hold for the architectural profession," and the old women the re-embodied dead spirits of the three great revivals. In any case, the incident was of no importance.

HAROLD FALKNER
Farnham.

"*Focus*"

SIR,—Might I point out that though *Focus* has been started by students who are at present studying in the A.A., it has no connection or representation with the Association.

Our aim is that finally all schools will contribute and be represented on the journal.

LEO DESYLLES,
Editor, *Focus*,
London.

A.R.P.

SIR,—I am writing to congratulate you on the very valuable issue on A.R.P. last week.

I have sent a copy to the chief constable, who is an A.R.P. officer in Bradford.

In conversation today with Mr. Geoffrey Lloyd, on his visit to Bradford, I told him of the issue, and he, not having seen a copy, is going to order one and study it. Perhaps this may help the propaganda work you are trying to do for our very reluctant profession!

HAROLD CONOLLY
(Deputy City Architect)
City Architect's Dept.,
Town Hall, Bradford.

HAROLD FALKNER, F.R.I.B.A.

LEO DESYLLES, Editor, "Focus"

HAROLD CONOLLY, A.R.I.B.A.
Deputy City Architect, Bradford.

F. E. TOWNDROW, A.R.I.B.A.

HARRY EAVES

SIR,—A contributor has drawn my attention to a notice which appears on page 1053 of your JOURNAL (issue for June 23), which, in announcing your issue for July 7, says: "This issue will be the first publication in this country dealing with the structural aspects of A.R.P."

We do not wish to claim more credit than is due to us, but we must certainly disagree with your statement as quoted above. We have been publishing, since January of this year, a series of articles called "Civil Defence," which has most clearly dealt with the structural aspects of A.R.P. There have been five articles altogether, and most of them have dealt with the matter from the structural point of view, with a considerable amount of detail and a large number of drawings. The authors are Sidney Webster, DIPL.ARCH., DIPL.T.P., and F. Digby Firth, A.R.I.B.A., and the former, I understand, is a specialist in this work. These gentlemen have every good reason to be aggrieved by your statement, as it implies either that they did not deal with the matter as they professed to do, or that the journal in which their articles appeared was not of sufficient consequence to be regarded as a publication.

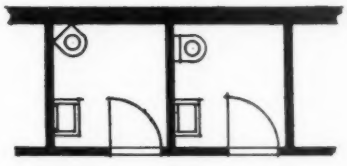
I am very sorry, indeed, that such a mistake should have been made in such an excellent JOURNAL as yours.

F. E. TOWNDROW,
Editor, *Architectural Design and Construction*,
London.

Conveniences

SIR,—Perhaps you will not take unkindly an observation from an engineer and interested reader of your JOURNAL as regards the planning of modern public conveniences.

I was forcibly reminded of the need for reform in our accepted ideas on this subject during a recent visit to the Empire Exhibition at Glasgow. Our present method makes pilfering an easy matter, but the combining of the w.c. and lavatory basin in one compartment would be a safeguard which the public would welcome, and



which the public deserve when they have paid 3d. for this service. This idea, as you will no doubt be aware, is used on the Continent, but so far I have not seen it used in this country.

HARRY EAVES
Nelson.

•

£50,000 ADDITIONS TO QUEEN MARY COLLEGE

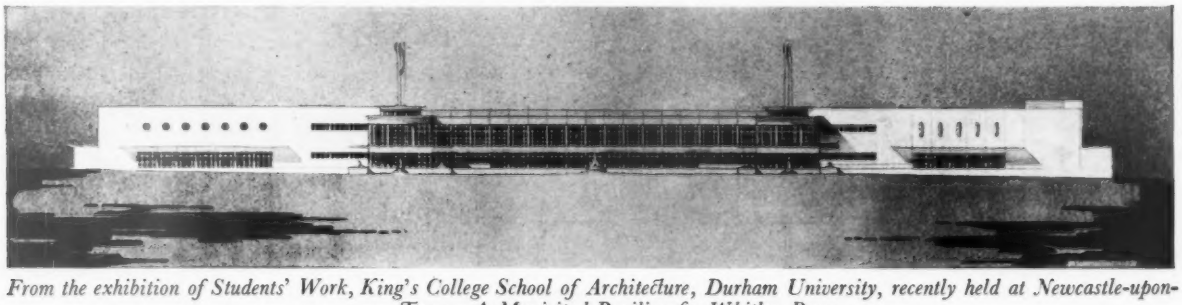
The new wing to accommodate the Arts and Zoology departments of Queen Mary College, University of London, is now almost completed at a cost of £50,000. It will be available for teaching and research when the new session begins on October 4.

WEST HARTLEPOOL TECHNICAL COLLEGE

West Hartlepool Education Committee has approved a recommendation to spend £31,350 on improving and extending the Technical College. At present there is housed within the college a boys' secondary school, but the scholars will shortly move to new buildings in another centre of the town. It is then proposed, following extensions, to utilise the college solely for the teaching of technical subjects. Plans are being forwarded to the Board of Education at once in order that the work might be expedited.

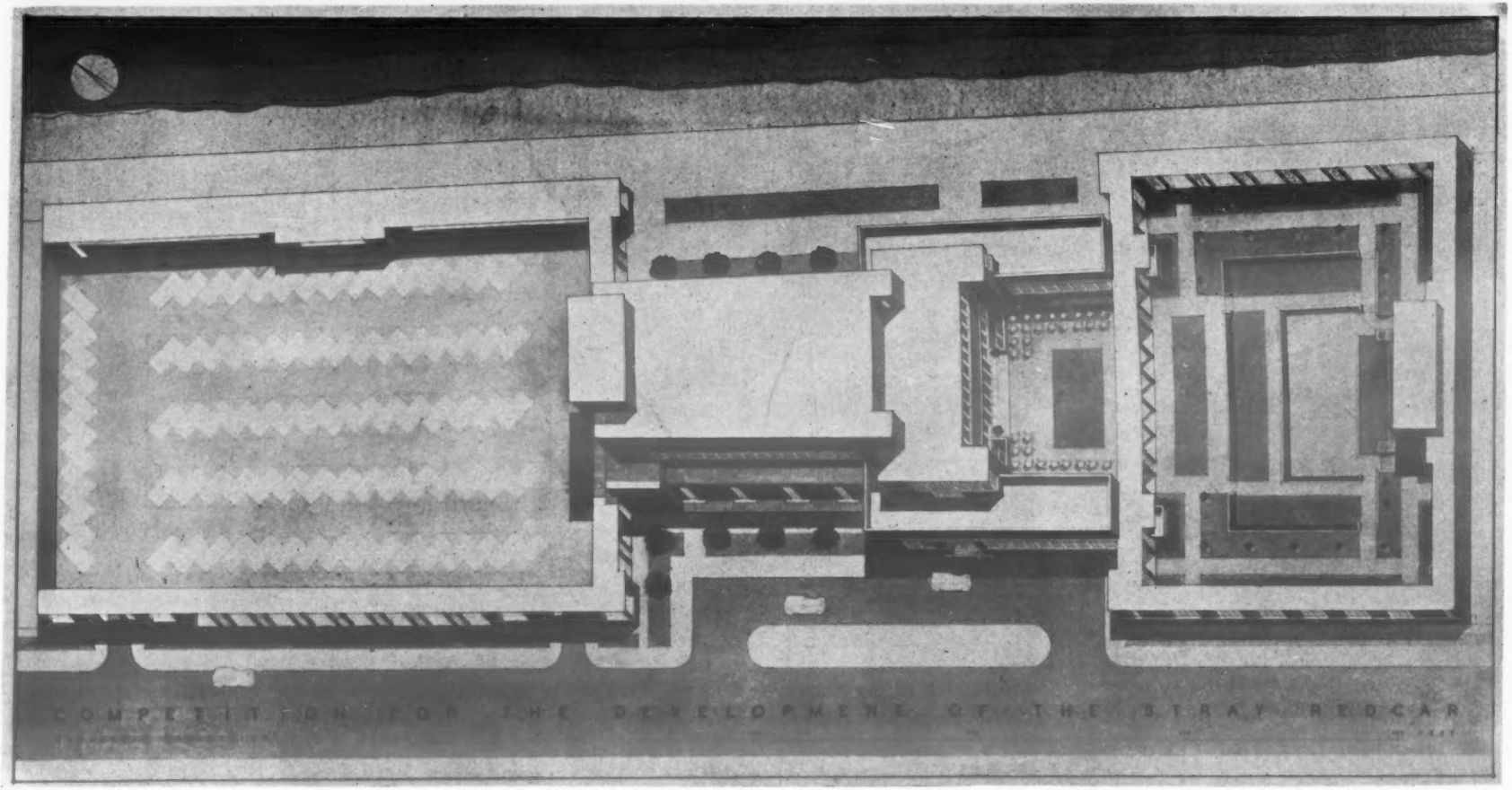
BUILDINGS IN BRISTOL

In our issue for June 23, in which several recent buildings in Bristol were illustrated, we inadvertently omitted from the list of contractors the name of Pharaohs (Distributors), Ltd., who were responsible for the Insulite used in the Shirehampton Baths and Avery's, Park Street. Some of the photographs used in the issue were reproduced by courtesy of the firm. They are: 1073 (top), 1074; 1077 (bottom); 1083 (bottom).



From the exhibition of Students' Work, King's College School of Architecture, Durham University, recently held at Newcastle-upon-Tyne. A Municipal Pavilion for Whitley Bay.

THE REDCAR COMPETITION: WINNING DESIGN



B Y R . P . S . H U B B A R D

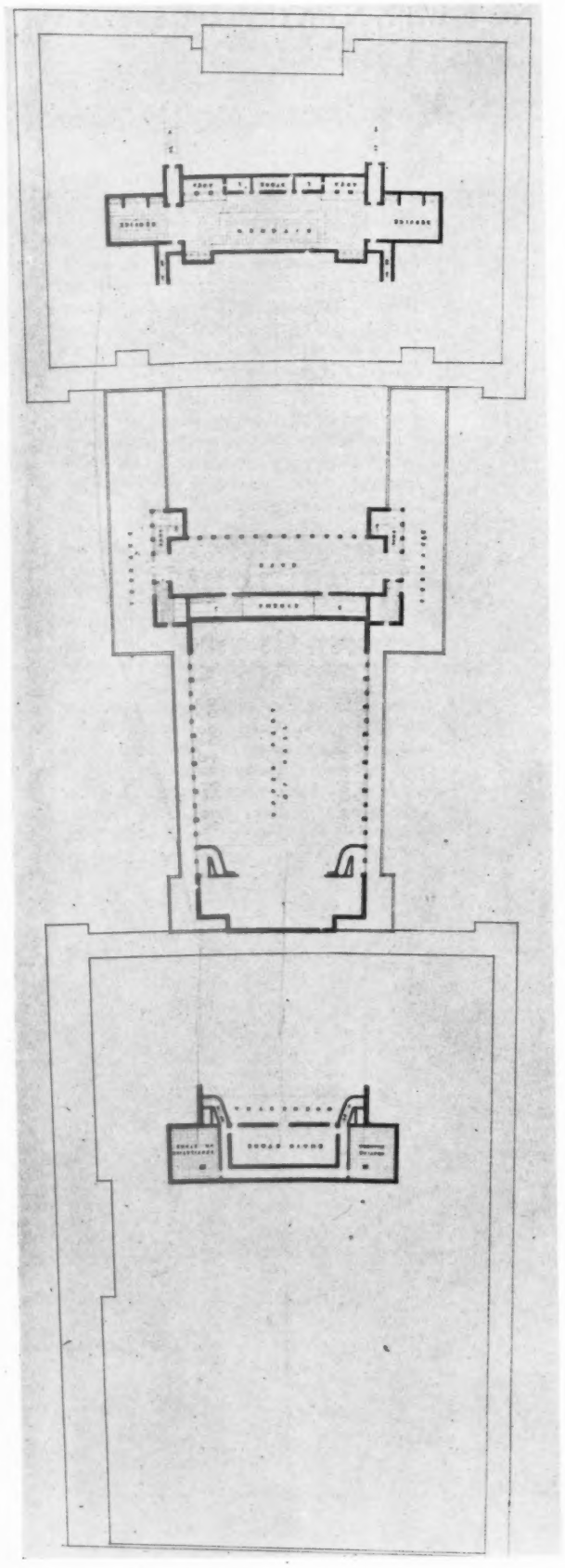
Professor Patrick Abercrombie, F.R.I.B.A., the assessor of the competition for the layout of, and buildings to be erected on, the "Stray" at the front of Zetland Park, Redcar, for the Redcar Corporation, has awarded the first premium (£200) to Mr. R. P. S. Hubbard, of 12 Holly Mount, Hampstead, N.W.3, whose design is illustrated on this and the facing page. At the time of going to press we learn that the assessor has made his full *award, but that the names of the authors of the other premiated designs will not be disclosed until the end of the week.*

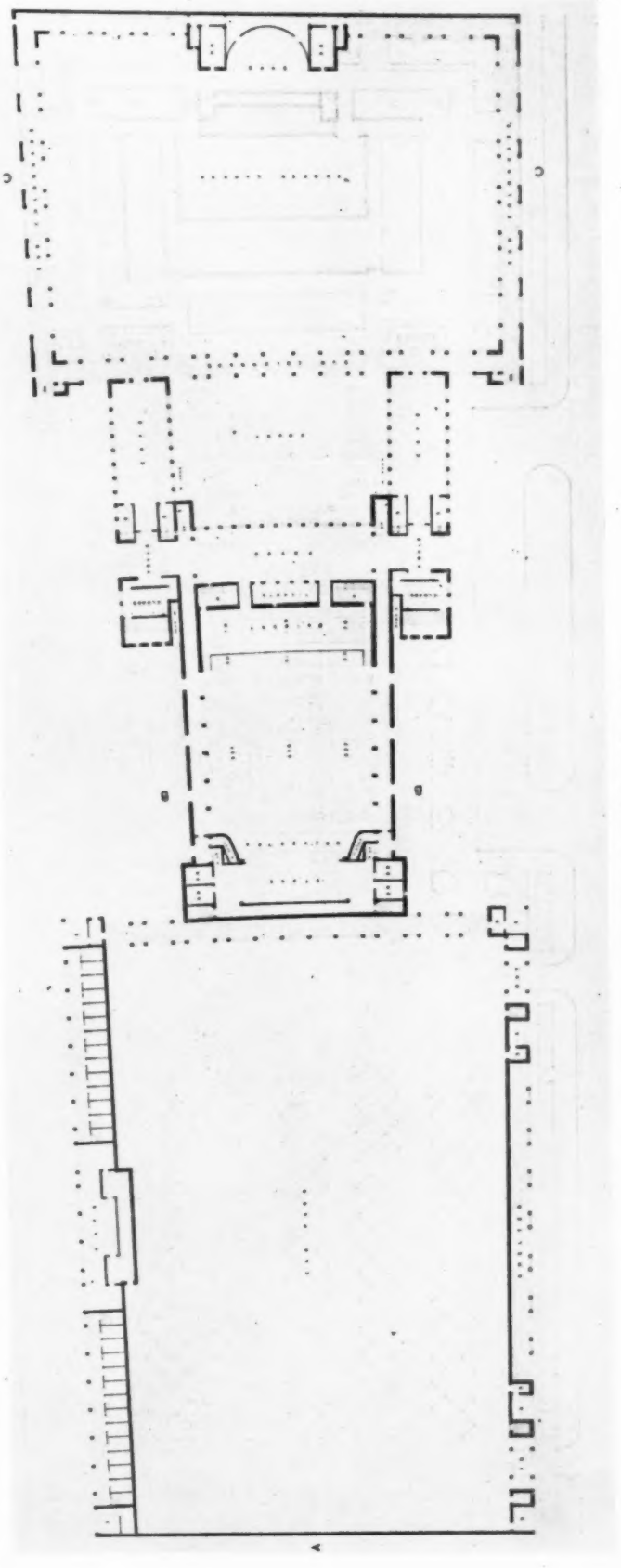
FOLLOWING ARE SOME EXTRACTS FROM THE WINNER'S REPORT.

In the preparation of the design great care has been taken that the buildings, as well as being of sound and durable construction and fulfilling the practical requirements, may harmonize with their surroundings and provide a suitable background for the social functions of which they will be the centre. The problem has been approached with an open mind and the design allowed to develop naturally from the requirements and controlling factors such as the site, orientation and methods of construction without any attempt to force it into any preconceived style, either traditional or revolutionary.

The system of construction chosen is steel framework faced with brick, both of which materials are easily obtained locally and are well understood by the local craftsmen. It is felt that apart from harmonizing with the local tradition of construction, brickwork is the type of facing which will best withstand exposure to the bleak weather conditions which prevail during a large part of the year and will provide a note of warmth even on grey and chilly days.

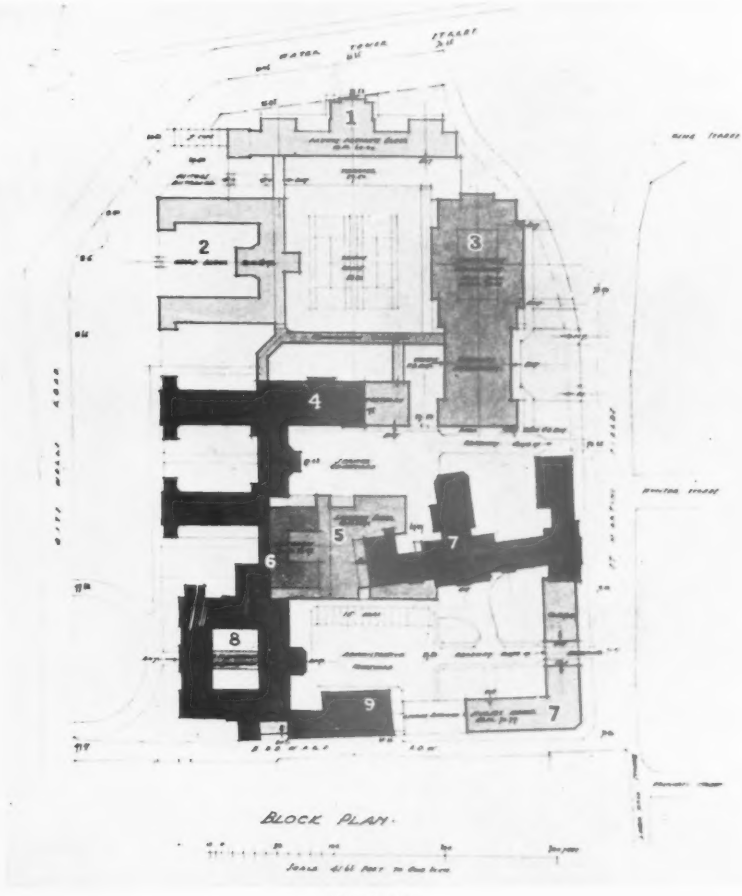
By reason of economy as well as for æsthetic reasons the buildings have been treated with great simplicity, and, as in the best tradition of Georgian building, effect has been obtained by relying upon simplicity of form and perfection of proportion, materials and workmanship rather than upon inorganic and applied ornamentation. The design naturally resolves itself into a scheme of long horizontal lines of restful proportion which echo the long line of the horizon, the flatness of the surrounding country and the clear straight sweep of the coast road.





Ground and first floor plans

THE CHESTER COMPETITION: WINNING DESIGN:

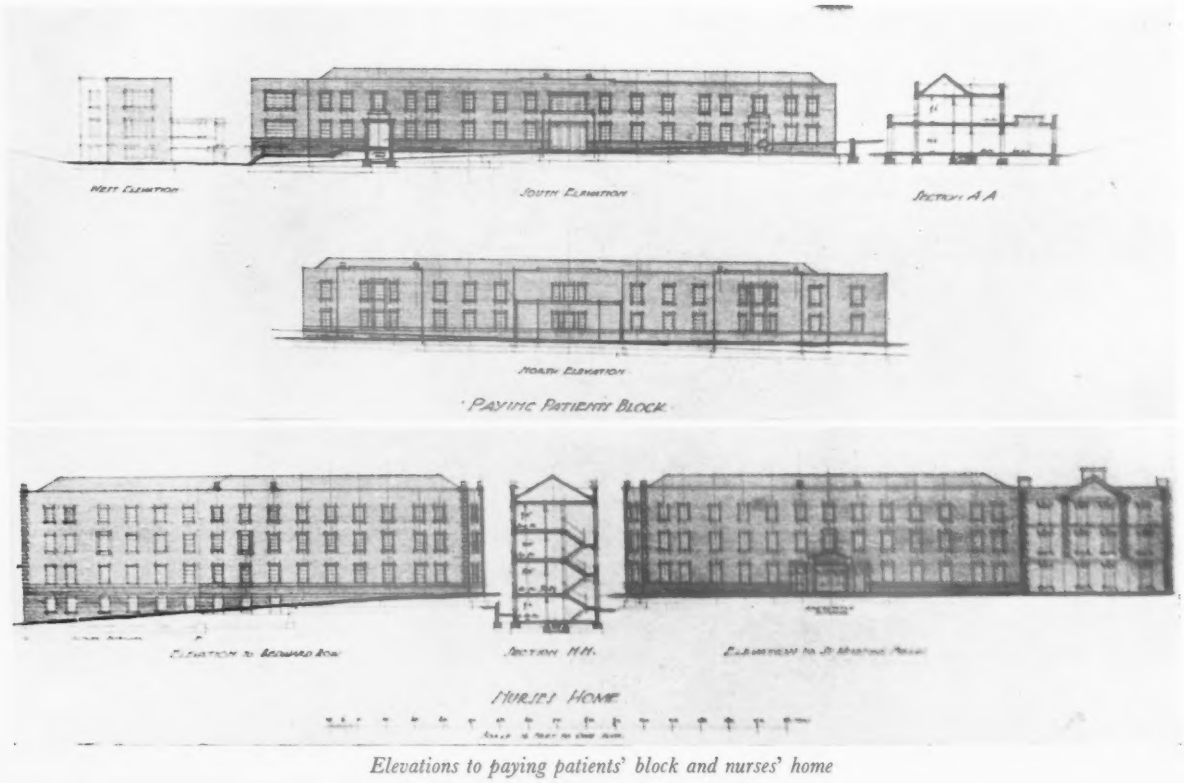


Block plan

Mr. Arthur J. Hope, F.R.I.B.A., assessor of the competition for the Chester Royal Infirmary Extension, made his award as follows: 1st (£300): H. V. Ashley and Winton Newman, 14 Gray's Inn Square, W.C.1. 2nd (£200): C. B. Pearson and Son, Lancaster. 3rd (£100): Alliston and Drew, 24 Woburn Square, W.C.1.

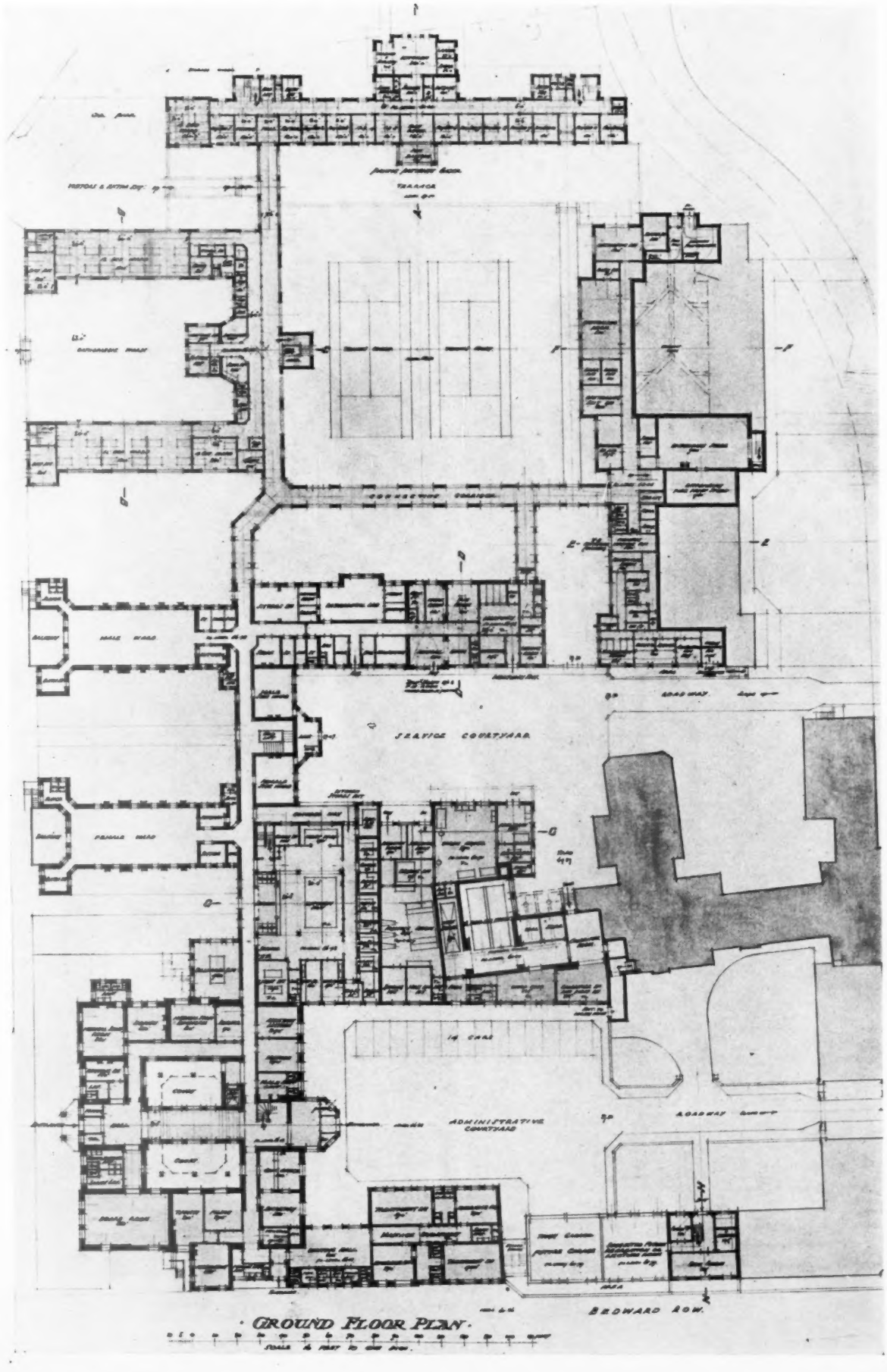
In his report the Assessor said: "The new buildings in the winning design are chiefly grouped around an open garden which forms an attractive feature, and makes use of the land to the best advantage. The various units are suitably sited in relation to the existing hospital, both for outlook and convenient working, and direct connection with the out-patients' department is obtained by means of a separate corridor."

The winners state that, externally, the buildings would be faced with a red hand-made brick, with roofs as shown to match existing; stone dressings, in a certain few cases, as shown, to harmonize with existing work, but from motives of economy stone is not extensively adopted. The windows to typically hospital rooms would be of steel, set in wood frames, and in wards the whole area of the windows between the hoppers would be on sliding pivots; in the more residential portions, double-hung sashes are proposed.



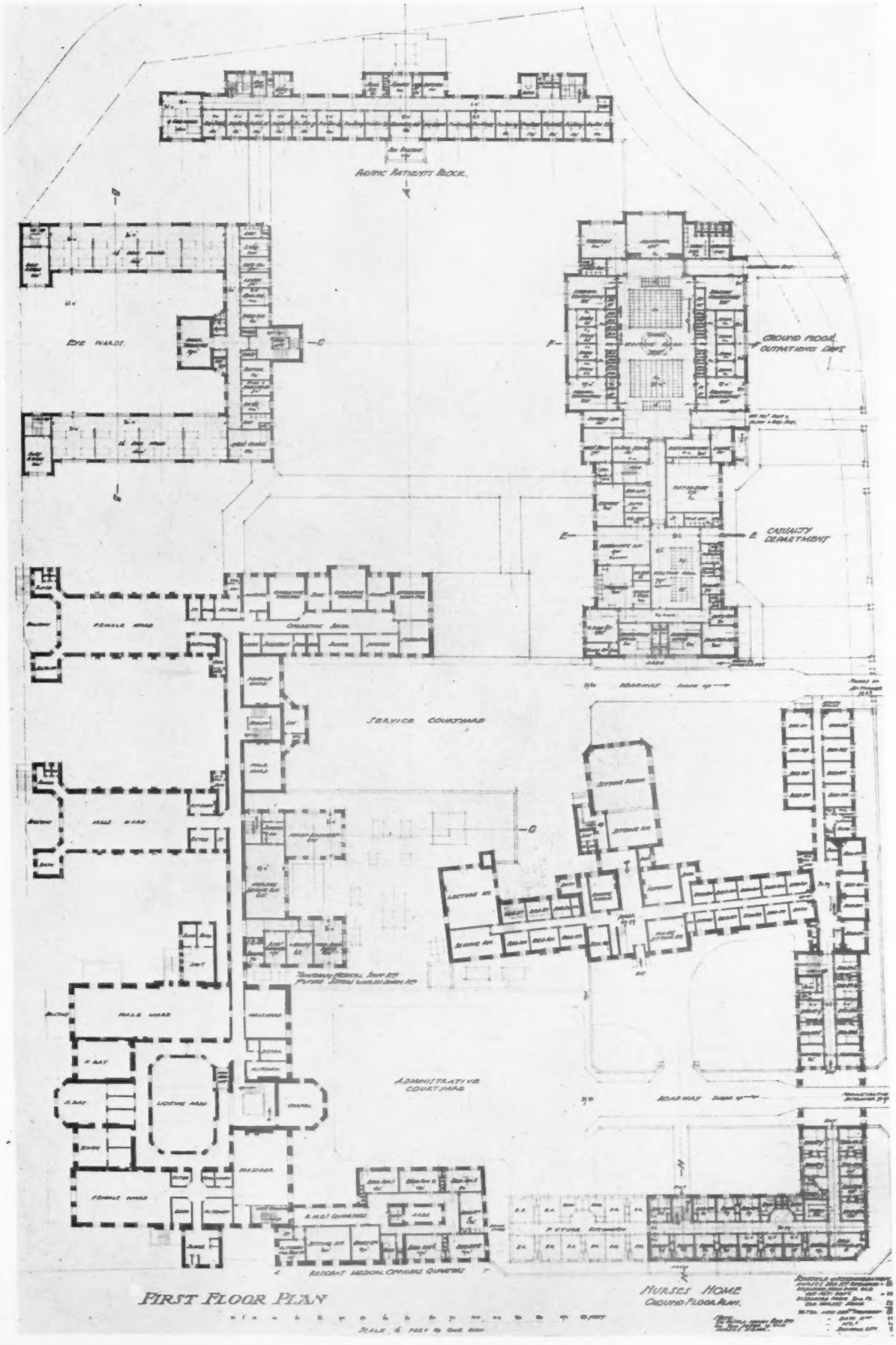
Elevations to paying patients' block and nurses' home

BY H. V. ASHLEY AND WINTON NEWMAN



GROUND FLOOR PLAN.

THE CHESTER COMPETITION: WINNING DESIGN



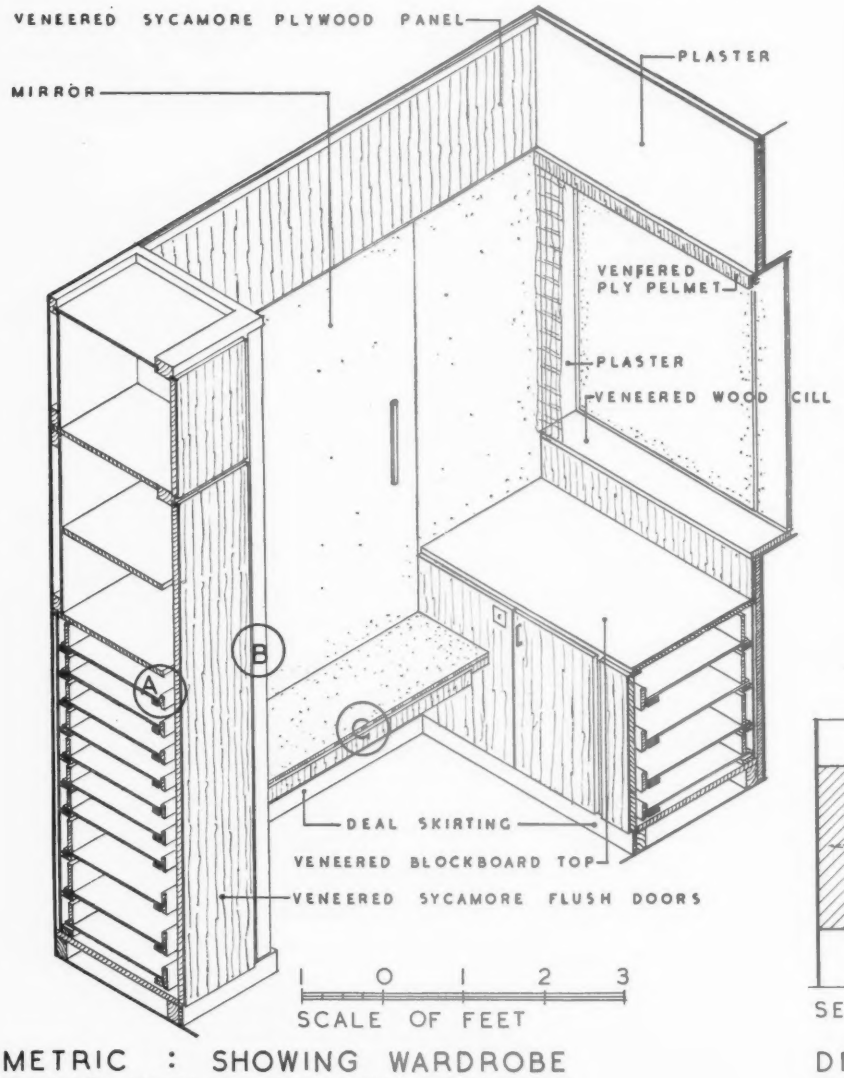
WORKING DETAILS : 667

BEDROOM FITMENTS • HOUSE AT KINGSTON, SURREY • E. MAXWELL FRY

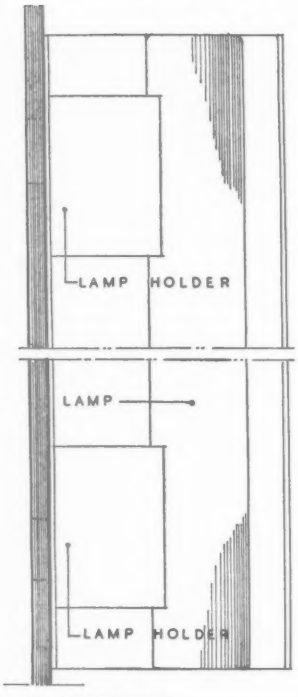
The fitments shown in the detail are the wardrobe and dressing table. There are corresponding fitments in the adjcining bedroom, and together they form a partition of back-to-back built-in wardrobes, which stop short to provide a dressing-table recess. The narrow partition at this point allows continuous windows along the façade, and at the same time the dressing-table is ideally illuminated.
The built-in wardrobe is constructed of sycamore veneered plywood, with drawers in mahogany. The wall of the dressing-table recess is covered with mirror glass from the level of the top of the windows to the skirting. A glass topped shelf with narrow drawer under runs between the wardrobe and a further series of cupboards which run underneath the windows. The dressing-table is illuminated by a strip light fixed to the mirror covered wall.
Details are shown overleaf.

WORKING DETAILS : 668

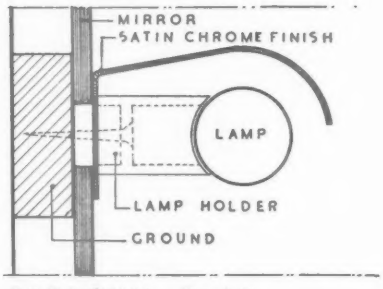
BEDROOM FITMENTS • HOUSE AT KINGSTON, SURREY • E. MAXWELL FRY



ISOMETRIC : SHOWING WARDROBE DRESSING·TABLE & WINDOW FIXTURE

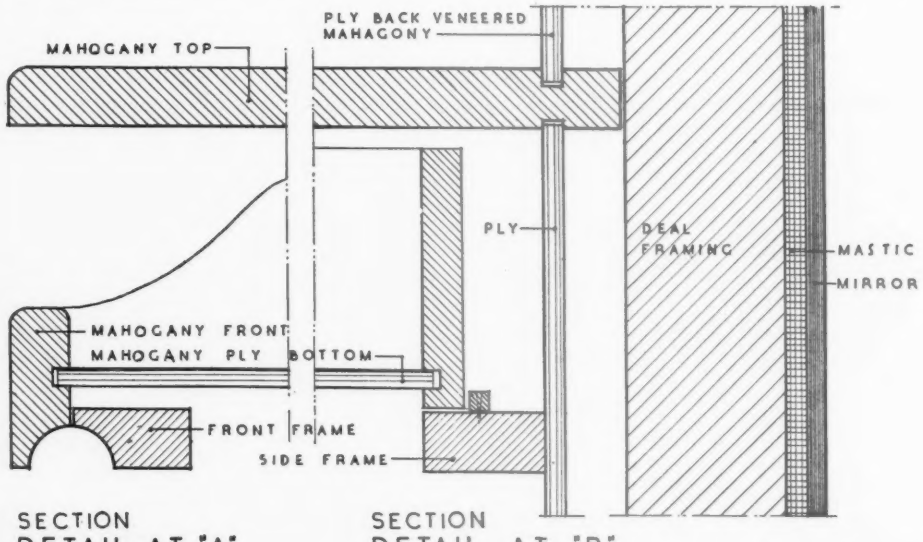


ELEVATION



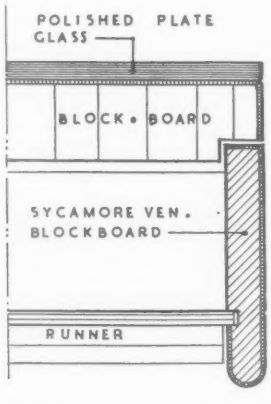
SECTIONAL PLAN

DETAIL OF LIGHT FITTING TO MIRROR



SECTION DETAIL AT "A"

SECTION DETAIL AT "B"



DETAIL AT "C" DRESSING·TABLE SECTION

TRAY FITTING TO WARDROBE

1 0 1 2 3 4 INCHES

SCALE OF DETAILS

Axonometric and details of the bedroom fitments illustrated overleaf.

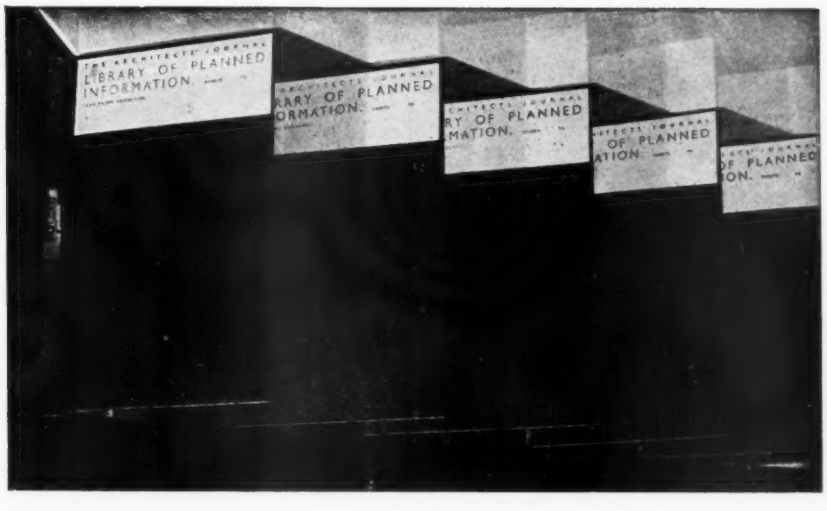
The Architects' Journal Library of Planned Information

INFORMATION SHEET
SUPPLEMENT

SHEETS IN THIS ISSUE

645 Metal Curtain Rails

646 Plumbing



In order that readers may preserve their Information Sheets, specially designed loose-leaf binders are available similar to those here illustrated. The covers are of stiff board bound in "Rexine" with patent binding clip. Price 2s. 6d. each post free.

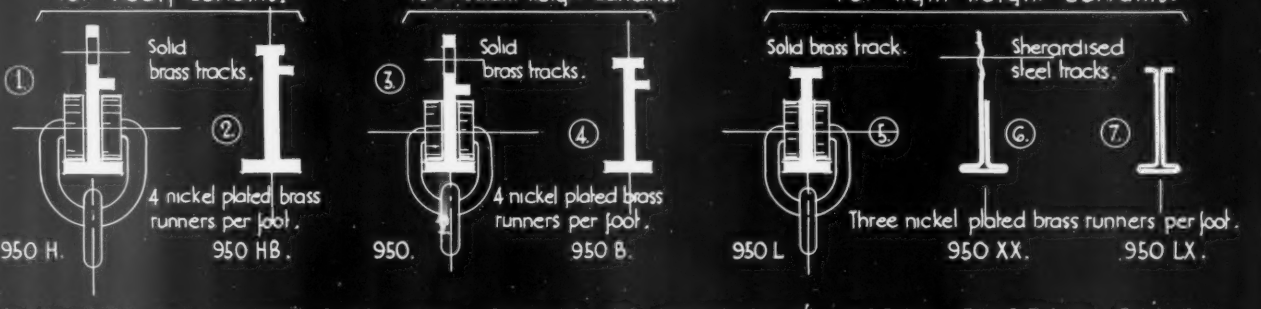
Sheets issued since Index :

601 : Sanitary Equipment
602 : Enamel Paints
603 : Hot Water Boilers—III
604 : Gas Cookers
605 : Insulation and Protection of Buildings
606 : Heating Equipment
607 : The Equipment of Buildings
608 : Water Heating
609 : Fireplaces
610 : Weatherings—I
611 : Fire Protection and Insulation
612 : Glass Masonry
613 : Roofing
614 : Central Heating
615 : Heating : Open Fires
616 : External Renderings
617 : Kitchen Equipment
618 : Roof and Pavement Lights
619 : Glass Walls, Windows, Screens, and Partitions
620 : Weatherings—II
621 : Sanitary Equipment
622 : The Insulation of Boiler Bases
623 : Brickwork
624 : Metal Trim
625 : Kitchen Equipment
626 : Weatherings—III
627 : Sound Insulation
628 : Fireclay Sinks
629 : Plumbing
630 : Central Heating
631 : Kitchen Equipment
632 : Doors and Door Gear
633 : Sanitary Equipment
634 : Weatherings—IV
635 : Kitchen Equipment
636 : Doors and Door Gear
637 : Electrical Equipment, Lighting
638 : Elementary Schools—VII
639 : Electrical Equipment, Lighting
640 : Roofing
641 : Sliding Gear
642 : Glazing
643 : Glazing
644 : Elementary Schools—VIII

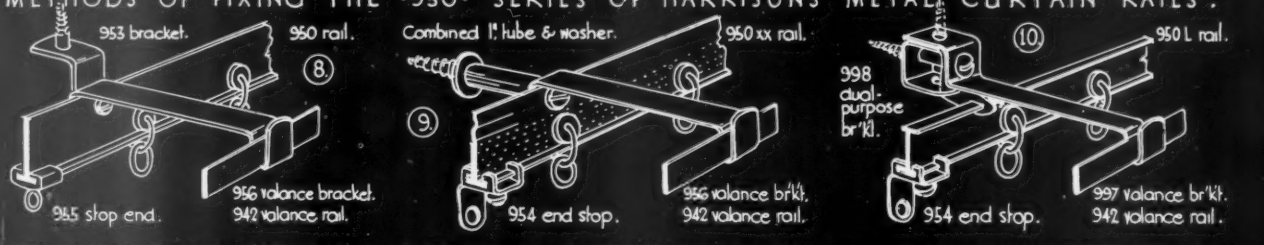
780.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

FULL SIZE SECTIONS OF THE ·950· SERIES OF HARRISON'S METAL CURTAIN RAILS :



METHODS OF FIXING THE ·950· SERIES OF HARRISON'S METAL CURTAIN RAILS :



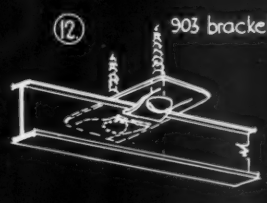
TOP FIXING, SUITABLE FOR 950 H, 950, & 950 XX. Valance rail optional.

FACE FIXING, SUITABLE FOR 950 H, 950, & 950 XX. Valance rail optional.

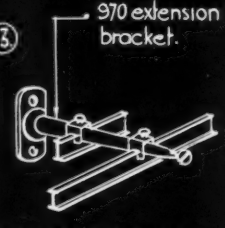
TOP OR FACE FIXING FOR 950 HB, 950 B, 950 L & 950 LX. Valance rail optional.

Designed in technical collaboration with principle metal window manufacturers.

METAL WINDOW FIXING, 950 M, brass or steel. Valance rail optional.

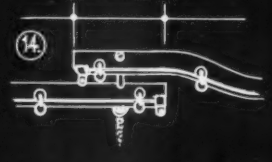


CLOSE TOP FIXING BR'K'T, for 950 HB, 950 B, 950 L, 950 LX.



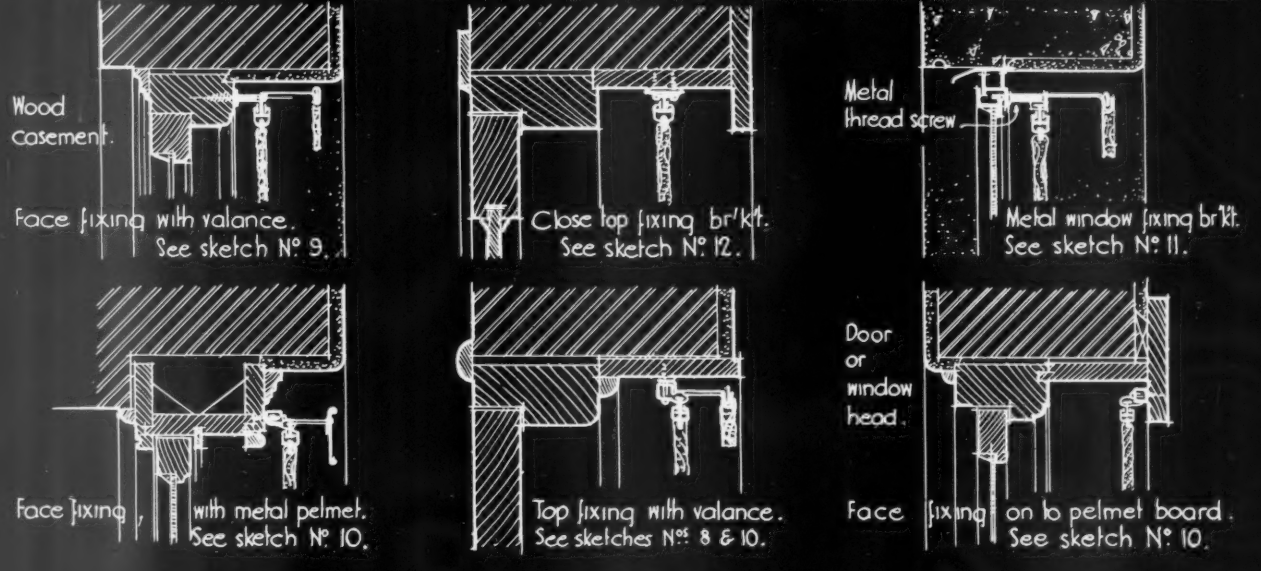
EXTENSION BRACKET for all rails. Max. exths'n., 6"

Normal overlap is 4"



950 OVERLAP FITTING. Adaptable to most rails.

DETAILS SHOWING VARIOUS METHODS OF FIXING CURTAIN RAIL & COMPONENTS TO OPENINGS :



Information from Harrison (Birmingham) Ltd.

INFORMATION SHEET : BALANCED DOUBLE RUNNER METAL CURTAIN RAILS.
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WC1. Oliver A. Bayne

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 645 •

METAL CURTAIN RAILS

Product : Harrison "950" Series of Curtain Rails and Equipment

General :

This Sheet illustrates various types of Harrison 950 metal curtain rails and components with methods of assembly for fixing over windows, doors, cupboards and openings between rooms. A further Sheet will deal with cord control.

Design :

All Harrison 950 curtain rails and components are simple and strong and designed to accommodate all weights of curtain fabric.

1. *Light rails.* 950L, 950LX, 950XX for all medium and light curtains.

2. *Medium rails.* 950, 950B for ordinary length heavy curtains.

3. *Heavy rails.* 950H, 950HB for exceptionally long and heavy curtains.

The balanced double runners revolve freely and smoothly along the double track in either direction and can be stopped in any position.

The curtain rails can be easily and quickly fixed in position, and will bend by hand to suit any shape of window. Where an overlap in the curtain is required, overlap fittings are available as shown in Sketch 14.

All 950 curtain rails are supplied complete with the appropriate components in sets, ready to fix to either wall, window frame, pelmet board, lining board or ceiling. The rails may be fitted with top or face fixing brackets, with or without valance rails.

When face fixing at distances from 2 in. to 6 in. or even up to 12 in. from the window, special extension brackets should be employed, these brackets may, if necessary, be used to accommodate one, two or even three rails. Sketch 13.

Close top fixing is possible with all girder section curtain rails (950HB, 950B, 950L, 950LX) by using one of the close top fixing brackets, Sketch 12.

For metal windows 950M, brass or steel curtain rail should be used with the special bracket and metal thread screw designed to the standards of the Metal Window Manufacturers' Association. 950L brass and 950LX steel sections when required with metal thread screws for use with metal windows are for convenience known and specified as 950M brass or 950M steel respectively.

The brackets are secured by $\frac{3}{16}$ in. diameter metal thread screws to suit the holes tapped in the present standard window frames. 950M can be fitted with or without valance rail.

Types of rails and runners :

There are five standard sections of extruded solid brass curtain rails.

950 H—Sketch 1.
950HB—Sketch 2.
950—Sketch 3.
950B—Sketch 4.
950L—Sketch 5.

and two standard sections of steel curtain rails :—

950XX—Sketch 6.
950LX—Sketch 7.

These steel curtain rails are constructed of folded rolled steel strip, heavily sherardised and lacquered to resist corrosion and are suitable for use in coastal districts where damp saline atmospheric conditions prevail and in bathrooms and kitchens where moisture and fumes may be present under varying temperatures.

All runners are of nickel plated brass, the rollers being formed from solid brass rod to ensure accuracy and balance.

Components :

Schedule of standard lengths of "950" curtain rails showing number of components which are supplied in boxed sets to correspond with appropriate lengths of curtain rail, when ordered complete.

Heavy and medium weight rails.
950H, 950HB, 950 and 950B.

Length of Rail	No. of Runners	No. of Fixing	No. of End Stops
4′ 0″ ...	16	4	2
4′ 6″ ...	18	5	2
5′ 0″ ...	20	5	2
5′ 6″ ...	22	6	2
6′ 0″ ...	24	6	2
6′ 6″ ...	26	7	2
7′ 0″ ...	28	7	2
7′ 6″ ...	30	8	2
8′ 0″ ...	32	8	2
8′ 6″ ...	34	9	2
9′ 0″ ...	36	9	2
9′ 6″ ...	38	10	2
10′ 0″ ...	40	10	4
10′ 6″ ...	42	11	4
11′ 0″ ...	44	11	4
11′ 6″ ...	46	12	4
12′ 0″ ...	48	12	4
12′ 6″ ...	50	13	4
13′ 0″ ...	52	13	4
13′ 6″ ...	54	14	4
14′ 0″ ...	56	14	6

Note.—For 950H, 950.

Face fixing—combined tube and washer, and screw, Sketch 9.

Top fixing—bracket with bolt and fixing screws, Sketch 8.

For 950HB, 950B.

Face or top fixing—dual purpose bracket and screw, Sketch 10.

Overlap :

Standard sets of overlap fittings can be supplied for any rail. When specifying rails to overlap, include extra length of rail required for such overlap. (Normal overlap is 4 in.)

Valance Rail :

Valance rails for all heavy and medium weight rails are supplied complete with three solid brass valance hooks and one brass valance bracket to each foot.

Light Rails.
950L, 950LX and 950XX.

Length of Rail	No. of Runners	No. of Fixing	No. of End Stops
4′ 0″ ...	12	4	2
4′ 6″ ...	14	4	2
5′ 0″ ...	16	4	2
5′ 6″ ...	18	5	2
6′ 0″ ...	18	5	2
6′ 6″ ...	20	6	2
7′ 0″ ...	22	6	2
7′ 6″ ...	24	6	2
8′ 0″ ...	24	7	2
8′ 6″ ...	26	7	2
9′ 0″ ...	28	8	2
9′ 6″ ...	30	8	2
10′ 0″ ...	30	8	4
10′ 6″ ...	32	9	4
11′ 0″ ...	34	9	4
11′ 6″ ...	36	10	4
12′ 0″ ...	36	10	4
12′ 6″ ...	38	10	4
13′ 0″ ...	40	11	4
13′ 6″ ...	42	11	4
14′ 0″ ...	42	12	6

Note.—For 950XX.

Face fixing—combined tube and washer and screw, Sketch 9.

Top fixing—bracket with bolt and fixing screws, Sketch 8.

For 950L, 950LX.

Face or top fixing—dual purpose bracket and screws, Sketch 10.

Overlap :

Standard sets of overlap fittings, wrapped separately, can be supplied for any rail. When specifying rails to overlap include extra length of rail required for such overlap. (Normal overlap is 4 ins.).

Valance rail :

Valance rail for all lightweight rails is supplied complete with three brassed or rustproofed valance hooks and one brassed or rustproofed valance bracket to every 15 ins.

Metal windows :

950M sherardised steel or brass curtain rails.

Specification No.	Runners	End Stops	Brackets
1×9⅞″ ...	4	2	2
2×18⅞″ ...	6	2	2
3×3′ 2⅛″	10	2	3
4×4′ 9⅜″	16	2	4
5×6′ 6⅛″	20	2	5
6×8′ 1⅜″	26	2	6

Specification No.	Valance Brackets	Hooks
1V× 9⅞″ ...	2	4
2V×18⅞″ ...	2	6
3V×3′ 2⅛″ ...	3	10
4V×4′ 9⅜″ ...	4	1b
5V×6′ 6⅛″ ...	5	20
6V×8′ 1⅜″ ...	6	26

Face fixing to standard tapped holes in window frame, Sketch 11

Valance rail :

Valance rail, hooks and brackets rustproofed or brassed to correspond are supplied complete to above schedule.

Metal Pelmets :

Solid brass extruded pelmet sections are available in two widths, narrow 1⅜ ins. and wide 2⅛ ins. These pelmets are easily fixed by special brackets to the curtain rail, no additional drilling or fixing screws being necessary.

Finishes :

Extruded brass curtain rails and components may also be obtained in any of the following finishes :—

Satin nickel
Florentine bronze
Chromium.

The folded steel curtain rails are available only in sherardised dark grey colour.

Fixing :

The diagrams illustrate the more usual methods by which "950" curtain rails and components are fixed to windows, door openings and like positions. Ample space should always be allowed for the free movement of the curtains when the rail is to be enclosed by a pelmet board after fixing.

Models :

Models of each type of rail are available on request. A comprehensive model of the "950" series of curtain rails is on view at the Building Centre, 158 New Bond Street, London, W.1.

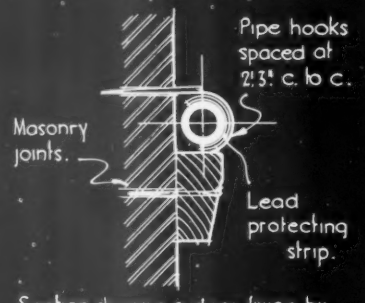
Manufacturer : Harrison (Birmingham) Limited
Address : Bradford Street Works, Birmingham, 12
Telephone : Victoria 2771
Telegrams : Remarkable
London Office : 27-30 Holborn Viaduct, E.C.1
Telephone : Central 8227
Glasgow Office : 52 St. Enoch Square, C.1
Telephone : Central 5381
Representatives : In principal cities throughout the world

809.

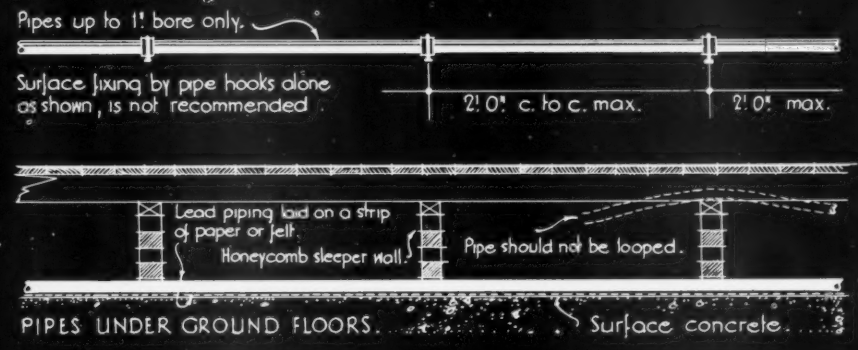
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

(A) METHODS OF FIXING LEAD SERVICE PIPES RUN HORIZONTALLY :

Lead pipes should be provided as far as possible with continuous support.

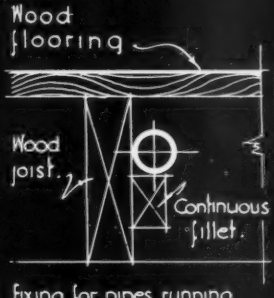


Section showing surface fixing by means of continuous wood batten.

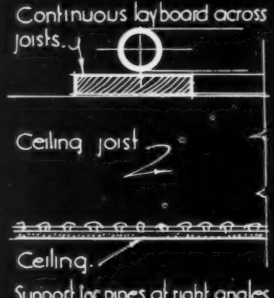


PIPES UNDER GROUND FLOORS.

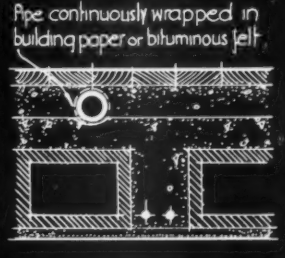
Section showing alternative fixing for pipes running at right angles to joists.



Fixing for pipes running parallel to wood floor joists.

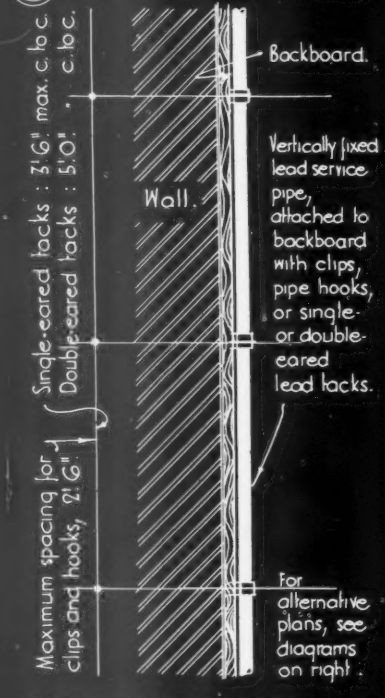


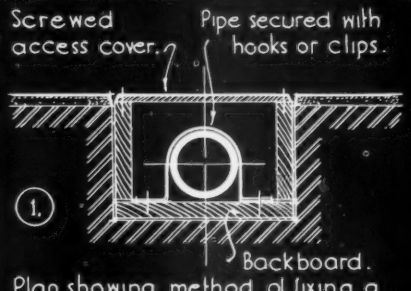
Support for pipes at right angles or raking across ceiling joists.



Treatment of lead pipes laid in concrete or hollow tile floors.

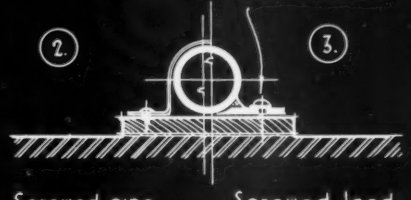
(B) METHODS OF FIXING LEAD SERVICE PIPES RUN VERTICALLY OR ON THE RAKE :





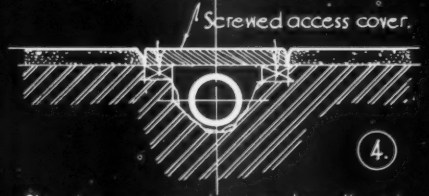
Plan showing method of fixing a pipe in a vertical pipe chase

Lead tacks may be single- (as shown) or double-eared, & may be face or back soldered.



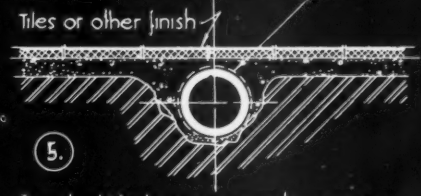
Screwed pipe clip fixing. Screwed lead tack fixing.

The chase and cover permit the pipe to move freely but not to sag.



Plan showing pipe chased into wall and supported by screwed wood cover.

Buried pipes to be continuously wrapped in building paper or thin bituminous felt.



Pipes should be buried in cement renderings only when other fixings are impracticable.

PREVIOUS SHEETS : For additional diagrams and notes related to the support and fixing of horizontal and vertical lead pipe runs, see Information Sheet N° 161, number four of this series.

Information from Lead Industries Development Council.

INFORMATION SHEET : THE FIXING OF LEAD PIPES INSIDE BUILDINGS : N°49

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

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 646 •

PLUMBING

Subject : Fixings for Internal Lead Pipes

General :

This Sheet shows some of the more common methods of fixing and supporting lead service pipes in interior work. Correct fixing is important in all plumbing work, since poor fixing practice may cause a variety of faults in both water supplies and wastes, and may shorten the life of the pipe.

The support provided for pipes is equally important and it is recommended that, as a general rule, continuous support should be given throughout the length of all horizontal pipes.

Horizontal Runs :

Continuous support can be obtained for horizontal pipes by laying them in chases and boxing them in or, where they need not be concealed, by laying them on continuous battens fixed to the wall face.

Pipes may be fixed with pipe hooks, tinned clips or lead tacks soldered or lead-burned to the pipe. Hooks or clips of this kind should be spaced at distances not greater than 2 ft. centre to centre, but lead tacks may be spaced at from 30 ins. to 36 ins. centre to centre where pipes are horizontal. Illustrations of lead tacks are given on Information Sheet 161, No. 4 of this series.

While continuous support is very necessary for pipes of all sizes, it is essential for all pipes of 2 ins. diameter or larger. Pipes run in floors and in roofs at right angles to the joists may be laid without continuous support if the joists are of normal thickness and spacing (i.e. not more than 16 ins. centre to centre).

If the pipes run diagonally across the joists, the space between the joists is greater, and a continuous support fillet or board should be provided, as shown on the front of this Sheet. Lay boards are particularly necessary in the roof, where there is a possibility that pipes may be trodden on.

If the pipes are run within the thickness of the floor, full clearance should be allowed above and at the sides of the pipe and means of access provided wherever possible.

To take pipes, the joists should preferably be bored about the centre (neutral axis) and not notched at top or bottom as this considerably reduces the strength of the joist. Lead pipe can easily be threaded through such holes.

Pipes which are buried in or through brickwork, concrete or other work containing cement or lime must, without exception, be wrapped throughout their length with light building paper or felt before being bedded in position. This wrapping allows for expansion and protects the pipe from the action of cement or lime.

Vertical Pipe Runs :

Vertical pipes may be fixed with clips or lead tacks, which should be spaced at not more than 2 ft. 6 ins. centre to centre. Single-eared or double-eared lead tacks of single or double thickness may be used, according to the weight of pipe and conditions of fixing. Ears are soldered or lead-burned to the pipe.

Where pipes are set in chases in the wall, it is advisable to fix them to wood backboards.

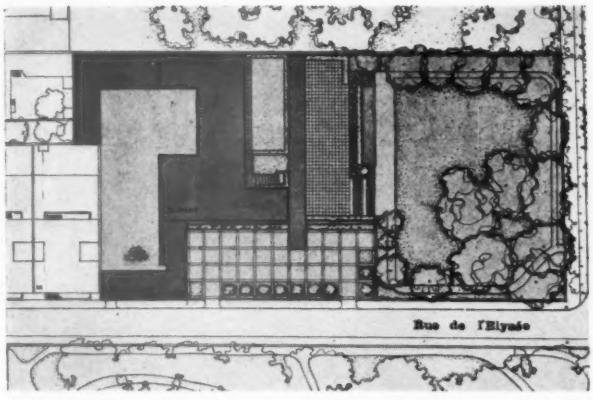
Issued by : The Lead Industries Development Council

Address : Rex House, 38 King William Street, London, E.C.4

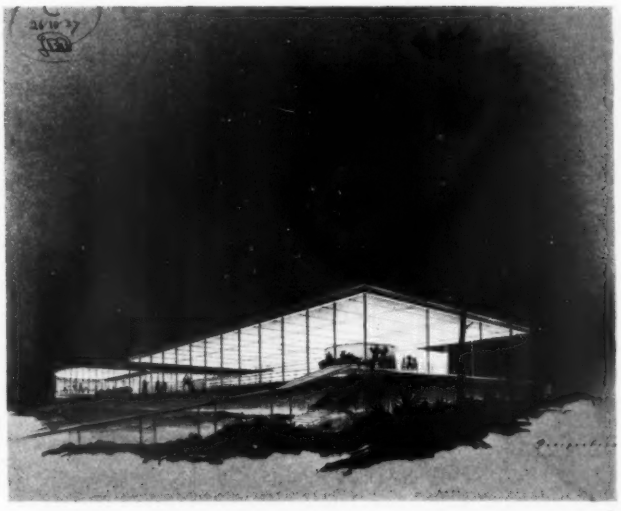
Telephone : Mansion House 2855

THE WORK OF THE SCHOOLS

1: LIVERPOOL SCHOOL OF ARCHITECTURE



1



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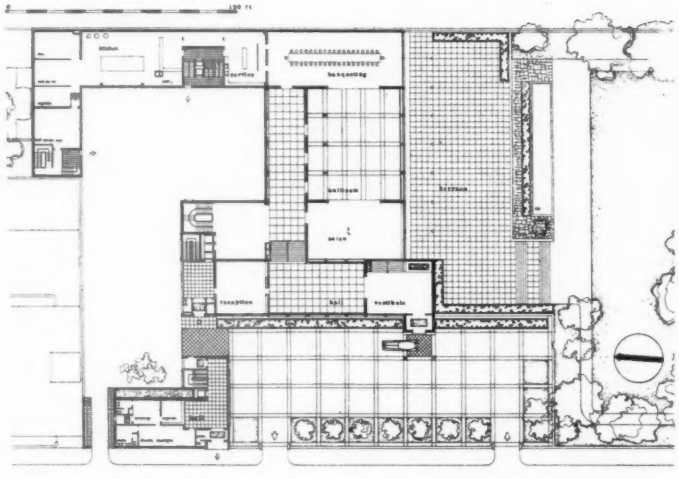

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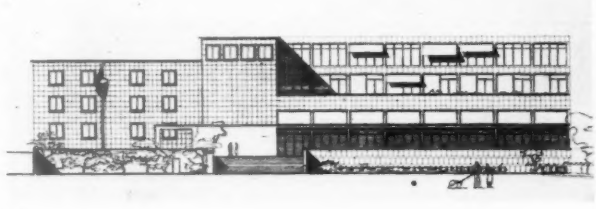

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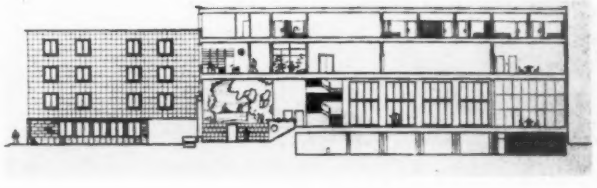

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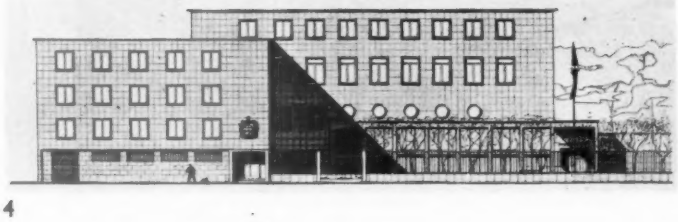


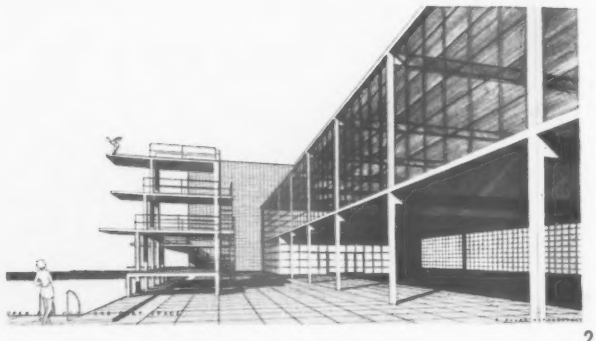
4

The illustrations show: 1–5, Fifth Year Thesis Design: A British Embassy for Paris. By D. W. Notley. 1, site plan; 2, ground floor plan; 3, south elevation; 4, west elevation; 5, section. 6: Fifth Year Sketch Design: A Dance Floor on the Mediterranean Coast. By D. P. Thomas. 7: First Year: Model of Constructional Study of a stable for three horses.

E

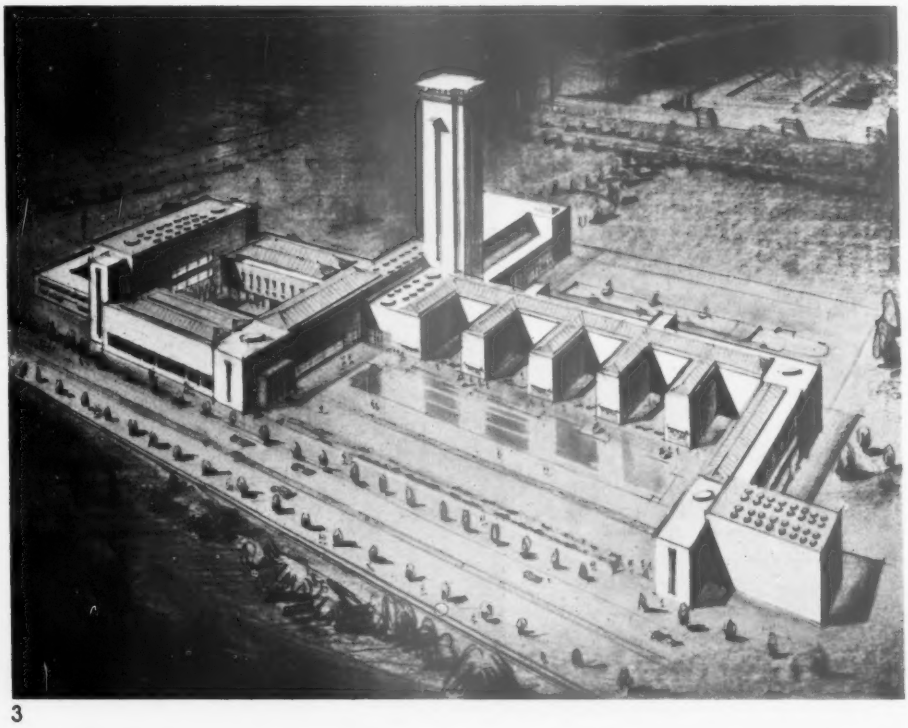
THE WORK OF THE SCHOOLS

1



2

2. LEEDS SCHOOL OF ARCHITECTURE

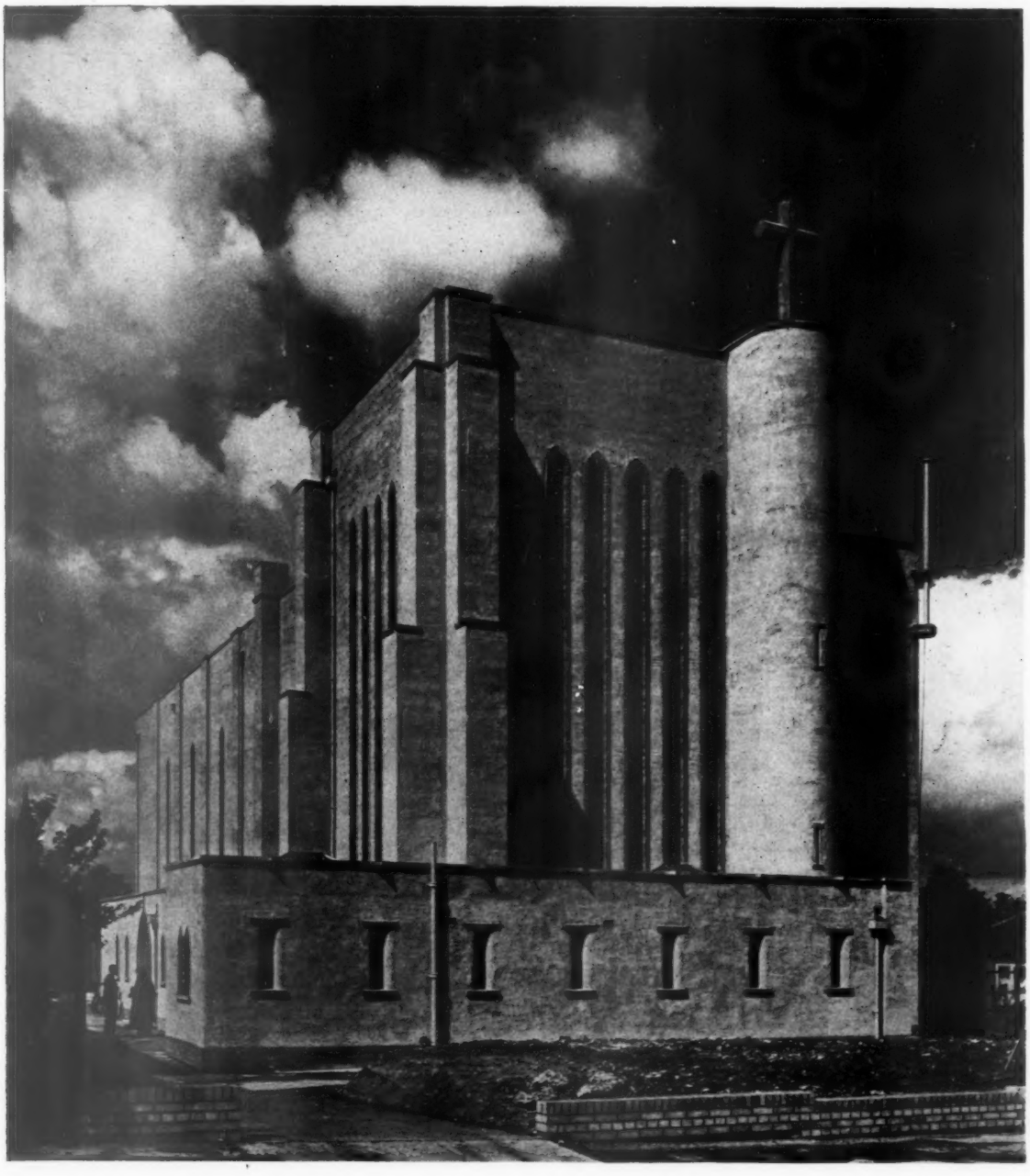


3

The illustrations show: 1 and 2: A Health Centre for Seacroft. By E. A. Heppenstall (fifth year diploma student). 1, gymnasium and swimming bath; 2, open air pool and play space. 3: A Regional Art Gallery and Museum for Yorkshire. By F. Booth (fifth year diploma student). 4: A Medical Clinic By G. A. Johnson (second year).

4

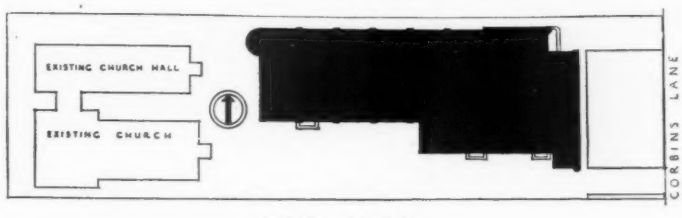
CHURCH AT SOUTH HARROW



CONSTRUCTION AND EXTERNAL FINISHES —*Brick construction on a reinforced concrete foundation, the latter owing to the unsatisfactory state of the clay sub-soil, for which reason piles were also used. Roofing to the nave and aisles is in timber, with open trusses over the nave; external covering is of slates. Roofs to vestries, the tower and belfry are in reinforced concrete. Elevations generally are rendered in a cream lime-wash, the plinth and architraves to windows being in an exposed silver-grey brick. The cross surmounting the tower is in reinforced concrete.*

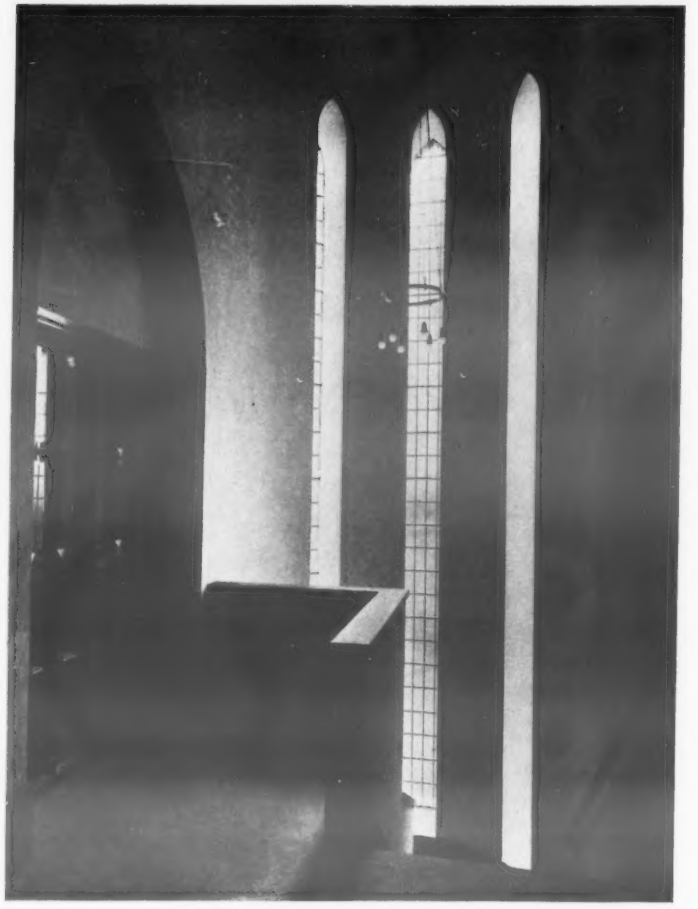
Above, a view from the east.

DESIGNED BY N. F. CACHEMAILLE-DAY



SITE PLAN

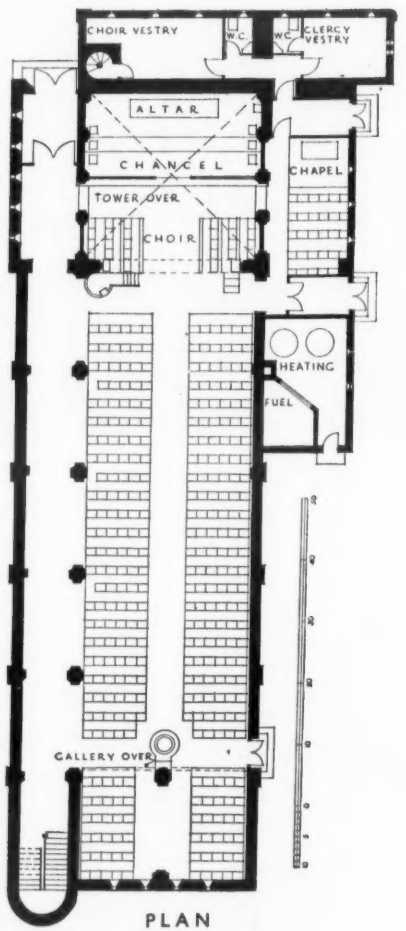
CHURCH AT SOUTH HARROW: BY N. F. CACHEMAILLE-DAY



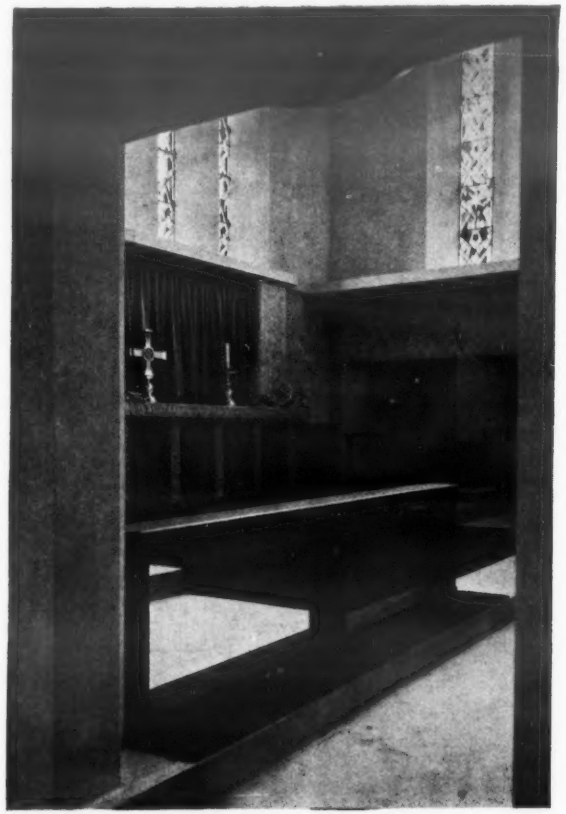
The photographs show : above, the gallery stairs ; left, the font, in silver-grey bricks and black quarry tiles.

The photographs show : the chancel and a view looking towards the altar.

For list of general and sub-contractors, see page 144.



PLAN



INTERNAL TREATMENT AND FINISHES—*Walls in general are plastered, being left a natural cream colour, with cement-finish dadoes to match. The west wall, however, is covered with sound-absorbent blocks for acoustic reasons. Floors are in granolithic, with wood block treatment under seating. Internal doors are painted peacock blue, with trusses in cream. Windows to the nave and aisles are leaded and glazed with white cathedral glass ; those to the chancel are in stained glass designed and executed by Christopher Webb. The tower ceiling is coffered in acoustic board.*

The Columbia Broadcasting Studios, Hollywood, by William Lescaze.
[From the "Architectural Forum."]

PERIODICALS

JUNE ANTHOLOGY

AMERICA

Architectural Forum

(Monthly, $1.00. 135 East 42nd Street, New York)

JUNE. Sunshine: a sensible article and a series of very useful cotangent diagrams from which sun altitude and angle can be read direct for any time of day—most of the figures are naturally based on the 40 deg. N. latitude of New York, but there is a cotangent diagram for 50 deg. N. which is near enough for the south coast of England; the main building of the month is the Columbia Broadcasting Studio in Hollywood, an admirable job by William Lescaze and a host of consultants. Where is modernism now?—a short introductory article followed by a collection of current examples, including the Griffith ranch by Frank Lloyd Wright, and a New York bank in the modern manner externally, but very simple inside—Walker and Gillette, architects; planning technique deals with men's shops; houses are good but not brilliant, a beach house in California by W. W. Wurster being the best.

Architectural Record

(Monthly, $1.00. 115 West 40th Street, New York)

June. The Bredenberg Shop, Stockholm, by Gunnar Asplund—vertical planning on a long, narrow site; trailer hotels for tourist service in the Belgian Congo—an interesting study in minimum planning by Alexis de Sakhnoffsky; Oscar Fisher's article on plywood in residential construction deals with shop-fabricated systems at some length, and with plenty of diagrams; the Building Types section deals with factories—photographs and plans, the other details being mainly constructional—the hangar doors for the Martin Aircraft Corporation are particularly interesting.

Pencil Points

(Monthly, 50 cents. 330 West 42nd Street, New York)

June. Professor Talbot Hamlin reviews the Architectural League's show as kindly as possible, but seems, in the main, to be rather depressed by it; a very thorough article by H. Vanderwoort Walsh on the separate contract system for small house construction, his conclusions being that it is definitely cheaper for the client even though fees must be at least 15 per cent.; J. D. Weiss's own New York office—small with much built-in furniture; Don Graf continues his articles on cinema design with a consideration of auditorium floor slopes.

Multiple shop in Stockholm by Gunnar Asplund.
[From the "Architectural Record."]

FINLAND

Arkkitehti

(Monthly, 15 F.mk. Ainonkatu 3, Helsinki)

No. 5. A church at Naakila, East Finland, by Erkki Huttunen; a summer cottage for himself by the same architect; a review by R. Lindbohm of the new wiring regulations in Helsinki.

FRANCE

L'Architecture

(Monthly, 8 frs. 2 Rue de L'Ecole, Paris 1er)

June. An illustrated article by Charles Picard on the new mosaics of Santa Sophia; the Fondation Foch, a hospital building at Suresnes, by A. Fouque; printing works for the *Paris-Soir*, by F. Leroy.

La Technique des Travaux

(Monthly, 10 frs. 54 Rue de Clichy, Paris 9e)

June. The Leopold flat block in Brussels, by J. J. Eggericx and R. Verwilghen; a cinema in Copenhagen, by E. Kuhn (1,400 seats); a restaurant in Amsterdam, by G. A. Roobol; grain silos at Noyon; new banana storage sheds at Dieppe; railway improvements in New York.

GERMANY

Baukunst und Städtebau

(Monthly, 1 m.90. Bauwelt Verlag, Charlottenstrasse 6, Berlin, S.W.68)

June. Recent work by Paul Mebes and Paul Emmerich; new school buildings, by Karl Bonatz; alterations and additions to the Town Hall of Stuhlweissenburg, by Iwan Kotsis; Carl Meissner on the work of C. L. Engel.

Baumeister

(Monthly, 3 m. Georg Callwey, Finkenstrasse 2, Munich)

June. Detached houses by Franz Ruf—small and medium sized country jobs, simply planned with no breaks; Sontra—

the first four-year plan housing scheme of the Workers' Front, by Hansgeorg Oechler—most of the houses are timber-frame construction ; result of a competition for small house for workers, won by Hans Bensinger ; a school near Hamburg, by Klaus Groth ; measured drawings of the various jobs.

Bauwelt

(Weekly, 90 pf. Bauwelt Verlag, Charlottenstrasse 6, Berlin, S.W.68)

June 2. Building regulations for fireproofing against aerial attack ; an appreciation of the work of the late Paul Mebes.

June 9. Additions to an accumulator works, by D. W. Loevenich ; "Thirty Years of Dwelling-houses"—the flat blocks and houses of Mebes and Emmerich.

June 14. The beginning of the rebuilding of Berlin.

June 16. The International Handicrafts Exhibition in Berlin—no noticeable British exhibit ; bridges on the Reichsautobahnen, mostly very simple and successful ; hotels and petrol stations on the autobahnen—an article by Bruno Wehner.

June 23. Result of a competition for a new Town Hall at Kreuzberg, won by Bruno Grimmect ; two Rathskeller, one in Stendal, the other in Augsburg.

June 30. The new fire station and practice tower for Jena, by Gunther Hack.

Deutsche Bauzeitung

(Weekly, 3m.40 per month. Beuthstrasse 6-8, Berlin, S.W.19)

June 15. Competition for a holiday camp in East Prussia, won by Helmuth Conradi.

June 22. Alloys for decorative work ; a new electrical door latch by Siemens Brothers.

June 27. Further schemes in the Hamburg competition.

Buildings Supplement. Buildings by Clemens Holzmeister in Turkey—good photographs and a few plans ; recent buildings for the Reichsbank, by various architects ; small houses in the Berlin district, by J. Vassilière ; schemes for Hitler Youth Hostels in different parts of the country.

Innen Dekoration

(Monthly, 2m.50. Alexander Koch, Neckarstrasse 121, Stuttgart)

June. Several large interiors by Bruno Moretti, to whose work about half the issue is devoted ; a living-room in nutwood, by Erich Zschiesche, seems the best job in the issue, and is a welcome relief after the luxury of Signor Moretti.

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HOLLAND

Bouwkundig Weekblad Architectura

(Weekly, 15 florins per annum. Weteringshans 102, Amsterdam)

June 4. The traditional architecture of Brabant ; an excellent article by J. P. Mieras.

June 11. An article on the new Town Hall at 'S-Gravenhage, by J. Luthmann ; technical notes on glass block construction.

June 18. New railway stations in Amsterdam—full plans and sections make this number very informative.

June 25. A pair of houses at Maarssen, by W. Wymstra ; technical notes on Franki piles ; two pages of progress photographs of the Amsterdam Boschplan.

A church in Finland by Erkki Huttunen. [*From "Arkkitehti."*]

de 8 en opbouw

(Fortnightly, 30 cents. Amstel 22, Amsterdam C.)

June 4. Two large flat blocks in Rotterdam, "Plaslaan," by Van Tyen and Maaskant ; "Bugpolder," by Van Tyen, Brinkman and Van der Vlugt.

June 25. A ship number—some amusing horrors leading up to the *Nieuw Amsterdam*, a recent ship in which a number of architects have collaborated with great success.

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ITALY

Architettura

(Monthly, 18 lire. Via Palermo 10, Milan 1)

May. The vernacular architecture of "Italian East Africa," an article by Riccardo Partini ; a flat block in Rome, by Ugo Luccichenti ; three jobs, a house, a flat block, and a cinema, in San Paulo, by Rino Levi ; a competition for a sanatorium at Montecatini, won by Gino Cancellotti ; many other schemes are illustrated.

June. The Italian Royal Aeronautical Society's school at Florence, a huge job by Raffaello Fagnoni ; forty pages of plans, photographs and description ; one or two smaller jobs.

Rassegna di Architettura

(Monthly, 15 lire. Via Podgora 9, Milan)

No. 3. A flat and shop block on a triangular site in Milan, by Marcello Piacentini ; competition for a working-class housing scheme in Milan—many schemes illustrated and analysed.

No. 4. A comprehensive town-planning scheme for the province of Aosta, the work of many architects, engineers and town planners in collaboration.

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SWEDEN

Byggmästaren

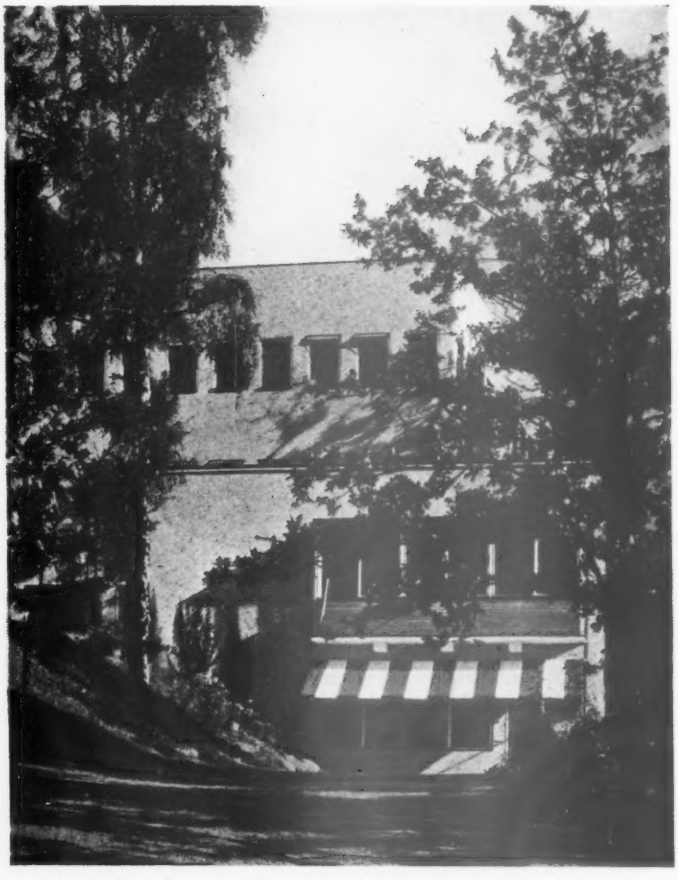
(Weekly, 20 kr. per annum. Kungsgatan 32, Stockholm)

No. 16. The Swedish Government bacteriological station, by Tore Ahlsén and Åke Porne.

No. 17. Centralized information, the need of the building industry for a properly run bureau and various aspects of the problem of storing archives, the miniature photographic method being generally favoured.

No. 18. Standardized rehousing plans in Gothenburg, an article by Uno Ahrén.

No. 19. The treatment of eaves, gutters



The Swedish Government bacteriological station, by Tore Ahlsén and Ake Porne. [*From "Byggmästaren."*]

and parapets of all kinds, an article by Evert Strokirk.

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SWITZERLAND

Schweizerische Bauzeitung

(Weekly, 1 fr. Dianastrasse 121, Zürich)

June 4. The meteorological station on the Sphinx, a minor peak of the Jungfrau group.

June 11. Competition for an elevated roadway in Basle, won by Rapp and Kehlstadt.

June 18. The jubilee of the Zürich Engineers' and Architects' Association.

June 25. Further notes on the Sphinx meteorological station.

Werk

(Monthly, 3 m. 50. Mühlebachstrasse 59, Zürich)

June. A number devoted to Lucerne, brief historical notes, town-planning schemes, the main space being devoted to recent architecture.

L I T E R A T U R E

NEW TESTAMENT

By R. GARDNER-MEDWIN

***FOCUS** : a new journal produced by young architects and students, to be published three times a year by Lund Humphries, London and Bradford. Price 1s. 6d.*

THIS new ournal is good. First of all, "If I had to teach you architecture," by Le Corbusier. I wouldn't have known his words were "hitherto unpublished," but never mind, they stimulate. A magnificent contradiction in the first two lines : "The architecture of the new age has triumphed the world over. But it is still subject to violent and insidious opposition." That makes us realize we're going places. But I wish they'd illustrate one of the Master's latest works instead of wasting two whole blocks on his doodles. Sacrée la plume . . .

Then there are the illustrations of a project for a new town in Berkshire for 50,000, designed by a group of A.A. students. The general plan and the two masterly line perspectives which are illustrated are a very small part of the exhilarating set I have just seen, hung round the walls of the exhibition room at the A.A. : comprehensive plans, from general layouts to details of housing equipment, based on a massive survey of agriculture and industry and on a study of housing standards.

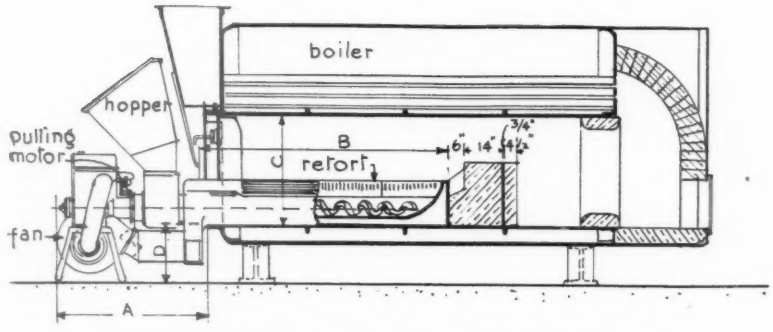
E. A. A. Rowse, under whose guidance the research for this town was made, contributes an article called "The Unknown Towns," in which he gives us an imaginative interpretation of what is too often coldly termed "comprehensive town planning." While I cannot share his enthusiasm for bringing the country into the town, "even to the provision of pasturage of animals well within the town precincts," I'm with him all the way when he says the problem of the town, at the outset, is not that of building but of preventive medicine, agriculture and economics. He must feel that the A.A. town—which leaves no possible doubt about the School's progressive leadership—is, on paper, an effective demonstration of his principles. It is emphatically a town for *to-day*, and obviously its authors, and those who produced this new journal, believe the conception of community planning for which it stands is the way of salvation from our degenerate, chaotic state of mind. Their faith is strong. They will go on until somewhere, somehow, this town has been made real.

A consistent philosophy runs through these pages—through the words of all its writers, "known and unknown." A romantic faith, urgent, irrepressible, in the new architecture (or "call it what you will"). A belief, in spite of this, in an approach to architecture based on the precision of exact analysis : "Problems have no objective existence; they only exist as a mental analysis of conditions perceived with varying degrees of clarity and exactitude." A conception of architecture as one with town-planning : "Architecture provides the framework for a civilization (housing, work, leisure, circulation) ; so architecture is also town-planning."

The necessary political bias is provided by Anthony Cox's bland letter to H. S. Goodhart-Rendel—reply to a famous speech on The Training of an Architect. Other features : some interesting details of a timber house with explanatory notes by Max Locke, architect, and Lewis Wilson, contractor ; "A Human Architecture," by Gerhard Kallmann, which in places smacks of Auden ; and an A.A.S.T.A. manifesto by Blanco-White.

A competent effort, even to the make-up and format, which are in the best Lund Humphries tradition. I hope it will be openly supported by all architectural school authorities and recognized as an opportunity for crystallizing thought and, incidentally, for letting off steam. But next time I should like to see more specific architectural criticism, less generalizing ; more "unknown" contributors (specially students), less famous names ; more humour, less arch-impudence ("let us neglect the older generations : they are of no importance to us").

But there is an important place for *Focus*. Don't let it drop.



Size	max coal burnt per hr in lbs	A	B	C	D
B1	330	4'0"	4'9½"	2'4"	1'8"
B3	450	4'0"	6'-3¼"	2'4"	1'8"
B5	650	4'6½"	7'4⅛"	2'9"	1'8"
B7	850	4'6½"	7'5½"	3'4"	1'7½"

TRADE NOTES

[*By PHILIP SCHOLBERG*]

Automatic Stokers

FOR the efficient burning of bituminous coals it may be taken for granted that the underfeed principle is better than the overfeed, for the fresh coal arrives at the bottom of the fire and the volatile gases must pass through the glowing bed of the fire, and can thus be consumed without smoke instead of being chilled by the water-cooled boiler walls. With thermostatic control, the system of stopping the motor drive altogether when the boiler water has reached the desired temperature is not altogether ideal, as the fire is alternately bright and dead, furnace temperatures are uneven, combustion is smokeless only when the machine is working, and a dead fire helps clinker formation. For this reason the new class B stoker recently introduced by the Riley Company is worth a certain amount of investigation, as considerable trouble has been taken to get over this difficulty, and there is no obvious reason why the result should not be very satisfactory. The stoker has a variable speed gearbox, and the speed of the feed worm is regulated by a small pulling motor mounted just in front of the hopper. When the boiler temperature falls the rate of coal feed is automatically increased, and vice versa, and the supply of air is also regulated by the pulling motor to suit the quantity of coal being fed to the furnace. The stoker thus works continuously at varying rates, as opposed to the more usual method of full rate for a time followed by a stop. The pulling motor works only intermittently to control the rate, the drive to the fan and worm being from a separate motor altogether. All the usual time, pressure and temperature controls are available, and there is also a water level control which will stop the stoker and ring a warning bell if the feed pump should fail.

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This stoker has been developed mainly for Cornish and Lancashire type boilers, and the hopper allows easy access to the fire doors, while it can also be swung over to clear them altogether. The capacity of the standard hopper is 190 lb. of coal, but a larger hopper containing approximately 650 lb. can be supplied if required. This size is shown in the drawing at the head of these notes, which also shows the essential dimensions of the various models. There is also another type designed for operation from an overhead shaft line, an eccentric and pawl giving five different rates of feed. The company also supplies conveyor plant for taking the coal from the bunkers to the hoppers.—(*The Riley Stoker Co., Ltd., 40–43 Chancery Lane, London, W.C.2.*)

Cattle Stops

Three or four weeks ago there appeared in these notes two photographs and a measured drawing of a cattle stop in the Cotswolds. It has recently been pointed out to me that these stops are potential ankle traps, and I was told of a case in which damages of £2,000 were awarded to a plaintiff who had succeeded in spraining an ankle on the way up the drive to the house. Visitors, I gather, are invitees, and are entitled to assume that the way up to a house or through an estate is reasonably safe. As far as I can see there is no way out of this difficulty, for if you put the tubes or planks of the stop closer together the cattle will walk across it quite cheerfully. One of the railway companies used to employ timbers triangular in section set with the apex upwards and arranged so that the bases were very nearly touching. This is probably a little safer, but there is really no defence against the visitor who is determined to get hurt, and to get substantial damages for it. After all, if somebody walks too fast round a corner and falls over they have quite a good case against the building owner if the floor can be shown to be at all slippery. (How long will it be, by the way, before the R.I.B.A. has to fight a case of this kind, or are members legally part owners of the building?)

In an attempt to show that adequate warning was provided at least one estate puts up large notices saying that visitors use the cattle stops at their own risk and should come in through the gate, but for complete safety these notices would presumably have to be illuminated at night, and what with the fuss and bother it would probably be simpler to have a lodge and a keeper.

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From what I have heard of the relationships usually existing between architect and client towards the end of the job, it seems more than probable that the architect might find himself joined in the action, or sued for professional malpractice afterwards. So it might be as well to warn the client of the possible dangers and leave him to make up his mind whether the risk is worth while.

Unbreakable Plugs

Exactly how much is spent every year on replacing plugs which have been dropped or trodden on I do not know. In factories and garages, however, it is often easy to find plugs for portable tools or lights with bent pins and cracked covers, factory inspectors or no. In an attempt to solve this problem Messrs. Sanders have just introduced a plug in which the whole of the body is made in medium hard rubber, strong enough to keep its shape in normal use, but sufficiently flexible to allow the brass pins to be bent until they touch, after which they will spring back to the normal position. The sample sent to me I have thrown about, trodden on and driven over with 27 cwt. of motor car, and the pins still fit the B.S.S. standard socket, while the body of the plug looks very much the same. It is now in use in a garage and I have asked that it shall be severely maltreated as often as possible. It remains to be seen how long it will stand up to oil.

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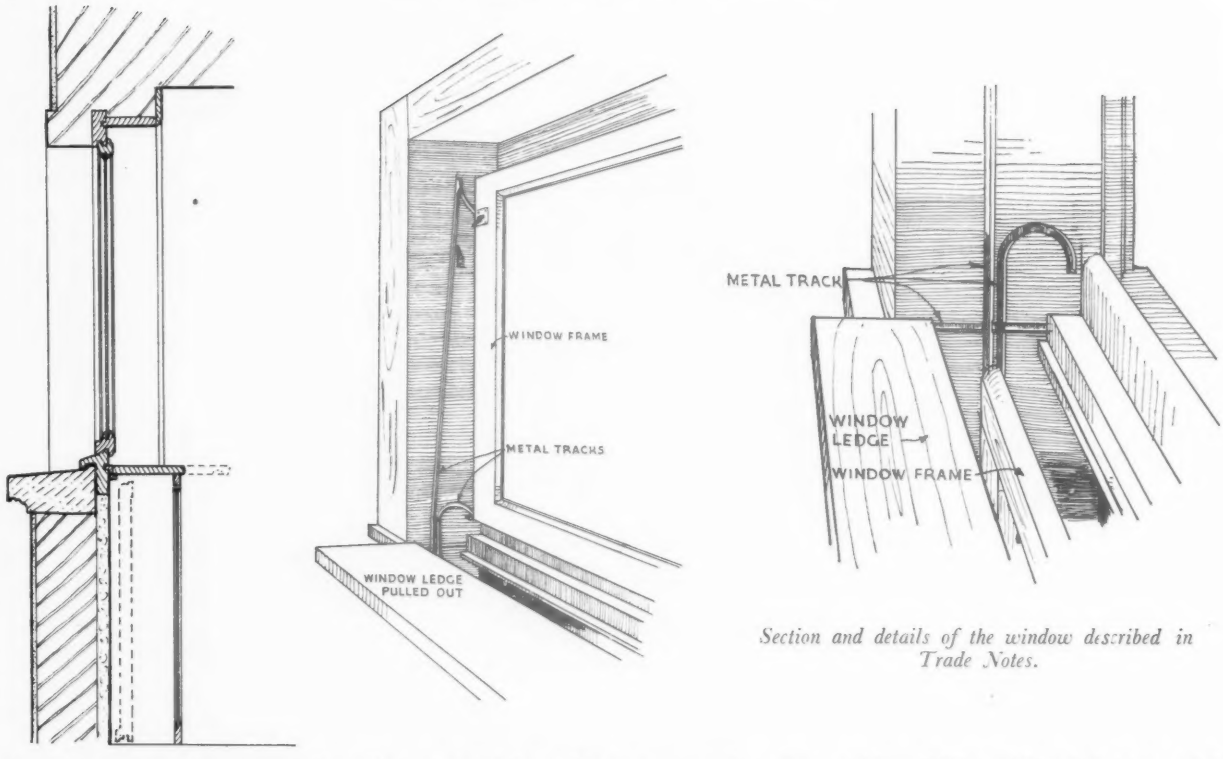
For factories, or for any industrial job, these plugs would seem to be the most sensible thing to use, while they might well be worth while in the private house, where people are always liable to be pushing vacuum cleaners and furniture about. Wiring is perfectly straightforward, there is a good strong cord grip, and the rebated rubber cap stays firmly in position. Price is 32s. 4d. a dozen in the 15 amp. size, 5 amp. is 4s. less.—(*William Sanders & Co. (Wednesbury), Ltd., Falcon Electrical Works, Wednesbury, Staffs.*)

Full Opening

From time to time one sees in foreign periodicals windows which completely disappear and leave a perfectly clear opening. While it is possible with a good deal of thought to design this sort of thing and have it made, it is useful to know that windows of this kind can now be obtained in this country. The example shown in the drawing overleaf is counterbalanced, and can, quite literally, be opened and closed with one finger. The sill is pulled forward into the room a short distance, opening the cavity into which the window falls; the window is then lifted slightly inwards, after which the guides take it down out of sight. The sill is then pushed back and the opening is clear. For rainy days there are two small triggers at the top of the window, and these allow an inward opening of about 5 ins. for ventilation, or the window may be swung down right into the room for cleaning. From



Section and details of the window described in Trade Notes.

the point of view of appearance the only unfortunate thing is that there is a suspension wire each side about an inch or so clear of the reveal, and this is visible when the window is open. It is difficult to suggest, however, any way in which this could be avoided, and the result is not offensive, besides which there are generally curtains to help hide it.

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There are also two other models now available in this country, the first is a Georgian type of sash window with spring-loaded plungers to stop all rattle. The second also looks like an ordinary sash, but the two halves are hinged together in the middle, the upper half being also hinged at the top. Fully opened, the two halves slide upwards and inward until they are parallel to the ceiling, and leave a clear opening.

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These windows are made by the Swiss firm of Kiefer, to whom I referred some months ago. The disappearing model is not going to be wanted on every job, but it can be made in almost any size at a price of roughly 7s. a sq. ft. of opening, complete with all framing and counterweights ready for building in. The English agent, who has on show a large range of interesting types, is *M. Bachtold, 283 High Holborn, London, W.C.1.*

Wallboard Manufacture

A recent booklet from Lloyd Boards tells its story in a sensible way. A few pages of photographs to show how it is made, two pages of tabulated data on the seven different types, ten pages of photographs to show how it has been used by different designers and twelve Information Sheets reprinted from this JOURNAL to show the constructional details. Having seen the Information Sheets before I am more interested in the photographs showing how the board is made. So far as I can see, you take moist logs and mash them up into a sort of porridge, roll it out thin and dry it, and then cut it to size. There is more in it, of course, than that, but from the photographs it looks the sort of works it would be interesting to go and see. From the office point of view the most important parts are obviously the executed jobs and the constructional details, and for these the booklet is definitely worth keeping.—(*Lloyd Boards, Ltd., Shell Mex House, Strand, London, W.C.2.*)

THE BUILDINGS ILLUSTRATED

NEW CIVIC OFFICES, SWINDON (pages 117-121). Architect: Bertram, Bertram and Rice. The general contractors were Spackman and Sons, and the sub-contractors and suppliers included: Trinidad Lake Asphalt Co., Ltd., asphalt; The Basildon Brick Works, Ltd., bricks; Bath and Portland Stone, stone; Gloucester Stone Co., Ltd., artificial stone; Redpath Brown & Co. Ltd., structural steel; The Kleine Co., Ltd., fireproof construction, floors and roof; Cork Insulating Co., Ltd., Eldorado Cork Flooring; Pioneer Plaster Block, partitions; The British Challenge Glazing Co., patent glazing; Marble Mosaic Co., Terrazzo; Sika Francois, Ltd., waterproofing materials; J. Jeffreys & Co., Ltd., plenum and central heating; Bratt Colbran, Ltd., grates; Hartley & Sugden, Gravico boilers; Rashleigh Phipps & Co., electric wiring, bells; General Electric Co., electric light fixtures; J. Jeffreys & Co., Ltd., ventilation; Doulton & Co., Ltd., sanitary fittings; K. S. Neale, door furniture; Henry Hope and Sons, casements, window furniture; Standard Telephones and Cables, telephones; Chatwood Safe Co., Ltd., fireproof doors; H. H. Martyn & Co., Ltd., metalwork; J. P. White and Sons, Ltd., and Samuel Elliot and Sons, Ltd., joinery; J. S. Gilbert, textiles; J. P. White and Sons, Ltd., furniture; Marryat and Scott, Ltd., lifts; Gerrard Clocks, Ltd., clocks; The London Sand Blast Decorative Glass Works, Ltd., signs; General Electric Co., signs.

THE CHURCH OF SAINT PAUL, SOUTH HARROW (pages 137-139). Architect: N. F. Cachemaille Day. The general contractors were Pitchers, Ltd., and the craftsmen, sub-contractors and suppliers included: Messrs. The Trussed Concrete Steel Co., Ltd., reinforced concrete; Brick Makers and Factors, Ltd., facing bricks; E. J. and A. T. Bradford, Ltd., foundation-stone; Christopher Webb, Esq., coloured chancel glass; Morris Singer Co., leaded lights and metal casements; The Alpha Manufacturing and Electrical Co., Ltd., electrical installation and fittings and lightning conductor; E. Parkinson (London), Ltd., slating; Honeywill and Stein, Ltd., Heraklith; Wm. Salter, Edwards & Co., Ltd., asphalt; The City Iron Co., sanitary fittings; Improved Pipeless Central Heating, heating; Nettlefold and Sons, Ltd., ironmongery; Zeta Wood Flooring Co. (1910), Ltd., wood block flooring; Kingsgate Davidson & Co., Ltd., organ rebuilding; A. and F. Howland (Wycombe), Ltd., chairs; A. Robinson, furniture; Mrs. Mary Ozanne, frontals, etc.; J. Wippell & Co., Ltd., sundry furnishings; Cashmore Art Workers, lead flower vases.

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£1,500,000 FOR LEEDS FLATS

The Leeds Corporation Housing Committee have approved layout plans for rehousing on the Marsh Lane clearance area. It is proposed to build 508 tenement flats at Marsh Lane, bringing the total number of tenement flats in course of erection or preparation for erection in the city to about 2,200, providing accommodation for nearly 7,000 people. In addition, the Housing Committee has in mind the erection of 500 flats on the York Road clearance site, and more than 1,000 at Kirkstall Road. In a few years Leeds will be housing more than 10,000 people in nearly 4,000 tenement flats in various parts of the city.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

CHINGFORD. *School.* The Essex Education Committee has approved plans for the erection of a council junior and infants' school at Whitehall Road, Chingford.

EDMONTON. *Houses.* The Edmonton Corporation is to erect 354 houses in Hoe Lane, Stoneleigh Avenue and other roads.

ENFIELD. *Houses, etc.* The Enfield U.D.C. has approved a scheme for the erection of 200 houses and 50 flats on the Bullsmoor Lane site.

FINCHLEY. *Police Station, etc.* The police authorities are to erect a section house and police station in Ballards Lane, Finchley.

HACKNEY. *School reconstruction.* The L.C.C. is to reconstruct the Hackney Downs School, Hackney, at a cost of £52,240.

ILFORD. *School Modernizing.* The Ilford Education Committee is to modernize the Mount Central and Uphall Schools, at a cost of £9,153.

ILFORD. *Kitchen, etc.* The Ilford Corporation has obtained sanction to borrow £13,311 for the new kitchen and other extensions at the isolation hospital, and Mr. J. Roger Preston is to be engaged as consulting engineer.

ILFORD. *Flats, etc.* Plans passed by the Ilford Corporation : Eight flats, adjoining 111 Craven Gardens, Mr. E. Meredith ; seven houses, 90-102 Breamore Road, two shops and three houses, Chadwell Heath Lane, Mr. J. T. Perrin ; four bungalows, 18-24 Peaketon Avenue, Jay and Deverell ; workshop, Thorium, Ltd., Uphall Road, Norton Bros. : nine shops and flats, Goodmayes Road, Knight & Co. ; 15 flats, York Road, White and Mileson ; 14 houses, Merrivale Avenue and Park Lane, Mr. W. M. Edwards ; two bungalows, 13-15 Strafford Avenue, New Ideal Homesteads, Ltd. ; 11 houses, Stoneleigh Road, Hirstwell & Co. ; four houses, 407-413 Wanstead Park Road, Mr. A. P. Griggs ; 17 houses, Tudor Estate, Fencepiece Road, Mr. J. R. Crewes ; house, 49 Mighell Avenue, Mr. T. A. Clark ; house, 601 Eastern Avenue, Mr. J. Aldridge ; 13 shops, 16 flats, 1-13 Mildmay Parade, etc., and 46 houses, 41-54 Dorchester Gardens, etc., Mr. G. F. Siegerts ; four shops, 64-70 Chadwell Heath Lane, Mr. J. Giles.

ISLINGTON. *Rebuilding.* The L.C.C. is to rebuild the Highbury County School, Islington, at a cost of £57,815.

TOTTENHAM. *School Enlargement.* The Tottenham Education Committee is to enlarge the Parkhurst School, at a cost of £23,350.

TOTTENHAM. *Community Centre.* The Middlesex Education Committee is to erect a youth community centre at an estimated cost of £8,640, in Philip Lane, Tottenham.

TOTTENHAM. *Flats.* Plans passed by the Tottenham Corporation : Six flats, James Place, Hillingdon Estates Co. ; 16 flats, Park Lane, Mr. E. C. Benfield.

UXBRIDGE. *Houses.* The Uxbridge U.D.C. is to erect 54 houses in Corley Mill Road and Church Lane, the Ministry of Health having sanctioned a loan of £20,621 for the purpose.

UXBRIDGE. *Library, etc.* The Middlesex C.C. has obtained sanction for a loan of £33,839 for the erection of a library, offices and clinic in Uxbridge.

PROVINCES

BARROW-IN-FURNESS. *Maternity Home.* The Barrow-in-Furness Corporation has approved plans by the borough engineer for the erection of a natal clinic at the Risedale maternity home, at an estimated cost of £2,200.

BARROW-IN-FURNESS. *Houses and Flats.* The Barrow-in-Furness Corporation has approved plans for the erection of 136 houses and 20 flats for single persons on the Greengate Estate.

BARROW-IN-FURNESS. *Bungalow.* Plans passed by the Barrow-in-Furness Corporation : Bungalow, Rakesmoor Lane, Mr. M. Bolt ; shop, Dalton Road, Montague Burton, Ltd. ; alterations, Imperial Hotel, Cornwallis Street, James Thompson & Co., Ltd. ; alterations, White Lion Inn, Mount Pleasant, R. F. Case & Co., Ltd. ; two houses, off Wheatclose Road, Mr. E. Elliott ; two houses, Westbourne Crescent, Mr. S. Hudson ; alterations, old Wesleyan Chapel, Hindpool Road, Mr. O. Chalker ; three houses and shops, Black Butts Lane, J. Parkinson and Sons, Ltd. ; 12 houses, Laburnum Crescent, J. H. Sharp, Ltd. ; six houses, Rakesmoor Lane, Mr. R. E. McBratney.

BIRKENHEAD. *School.* The Birkenhead Education Committee has approved plans by the managers for extensions to the premises of St. Joseph's School.

BIRKENHEAD. *Houses, etc.* Plans passed by the Birkenhead Corporation : Public-house, Landican Road, for Messrs. H. E. Davies and Sons ; six houses, Barnston Road, for Messrs. R. V. Wilson, Ltd. ; 314 houses and six shops, Wood Lane and Saughall Massie Road, for Park Estates (Wirral), Ltd.

BIRMINGHAM. *Market Extensions.* The Birmingham Corporation has approved an amended scheme for extending the wholesale fruit and vegetable market in Edgbaston Street, at a cost of £127,000.

BIRMINGHAM. *Reconstruction.* The Birmingham Gazette, Ltd., are to reconstruct premises in Corporation Street, Birmingham, at a cost of £90,000.

BLACKPOOL. *Houses, etc.* Plans passed by the Blackpool Corporation : 14 houses, Henson Avenue, Yates & Walsh ; 8 houses, Devonshire Road, R. Fielding and Son ; 30 houses, Lockerbie Avenue, etc., R. and H. Fletcher, Ltd. ; 30 flats, Queen's Drive, Mr. W. Lancaster ; 70 chalets, Sunnyhurst Avenue, Sunnyhurst Holiday Camp.

BRIDLINGTON. *Houses.* The Bridlington R.D.C. is to erect 118 houses in various parishes at a cost of £47,790.

BURNLEY. *School.* The Burnley Education Committee is to erect a senior school for boys at a cost of £42,418.

CHELMSFORD. *Extensions.* The Chelmsford Corporation is to extend the municipal office accommodation at a cost of £3,260.

CHELMSFORD. *School.* The Chelmsford Education Committee has approved plans by Mr. Allardyce for the Rainsford Senior School, at a cost of £57,900.

DAGENHAM. *Enlargements.* The Essex County Nursing Association is to enlarge the training homes at Beachcroft Road, Leytonstone, and York House, Dagenham, at a cost of £20,000.

DUDLEY. *Modernization.* The Dudley Corporation is to modernize 275 houses on the Brewery Fields Estate at a cost of £13,620.

HORNCHURCH. *Branch Library.* The Essex C.C. has approved plans for the erection of a branch library at Elm Park, Hornchurch, at a cost of £6,066.

KING'S LYNN. *Houses.* The King's Lynn Corporation is to erect 56 houses on the Haywood Hall estate at a cost of £22,031.

IN PARLIAMENT

IT is now regarded as certain that the Architects' Registration Bill will receive the Royal Assent before Parliament rises at the end of July. The Government have decided to give facilities for the remaining stage.

This information was given to Mr. Bossom, who asked the Prime Minister if he would grant facilities for the consideration of the Lords Amendments to the Bill, which were of a purely drafting nature.

Sir J. Simon, who replied, said : "Yes, sir. My right hon. Friend hopes to be able to afford facilities for the consideration of the Lords Amendments to this Bill."

Mr. G. Strauss asked the Minister of Health whether he is aware that all tenders for building contracts in London above a value of £3,000 were first submitted to a trade organization entitled the London Builders Conference, which required the lower tenderers to increase their tenders according to a certain formula ; and, as this artificially increased the cost of working class dwellings in London, would he take steps to protect the London ratepayers and the tenants of the London County Council and borough council houses from this exploitation.

Mr. Elliot said he had seen reference to the arrangements to which the hon. member referred in the Press, but no sanction from his Department was required for capital expenditure on housing in London, the question whether tenders were reasonable being one for the consideration of the London County Council and the Metropolitan Borough Councils.

Mr. McGovern asked the Minister of Health if his attention had been drawn to the decision of Slough Town Council to build 300 houses on the Baylis Court estate at a cost of £153,000 ; if he was aware that the council had already decided to give the contract to the Manor Park Construction Co., Ltd., without competitive tenders from any other firms ; whether he would enquire into the contention of the council that it had no alternative but to give the contract to the Manor Park Construction Co., Ltd., who were the owners of the land in question ; and if he would order an inquiry into the relationship between this company and the town council of Slough.

Mr. Elliot said he was aware of the proposals of the Council referred to in the first two parts of the question. He was already cognisant of the circumstances of this case, but he did not think there was any need for an inquiry of the kind proposed.

Mr. Goldie asked the Minister of Transport whether he was aware that the old town hall at Wrexham, built in the reign of His Majesty King Henry VIII, had been scheduled for compulsory purchase and demolition in connection with a proposed new trunk road from Swansea to Manchester ; and what steps he proposed to take to prevent such an act of vandalism.

Mr. Burgin said that this building was in private ownership as a licensed house and bonded stores. It projected into Town Hill at four cross roads and reduced the width of the trunk road to between 14 ft. and 17 ft. He was satisfied that the only way to improve traffic conditions and increase safety at this point was by removing the building and widening the trunk road. The present proposal had the support of the Wrexham Town Council, who had agreed to make a contribution towards the cost.

Mr. Erskine Hill asked the Secretary of State for Scotland, whether the Department of Health gave grants to local authorities in Scotland to enable them, with the help of a subsidy, to recondition and to utilize old buildings for working-class houses so as to preserve façades of historical and architectural character and at the same time utilize these buildings for purposes of housing schemes ; and, if not, would he consider the advisability of exercising such powers as existed or, if necessary, take steps to enlarge these powers.

Mr. Colville said he was prepared to consider on its merits any application by a local authority for grant under the Act of 1930 or 1935 for new houses in which a local authority might incorporate features of architectural, historic or artistic interest belonging to existing buildings on the site.

Mr. McEntee asked the Home Secretary if he was aware that the most modern blocks of workmen's flats were being built by local authorities in London at 1s. 7d. to 1s. 8d. per foot cube ; that first-class residential flats in London were costing from 1s. 9d. to 2s. 3d. per foot cube ; that blocks of flats for married police officers cost 1s. 7d. per foot cube and that new section houses for unmarried police officers at Putney, Judd Street and Kennington Lane cost, respectively, 2s. 2d., 2s. 4·55d., and 2s. 5·92d. per foot cube ; and would he cause inquiry to be made as to the excessive cost of the section houses.

Sir S. Hoare said that the accommodation provided in a Section House included much that was not provided and was unnecessary in married quarters, such as common and recreation rooms, gymnasia, canteens, etc. Much of the general accommodation in a section house was for the use not merely of the residents, but for all the local police. Moreover, as regarded the three Section Houses mentioned, account must be taken of the recent increase in building costs which was reflected in the tenders for these schemes. If account was taken of all the factors there was no reason for regarding the cost of the Section Houses in question as excessive.

Copies of the loose supplement containing the labour rates for the principal towns and districts throughout the country can be obtained from the JOURNAL, price 2d. to cover postage.

PRICES

On the following pages appears Prices of Materials—Part 1, with the prices, last published on June 16, brought up to date.

NOTES ON PRICE CHANGES

The majority of carcassing timber prices have fallen by 10/- to £2 per standard.

O. A. DAVIS, P.A.S I.

ANSWERS TO QUESTIONS

A client who has had 2 ft. plywood square laid in his living room objects to the "plip-plop" made by footfalls on them. I have inspected such squares laid on felt, but a slight arching in the centre still seems to occur. Is there any method of pinning such squares firmly, and is it much more costly than other methods?

The usual method used to prevent plywood floors arching in the centre, is to glue the centre to the sub-floor and then fix with panel pins in the ordinary way. This is not costly.

On a job on which I am using electric panel fires it has been suggested that the provision of gas flues would be an additional attraction to a purchaser. As cost is particularly important, I should be grateful if your costs expert could let me know the probable additional cost of providing three such flues complete with capping in £1,000 house.

It would have been more helpful if you had let me know whether the fireplaces were required on the Ground or the First Floor, instead of letting me know the cost of the house, which does not have much bearing on the subject. It would also be useful to know whether the house has a flat or a pitched roof, so that some idea of the length of the flue could be gauged. The cost of a gas flue to a fireplace on the Ground Floor of a building with normal room heights and a flat roof, would cost approximately £1 15s. 0d., and a similar flue commencing at First Floor level would cost approximately £1 2s. 6d. If any of the flues are back to back so that a double flue block may be used, the result would be cheaper than if three separate flues w ere required.

I should be glad if you could let me know the approximate cost of asbestos cement corrugated sheeting laid complete on light steel trusses and purlins. The span is about 20 ft. and the job is about 10 miles from Cambridge.

The approximate cost of Asbestos Cement Corrugated Sheeting, exclusive of the light steel trusses and purlins would be £2 10s. per square. You should be able to obtain stock pattern roof trusses with a set of purlins and have them erected and painted complete for approximately £6 0s. 0d. each.

The complete series of prices will consist 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.

★ ***The previous complete Supplement is contained in the issues of the JOURNAL for June 16, June 23, June 30 and July 7.***

Prices vary according to quality and the quantity ordered.

Those given below are average market prices and include delivery in the London area, except where otherwise stated, but do not include overhead charges and profit.

PART 1

CURRENT MARKET PRICES OF MATERIALS—I

BY DAVIS AND BELFIELD, P.A.S.I.

CONCRETOR

Cements

All delivered in paper bags (20 to the ton) free and non-returnable.

	4 Tons and over
Portland	per ton 42/–
Rapid hardening	per ton 48/–
Water repellent	per ton 72/–
Atlas White (1 barrel 376 lbs.)	per barrel 44/–

	1 ton upwards
Colorcrete rapid hardening, Nos. 1 and 2	per ton 69/–
Colorcrete non rapid hardening	per ton 140/– to 300/–
Snowcrete	per ton 175/–

	1–10 cwts.	11–15 cwts.	16–20 cwts.	1 ton and upwards
Ciment Fondu, delivered Central London area	per cwt. 7/9	7/3	6/–	6/–

Aggregate and Sands (Full Loads)

2″ Unscreened ballast	per yard cube 6/–
¾″ (Down) Washed, crushed and graded shingle	per yard cube 6/2
¾″ (Down) Ditto	per yard cube 7/6
2″ Broken brick	per yard cube 10/6
¾″ Ditto	per yard cube 11/9
Washed pan breeze	per yard cube 5/3
Coke breeze 1″ to dust	per yard cube 13/6
$\frac{3}{16}$″ Sharp washed sand	per yard cube 8/3
White Silver Sand for white cement (one ton lots)	per ton 25/–

(For Sands for Bricklaying and Plastering see respective trades)

Pavings

Brick hardcore	per yard cube 2/9
Concrete ditto	per yard cube 3/9
Clean furnace clinker and boiler ashes	per yard cube 3/6
Coarse gravel for paths	per yard cube 6/9
Fine ditto	per yard cube 9/6
Clean granite chippings	per ton 18/6
Red quarry tiles, 6″ × 6″ × $\frac{7}{8}$″	per yard super 6/–
Buff ditto, 6″ × 6″ × $\frac{7}{8}$″	per yard super 6/6
Hard red paving bricks	per 1,000 150/–

Reinforcement

Basis price for mild steel rods, $\frac{5}{8}$″ diameter and upwards, from London stocks	per ton £15 0 0
Extras for :—	
$\frac{3}{16}$″ and ½″ diameter	per ton 10/–
$\frac{7}{16}$″ diameter	per ton 15/–
⅝″ diameter	per ton 20/–
$\frac{9}{16}$″ diameter	per ton 30/–
¼″ diameter	per ton 40/–
$\frac{3}{16}$″ diameter	per ton 60/–
Lengths of 40 ft. to 45 ft.	per ton 10/–
Lengths of 45 ft. to 50 ft.	per ton 15/–

CONCRETOR—(*continued*)

Sundries

Retarding liquid, in 5-gallon drums (for exposing aggregate)	per gallon 20/–	Ex Warehouse, Southwark Bridge. Drums chargeable and credited, if returned.
Ditto. (for obtaining a bond)	per gallon 12/6	

BRICKLAYER

Common Bricks

Rough stocks	per 1,000 69/6
Third stocks	per 1,000 54/6
Mild stocks	per 1,000 71/6
Sand limes	per 1,000 50/–
* Phorpres pressed Flettons	per 1,000 46/3
* Phorpres keyed Flettons	per 1,000 48/3
Blue Staffordshire wirecuts	per 1,000 165/–
Lingfield engineering wirecuts	per 1,000 95/–
Breeze fixing bricks	per 1,000 57/6
Firebricks, best Stourbridge 2½″	per 1,000 155/–
Firebricks, best Stourbridge 3″	per 1,000 190/–

* At King's Cross. For delivery in W.C. district add 4/3 per 1,000.

Facing and Engineering Bricks

Sand Limes, No. 1	per 1,000 85/–
Sand Limes, No. 2	per 1,000 70/–
*Phorpres rustic Flettons	per 1,000 66/3
Midhurst Whites	per 1,000 75/–
Hard stocks, firsts	per 1,000 97/–
Hard stocks, seconds	per 1,000 89/–
Sand-faced, hand-made reds	per 1,000 from 115/–
Sand-faced, machine-made reds	per 1,000 from 110/–
Red rubbers (9¾-in.)	per 1,000 300/–
Hunziker (white)	per 1,000 67/6
Hunziker (creams, light greys, etc.)	per 1,000 from 100/–
Dunbricks (concrete), multi reds, ex works	per 1,000 72/–
Dunbricks (concrete), multi lavender, ex works	per 1,000 75/–
Southwater engineering No. 1 (first quality red pressed)	per 1,000 145/–
Southwater engineering No. 2 (second quality red pressed)	per 1,000 125/–
Blue pressed	per 1,000 174/–

* At King's Cross. For delivery in W.C. district add 4/3 per 1,000.
Discount if accompanied by order for pressed 2/– per 1,000.

CURRENT PRICES

BY DAVIS AND BELFIELD, P.A.S.I

BRICKLAYER AND DRAINLAYER

BRICKLAYER—(*continued*)

White, Salt and Coloured Glazed Bricks (9″×4½″×2⅞″)

The following prices are subject to 2½ per cent. trade discount and 2½ per cent. cash discount, and include delivery to any railway station (minimum 4-ton loads). Add 10/– per 1,000 for delivery in London area.

Prices per 1,000	White, Ivory and Salt Glazed		Buff, Cream and Bronze	Other Colours	All Colours
	Best	Seconds	Best	Best	Seconds
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Stretcher, glazed one side ..	24 0 0	22 0 0	26 0 0	29 10 0	23 0 0
Header, glazed one end	23 10 0	21 10 0	25 10 0	29 0 0	22 10 0
Double stretcher, glazed two sides	32 10 0	30 10 0	34 10 0	38 0 0	31 10 0
Double header, glazed two ends	29 10 0	27 10 0	31 10 0	35 0 0	28 10 0
Quoin, glazed one side and one end	30 10 0	28 10 0	32 10 0	36 0 0	29 10 0

Limes and Sand

		1-ton lots	6-ton lots
Lime, greystone	per ton	43/–	37/6
Lime, chalk	per ton	43/–	37/6
Lime, blue Lias (including paper bags)	per ton	47/–	42/6
Lime, hydrated (including paper bags)	per ton	47/–	42/6
Washed pit sand	per yard cube		7/9

(For cements, *see* "Concretor.")

Hire of jute sacks charged at 1/6 and credited at 1/6. If left, charged at 1/9.

Sundries

Wall ties, self coloured	per cwt.	19/–
Wall ties, galvanized	per cwt.	24/6
Hoop iron, black	per cwt.	25/–
D.P.C. slates, size 18″×9″	per 1,000	157/6
D.P.C. slates, size 14″×4½″	per 1,000	61/3
*Ledkore D.P.C. Grade A	per foot super	5d.
*Ledkore D.P.C. Grade B	per foot super	6½d.
*Ledkore D.P.C. Grade C	per foot super	8d.

* Trade discount 5 per cent. and cash discount 5 per cent. Prices include delivery on minimum of £4 orders.

	9″×3″	9″×6″	9″×9″	12″×9″	14″×9″
Earthenware airbricks: red, blue, vitrified and buff terra cotta each	–/8	1/4	2/4	4/–	6/8
	9″×3″	9″×6″	9″×9″	12″×6″	12″×9″
Black cast iron, School Board pattern airbricks per doz.	3/–	5/6	11/–	11/–	20/–
Galvanized ditto per doz.	5/6	11/–	22/–	22/–	40/–
Black hit and miss cast iron ventilators per doz.	12/–	15/–	21/–	21/–	36/–
Galvanized ditto per doz.	24/–	30/–	42/–	42/–	72/–

	1′ 0″	1′ 6″	2′ 0″	2′ 6″	3′ 6″	5′ 0″
Buff terra cotta chimney pots .. .. each	2/6	3/–	4/4	5/9	13/4	22/6
Fireclay .. per cwt.	4/–					

Wall reinforcement supplied in standard rolls containing 25 yards lin.
2″ wide black japanned per roll 2/1
2″ wide galvanized .. per roll 3/2
2½″ wide black japanned per roll 2/7½
2½″ wide galvanized per roll 3/10½
} Greater widths pro rata 2½″ price carriage paid on orders of £5. Discounts for quantities.

Partitions

		2″	2½″	3″	4″
Breeze ..	per yard super	1/3½	1/5½	1/8	2/3
Clay tiles ..	per yard super	2/3	2/6	2/9	3/1
Pumice ..	per yard super	2/8	3/–	3/6	4/–
Plaster ..	per yard super	2/3	2/9	3/3	4/–

BRICKLAYER—(*continued*)

Shepwood Partition Bricks size 9″ × 2⅞″ and 2½″ on bed. Terms, as for Glazed Bricks

Prices per 1,000 except where stated per brick	White, Ivory and Salt Glazed		Buff, Cream and Bronze	Other Colours	All Colours
	Best	Seconds	Best	Best	Seconds
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Double stretcher, glazed two sides	32 10 0	30 10 0	34 10 0	38 0 0	31 10 0
Single stretcher, glazed one side	24 0 0	22 0 0	26 0 0	29 10 0	23 0 0
	Each	Each	Each	Each	Each
Round end glazed two sides and one end ..	–/10½	–/10	1/0½	1/0½	–/10½

Gas Flue Blocks

		Single Flues	Double Flues
Straight blocks	each	1/1	1/11
Building in set	Per set of 3	2/8	4/10
Cover blocks	each	1/5	3/–
Raking blocks 45°	each	2/9	3/11
Raking blocks 60°	each	1/11	2/10
Offset blocks	each	3/4	4/10
Closer blocks	each	1/1	1/11
Closer flashing blocks	each	1/–	1/8
Straight flashing blocks	each	1/–	1/8
Terminal and cap	per set	6/9	11/6
Middle terminal and cap	per set	6/3	10/9
End terminal and cap	per set	6/6	11/3
Corbel block	each	4/10	3/2
Gathering block	each	—	9/8

DRAINLAYER

Agricultural Pipes

		2″	3″	4″	6″
Pipes in 12″ lengths ..	per 1,000	67/6	92/6	120/–	210/–

(Delivered in full loads Central London Area.)

Salt Glazed Stoneware Pipes and Fittings

		4″	6″	9″
Pipes (2′ lengths)	each	1/8	2/6	4/6
Bends, ordinary	each	2/6	3/9	6/9
Single Junctions, 2′ long	each	3/4	5/–	9/–
Yard Gulley, without grating ..	each	6/3	6/10½	11/3
Ordinary 6″ × 6″ Grating, painted ..	each	–/7½	1/3	2/6
Ordinary 6″ × 6″ Grating, galvanized	each	1/0½	2/1	4/4½
Extra for Inlets, horizontal	each	1/6	1/6	1/6
Extra for Inlets, vertical	each	2/3	2/3	2/3
Intercepting Trap with Stanford Stopper	each	17/6	22/6	37/6
Grease and mud interceptor with bucket for removing silt and grease for 6″, 9″ and 12″ drains, with iron grating, painted	each	20/–		
Ditto, with iron grating galvanized	each	21/10½		

The above prices to be varied by the following percentages for the different qualities given. All subject to 2½ per cent. cash discount.

	British Standard	British Standard Tested
Orders for 2 tons and over	Less 20%	Plus 5%
Orders under 2 tons, 100 pieces upwards	Less 2½%	Plus 22½%
Orders under 2 tons, less than 100 pieces	Plus 7½%	Plus 32½%

	Best	Seconds
Orders for 2 tons and over	Less 27½%	Subject to 15% off the price of best quality for all sizes
Orders under 2 tons, 100 pieces upwards	Less 10%	
Orders under 2 tons, less than 100 pieces	Nett	

CURRENT PRICES

BY DAVIS AND BELFIELD, P.A.S.I.

DRAIN-LAYER AND MASON

DRAINLAYER—(*continued*)

Cast Iron Drain Pipes and Fittings

Socket and Spigot Pipes :— Weight (per 9 ft.)	Size.	9 fts.	6 fts.	4 fts.	3 fts.
				each	each
1 . 1 . 8	4″ per yard ..	6/6	7/3	11/7	8/9
1 . 1 . 20	4″ per yard ..	6/9	7/5	11/10	9/–
2 . 0 . 6	6″ per yard ..	10/–	11/11	19/3	15/4
4 . 0 . 2	9″ per yard ..	18/2	23/9	41/3	31/5

Socket and Spigot Pipes :— Weight (per 9 ft.)	Size.	2 fts.	18 ins.	12 ins.	9 ins.
1 . 1 . 8	4″ each	7/3	6/6	5/8	5/2
1 . 1 . 20	4″ each	7/4	—	—	—
2 . 0 . 6	6″ each	11/6	—	—	—
4 . 0 . 2	9″ each	—	—	—	—

Tonnage Allowances :
Orders up to 2 tons nett.
Orders 2 to 4 tons less 2½%
Orders 4 tons or over less 5%

		4″	6″	9″
Bends	each	6/3	12/10	40/7½
Single junctions	each	11/–	22/–	70/11
Intercepting traps	each	37/6	48/3	137/6
Gulleys ordinary trapped ..	each	15/–	—	—
Extra for inlet 4″	each	4/3	—	—
Grease Gulley trap	each	117/6	—	—
H.M.O.W. large socket gulley trap with 9″ gulley top and heavy grating and one back inlet ..	each	23/9	42/9	—

Cast Iron Inspection Chambers

	The larger figures below refer to the main pipes and the smaller figures to the branches			
	4″×4″	6″×4″	6″×6″	9″×6″
Straight chambers with two branches one side .. each	56/3	66/10	78/9	153/9
Straight chambers with three branches in all .. each	66/3	76/10	91/3	166/3
Straight chambers with four branches in all .. each	76/3	87/10	103/9	178/9
Straight chambers with three branches one side .. each	71/3	88/9	101/3	—
Straight chambers with four branches in all .. each	81/3	98/9	113/9	—
Straight chambers with five branches in all .. each	91/3	108/9	126/3	—
Straight chambers with six branches in all .. each	101/3	118/9	138/9	—
Straight chambers with four branches one side .. each	93/9	111/3	133/9	—
Straight chambers with five branches in all .. each	103/9	108/9	146/3	—
Straight chambers with six branches in all .. each	113/9	131/3	158/9	—
Straight chambers with seven branches in all .. each	123/9	141/3	171/3	—
Straight chambers with eight branches in all .. each	133/9	151/3	183/9	—

The branches to the above are at 135°

		4″	6″
Extra for branches between 135° and 180°	each	7/6	7/6
Extra for branches between 90° and 135° other than standard angles	each	6/3	6/3

	4″×4″	6″×4″	6″×6″
Curved chambers, no branch 90°–112½° each	26/10	—	38/2
Curved chambers, no branch 135° each	26/10	—	38/2
Curved chambers, one branch 135° each	33/9	48/9	55/–
Curved chambers, two branches 135° each	40/8	65/8	76/3

Channels in White Glazed Ware (Unselected Quality)

		4″	6″	9″
Half round straight channels, 6″ long	each	2/4	3/2	5/3
Half round straight channels, 12″ long	each	3/3	4/5	6/11
Half round straight channels, 18″ long	each	4/–	5/3	8/5
Half round straight channels, 24″ long	each	4/8	6/4	10/6
Half round straight channels, 30″ long	each	5/10	7/11	13/2
Half round straight channels, 36″ long	each	7/–	9/6	15/9
Half round ordinary or long channel bends	each	8/5	12/11	21/–
Half round ordinary or short channel bends	each	6/–	8/5	—
Three-quarter round ordinary branch bends	each	8/1	11/8	—
Three-quarter round ordinary branch bends, midgets	each	7/3	—	—

		6″×4″	9″×6″
Half round taper channels 24″ long ..	each	7/10	11/3
Half round taper channel bends ..	each	10/3	17/9

These prices are subject to 20% discount.

DRAINLAYER—(*continued*)

Channels in Brown Glazed Ware

		4″	6″	9″
Half round straight channels 24″ long ..	each	1/3	1/10½	3/4½
Half round straight channels 30″ long ..	each	—	—	4/2½
Ditto, short lengths	each	1/3	1/10½	—
Half round ordinary channel bends ..	each	1/10½	2/9½	5/0½
Ditto, short	each	1/10½	2/9½	—
Ditto, long	each	3/9	5/7½	10/1½
Three-quarter round branch bends ..	each	5/–	7/6	—

		6″×4″	9″×6″
Half round taper channels 24″ long ..	each	3/9	6/9
Half round taper channel bends ..	each	4/8½	8/5½

The above prices are subject to the same discounts as those given for "Best" quality salt glazed stoneware pipes.

Manhole Covers

	Black	Galvanized
24″ × 18″ single seal for foot traffic. (Weight 0.3.0 in lots of 24) .. .. .. each	12/–	23/3
24″× 18″ single seal for light car traffic. (Weight 2 cwt. in lots of 24) .. each	35/–	61/6
24″×18″ Wood Block pattern. For road traffic. (Weight 3 cwts.) .. .. .. each	Coated 55/9	

	Fine Cast	Galv.
Cast step irons, 13½″ long, 6″ wide, 9″ in wall, approximate weight 5½ lbs. each per dozen	12/6	20/6

	4″	6″
Galvanized fresh air inlets, with cast brass fronts (L.C.C. pattern) .. .. each	5/6	20/3

MASON

Yorkstone

Building quality Robin Hood and Woodkirk Blue Stone.

Blocks scrappled, random sizes .. .. per foot cube	4/6
Add for blocks to dimension sizes .. .. per foot cube 6d. (each dimension)	
Templates with sawn beds, edges rough (up to 4 ft. super and not over 2′ 6″ long) .. .. .. per foot cube	5/–
Templates with sawn beds, sawn one edge per foot cube	6/–
Templates with sawn beds, sawn two edges per foot cube	7/–
Prices f.o.r. Yorkshire, railway rate to London Station per ton. (Minimum 6-ton loads.)	18/3

Ancaster Stone

Freestone, random blocks .. .. .. per foot cube	3/6
Brown weather bed stone selected for polishing all brown blocks .. .. per foot cube	8/–
Brown and blue weather bed stone selected for polishing .. .. per foot cube	7/–

Prices f.o.r. Ancaster, railway rate to London Station approximately 11½d. per foot cube (minimum 6-ton loads).

Bath Stone

Random blocks, delivered railway trucks, Paddington or South Lambeth .. .. per foot cube	2/10½

Portland Stone

Whitbed, in random blocks of 20 feet cube average, delivered railway trucks Nine Elms, South Lambeth or Paddington .. .. per foot cube	4/5
Basebed—add to the above .. .. per foot cube	–/3
For every foot over 20 ft. cube average—add per foot cube	–/1
For every foot over 30 ft. cube average—add per foot cube	–/0½

¾″ Thick Plain Marble Wall Linings

Roman Travertine .. .. per foot super	5/–
Golden Travertine .. .. per foot super	6/3
Roman stone .. .. per foot super	4/6
Hopton-wood stone .. .. per foot super	5/–
Second statuary .. .. per foot super	4/6
Sicilian .. .. per foot super	4/–

Artificial Stone

6″×3″	Copings and sills	per foot run	1/6
6″×6″	Copings and sills	per foot run	2/4
9″×3″	Copings and sills	per foot run	2/–
9″×6″	Copings and sills	per foot run	3/4
12″×3″	Copings and sills	per foot run	2/4
12″×6″	Copings and sills	per foot run	3/9

Cornices according to detail, per foot cube (from) 6/9

CURRENT PRICES

BY DAVIS AND BELFIELD, P.A.S.I.

MASON, SLATER, TILER AND ROOFER, AND CARPENTER

MASON—(*continued*)

Reconstructed Stone to match Natural Stone

Sills, lintols, coping, cornices, ashlar, etc., average size	per foot cube	11/-
Window sills, 9″×3″ section	per foot run	2/1
,, ,, 7″×3″ section	per foot run	2/-

Slate Slabs, cut to size and Planed

	1″	1½″	1½″
Not exceeding 4′ 6″ long or 2′ 3″ wide per foot super	3/1	3/4	3/11
,, ,, 6′ 6″ long or 3′ 3″ wide per foot super	3/9	4/1	4/10
Exceeding 6′ 6″ long or 3′ 3″ wide per foot super	4/1	4/6	5/2
Rubbed faces .. .. per foot super	-/5	-/5	-/6
,, edges .. .. .. per foot run	-/4	-/4	-/5

Combined Slate Cills and Window Boards for Metal Windows

Straight Cills: Window Width	Wall thickness 9″	11″	13½″	Circular Cills for C.O.P. Frames: Radius	External reveals 2″	4½″
1′ 8″ ..	4/-	4/8	5/8	2′ 4½″ ..	21/-	24/-
3′ 3½″ ..	7/4	8/7	10/4	2′ 7½″ ..	25/6	28/6
4′ 10½″ ..	10/6	12/3	14/10	2′ 10½″ ..	30/-	33/3

SLATER, TILER AND ROOFER

Best Bangor Slates

		£	s.	d.
24″×12″	per 1,000 actual	33	6	6
22″×12″	per 1,000 actual	27	19	0
22″×11″	per 1,000 actual	25	4	9
20″×12″	per 1,000 actual	24	14	6
20″×10″	per 1,000 actual	21	15	5
18″×12″	per 1,000 actual	20	19	3
18″×10″	per 1,000 actual	17	4	0
18″×9″	per 1,000 actual	15	11	9
16″×12″	per 1,000 actual	17	14	9
16″×10″	per 1,000 actual	15	11	9
16″×9″	per 1,000 actual	13	19	6
16″×8″	per 1,000 actual	12	1	11

Prices include for delivery to site in lots of 1,000 and upwards.

Old Delabole Slates (f.o.r.)

Standard sizes.
Prices and computed weights per 1,200.

		20″×12″	16″×10″
Grey medium gradings	per 1,200 cwts.	597/- 46½	366/- 30
Unselected greens (V.M.S.) ..	per 1,200 cwts.	672/- 55½	413/- 36

Random sizes.
Prices per ton and computed covering capacities in squares per ton.

		No. 1 Grading 24″/22″ to 12″/10″
Ordinary grey greens	per ton	128/-
Covering cap.:	per ton (3″ lap)	2·37 squares
	per ton (4″ lap)	2·19 squares
		No. 2 Grading 24″/22″ to 12″/10″
Weathering grey greens (V.M.S.)	per ton	139/-
Covering cap.:	per ton (3″ lap)	2·25 squares
	per ton (4″ lap)	2·08 squares
		No. 2 Grading 24″/22″ to 12″/10″
Weathering greens (V.M.S.) ..	per ton	149/-
Covering cap.:	per ton (3″ lap)	2·25 squares
	per ton (4″ lap)	2·08 squares
		No. 2 Grading 24″/22″ to 12″/10″
Rustic reds (25%) and weathering greens (V.M.S.)	per ton	174/-
Covering cap.:	per ton (3″ lap)	2·25 squares
	per ton (4″ lap)	2·08 squares

Railway rate to Nine Elms, London, minimum 4 tons, 21/9, minimum 6 tons per truck, 18/1 per ton.

Tiles

		£	s.	d.
Hand-made sandfaced 10½″×6½″ red roofing tiles	per 1,000	4	15	0
Machine-made sandfaced 10½″×6½″ red roofing tiles	per 1,000	4	0	0
Berkshire rustic pantiles	per 1,000	18	10	0

SLATER, TILER AND ROOFER—(*continued*)

Westmorland Green Slates

	Bests, 24″ to 12″ long. Proportionate widths. Price per ton	Computed cover in sq. yds. per ton
Random sizes.		
No. 1 Buttermere fine light green ..	240/-	30
No. 2 ,, light green (coarse grained)	215/-	27–28
No. 5 ,, olive green (coarse grained)	197/-	25–27
No. 3 Medium green	197/-	25–26
No. 7 Elterwater fine light green ..	216/-	27–28
No. 15 Tilberthwaite fine light green ..	214/-	26–28
No. 16 ,, light green (coarse grained)	202/-	25–27

Prices include for delivery to any station, minimum 6-ton truck loads.

Asbestos-cement

6″ corrugated sheets, grey	per yard super	2/11		
Standard 3″ corrugated sheets, grey	per yard super	2/7¾		
Slates :—				
15¾″×7⅞″ grey	per 1,000	£6	16	3
15¾″×15¾″ diagonal, grey	per 1,000	£12	18	6
15¾″×15¾″ diagonal, russet or brindled	per 1,000	£16	6	6
Pantiles.				
Large russet brown	per 1,000	£19	8	6

Prices are for minimum two-ton loads.

Cedar Wood Tiles

Canadian cedar wood shingles .. per square 32/- (normal quantity).

Prices include for delivery to nearest railway station in England but vary with quantity.

CARPENTER

Carcassing Timber

Prices are for Standards in one delivery; when less than a standard is required, or special lengths, add £1 per standard.

		Per standard £ s. d.	Per foot cube
*4″ ×11″ Scantling		25 10 0	3/1½
*4″ × 9″ ,, ...		24 10 0	2/11¾
*3″ ×11″ ,, ...		22 10 0	2/8¾
2″ ×11″ ,, ...		23 10 0	2/10¼
3″ × 9″ ,, ...		22 0 0	2/8
2″ × 9″ ,, ...		23 0 0	2/9½
*3″ × 8″ ,, ...		20 10 0	2/6
*2″ × 8″ ,, ...		20 10 0	2/6
*3″ × 7″ ,, ...		20 10 0	2/6
*2″ × 7″ ,, ...		20 5 0	2/5½
4″ × 6″ ,, ...		24 0 0	2/11
*3″ × 6″ ,, ...		21 0 0	2/7½
2″ × 6″ ,, ...		20 0 0	2/5¼
*3″ × 5″ ,, ...		21 0 0	2/6¾
*3″ × 4″ ,, ...		19 10 0	2/4½
*2″ × 5″ ,, ...		19 5 0	2/4
*2″ × 4″ ,, ...		18 10 0	2/3
1½″×11″ ,,	(20 ft. lengths and over)	per ft. run	-/5
1½″×9″ ,,	(20 ft. lengths and over)	per ft. run	-/4
1½″×7″ ,,	(20 ft. lengths and over)	per ft. run	-/2¾

Yellow Deal Battens

¾″×1″	per 100 feet run 1/6
¾″×1½″	per 100 feet run 2/-
*¾″×2″	per 100 feet run 3/-
*1″ ×2″	per 100 feet run 4/3
*1½″×2″	per 100 feet run 5/6

Weather Boarding

Deal :—	
¾″×¼″×6″ Feather edge	per square 11/9
*¾″×¼″×4″ Feather edge	per square 9/-
Western red cedar :—	
1″×6″ Bevel sidings	per square 32/-
11/16″×3/16″×6″ Feather edge	per square 11/9
¾″×¼″×4″ Feather edge	per square 12/6

Roof Boarding

Deal :—	
*¾″×6″	per square 17/-
*1″×6″	per square 22/-

* Items marked thus have fallen since June 16.

TO BE CONTINUED IN NEXT ISSUE