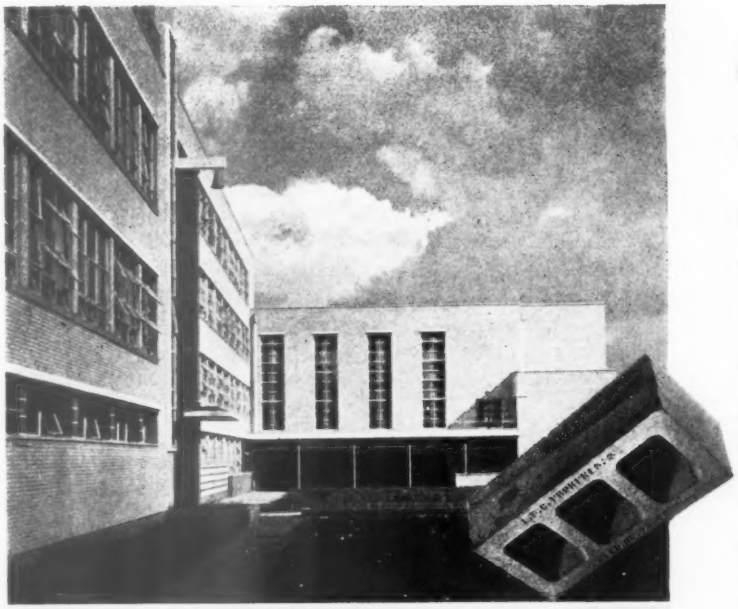
New Burlington Schools, Hammersmith.
Architects : Sir John Burnet, Tait & Lorne, FF.R.I.B.A. Contractors : John Laing & Son.

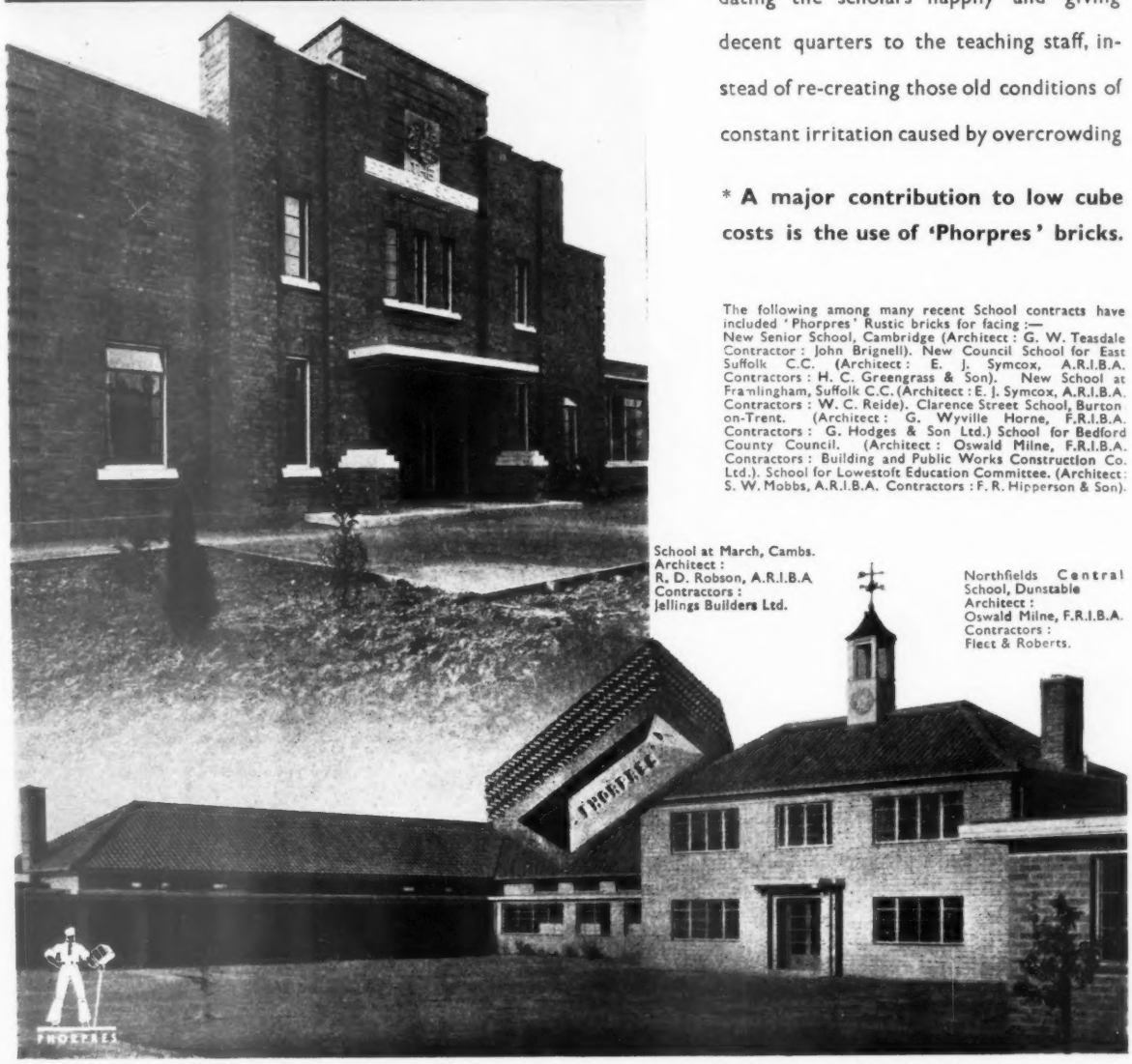


CUBE COSTS v. EDUCATION

Not for many years has so much excellent work been done in the field of school building. A freshness of outlook coupled with a realisation of the economic factors involved have resulted in some cases in figures as low as 11d. per foot cube.* At such moderate cost per cube no authority hesitates to pass plans accommodating the scholars happily and giving decent quarters to the teaching staff, instead of re-creating those old conditions of constant irritation caused by overcrowding

*** A major contribution to low cube costs is the use of 'Phorpres' bricks.**

The following among many recent School contracts have included 'Phorpres' Rustic bricks for facing :— New Senior School, Cambridge (Architect : G. W. Teasdale Contractor : John Brignell). New Council School for East Suffolk C.C. (Architect : E. J. Symcox, A.R.I.B.A. Contractors : H. C. Greengrass & Son). New School at Framlingham, Suffolk C.C. (Architect : E. J. Symcox, A.R.I.B.A. Contractors : W. C. Reide). Clarence Street School, Burton on-Trent. (Architect : G. Wyville Horne, F.R.I.B.A. Contractors : G. Hodges & Son Ltd.) School for Bedford County Council. (Architect : Oswald Milne, F.R.I.B.A. Contractors : Building and Public Works Construction Co. Ltd.). School for Lowestoft Education Committee. (Architect : S. W. Mobbs, A.R.I.B.A. Contractors : F. R. Hipperson & Son).



School at March, Cambs.
Architect :
R. D. Robson, A.R.I.B.A
Contractors :
Jellings Builders Ltd.

Northfields Central School, Dunstable
Architect :
Oswald Milne, F.R.I.B.A.
Contractors :
Flect & Roberts.

PHORPRES

LONDON BRICK COMPANY LIMITED · AFRICA HOUSE . KINGSWAY · W.C.2

THE ARCHITECTS' JOURNAL

THE ARCHITECTS' JOURNAL, WITH WHICH IS INCORPORATED THE BUILDERS' JOURNAL AND THE ARCHITECTURAL ENGINEER, IS PUBLISHED EVERY THURSDAY BY THE ARCHITECTURAL PRESS (PUBLISHERS OF THE ARCHITECTS' JOURNAL, THE ARCHITECTURAL REVIEW, SPECIFICATION, AND WHO'S WHO IN ARCHITECTURE) FROM 9 QUEEN ANNE'S GATE, WESTMINSTER, S.W.1

*

THE ANNUAL SUBSCRIPTION RATES ARE AS FOLLOWS :
BY POST IN THE UNITED KINGDOM £1 3 10
BY POST TO CANADA £1 3 10
BY POST ELSEWHERE ABROAD £1 8 6
SPECIAL COMBINED RATE FOR SUBSCRIBERS TAKING BOTH THE ARCHITECTURAL REVIEW AND THE ARCHITECTS' JOURNAL : INLAND £2 6s. ; ABROAD £2 10s.
SUBSCRIPTIONS MAY BE BOOKED AT ALL NEWSAGENTS

*

SINGLE COPIES, SIXPENCE ; POST FREE, EIGHTPENCE. SPECIAL NUMBERS ARE INCLUDED IN SUBSCRIPTION ; SINGLE COPIES, ONE SHILLING ; POST FREE, 1s. 3D. BACK NUMBERS MORE THAN TWELVE MONTHS OLD (WHEN AVAILABLE), DOUBLE PRICE

*

SUBSCRIBERS CAN HAVE THEIR VOLUMES BOUND COMPLETE WITH INDEX, IN CLOTH CASES, AT A COST OF 10S. EACH. CARRIAGE 1S. EXTRA

*

9 *Queen Anne's Gate, Westminster, London, S.W.1*
TELEPHONE : WHITEHALL 9212-7 (OWN EXCHANGE)
TELEGRAPHIC ADDRESS : BUILDABLE, PARL., LONDON

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.

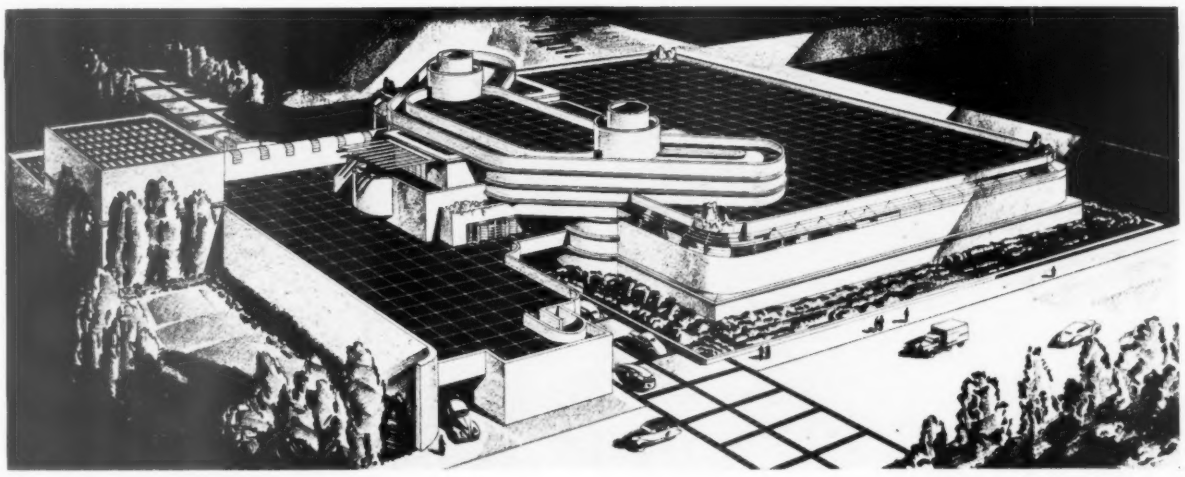
THURSDAY, February 18, 1937. NUMBER 2196 : VOLUME 85

PRINCIPAL CONTENTS

* *The Working Details are temporarily suspended until the conclusion of this series.*

OFFICE BUILDING IN WISCONSIN

DESIGNED BY FRANK LLOYD WRIGHT

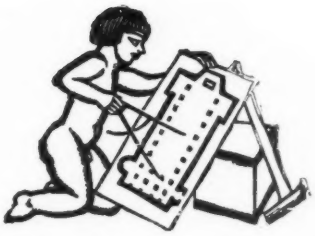


A NEW office building at Racine, Wisconsin, now under construction from the designs of Frank Lloyd Wright. The main unit of the building is a workroom 210 ft. by 130 ft. and 20 ft. high. Offices of departmental chiefs surround this room, and the raised block contains the offices of directors.

The building is framed on a 20 ft. grid, and is faced with brick. Ventilation will be completely mechanical, all windows being sealed, the two "chimneys" shown being the extract and intake stacks. The cost of the building will be about £55,000 or 1s. 2d. a foot cube.

R.I.B.A. EXHIBITION: AIRPORTS AND AIRWAYS

The Port of London, taken from a height of 8,000 feet. The narrow twisting line in the foreground is the River Lea, and to the right are the East India Docks. Greenwich is across the river. This photograph is taken from the Aerial Photography section of the R.I.B.A. Airports and Airways Exhibition, which was opened yesterday by Lord Swinton at 66 Portland Place, W.1. (Photo: "Daily Mirror.")



THE COMMONS TO THE RESCUE

THE House of Commons last Wednesday spent a strenuous evening considering two kinds of preservation, the preservation of the population and the preservation of its surroundings. It was stated that if no radical change took place in the rate of reproduction the population of the country would begin to fall in about three years' time and might thereafter fall by something approaching one quarter in each generation.

The motion to do something about this considerable problem came, however, second on the list.

The first motion, by Mr. Alfred Bossom, dealt with another kind of preservation ; and no one reading the speeches reported in *The Times* could well retain further doubts concerning the perfection with which the House of Commons represents the democracy it rules.

Mr. Bossom's motion contained the word " beauty " and the House was immediately upon its mettle as a lover of the arts. The motion was fortunately calculated not to shock the House by referring to beauty in any unnatural way. To the Englishman beauty means something old and costly in a museum ; something old, and preferably ruinous, out of it ; and the countryside, when untouched for a hundred years (except for purposes of agriculture). What it *never* means is anything created or done during the last 40 years.

The motion, which nicely allowed for these prejudices, ran :—

> That this House deplores the destruction of beauty in town and country and the danger to houses of historic and architectural interest . . . . and is of opinion that the Government should take active steps to ascertain whether its existing powers are adequate . . . .

So adroitly introduced the motion could hardly fail to allow everyone to fulminate richly and enjoyably on very familiar ground, without, as the honourable and gallant member for Nuneaton was coarse enough to say, being in any danger of losing votes by it.

Mr. Bossom is known to be one, perhaps the only one amongst our 615 legislators, who spends a great portion of his time in trying to improve our ways of using our surroundings. He is also a very experienced politician. Perhaps it seemed to him that if the House was allowed to say all the things and make all the gestures of which we have grown so tired, a little progress might be made towards better uses.

At isolated points in the debate this view seemed almost justified. Mr. Bossom himself pointed out that permissive powers involving payment of compensation were useless to poor local authorities and that changes in Carlton House Terrace, Lansdowne House, the Adelphi and elsewhere seemed questionable when London had flat blocks and offices already going begging. Mr. Keeling asked whether it was not time that local authorities were compelled to employ architectural advisers, and said that £100,000 a year was refused for National Parks, but £400,000 a year was spent on London museums.

Lieut.-Com. Fletcher went further and brought an appropriately breezy plain-speaking into the debate :

> The University buildings at Oxford had become an anachronism on the face of an eyesore (laughter). . . London's individuality was disappearing. The artist was not allowed to function, the engineer had been turned loose to do his splendid worst. (Hear, hear.) They were up against Government apathy and the strongest emotions in human nature—greed, graft, selfishness, and love of money. The Government would do nothing because there were no votes in this. The Prime Minister had told them that they could win a general election on double-crossing, but they could not win a general election on æstheticism. (Laughter and cheers.) Until there were votes in it beauty was fated to go uncherished by politicians, although, as self-preservation was the first law of nature, he would have expected certain members of the Government to take a livelier interest in the preservation of ancient monuments. (Laughter.)
>
> He attached great importance to the education of children in the schools in a sense of beauty.

This spirited plain-speaking resulted in the Government accepting the motion, but save for a very passing reference to buildings being properly designed, the Government agreed with the universal defeatism. The Office of Works, National Trust, voluntary societies educating public opinion—all were to be mobilized to preserve. Old buildings, ruinous or habitable, the countryside, the coasts, everything that a highly industrialized civilization had not yet touched would, one felt, soon be scheduled as sacrosanct and for ever inalterable by those who are merely alive and want to earn a livelihood and better their living conditions. Solemnly, with a genuine feeling that they were apostles of light in a dark world, the members of the Commons confessed that whatever the inhabitants of Britain did to their surroundings was bound to be for the worse.

The really tragic part of this self-condemnation is not in its general justification, but that it can never be anything else than justified until the attitude of mind shown by the House during the debate is entirely changed. There may be buildings in this country that we want always to keep; it may seem foolish to pull down some others and to replace them when our population is about to fall. But these foolishnesses are nothing to the splendid lunacy of imagining that universal preservation can change the bad use of our land surface; and the strange perversion of being thoroughly ashamed of the way we earn our living.

The Commons talked loudly last Wednesday of the beauty of the Lakes and the stone-built Cotswold cottage. No one mentioned collieries or factories, docks, warehouses or city shops. And no politician saw that until we are proud of what we do and where we live every day, and can distinguish between good and bad in these things, we will not care very much what anyone else does away from them.

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

NOTES & TOPICS

R.I.B.A. JUNIOR MEMBERS' COMMITTEE

IT is a pity that some of the Informal Discussion Meetings arranged by the Junior Members' Committee at the R.I.B.A. have not been better attended. On Wednesday, for instance, there was rather a thin house to hear Mr. J. D. Bernal on "Architects and Scientists." This was unfortunate.

*

Mr. Bernal is lecturer on crystallography at Cambridge, a subject which may seem, perhaps, a trifle *recherché*, but his address was one of the most stimulating things of its kind that I have heard for a long time. His fine mixture of hard logic and almost reckless prophecy reminded me of the early H. G. Wells or J. B. S. Haldane.

*

Architects, it seems, have scarcely begun to realise the existence of scientists; stresses, strains, geology and a few statistics about slums, is about the sum total, so far, of co-operation between them. Mr. Bernal went much further than this. A material which is stronger than cork, far, far lighter and quite fireproof—a sort of aerated silica—could be produced to-morrow; with the result that, like snails, we could carry our houses on our backs.

*

Anyhow, why houses at all? The whole of London could, it seems, be roofed in by the scientists. The plans of the future may read "City, divided to tenants' requirements." That, I feel, is the logical conclusion of the modern movement.

GAS-PROOF-AS-POSSIBLE ROOMS

In the meantime, there are a good many things of more immediate concern with which the scientists might help. The present position over air-raid precautions, for instance, seems to be extraordinarily disturbing. The exhibition at Kensington Town Hall shows a number of what *The Times* gaily refers to as "simple devices" whereby one may make "one's own home as proof as possible against gas."

*

Is this farce of paper tape and blankets over doors and windows a scheme to inspire confidence—or boost recruiting—or what? In any case, when it comes to suggestions for actual buildings, the ideas put forward are equally unconvincing. I, for one, should hardly feel inclined to advise my clients to spend money on thick concrete roofs, etc., without being in possession of a great deal more scientific data than is at present available.

FINANCIAL NEWS

I once asked a man in the world of flat block promoting why Mr. T. P. Bennett got so much work. "Because his flats let" replied my expert.

*

A little put out by the reflection on other architects, and even on myself, which seemed to lurk behind such terseness, I enquired further; and found that one of Mr. Bennett's secrets was the avoidance of internal courts and obviously "inferior" aspects; thus allowing every tenant to feel that he had a key position for his particular nook.

FINANCIAL QUESTION

This seems to show such a sound grounding in psychology that here and now I ask Mr. Bennett a question which I hope he will answer on Monday next, when he talks to the R.I.B.A. on "Building Finance." It is the question I asked last week: Why are business men still putting money into "luxury" flat building?

*

To me, and to others, it seems that the number of flats, new and converted, which are now available in Greater London at rents from £200 and upwards must be closely approaching the number of residents with incomes of over £700. If this is so, are existing flat blocks half empty; and why build more? If not, where are all the tenants coming from?

SPECTACULAR AFFECTION

"Designed as a gesture of affection and loyalty to the Throne, the Golden Hall of Homage will transform the familiar grand hall at Olympia, with its vast roof span 200 ft. wide at a height almost that of the Nelson Column, into a majestic scene."

*

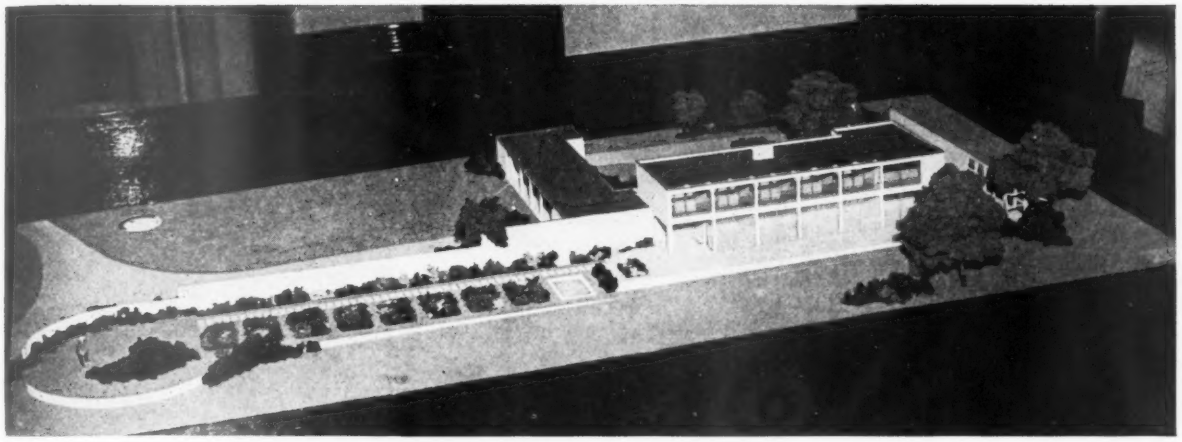
Thus the advance publicity for the Ideal Home Exhibition, March 30–April 24.

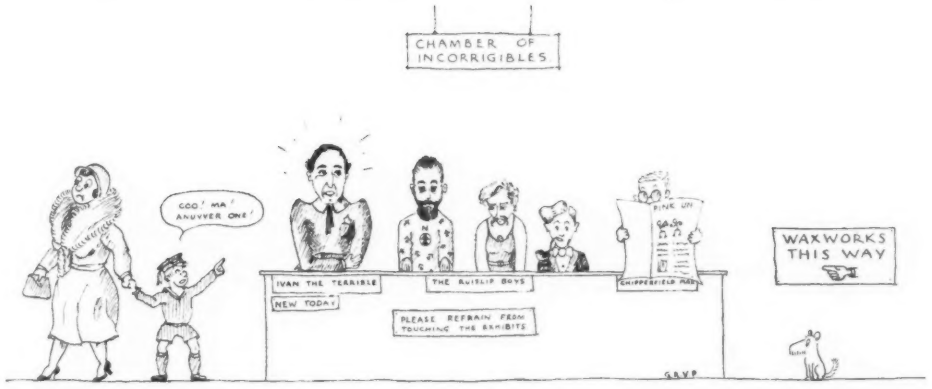
*

Guess what the main theme is this year? Yes! The "focal point of the Golden Hall will be a statue of King George VI—more than 15 ft. in height—the first imposing royal statue of the reign." Modelled by Sir William Reid Dick, K.C.V.O., R.A., the statue shows His Majesty wearing the robes of the Garter and, again quoting from the advance publicity, "lightly yet firmly holding the sceptre."

*

After this, the rest of the show may be a bit of an anti-climax, but there is, none the less, a series of "Look-your-Best" rooms—"rooms for lovelies, for blonde and goldilocks, Titian and red-head, brunette and silver-haired . . .





Above: a photograph of the model of the house, designed by Serge Chermayeff for his own occupation, proposed to be erected at Halland, near Uckfield. The Uckfield Council has rejected the design; an appeal has been lodged with the Ministry of Health; the drawing on the right shows the incorrigibles' room at an architectural Madame Tussaud's. The drawing is by G. R. V. Powell.

rooms with a personality in which the owner will always look and feel at her best, for each is to be created to flatter a special type of beauty."

*

CORONATION

Mr. Gordon Selfridge's scheme for decorations has been kept very secret, but I understand that each of his windows is to be adorned by an 8-foot wide Dove of Peace—significantly, perhaps, of plaster. The clock is to be hidden by a large symbolic group designed (again) by Mr. Reid Dick, in the real Bernard Partridge tradition. This was to be expected.

*

The exact composition of the group was a little obscure in the sketch. I suspect the central figure of being Britannia, but whether the other figures were the retail traders' association or, following up the dove idea, merely the non-intervention committee, I was unable to discover. However, the whole thing is to cost £35,000.

CONSERVATIVE PROGRESS

About a year ago a pamphlet called "A Ten-Year Plan for Schools" was published by a group of the more progressive M.P.s. Its chief features were the statement that 80 per cent. of our schools were unsatisfactory and the suggestion that £4,000,000 spent during ten years on new buildings, and especially on nursery schools, might in time pay a handsome dividend.

*

On Monday night this modest scheme for spending half one battleship, which had seemed lost to sight under crises and re-armament, was taken a little further.

*

The first two sections of the M.A.R.S. exhibit at Olympia were re-arranged in Lord and Lady Astor's dining-room at St. James's Square by Messrs. Samuel and Harding; and Dame Edith Lyttelton and Mr. Julian Huxley tried to interest a distinguished bag of guests.

*

One can only hope that Lady Astor's well-known determination will bring results. The visitors on Monday, received by Princess Alice, had the idea put tersely to them by words, drawings and models. Their conversion, joined to the *News Chronicle's* present competition, would bring good schools just a little nearer their building.

AIR MINISTRY

I referred the other week to the honour which had been conferred on Mr. Lewis Dale of the Air Ministry, and now a correspondent reminds me that Mr. Dale is an engineer and that such architects as the Ministry may employ are well accustomed to being treated as the cinderellas of bureaucracy.

*

Though the Air Ministry is about to launch out upon a vast building programme you won't be surprised to hear that the only qualified architect on its staff is placed very near the bottom of the official list, well below the Stores and Accounts Officers.

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

REGISTRATION BILL

The Architects' Registration Bill passed through the Committee Stage in the House of Lords on Tuesday last, without amendment.

DINNER TO PROF. GROPIUS

The following letter appeared in last Monday's *Times* :—

SIR,—The appointment of Professor Walter Gropius to the Graduate Chair of Architecture in Harvard University has already been announced in your columns. Professor Gropius has been a resident in this country for the last three years and it was the confident hope of many people that we were to have the benefit of his outstanding talents for many years to come. In this we have been disappointed. But in his brief stay among us Professor Gropius has already strengthened his great reputation on a basis of friendship and personal inspiration, and before he leaves us for the important post to which he has been called it has seemed fitting to us that some public recognition should be given of our appreciation of his services to modern architecture.

For this purpose it is proposed to give a dinner in his honour on Tuesday, March 9, and those interested in the proposal and desirous of being present are invited to communicate with the secretary of the organizing committee, Mr. E. J. Carter, 66 Portland Place, W.1. As the accommodation will be strictly limited it is advisable that immediate application should be made.

Yours faithfully,

PATRICK ABERCROMBIE, W. G. CONSTABLE, CHARLES HOLDEN, IAN MACALISTER, HERBERT READ.

66 Portland Place, W.1.
February 12.

Final arrangements for this dinner have now been made and the following additional information is available :—

The dinner will take place (on the date announced above) at the Trocadero Restaurant. Professor Julian Huxley will be in the chair and the cost will be 25s. (including wines) for each ticket. The Committee which is organizing the dinner is asking for the earliest possible application for tickets, on grounds of limitation of space. People applying for tickets are asked to state whether they will be accompanied by a lady or a gentleman.

The only announcement of the dinner is that being made through the press, though a few notices are being sent independently to people who it is expected would be especially interested.

THE ARCHITECTS' DIARY

Thursday, February 18

ROYAL ACADEMY, *Burlington House, W.1. Exhibition of British Architecture. Until March 6, 10 a.m. to 6 p.m. (Thursdays, 10 a.m. to 8 p.m.).*

ELECTRIC ILLUMINATION EXHIBITION. *At the Science Museum, South Kensington, S.W. Until April 25. Weekdays, 10 a.m. to 6 p.m. Sundays, 2.30 to 6 p.m.*

BRITISH INDUSTRIES FAIR. *London and Birmingham. Until February 26.*

SOCIETY OF ANTIQUARIES, *Burlington House, W.1.* "*Developments in the Pre-history of Anatolia.*" *By Winifred Lamb. 8.30 p.m.*

INSTITUTION OF STRUCTURAL ENGINEERS, *Yorkshire Branch. At the Hotel Metropole, Leeds.* "*Timber in Structural Engineering.*" *By E. H. B. Boulton. 7 p.m.*

ROYAL SANITARY INSTITUTE, 90 *Buckingham Palace Road, S.W.1. Discussion on* "*The House as a Home: Design, Construction and Equipment as they affect Comfort.*" *To be opened by H. A. Faucett, P. T. Harrison and H. H. Clay.*

JUNIOR TECHNICAL SCHOOLS EXHIBITION. *At the County Hall, S.E. An exhibition of the work of Junior Technical Schools for boys and girls, maintained and aided by the L.C.C. Until February 20.*

WORSHIPFUL COMPANY OF CARPENTERS. *Dinner to be held at Carpenters' Hall, Throgmorton Avenue, E.C.2. 6.30 for 7 p.m.*

Friday, February 19

R.I.B.A., 66 *Portland Place, W.1. Exhibition: Airports and Airways, to be opened at 3 p.m. by Viscount Swinton. Until March 24th. 10 a.m. to 8 p.m. (Saturdays, 10 a.m. to 5 p.m.).*

Saturday, February 20

LONDON SOCIETY. *Visit to the Royal College of Physicians, No. 12, Pall Mall East, S.W.1. 2.30 p.m.*

Monday, February 22

R.I.B.A., 66 *Portland Place, W.1.* "*Building Finance and Architecture.*" *By T. P. Bennett. 8 p.m.*

LONDON SOCIETY. *Visit to the Pioneer Health Centre, St. Mary's Road, Peckham, S.E.15. 2.30 p.m.*

Tuesday, February 23

ILLUMINATING ENGINEERING SOCIETY, *Savoy Hill, W.C.2.* "*Diffusion and Shadows.*" *By Howard Long. 7 p.m.*

Wednesday, February 24

INSTITUTION OF MECHANICAL ENGINEERS. *At the University, Sheffield.* "*Television.*" *By T. C. Macnamara. 7.30 p.m.*

LIBRARY ASSOCIATION. *At Chaucer House, Malet Street, W.C.1. The plans of a number of new municipal libraries will be exhibited and discussed. The discussion will be opened by E. J. Carter, the R.I.B.A. librarian, and J. E. Walker, F.L.A., librarian of the Hendon Public Libraries and vice-chairman of the branch.*

HOUSING CENTRE, 13 *Suffolk Street, S.W.1.* "*Housing Estate Management for Women.*" *By M. Jeffery. 5.30 p.m.*

GOVERNMENT FACTORY FOR LIVERPOOL

The Government's aeroplane factory which it was decided, owing to public protests, not to build at White Waltham, Bucks, is to be erected on the Liverpool Corporation's Speke estate, near the city's airport. The necessary land has been leased to the Air Ministry. The first sod was cut by the Lord Mayor of Liverpool on Monday last.

QUEEN MARY VISITS R.A. EXHIBITION

Queen Mary paid a visit to the Exhibition of British Architecture at the Royal Academy last week. She was received by the President, Sir William Llewellyn, Sir Reginald Blomfield, R.A., Vice-Chairman of the Exhibition Committee, and Mr. W. R. M. Lamb, Secretary of the Royal Academy. Her Majesty spent a considerable time in the exhibition and was specially interested in the early drawings shown in the retrospective section, the designs and models for houses and housing schemes, and also in the designs for coronation decoration schemes which have been added to the exhibition recently. These include Sir Giles G. Scott's designs for Queen Victoria Street, Cheapside, Ludgate Hill and Fleet Street, also the Office of Works' schemes for Westminster Abbey, with temporary annexe for marshalling the procession, and the Mall.

BY-PASS DEVELOPMENT REFUSED

The Ministry of Health last week dismissed the appeal of John Laing and Son, against the refusal of the Barnet U.D.C. to allow the erection of factories and workers' houses on land fronting the Barnet by-pass. The area had been scheduled for residential purposes.

The Ministry stated that factory development would be inappropriate in that spot and detrimental to the amenities of the neighbourhood.

REGISTRATION

The following letter appeared in *The Times* for February 13 under the signature of Mr. Sydney Tatchell, Chairman of the Architects' Registration Council :—

"SIR,—I could not expect you to allow me the space to reply in detail to all the matters referred to in the letter from the Secretary of the Incorporated Association of Architects and Surveyors in your issue of February 11. In so far as they are relevant there will be ample opportunity for this in the debates in Parliament on the Bill.

"There is little room for doubt that the foundation of the opposition of the Incorporated Association to this Bill is the fact that the statutory Board of Architectural Education, set up under the Registration Act of 1931, have refused to recognize the Direct Associate Examination of the Incorporated Association as a qualification for registration on the ground that it is below the required standard. Altogether some 20 examinations have been recognized by the Board and confirmed by the Council. It is open to the Incorporated Association at any time to revise their examination and submit it again for approval. They have not done so.

"In order that the matter might be placed beyond question a special meeting of the Architects' Registration Council was called on February 15, 1934, to investigate the matter and, after a meeting lasting three hours at which the examination was exhaustively considered, the 30 members of the Council present decided by 24 votes to three (three members not voting) that the examination was below the standard required for a properly qualified architect. The three members dissenting from the decision were the three members of the Incorporated Association on the Council.

"Ever since that date the representatives of this minority organization, containing only 10 per cent. of the 12,000 architects on the register, have suffered under a grievance which can only be met by lowering the standard which the statutory board consider necessary for a qualified architect.

"The only purpose of the present Bill is to ensure that a person shall not be allowed to call himself an architect unless he is qualified, either by examination or practice, and no person now earning his livelihood as an architect will be excluded from the register.

"New entrants to the profession, on the other hand, whether members of the Incorporated Association or of any other body, will not be admitted unless they have passed one of the recognized examinations. It is open to your readers to draw their own conclusions from the above facts."

(See Major Athoe's letter on page 296.)

R.I.B.A.

THE ROYAL GOLD MEDAL FOR ARCHITECTURE

At a Council meeting of the Institute held on February 9, Sir Raymond Unwin, HON.LL.D., Past President R.I.B.A., was elected by the members and his name will be submitted to His Majesty the King as a fit recipient of the Royal Gold Medal for Architecture for the year 1937.

ELECTION OF MEMBERS

At a recent meeting of the Council of the Institute, the following members were elected:

As Fellows (4): Messrs. F. G. Hall (London); W. Kaula (London); L. L. Williams (Singapore); and J. H. Harvey (East Melbourne, Australia).

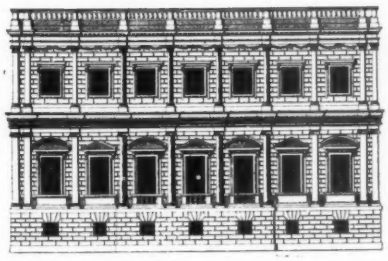
As Associates (26): Messrs. D. W. Aberdeen (London); E. Allen (St. Annes, Lancs); (Miss) E. M. Anderson (London); (Miss) P. E. Barry (Fish Hoek, C.P.); O. A. Bridgman (Oudtshoorn); H. E. Challis (London); A. D. Connell (Hampstead); J. Dean (Liversedge, Yorks); R. E. de Smidt (Cape Town); (Miss) A. M. Drysdale (Crieff, Perthshire); R. B. Finch (Whangarei, New Zealand); F. D. Firth (Leeds); C. C. Fraser (Dunfermline); J. W. Harrison (Sutton Coldfield); F. C. Keel (London); G. C. Logie (London); G. A. Lyall (Edinburgh); F. H. Marvan (Warley, Worcs); D. E. Pilcher (London); J. N. Pollock (Edinburgh); J. E. Riley (York); D. C. Sewell (Dunmow, Essex); (Miss) B. M. Smith-Carington (Salop); A. Tatlow (London); J. G. Tulloch (London); and P. D. Wootton (London).

As Licentiates (14): Messrs. G. N. Ellis (Bournemouth); R. H. Evans (Nottingham); H. Greenwood (London); W. E. Hull (Wembley Park, Middlesex); C. A. Lucas (London); J. D. Nairn (Perth); J. Rawlinson (Fleetwood); W. A. Sherrington (London); B. C. Shore (Northiam, Sussex); H. E. Smeed (Winchester); S. P. Smith (Leicester); W. J. Taylor (Norwich); I. E. Williams (Pwllheli); and J. Williams (London).

IN PARLIAMENT

In the House of Commons on Monday last, Mr. R. S. Hudson, in answer to a question by Lieut.-Com. Fletcher, dealing with the Whitehall scheme, said that the only department at present in Metropole Buildings was the Board of Control; it had been decided to move the Ministry of Transport to this building, but the transfer of Air Ministry staffs to Metropole Buildings had not been contemplated. The diversion of the sewer was an essential preliminary to the development of the Whitehall Gardens site, as excavations could not be begun until the work had been completed. In view of the widespread misapprehension on the matter, he wished to repeat that there was no question of the abandonment of the building project. His Majesty's Government considered that the erection of the building was essential in the interests of efficient administration. The vulnerability of buildings in Whitehall generally had been under consideration and the plans of the new Whitehall building were at present under revision with the object of providing an increased measure of protection from air attack.

In view, however, of the demands being made on the supply of building labour and materials, the Government were considering whether this building should have priority among the many urgent schemes at present in contemplation. Pending a decision on this point, the actual date of removal of the Ministry of Transport to Metropole Buildings had not been fixed.



IDEAS FOR SALE

By John Michael

OPENING *The Times* the other morning, I was surprised and intrigued to see an advertisement space approximately 22 ins. square occupied with a stirring plea for better street planning. A fine illustration showed a glimpse of what at first glance appeared to be one of the sets from a new film by H. G. Wells. Closer examination, however, revealed that it was in actuality a carefully worked out, perfectly rational visualization of the improvements which sensible construction or alteration could make to our over-congested streets. Pedestrians were shown upon broad concrete and glass promenades, on first floor level, crossing in safety over the main road and side streets by means of slender concrete bridges; whilst in the roadway below, the traffic was to be seen flowing freely in four lines (made possible by the absence of pavements) and uninterrupted by pedestrian crossings and central islands.

The whole of this glorious and most impressive feast of reason was an advertisement inserted and paid for by the Cement and Concrete Association (a body representing the whole of the concrete industry), and the object behind it was to promote and extend the usage of concrete.

Advertisement space booked in any of the eight big national morning newspapers is a highly priced commodity, costing anything up to £6 per single column inch. Selling tinned peas or pen nibs, coal or corsets, you have to make readers of your advertisement buy a mighty large quantity before you see your money coming back. Right away, I should say that I have the very best reasons for knowing that it generally *does* come back—providing that you have a good advertising agent, and providing that your peas, nibs, coal or corsets are good peas, nibs, coal or corsets, selling at the right price and easily obtainable from the shops when and where they are wanted.

It is just because the advertisers of this type of goods *do* "get results," as they say, that we are able to buy for 1d. such great, fat newspapers, so excellently printed (full of such tripe), and that annual company meetings are conducted with such a swing. And for this reason also, I should imagine that, for advertising agents who are still human as well as being business men, there is but little *higher adventure* to be had from advertising the goods. In these so narrow fields all activity must surely long ago have been dragged down to the brutal bedrock of bloodthirsty, unscrupulous competition; a savage, sordid struggle for a place in the market which can leave but little room for the exercise of those finer qualities of mind which are said to distinguish men from beasts. This theory is certainly supported by the personal appearance of many successful business men, who have been observed to develop the most outlandish expressions of animal cunning and low ferocity whilst going about their daily task of trying to sell more than their neighbour.

Of course, publicity agents are different. In their heart of hearts many advertising men are really the truest, bluest, most thoroughgoing idealist-reformers you could wish to meet. They are very unserious and disillusioned about this—they could hardly be expected, poor things, to sit back and watch a million people every day being fooled and tricked into buying or doing something which they had absolutely no desire to do or buy without becoming a little "cynical" about "human nature"—but this simply means that they are probably more practical than most idealist-reformers.

These rare souls cherish darkly in their hearts the belief that, properly directed, their arts of publicity could play a tremendous, and perhaps decisive, part in inspiring men to make the world a less uncomfortable and beastly place to live in than it is at present. This is most certainly not the place to examine more closely their doubtless very good reasons for holding this belief, but a quotation from Turgenev's "Fathers and Children," which may perhaps in part explain their feelings, will at the same time serve admirably to introduce what I have further to say.

"'We decided not to undertake anything," repeated Bazarov grimly. He suddenly felt vexed with himself for having, without reason, been so expansive before this gentleman.

"'But to confine yourselves to abuse?'

"'To confine ourselves to abuse.'"

In this famous definition of nihilism, the unhappy Bazarov has very aptly described what many people, including the present writer, believe to be the most characteristic attitude adopted by contemporary publics, particularly in this country, when they are confronted

with a situation which vitally affects them in any manner which is to a greater degree corporate rather than individual. They decide not to undertake anything, and confine themselves to abuse.

That is why I, for one, am filled with the deepest admiration and most profound respect for the (apparently) almost incredible courage and foresight which is being displayed by the executive of the Cement and Concrete Association.

It would be out of place for me to attempt an exact estimate of the total amount of money which the Association is spending on press advertising, but this certainly runs into many thousands of pounds, by far the greater part of which it appears to be spending on advertisements of the type mentioned at the beginning of this article. In these advertisements it is coming right into the middle of the boxing ring to meet its many-headed nihilistic public, and it is challenging them to *dare* " to decide not to undertake anything " about the appalling muddle and chaos which have been produced by the uncontrolled development of the built-up areas. Primarily, of course, they intend by this policy enormously to increase the national use of concrete. And time, I believe and hope, will almost certainly prove this courageous belief to be most profitably justified.

But, I make so bold as to ask, if our concrete manufacturers stand to gain much by such methods, how much more so do not architects ?

Why should not also architects stand up and proclaim their interests and expound their intentions ?

Architecture, surely, has an axe to grind, and it is a far, far larger axe than concrete merchants ever dreamed of. Why cannot its practitioners arise and bugle forth their message to a stricken world ?

All the Colonel Blimps of the profession will undoubtedly come flocking, with forefingers pointing to heaven and bath towels wildly flapping, to denounce such a procedure as tending to be incompatible with their professional status. Two facts remain, grimly, obviously immutable through all their " gad, sirs " and " the man's a cad, sirs." They are : (1) many young and talented architects are (or were, perhaps, before the armaments boom began) situated in the most embarrassing circumstances through lack of work; (2) speculative builders, on the make, refusing to employ architects, or to give them any scope if they do, are rapidly transforming the face of our towns, and large areas of the country, too, with interminable birthday-cake concatinations of unhealthy, uncomfortable, impractical and costly erections which are rapidly perpetuating a state of discordant (or negative) architectural anarchy which it will take several generations, or a world war, effectively to blot out.

Of course, architects themselves are largely to blame. I propose, if the Editor will permit me, to deal with that side of the question in a separate article. In the meantime, the great arbiter remains, as always, our old friend the man in the street. And propaganda is the only lever which will make him put his street in order. I put this merely as a suggestion. For presumably, if propaganda can make people eat more fruit, it can also educate them into using more architects more often.

If advertising experts were called in, opinions would naturally differ widely as to the particular brands of appeal which would have to be employed. One adviser might suggest the simple slogan : " Architects are Better." Another would doubtless prepare a series of strip cartoons to tell the world in pictures that " Architect Starvation Was Holding Him Back." Even sex interest would probably be advised by yet a third, who would employ such headlines as " Janie said ' yes ' when Bill promised he'd use an architect to build *their* house." Snob appeal, of course, would be exploited to the full : " All the best people use an architect : why run the risk of incurring social ignominy by having *your* house jerry-built ? " But doubtless, readers will be able to think out many subtler and more intriguing selling strategies for themselves.

Later in the same conversation from " Fathers and Children " which I have quoted above, Bazarov's friend, Arkady, cries : " We shall destroy, because we are a force."

In the same way, the incoherent masses of mankind destroy that which they love, because they, too, are that sort of a force. The right ideas in time will always filter through—it only took a few hundred years for people to realize that it was a bad thing to go on flogging women in public. How long must it be before the true function of architects and architecture reaches the public conscience ? By how much could that period be shortened through a combined effort on the part of architects to get at the public ? And what would be the benefits to the human happiness of the public and to the material well-being of architects if a palpable acceleration in the slow, inevitable progress of their approach to each other were found to be both feasible and practical ?

I have put these questions in all seriousness ; but something seems to warn me that an empty, mocking echo may be all the answer which I shall get for my pains. Perhaps I, too, am cynical.

G. B. J. ATHOE (Secretary of the I.A.A.S.)

FRANK PICK (Chairman of the Council for Art and Industry)

ALL FOR NOVELTY

DUDLEY HARBRON

LETTERS *FROM* READERS

The Registration Bill

SIR,—One morning about a fortnight ago, without a word of warning, architects woke up to find that a Bill to amend the Architects (Registration) Act, 1931, had been introduced into the House of Lords by Lord Crawford, although on whose behalf he was acting did not then, and does not now, appear.

The Bill was apparently sprung on the House of Lords as it was upon the profession.

The suggestion put forward by its introducer that the Bill was non-controversial was denied by the Government spokesman at its Second Reading. The bodies supposed to be supporting the measure have been publicly enumerated more than once, but whether or not all the members of all those bodies understand what it is all about or, let alone, are agreed on its support, is another matter. I for one should be surprised if you had not been inundated with inquiries on that very subject.

It would not be difficult to fill a whole page of your journal with reasons as to why the present rush to obtain an Amending Bill should be opposed. Although the text of the new Bill has been sprung on the public and the architectural profession, its principle might be regarded as a reasonable demand were the provisions of the existing Act of such a nature as to commend themselves. Such, however, is not the case.

What are the facts ? The Act is a bad one, full of pitfalls and imperfections. This is not a view held by me alone : it is one that has been held for a long time by practically all the members of the Registration Council and of the statutory Admission Committee.

Here is the Registration Council's own unanimous resolution :—

> " That in view of the several ambiguities in the Act of 1931 likely to embarrass the Architects' Registration Council of the United Kingdom and its Committees in the proper and equitable administration of the Act, this Council do now take action to draft, and secure as soon as possible, such amendments to the Act as may be necessary."

Immediately after passing this resolution, the Architects' Registration Council set up, under the chairmanship of a barrister-at-law, an Amending Act Committee, on which all the architectural interests were represented.

As I know from personal experience as a member of it, this Committee has spent a great deal of time and labour in examining the 1931 Act clause by clause and in drafting amendments. In the course of its work, the Committee has realized how many defects exist. But, without waiting for the Committee to finish its work, somebody has embarked on rush legislation regardless of the several recommendations made by the Registration Council's own Committee.

This Association, which has so far been referred to only as "one dissentient body" and has not been acknowledged by name, is not supporting the Amending Bill for the very good reason that the Architects' Registration Council, having decided in no uncertain terms and by a unanimous vote that the provisions of the principal Act needed a thorough overhauling and amendment, now proceeds, on a by no means unanimous vote (17 to 9) to get somebody to rush through Parliament an Amending Bill which does nothing to remove but would only confirm the ambiguities and inequities which the Registration Council themselves acknowledge to exist in the principal Act.

We take the view that no legislation should be attempted before the Amending Act Committee of the Registration Council has completed its labours. Piecemeal legislation is useless.

G. B. J. ATHOE
Secretary, The Incorporated Association of Architects and Surveyors.

Paris Exhibition: Art and Industry

SIR,—In response to many inquiries, will you allow me, as Chairman of the Council for Art and Industry, to explain that it is unfortunately not practicable to admit the general public to the preliminary assembly in South Kensington of the wide range of everyday articles now being selected for the British Pavilion at the Paris International Exhibition which opens on May 1.

For some months special searchers have been combing factories and workshops of the United Kingdom for a thoroughly representative selection of things in everyday use, and the final choice is now being approved by the Council. Pottery and glass and silverware are already complete; textiles, books and furniture, the implements of sport, leather goods and the products of our agricultural and rural industries, will soon be ready for Paris.

The Council's hope is that the result of the labours of the searchers will be to produce in Paris a collective exhibit which will give the world a clearer view than it has ever had of the skill and quality of modern design and workmanship in this country.

FRANK PICK

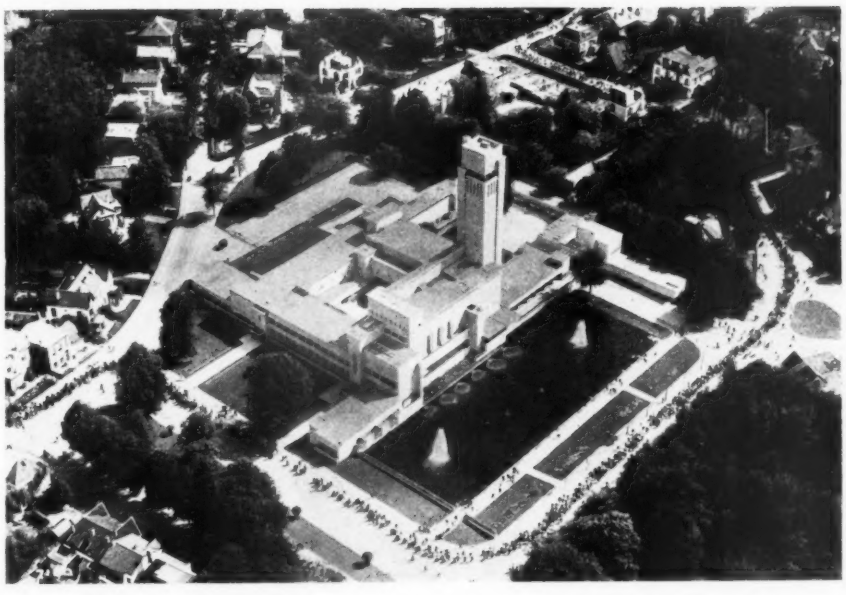
Flats at East Acton

SIR,—The photograph of G. A. Jellicoe and Partners' flats at East Acton, in your issue for February 11, provides a refreshingly novel technique in architectural illustration.

A human being may give effective scale to a building by standing at attention beside it, but he may have a most offensive face and altogether unbalance the calm judgment proper to readers of THE ARCHITECTS' JOURNAL.

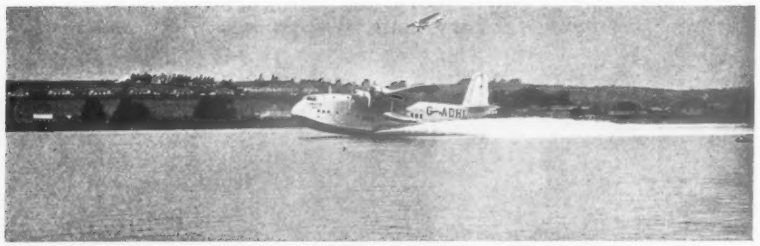
A dog, however, is a different matter, and does it not, incidentally, make the building look impressively larger than it really is? But let us select our dogs with care . . . a toy Pekingese would affront an armaments factory as much as a mastiff would shatter *Mon Abri* to the four winds. Jellicoe and Partners' wire-haired fox terrier, on the other

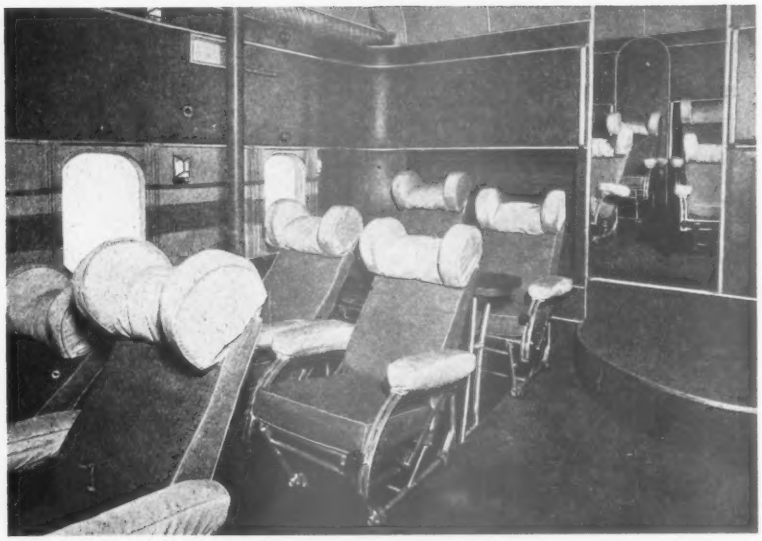
R.I.B.A. EXHIBITION

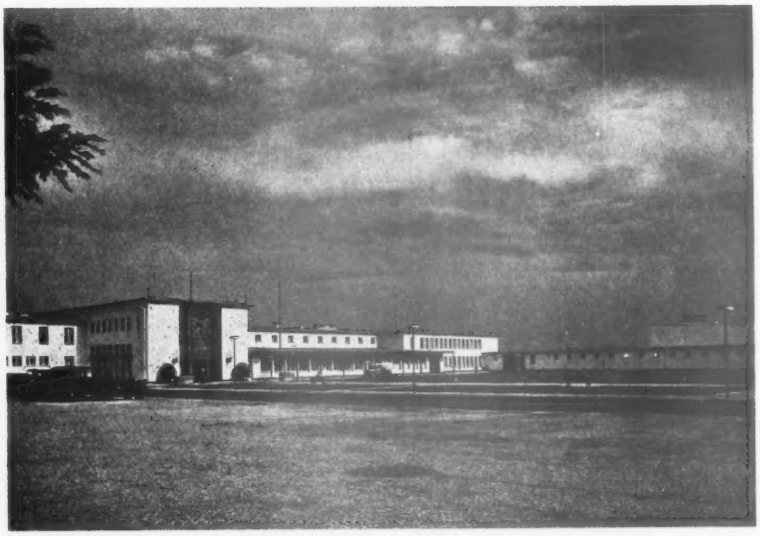


From the R.I.B.A. Exhibition, Airports and Airways; top: Holland, Naarden; bottom: Hilversum, the Town Hall. Photos: Royal Dutch Air Lines.

R.I.B.A. EXHIBITION







From the R.I.B.A. Exhibition, Airports and Airways: top and centre, the Short Empire flying-boat and its promenade saloon; bottom, Cologne, the buildings from the approach road. (Photo: Hugo Schmöltz.)

hand, seemed entirely *juste* for a block of flats at East Acton. Let us have more. ALL FOR NOVELTY

Globe-baiting

SIR,—There is little need to look for Messrs. Globe and Reed outside the Architectural Press.

Your own pages have extolled the merit of Salmon Trout—the world renowned artist—and Mr. Wilby Pugim—the universally recognized architect.

Further, today I have seen an invitation issued by architects to architects to attend a lecture on "Repton, Wash and the Brighton Pavilion," to be delivered by the author of the "Rules (*sic*) of Taste."—Yours,

DUDLEY HARBRON

[*We take a modest pride in accepting paternity for Salmon Trout, who made his debut in an article devoted in all other respects to the art of Samuel Prout. Trout was an erratic genius; his life was all too short. For Wilby Pugim we will take Mr. Harbron's word. Wash, however, is firmly rejected.*—ED., *A.J.*]

COMPETITION NEWS

TOWN HALL, WREXHAM

The Wrexham Town Council has appointed Mr. Herbert J. Rowse, F.R.I.B.A., to act as assessor in a proposed competition for a new town hall and assembly hall, as well as for a court house, to be erected either by the County Council or the Town Council, or by both authorities jointly. The estimated cost of the proposed municipal buildings is £26,500.

"NEWS CHRONICLE" COMPETITION

The 240 designs submitted in the *News Chronicle* Schools Competition were recently exhibited at Dorland Hall, Lower Regent Street, W.1. The assessors have selected 23 in the class for urban schools, and 15 in that for rural schools, for further consideration. These designs have been rehung at the Building Centre, New Bond Street, W.1. During next week the public will be admitted to the exhibition of these designs and, if the assessors' awards are made known during the course of the week, they will be indicated.

The hours of admission during the week beginning Monday, February 22, will be from 10 a.m. to 6 p.m. daily, except on Saturday, when the exhibition will be closed at 1 p.m.

LAY-OUT OF HOUSING ESTATE

The Corporation of the City and Royal Burgh of Aberdeen invites designs for the lay-out of Kincorth Estate, Aberdeen, comprising a net acreage of 435.2, within the city boundaries. Mr. Thomas Adams, F.R.I.B.A., PP.T.P.I., has been appointed assessor; and the following premiums are offered: £500 to the author of the design placed first; £350 to be divided between the authors of not more than three designs placed next in order of merit. Conditions, etc., are obtainable from the Town Clerk, Town House, Aberdeen (deposit £1 1s.). The last day for questions is March 31, 1937; and the last day for the submission of designs is July 31.

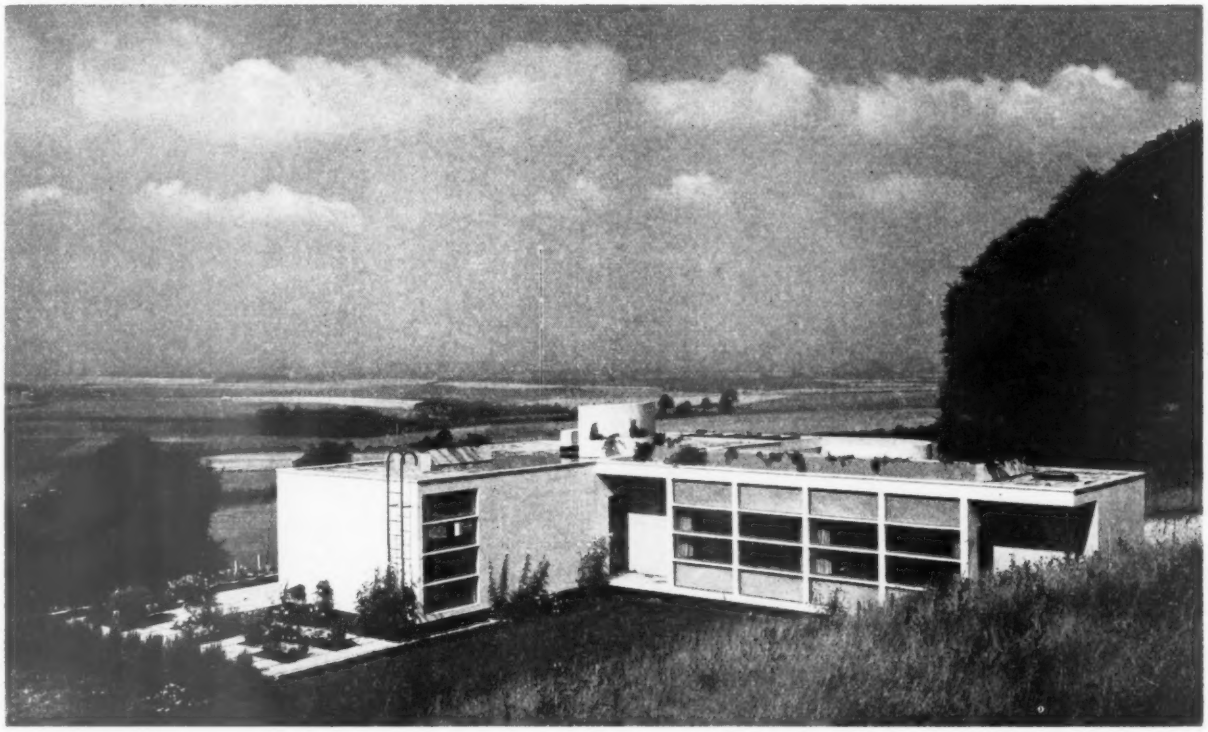
Models of the estate are on view, for inspection by intending competitors, at the R.I.B.A., 66 Portland Place, London, W.1, and at the Royal Incorporation of Architects in Scotland, 15 Rutland Square, Edinburgh.

ESTATE PLANNING, BROADSTAIRS

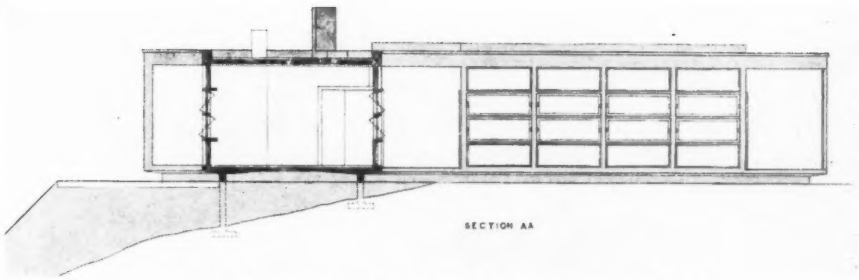
The Broadstairs and St. Peter's U.D.C. invites designs for the planning of a portion of the late Lord Northcliffe's North Foreland estate. The assessor is Professor W. R. Davidge, F.R.I.B.A., PP.T.P.I.; and the following premiums are offered: £100, £50 and £25.

Conditions, etc., are obtainable from the Clerk of the Council, Pierremont Hall, Broadstairs (Deposit £1 1s.). The last day for questions is February 20; and the last day for submission of designs is April 6.

TWO BUNGALOWS AT WHIPSNADE



DESIGNED BY LUBETKIN AND TECTON

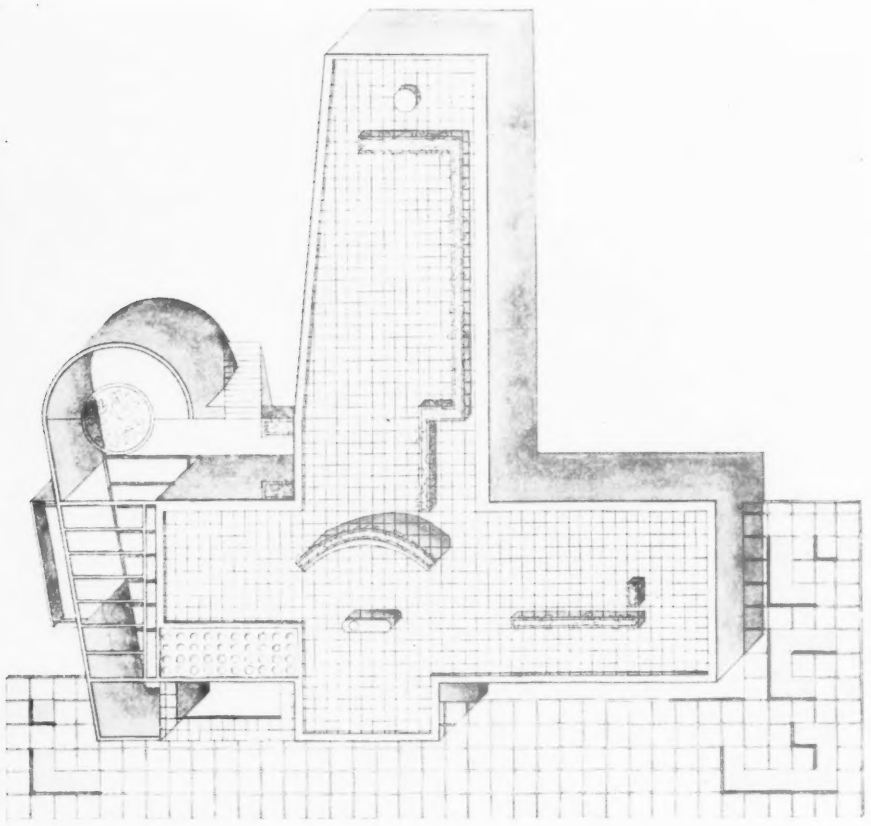


SECTION THROUGH LARGER BUNGALOW

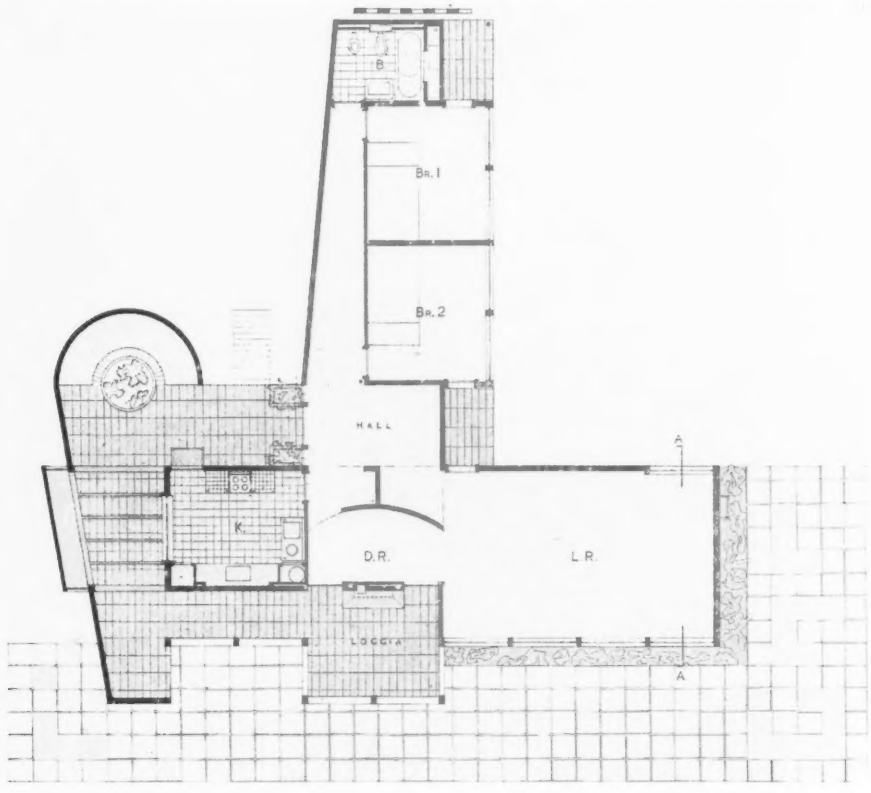
GENERAL PROBLEM—*The two bungalows are built on a western slope of the Chilterns, with a magnificent unobstructed view across the valley. The larger one was erected by the architect for his own occupation. It is not designed as a permanent residence but as a summer-time or week-end retreat. In the smaller bungalow the plan is slightly modified to meet the individual requirements of the client. It has less outside terrace, but the living room is larger.*

The photographs show two views of the larger bungalow: above, the living room (left) and the bedroom wings; left, a view from the back.

TWO BUNGALOWS AT WHIPSNADE:

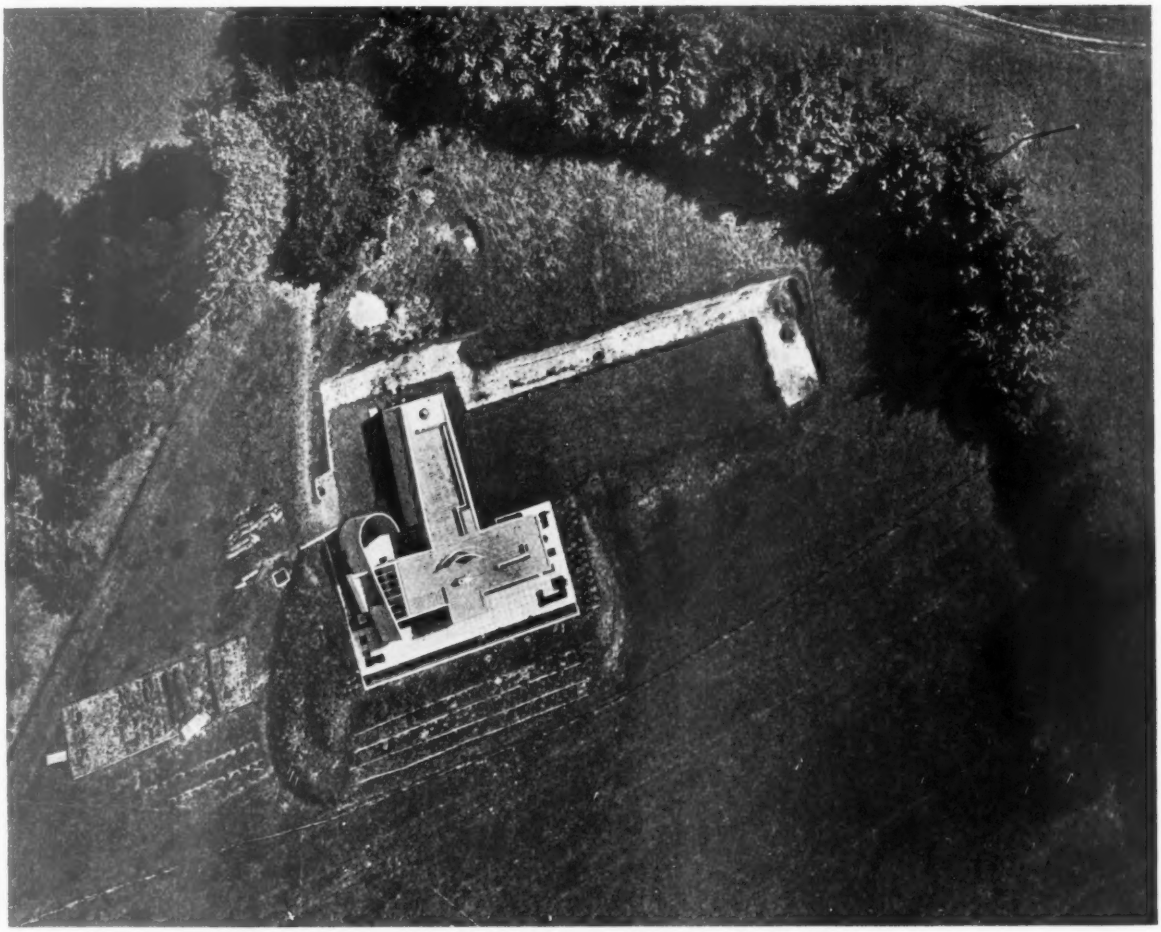


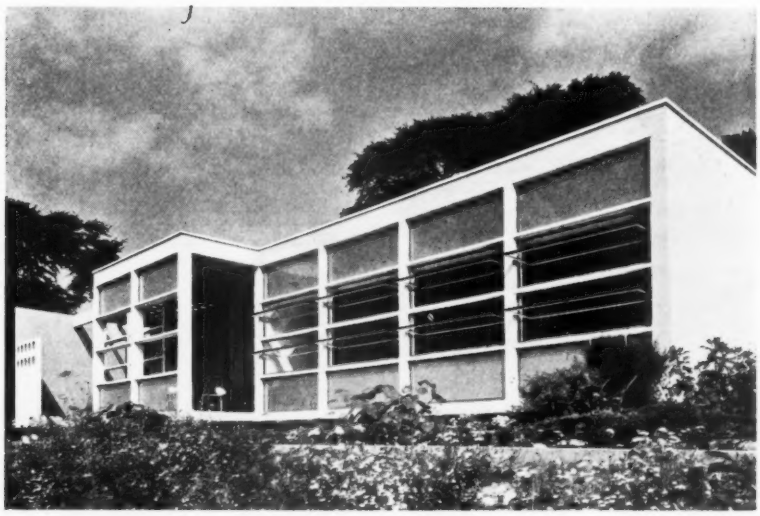
ROOF PLAN



GROUND FLOOR PLAN OF LARGER BUNGALOW

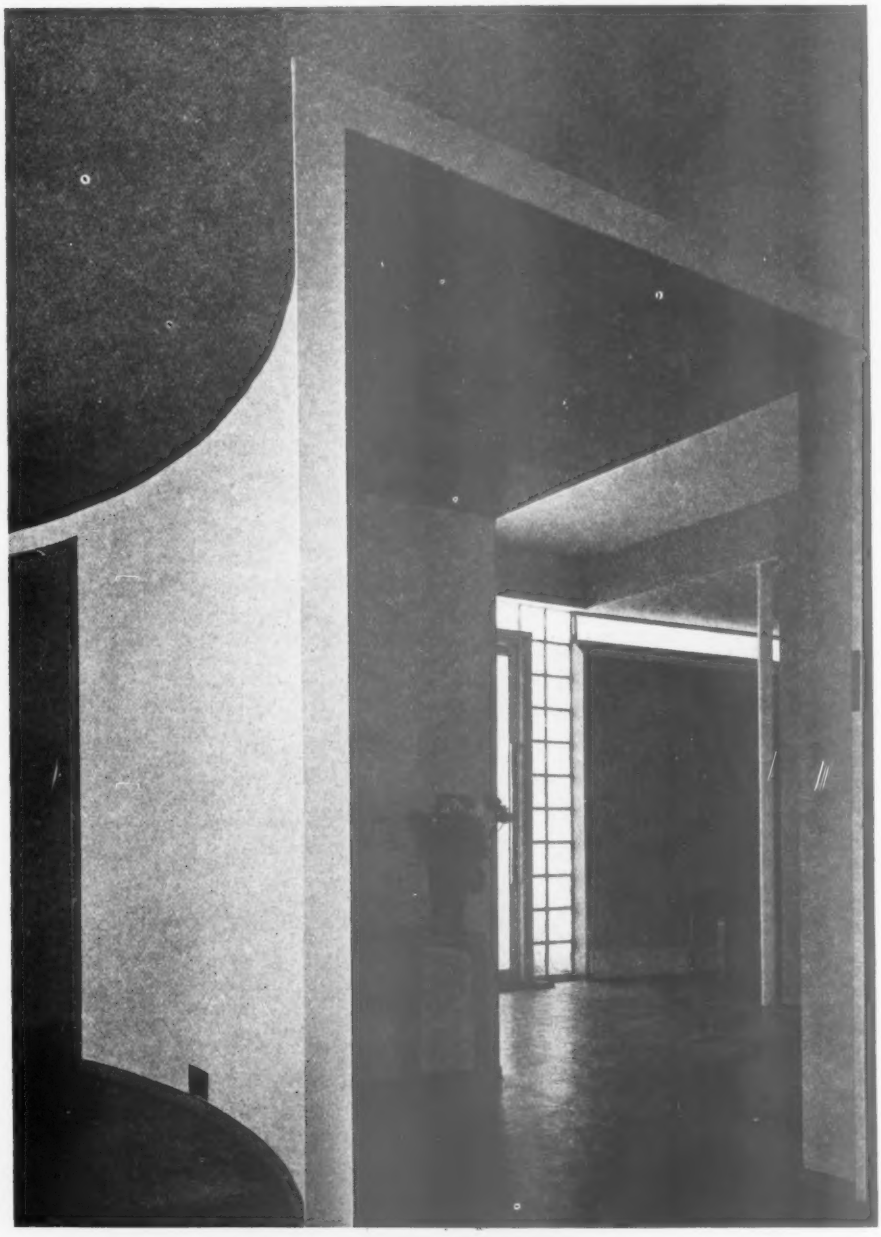
BY LUBETKIN AND TECTON





The photographs are of the larger bungalow, and show: above, an air view; left, a detail in the entrance court; right, the main front, looking towards the loggia.

TWO BUNGALOWS AT WHIPSNADE:

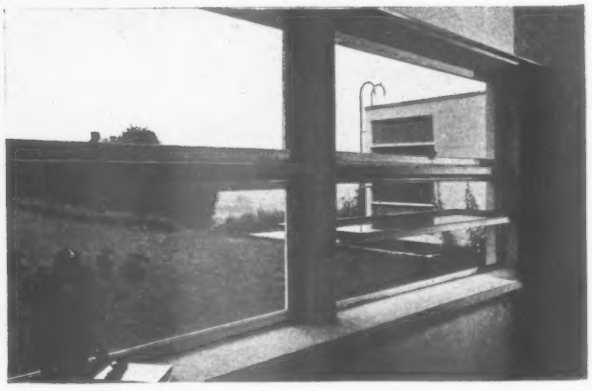


SITE — *Owing to the continuous fall of the ground, it was necessary to excavate a terrace for the larger bungalow and garden, and to bank up this terrace by placing the excavated earth in front. The orientation of this bungalow was dictated more by the view and the position of hedges and trees than by the sun. Each bedroom has its own sleeping porch, and the bungalow is connected to the garden by semi-open terraces for open-air meals, etc. In these terraces, flower-beds and a fish-pond are placed.*

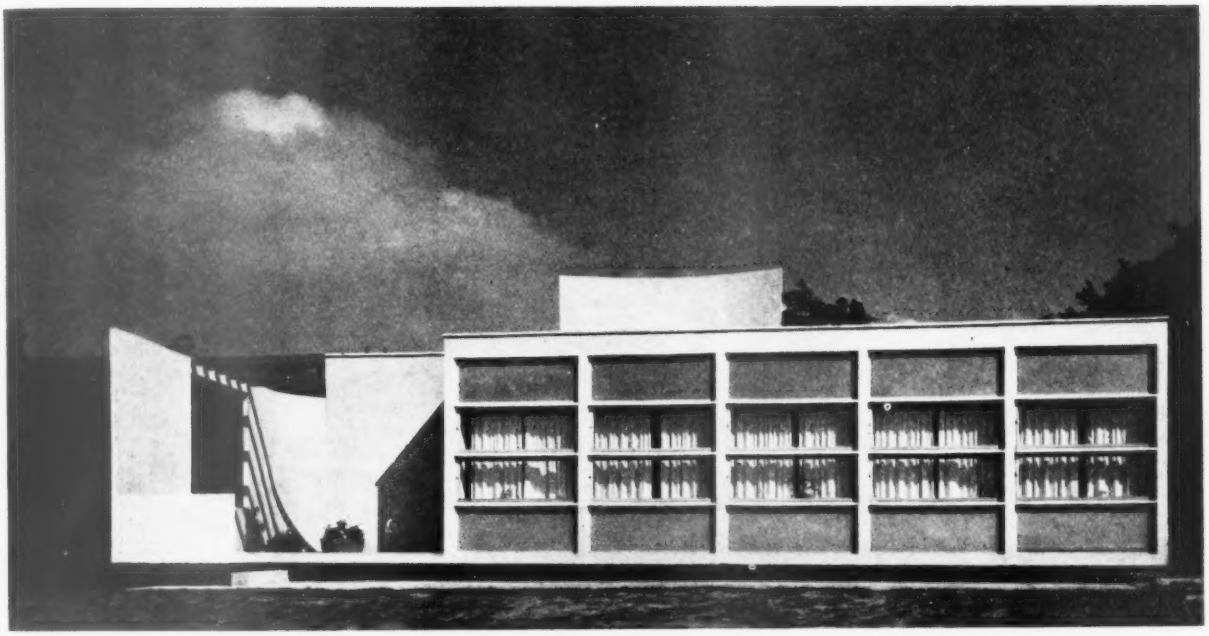
CONSTRUCTION—*Some of the exterior walls are constructed in 4 ins. reinforced concrete, insulated with cork. Others are built in prefabricated vertical and horizontal units, which support the roof slab, and are filled in with steel pivot-hung windows, and with panels of insulating glass in the top and bottom spaces. Behind the fixed panels are removable heaters. The flat roof of the larger bungalow is covered with pumice-concrete tiles, and screens and flower-boxes are placed on it; the loggias are paved with terra-cotta tiles; and the outside of the bungalow is painted parchment-colour, with dead white reveals, cobalt blue on the inside walls and ceilings of the loggias, and pompeian red flower-boxes. The terrace in front of the house is of coloured cement, with flower-beds cut out. Both bungalows were built at the same time, to reduce the cost of the prefabricated units and shuttering.*

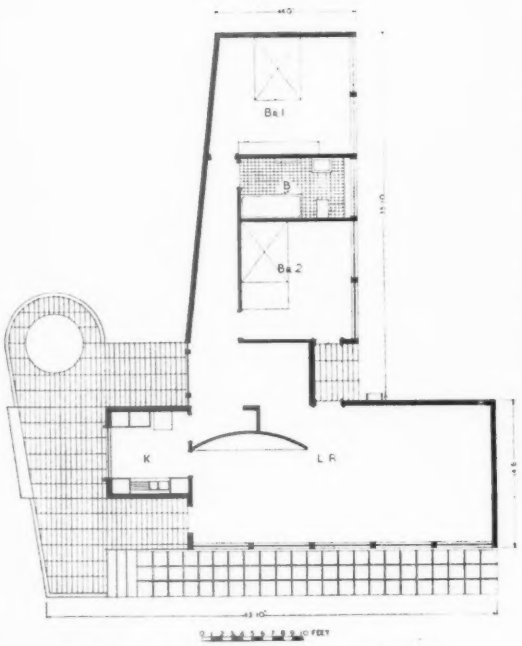
The photographs show: left, looking from the living room into the hall; below, the living room; and a bedroom window.

For list of general and sub-contractors, see page 325.

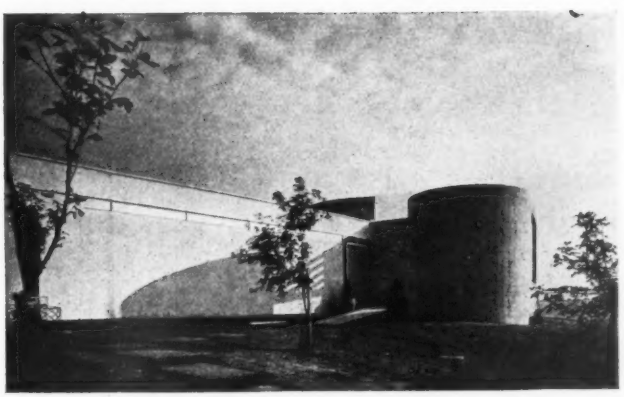


BY LUBETKIN AND TECTON





PLAN OF SMALLER BUNGALOW



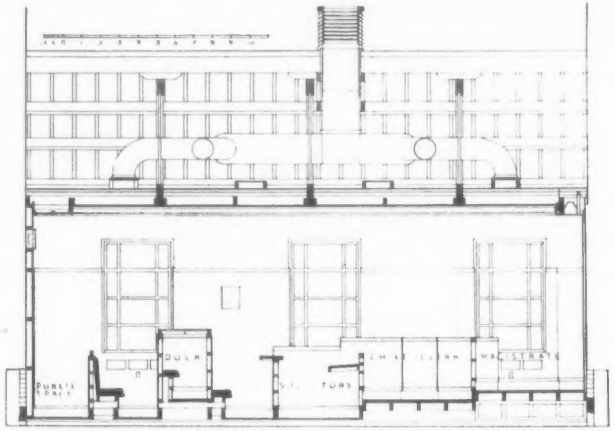
The photographs show : above, main front of the smaller bungalow ; centre, air view of both bungalows—the smaller one is the farthest away ; right, the side of the smaller bungalow showing the entrance.

NEW COURT, BOW STREET POLICE COURT

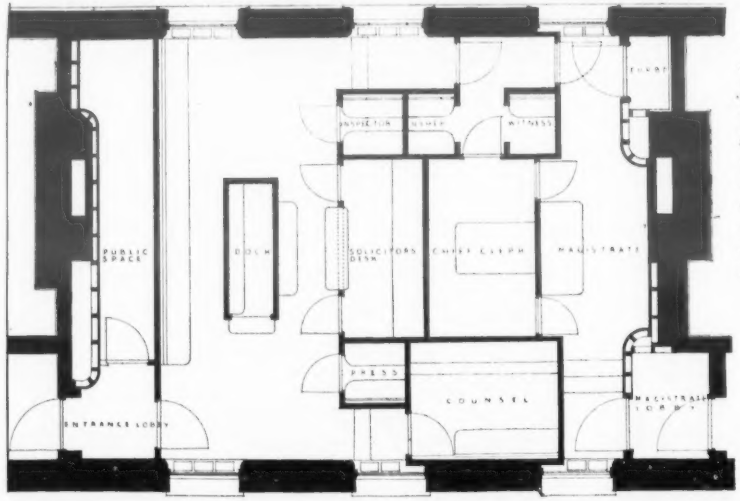
GENERAL PROBLEM—*An additional magistrate's court, made necessary by the large increase in the number of motor-car offences and by an extension of the area within the jurisdiction of Bow Street. It is situated on the second floor in space formerly subdivided into rooms and occupied by the resident office-keeper. The space available was determined by the existing structural walls at the ends and the external walls at the sides. The existing roof principals between the exterior walls enabled the interior partitions and ceilings to be removed.*

PLAN—*This has been adapted from other courts in the same building with only minor variations. The court has been soundproofed against street noises, and is designed to secure the best acoustics.*

The photographs show : above, looking from the prisoners' dock towards the magistrate's bench ; right, the magistrate's chair.

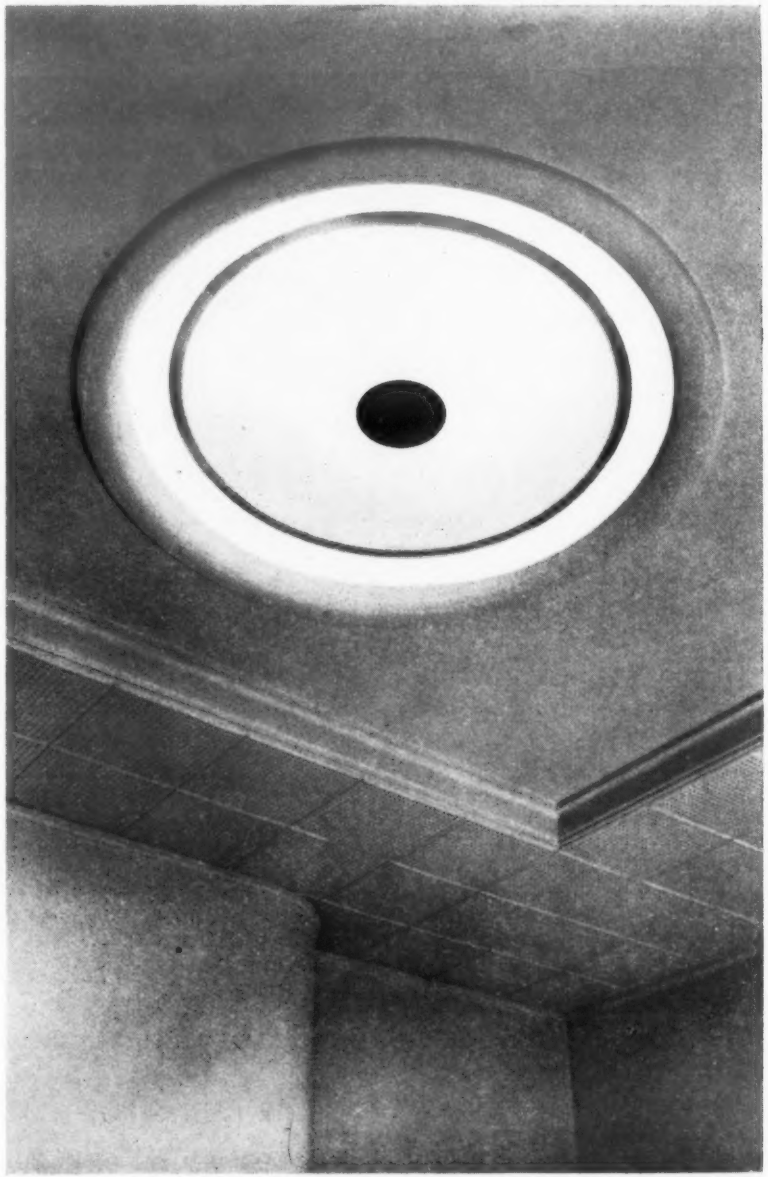


SECTION



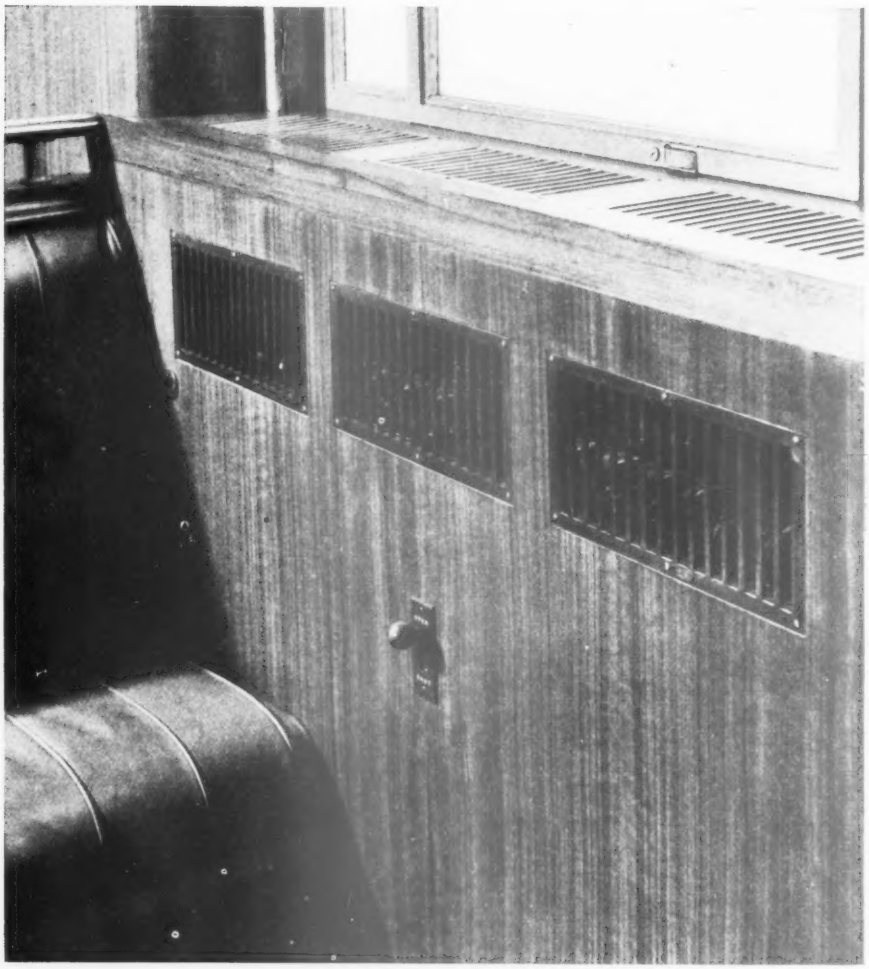
PLAN

The photographs show : below, looking from the magistrate's bench towards the prisoners' dock ; right, one of the eight light fittings in the ceiling. Four of them are used also as air extracts, see section on the facing page.



DESIGNED BY G. MACKENZIE TRENCH (POLICE ARCHITECT AND SURVEYOR)

NEW COURT, BOW STREET POLICE COURT



DESIGNED BY G. MACKENZIE TRENCH

J. W. TRIGGS, ASSISTANT ARCHITECT

CONSTRUCTION — *Existing sash frames were removed, new window openings being cut in one of the side walls and steel sashes in teak frames fixed throughout. The end walls, in which were fireplaces and flues, were packed out with timber framing to conceal the chimney breasts and to form a lobby at the magistrate's dais end. The ceiling is timber framed and suspended from the existing roof principals. The floor, of timber over a concrete vaulting, is stepped up to the new levels.*

INTERNAL FINISH—*Walls are flush panelled in Australian walnut plywood on timber battens with a plaster frieze; the balustrades and furniture, both built in and movable, are in Australian walnut; and the ceiling is of fibrous plaster, with a band of acoustic tiles around three sides. The walnut is wax polished, and the frieze and ceiling are finished with a textured paint. The floor is rubber laid on a plywood sub-floor with a rubber cove and skirting, except to the magistrate's dais, which is carpeted; and windows are glazed with $\frac{3}{8}$ in. obscured plate glass. The rubber floor is light grey with a narrow red margin; the window sashes are light grey; and the frieze and ceiling are a light cream. Seating is rubber covered with red hide; and the rails to the dock and the public space are of steel covered with red composition.*

SERVICES — *Lighting is from eight obscured glass disc fittings fixed flush with the ceiling and set in fibrous plaster domes. Four of these also form air extracts and are connected by trunking in the roof space to an extract fan and an outlet turret on the roof. Heating is by radiators set in recesses under the windows. An air inlet is provided to each radiator in the external wall, and all fresh air is drawn over these radiators before entering the court.*

The photographs show: top, radiator with fresh air inlet; left, the seating behind the prisoners' dock; and the dock.

For list of general and sub-contractors, see page 325.

INFORMATION SHEET
SUPPLEMENT

The Architects' Journal Library of Planned Information

IT is now some weeks since it was decided that Information Sheets, instead of being presented as loose inserts in the Journal, should be bound in and perforated, the perforation being so arranged that the Sheets remain exactly the same size as before, and may still be included in any filing system.

Photographs were first used a month ago, and a second Sheet in which they appear is published this week.

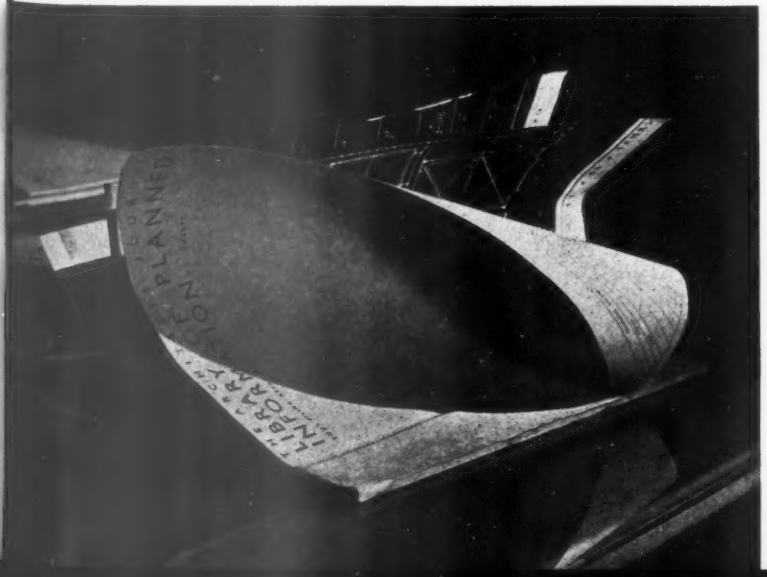
It should, however, be understood that, while the binding in and the perforation are naturally a permanent feature, the use of photographs or of colour depends entirely on the type of product to be described. The Editors of the Library are the final arbiters on both these questions, and the standard Information Sheet will only be amplified when the nature of the product shown demands additional information which cannot be presented adequately in the ordinary way. To avoid changing the character of the Sheets, any photographs and colour samples will be printed as a supplement to the Sheet, on an additional leaf, so that the normal single leaf Sheet will remain exactly as before.

INFORMATION SHEETS

472 Lead Insulation against X-Rays

473 Electrical Equipment—I

474 Asbestos-Cement Ventilating Ducts



Sheets issued since Index :

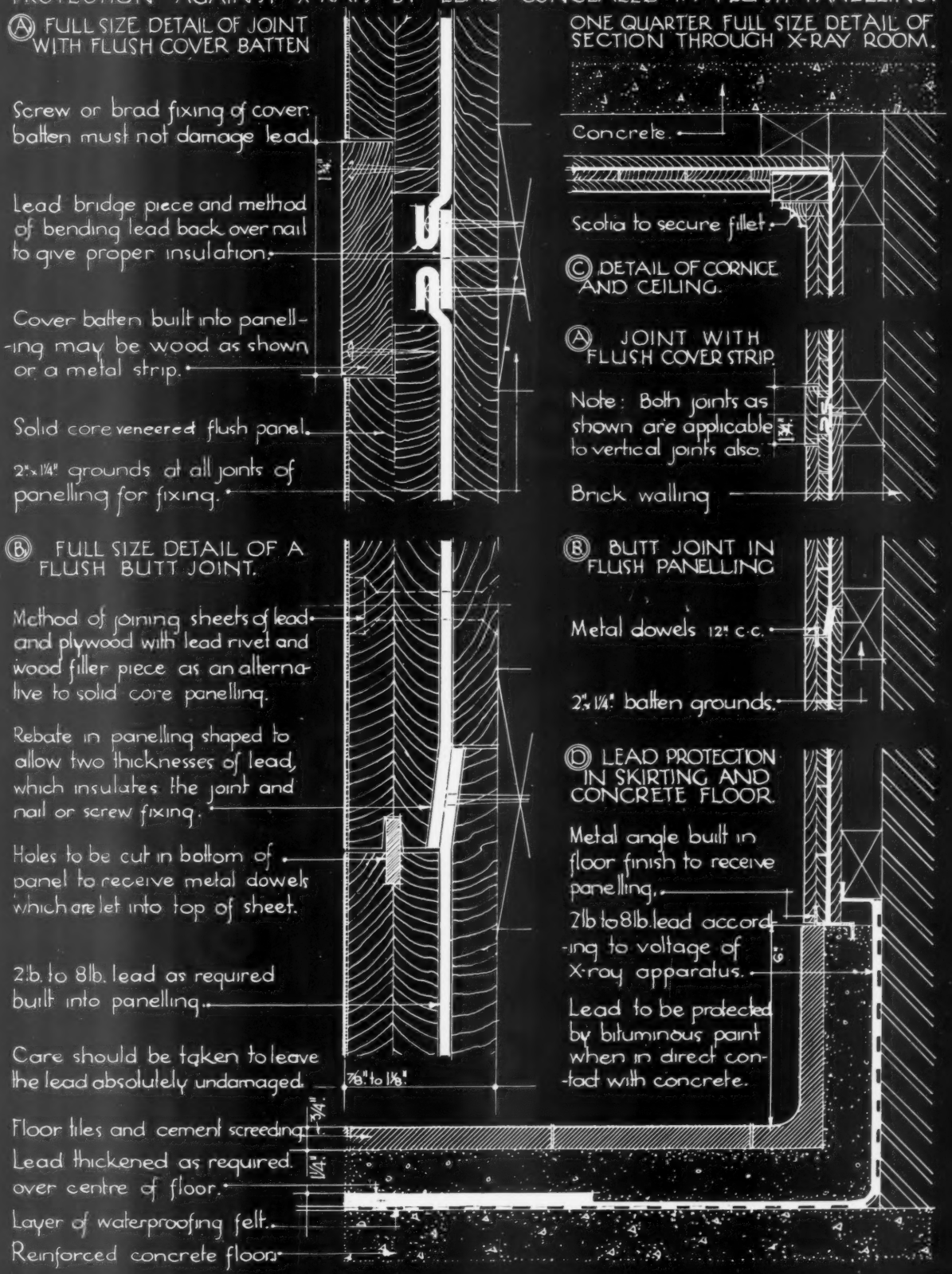
401 : Plumbing to Baths
402 : Waterproofing
403 : Asbestos-aluminium Foil—I
404 : Roofing
405 : Joinery
406 : Asbestos-aluminium Foil—II
407 : Roofing
408 : Joinery
409 : Rubber-faced Building Slabs
410 : Places of Public Entertainment—II
411 : Electric Switchgear
412 : Lead Soakers to Valleys
413 : Plumbing in Welded Copper Pipe
414 : Electric Switchgear
415 : Electric Switchgear
416 : Insulating Board
417 : Work on Glass
418 : Plumbing in Welded Copper Pipe
419 : Places of Public Entertainment—III
420 : Tentest Metal Cover Strip
421 : Wood Preservatives
422 : Welding Sheet Copper Work
423 : Garages and Drives—II
424 : Roof Glazing
425 : Places of Public Entertainment—IV
426 : Asbestos-cement Roofing Tiles
427 : Asbestos-cement Roofing Tiles
428 : Welding Sheet Copper Work
429 : Flat Roofing
430 : Asbestos-cement Roofing Tiles
431 : Automatic Boilers
432 : Plumbing
433 : Places of Public Entertainment—V
434 : Plumbing
435 : Lifts—I
436 : Lead Soakers to Hips
437 : Coloured Cement Renderings
438 : Wallboards
439 : Wall Finishes
440 : Roofing
441 : Sash Operating Gear
442 : Roofing
443 : Wallboards
444 : Rainwater Goods and Fittings—I
445 : Roofing
446 : Rainwater Goods and Fittings—II
447 : Bathroom Cabinets
448 : Roof Glazing
449 : Places of Public Entertainment—VI
450 : Telephone Cabinets
451 : Hardboard
452 : Escalators
453 : Automatic Boilers
454 : Places of Public Entertainment—VII
455 : Places of Public Entertainment—VIII
456 : Ellipses
457 : Roofing
458 : Sanitary Equipment
459 : Hoods and Canopies
460 : Expansion Joints
461 : Roof Pitches, etc.
462 : Gas Refrigerators—I
463 : Asbestos Cement Rubber Floor Tiles
464 : Approximate Estimating—I
465 : Gas Refrigerators—II
466 : Approximate Estimating—II
467 : Gas Refrigerators—III
468 : Approximate Estimating—III
469 : Gas Refrigerators—IV
470 : Stopstara Glazing Compound
471 : Gas Cookers

Sheets issued since Index :

401 : Plumbing to Baths
402 : Waterproofing
403 : Asbestos-aluminium Foil—I
404 : Roofing
405 : Joinery
406 : Asbestos-aluminium Foil—II
407 : Roofing
408 : Joinery
409 : Rubber-faced Building Slabs
410 : Places of Public Entertainment—II
411 : Electric Switchgear
412 : Lead Soakers to Valleys
413 : Plumbing in Welded Copper Pipe
414 : Electric Switchgear
415 : Electric Switchgear
416 : Insulating Board
417 : Work on Glass
418 : Plumbing in Welded Copper Pipe
419 : Places of Public Entertainment—III
420 : Tentest Metal Cover Strip
421 : Wood Preservatives
422 : Welding Sheet Copper Work
423 : Garages and Drives—II
424 : Roof Glazing
425 : Places of Public Entertainment—IV
426 : Asbestos-cement Roofing Tiles
427 : Asbestos-cement Roofing Tiles
428 : Welding Sheet Copper Work
429 : Flat Roofing
430 : Asbestos-cement Roofing Tiles
431 : Automatic Boilers
432 : Plumbing
433 : Places of Public Entertainment—V
434 : Plumbing
435 : Lifts—I
436 : Lead Soakers to Hips
437 : Coloured Cement Renderings
438 : Wallboards
439 : Wall Finishes
440 : Roofing
441 : Sash Operating Gear
442 : Roofing
443 : Wallboards
444 : Rainwater Goods and Fittings—I
445 : Roofing
446 : Rainwater Goods and Fittings—II
447 : Bathroom Cabinets
448 : Roof Glazing
449 : Places of Public Entertainment—VI
450 : Telephone Cabinets
451 : Hardboard
452 : Escalators
453 : Automatic Boilers
454 : Places of Public Entertainment—VII
455 : Places of Public Entertainment—VIII
456 : Ellipses
457 : Roofing
458 : Sanitary Equipment
459 : Hoods and Canopies
460 : Expansion Joints
461 : Roof Pitches, etc.
462 : Gas Refrigerators—I
463 : Asbestos Cement Rubber Floor Tiles
464 : Approximate Estimating—I
465 : Gas Refrigerators—II
466 : Approximate Estimating—II
467 : Gas Refrigerators—III
468 : Approximate Estimating—III
469 : Gas Refrigerators—IV
470 : Stopstara Glazing Compound
471 : Gas Cookers

609. THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION.

PROTECTION AGAINST X-RAYS BY LEAD CONCEALED IN FLUSH PANELLING.



Information from Lead Industries Development Council.

INFORMATION SHEET: CONCEALED LEAD PROTECTION AGAINST X-RAYS: No 31.
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

• 473 •

ELECTRICAL EQUIPMENT

Subject : Types of Light Switch

Product : Tenby, Tenbyluxe and Tenby Pilot Electric Light Switches

Description :

Tenby switches are available in a range to meet all light switch conditions, there being flush, semi-recessed and surface types. A feature, as indicated on the diagrams on this Sheet, being the shallow construction and simplicity of installation.

Flush type : Tenbyluxe :

Consists of a semi-rotary type switch secured by screws to a moulded box (bakelite or similar material) which is fully accommodated within the depth of the plaster, and the whole is covered by a flush plate, which in turn is fixed to the switch by means of a moulded ring. (See Diagrams B, C and E.) When mounting the box, as with all switches, it is advisable to have the surface as flat as possible. To overcome the tendency of flush switch plates turning when fixed, Tenby plates are fitted with cork pads which are effective on paper, glazed tile or other wall surfaces.

The size of the flush plate is 3 in. square and $\frac{3}{16}$ in. thick, and can be obtained in two patterns as shown overleaf. The plain type and the reed and ribbon type patterns are available in 1 to 4 gang units, vertical and horizontal.

The sizes of 1 to 4 holed plates are : 1 gang, 3 in. by 3 in. ; 2 gang, $5\frac{1}{8}$ in. by 3 in. ; 3 gang, $7\frac{3}{8}$ in. by 3 in. ; 4 gang, $5\frac{1}{8}$ in. by $5\frac{1}{8}$ in.

Surface type : Tenbyluxe :

The switch and box, which is standard for both surface and flush types, in this case is fixed to plugs in a similar way to the flush type, but on the surface of the wall. The moulded cover plate is then fixed to the switch by the ring, of which there are two types, one being bakelite throughout, and the other bakelite metal lined.

The cover plate may be used when surface wiring is being used and a minimum projection of fittings is required, there being "easy" knock-out panels provided for in the moulding on every side, to give easy entry for wires. Surface type switch cover plates are obtainable in two designs, one plain, as shown on the other side of the Sheet, and the other a reed and ribbon type. The dimensions are $3\frac{1}{4}$ in. square by $\frac{3}{4}$ in. depth.

The plates are available in gangs of 1 to 4, vertical and horizontal, the sizes being : 2 gang horizontal and vertical, $5\frac{1}{4}$ in. by $3\frac{1}{4}$ in. ; 3 gang horizontal and vertical, $7\frac{3}{4}$ in. by $3\frac{1}{4}$ in. ; 4 gang square, $5\frac{1}{2}$ in. by $5\frac{1}{2}$ in. No wood block is needed, as the switch is protected by the moulded box and the projection is small.

Semi-recessed type : Tenby Pilot :

This unit comprises a Tenby Pilot switch on the improved tumbler principle, partly recessed into a moulded block which is screwed to plugs on the surface of the plaster. The switch is screwed to the block and a cover is screwed on the switch. This type is available in 1 design and 1 to 4 gangs as shown on the diagrams overleaf.

Surface type : Tenby Pilot :

The Tenby Pilot surface switch has the same tumbler action as the semi-recessed type, except that the porcelain base differs in design to allow the switch to be mounted on a wood block, and the cover, as with the semi-recessed type, is fastened by screws to the porcelain base. The porcelain bases are in brown or white, and the covers, similar in design to the semi-recessed covers, can be obtained in colours.

Bases :

The vitreous bases of Tenbyluxe and Tenby Pilot switches have two separate channels in which the circuit is broken and a central recess to house the operating mechanism. This detail gives protection throughout from any arcing.

The switches are designed with the object of reducing the projection of the surface type, and of obviating, in the case of sunk types, the cutting of brickwork.

Switch sockets :

The Tenbyluxe 2-pin 5 amp. socket is interchangeable with the switches, the flush and surface cover plates being provided with holes for the passage of B.E.S.A. plug pins. In connection with switch socket units, by interchanging the accessories, the unit can be mounted either horizontally or vertically.

The Tenbyluxe 3-pin 5 amp. socket is similar in principle to the 2-pin 5 amp. socket described above and can be supplied with or without a screening shutter on the current sockets.

These units can be supplied complete with switch only.

Fixing : General Information :

The usual height for light switches for general conditions is 4 ft. 6 in. to the underside of the plate.

No switch should be located within reach of a bath or similar fitting. Danger of shock from any cause is thus obviated.

Loading :

The maximum load controlled by a lighting switch should not exceed 400 watts.

5 amp. switch sockets should be fed from separate ways on the distribution so that lighting points and switch sockets are separate. Not more than three 5 amp. switch sockets should be fed from one 15 amp. double pole way of a distribution board.

One 5 amp. switch socket should be fed with a cable not smaller than 3/.029 in. Two switch sockets fed from one circuit should be served by a cable not less than 3/.036 in. Three switch sockets fed from one circuit should be served by a cable not less than 7/.029 in.

The earthing pin of a switch socket should be fed by a separate cable of equal cross section to the other cable feeding the switch socket. The earthing cable should be connected to a satisfactory earth at the distribution board. 5 amp. switch sockets are not required to be interlocking on A.C. systems.

Prices :

Flush Type :

Tenbyluxe unit complete (including switch moulded (bakelite, etc.) box, plate and ring) ranges from 24s. to 43s. 4d. per doz., according to colour and type (one-way, two-way, two-way and off).

Multi gang units up to 100s. 8d. per doz. for 4 gang.

Surface type : Tenbyluxe

Switch unit complete (including switch, bakelite box, plate and ring) ranges from 25s. 4d. per doz. to 45s. 4d. per doz., according to colour and type. Multi-gang units up to 122s. 8d. per doz. for 4 gang.

2-pin 5 amp. socket complete units (including socket with switch in bakelite box, and surface plate) from 48s. 2d. to 56s. 2d. (according to colour) and similar to above with flush plate in place of surface plate 44s. to 49s. 11d. per doz. (according to colour).

3-pin 5 amp. switch socket complete (including switch, socket and bakelite box, shutter and plate with flush plate) from 65s. to 70s. 11d. (according to colour) and similar to above with surface plate in place of flush plate 69s. 2d. to 77s. 2d. (according to colour).

Surface type : Tenby Pilot (for wood blocks)

Complete unit (including switch, and moulded cover) ranges from 11s. 4d. to 21s. 4d. per doz.

Semi-recessed : Tenby Pilot

Complete unit (including switch, moulded block and cover) ranges from 16s. 4d. to 28s. 10d. (according to colour and type).

Multi-gang up to 95s. 4d. per doz. for 4 gang square.

Colours :

This list gives standard colours only for Tenbyluxe and Tenby Pilot. With the Tenbyluxe, switches can be specified to accord with any decorative scheme, the use of different colours for cover plate, dolly and/or fixing ring making this possible.

Colours available

Brown. Black. Walnut. White. Oak. Mahogany. Glass. Pink. Light green. Marble. Tortoiseshell. Mottled horn. Medium green. Dark blue. Light blue. Mottled blue. Mottled ivory and blue. Mottled ivory and green. Mottled ivory and orange. Mottled onyx. Also special matt finish for stone buildings.

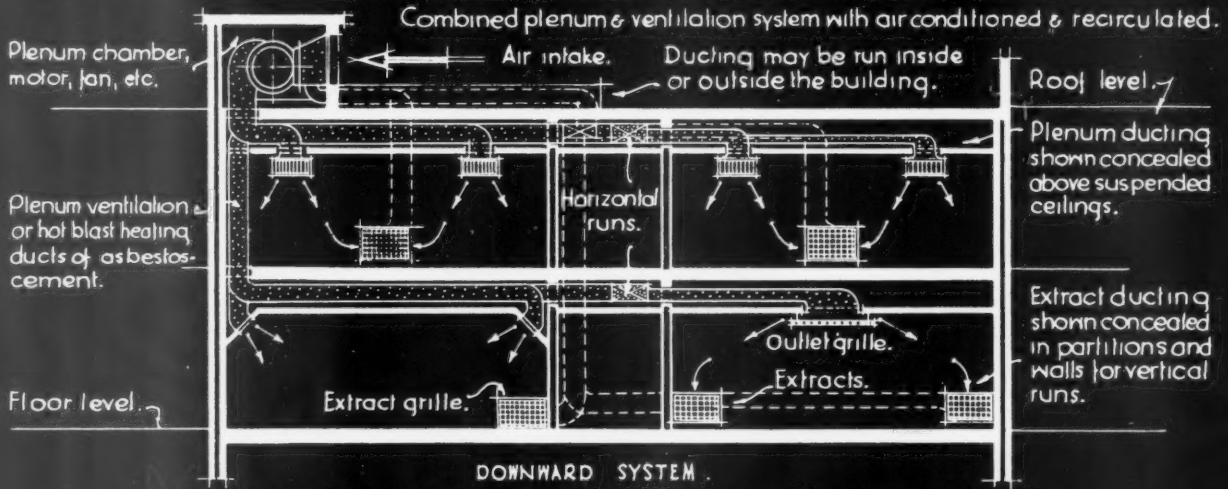
Information from : S. O. Bowker, Ltd.
Works : Tenby Works, Regent Row, Birmingham, 1
Telephone : Central 3701 (P.B.X.)

London Office and Stores :
Holborn Viaduct House, Holborn Viaduct, E.C.
Telephone : City 7586
Manchester (Office and Stores) : 2 Sussex Street
Telephone : Deansgate 2921
Southampton (Office and Stores) : 110 High Street
Telephone : Southampton 4168

578.

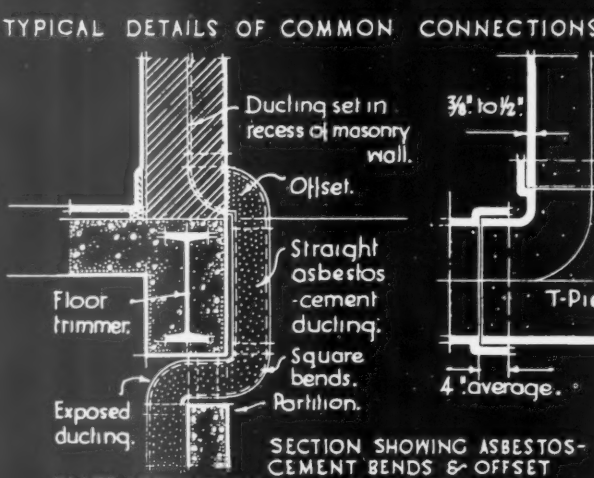
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION.

DIAGRAM SHOWING A LAYOUT FOR EVERITE ASBESTOS-CEMENT VENTILATION DUCT WORK :

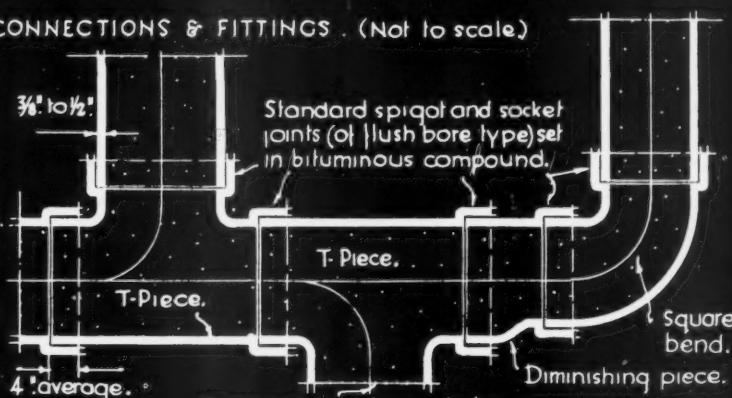


NOTE. The asbestos-cement ducting may be of circular, square or rectangular section according to position, exposure etc, & the velocity of air flow required.

TYPICAL DETAILS OF COMMON CONNECTIONS & FITTINGS. (Not to scale)



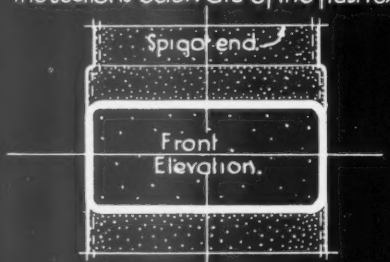
SECTION SHOWING ASBESTOS-CEMENT BENDS & OFFSET IN USE AROUND AN R.S.J. FLOOR TRIMMER.

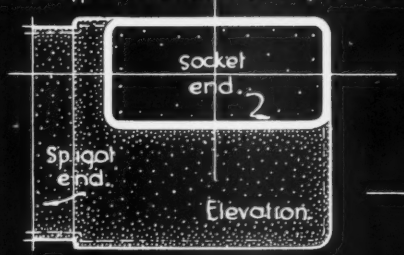


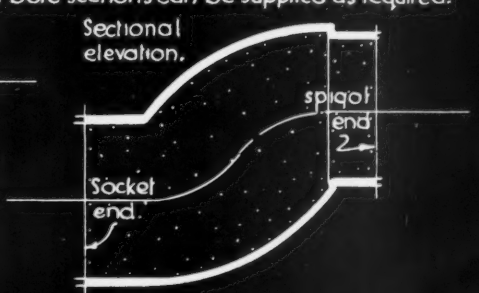
Strapped wood cover to be provided over inspection point.

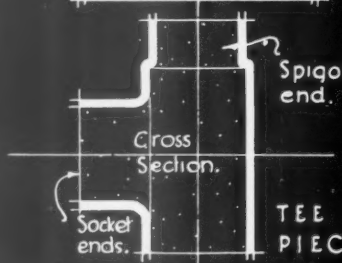
SECTION THROUGH DUCTING OF ANY SHAPE SHOWING JOINTING OF FITTINGS & CONNECTIONS.

The sections below are of the flush exterior type. Flush exterior or flush bore sections can be supplied as required.



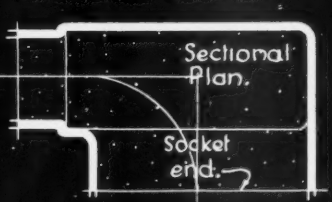




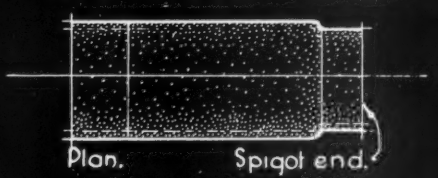


TEE PIECE.

SPECIAL BEND.



RECTANGULAR OFFSET.



Information from Turners Asbestos Cement Co. branch of Turner and Newall Ltd.

INFORMATION SHEET : ASBESTOS-CEMENT VENTILATING DUCTS : I.

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

THE ARCHITECTS' JOURNAL
LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 474 •

ASBESTOS CEMENT VENTILATING DUCTS

Subject :
Asbestos Cement Ventilating Ducts

General :

On this Sheet are set out typical arrangements and details of Everite asbestos cement ventilating ducts. The lay-out of the combined plenum and extract system shown is intended as a diagrammatic suggestion only, and no particular duct run, size, shape or position may be applicable to any scheme.

Size and Shape :

Although there are no standard shapes or sizes of asbestos cement ducts manufactured, runs and fittings are made to suit the requirements of any installation. Offsets and bends can be produced to any radius or curvature, and junctions and branch connections may be formed at any desired angle.

Section :

The section chosen for the duct work of any heating, ventilating, or air-conditioning installation will depend upon conditions such as the amount of space available, structure, air-flow velocity, friction, etc. Circular asbestos cement ducts are best from an air-flow point of view, and these may be used for internal exposed work, but it is recommended that for economy, whenever ducts are to be buried in the walls or floors, a square or rectangular section should be used.

Buried Work :

Asbestos cement ducting requires no painting or other preservative treatment, whether fixed in internal or external situations, exposed or buried. The natural insulating and acoustic properties of the material are increased if the runs are recessed into the surfaces of walls, etc., and air space is thereby saved. Such work, besides resisting all forms of corrosive attack, needs no subsequent maintenance, and the exposed face may be plastered or decorated in the same way as the surrounding surfaces.

When ducts are to be constructed of concrete, asbestos cement sections form an economical and efficient medium for use as internal shuttering, and should be retained in position after the outer timber shuttering has been struck. The smooth bore of the asbestos cement increases the efficiency of the ducting by reducing the skin friction.

Joints :

All joints in asbestos cement duct work are made by the spigot and socket method, designed either to give a flush bore or a flush exterior as may be required. Each length of duct and all fittings are supplied with one spigoted and one socketed end, each of an average length of 2 ins., which are well buttered with bituminous compound prior to being connected to the adjoining piece. The jointing material retains a degree of ductility over a long period of years, and forms an airtight joint without recourse to riveting or other mechanical means.

Supports :

Horizontal isolated and exposed runs may be hung from the main structure by means of light bolts with bottom bearing straps, while runs on wall surfaces are usually supported on light metal cantilever brackets built into the wall at one end and slightly hooked at the other. Vertical runs are best strapped right around the perimeter of the ducting, except when built into walls, when as a rule no fixings are necessary. Supports may be spaced up to 6 ft. centres for normal work, depending on the size of the ducts and the frequency of bends and connections.

Air Directing Vanes :

Asbestos cement air-splitters may be installed in bends, elbows, offsets, junctions, etc., to suit requirements.

Dampers :

Dampers of metal or asbestos cement may be inserted in any branch duct or fitting during manufacture.

Information from : Turners Asbestos Cement Co. Branch of Turner and Newall Ltd.

Address (Central Office and Works) :
Trafford Park, Manchester, 17

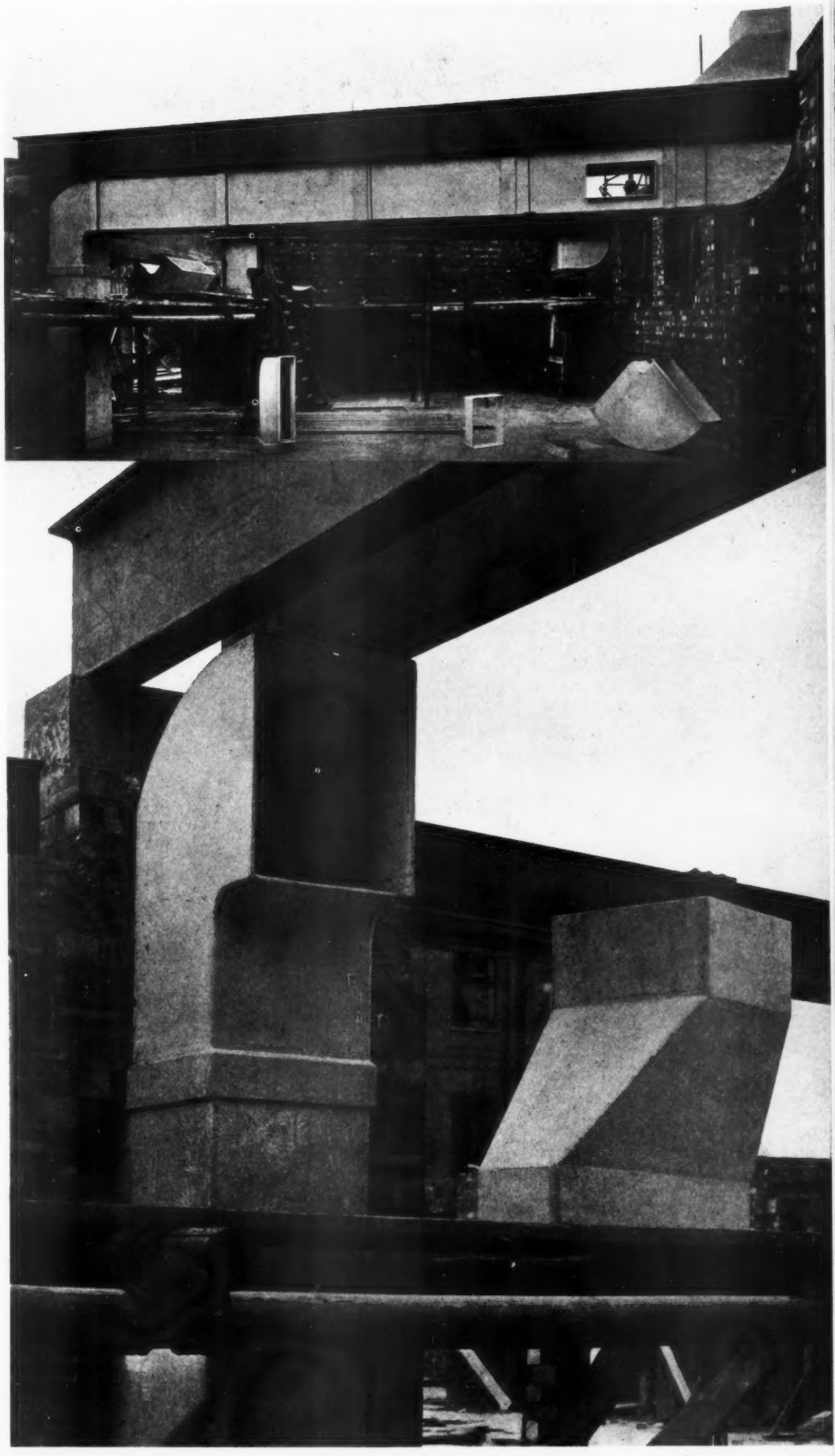
Telephone : Trafford Park 2181 (8 lines)

London Office : Asbestos House, Southwark Street, S.E.1

Telephone : Waterloo 4041

VENTILATING DUCTS

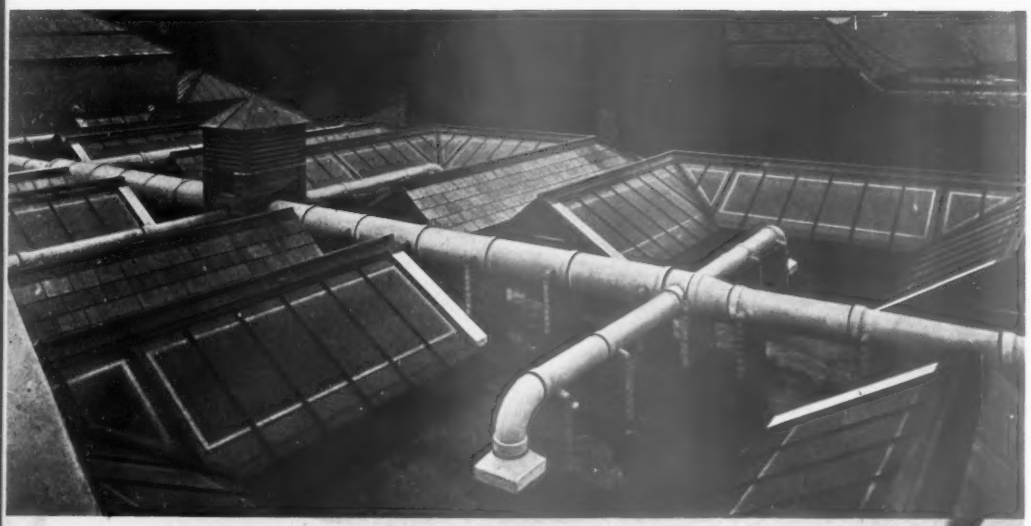
Building :
Brotherton Library,
Leeds.
Architects :
Lanchester and Lodge.



General photograph showing asbestos cement duct being built into the structure.

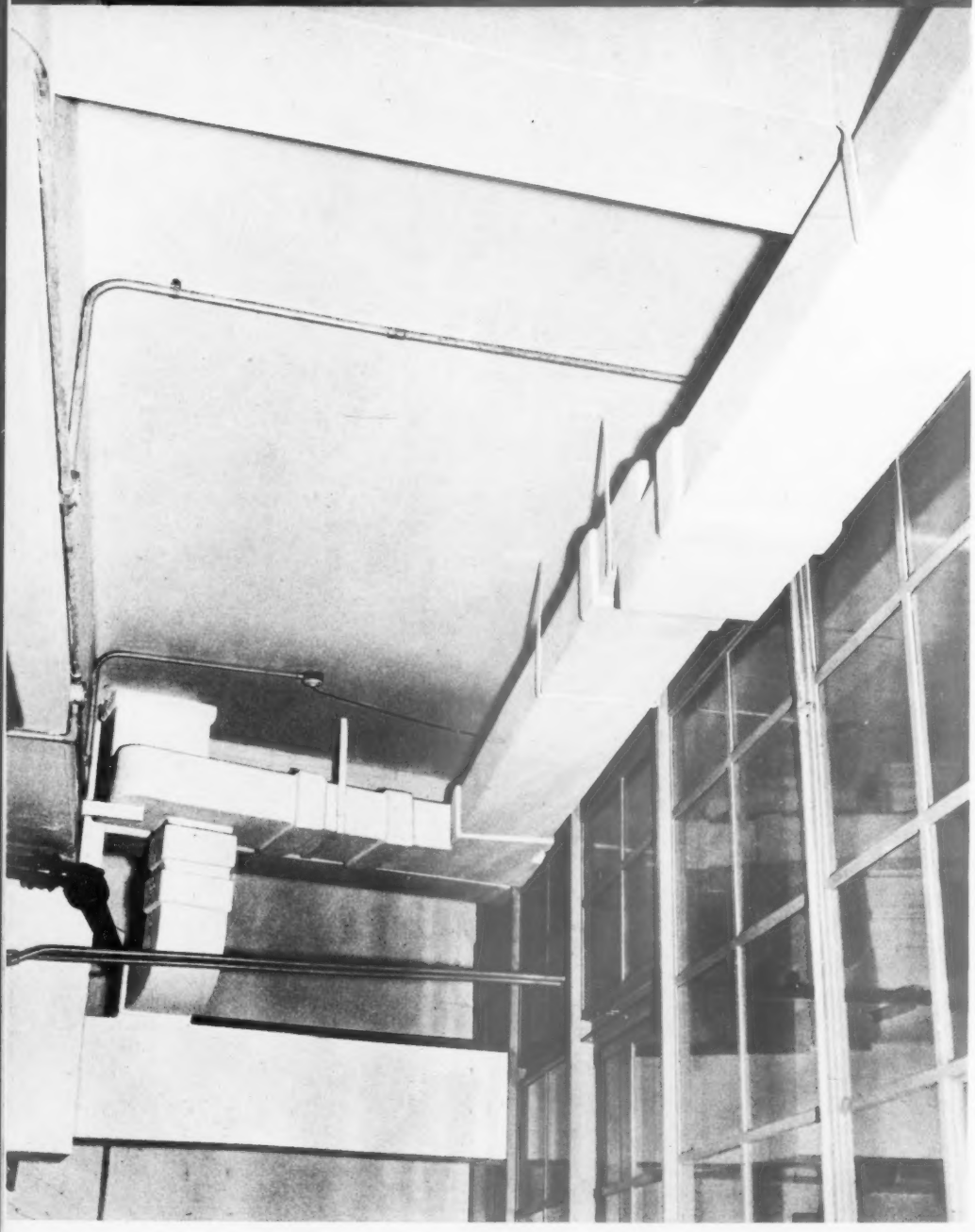
A close-up photograph of the angle fitting of the asbestos cement duct shown above.

VENTILATING DUCTS



General photograph showing asbestos cement duct work installed on the roof of the existing building.

Building :
City Art Gallery, Dublin.



Anti-acid asbestos cement ducting and fittings in a laboratory : to the left can be seen various purpose-made fittings.

Building :
Sir John Cass
Technical Institute
Architect :
Verner O. Rees.

The Architects' Journal Library of Planning

SHOPS

Floor and Wall Coverings—I

[By Bryan Westwood and Norman Westwood]

THE particular difficulty in deciding on flooring materials for shops is heavy and uneven wear. Whereas the greater part of the floor is not subjected to very heavy wear certain parts occurring in positions near counters or entrances, or places where people turn, such as staircase landings, are subjected to heavy wear. In these positions, in a busy shop, even the most durable materials which can be used, consistent with good appearance, only last a limited number of years.

Since the floor is an important contributory factor in determining the degree of attractiveness of the shop as a whole, it must look well and be easily cleaned. Moreover, in view of the heavy claims which arise if customers meet with accidents through slipping, such cleaning must be done without a high degree of polish. The essential qualities of a good shop floor are—

(1) Hard wearing.

(2) Possibility of partial renewal.

(3) Easy cleaning.

(4) Non-slip.

It should be noted that heavy pile carpets should not be used in positions where assistants have to stand for long periods, as under such conditions they are particularly tiring to the feet. At the other extreme if granolithic or similar material is used for the floor, shop assistants' societies insist on the provision of mats.

Main Types

(*a*) *Wood Blocks and Boards*

Pitch Pine, Oak, Maple, Jarrah, etc.

The appearance and wearing qualities are good but it is difficult to avoid slipperiness and the floor is noisy unless partly carpeted. Suitable for showrooms generally, and particularly for furniture rooms where the appearance of goods is improved by display in their probable future setting.

(*b*) *Rubber, Lino, Cork or their Derivatives*

Generally speaking this group of floorings is more suitable for the small shop than either (*a*) or (*c*). They are comparatively easy to keep clean if the right cleansers are used, and if polishes are avoided they retain their initial non-slip qualities.

With the exception of cork, which is only obtainable in light and dark brown, these materials are available in a wide range of plain and marbled colours, but experience proves that a light marbled colour shows the dirt less than plain colours, and partial renewals do not show to the same extent. In plain colours red seems to show the dirt more than green. On staircases it is advisable to have the nosings a different colour to the treads, so that they can be renewed when necessary.

Messrs. Austin Reed's shop on the "Queen Mary." In Indian silver greywood veneer. The principal lighting is from a laylight glazed with "maximum daylight" glass; warmed air enters through grilles at the base of fittings, and is extracted at ceiling level. Drawers are fitted with stops to prevent sliding as ship rolls. The architects were P. J. Westwood and Son.

Interior of Siemens-Werke gas and heating apparatus showrooms, designed by Professor Max Fellerer. Floor is of black tiles, one wall of cream tiles and side wall of varnished photo-murals of the firm's products.

For all these coverings it is absolutely essential that the surface of the sub-floor is perfectly dry, true and free from irregularities. If this is not so, uneven and rapid wear takes place and adhesion is liable to be defective. "Existing" floors which are too uneven to be planed to a good surface can be covered with suitable screeding provided by the makers of the final covering.

Cork tiles are composed of granulated cork which has been subjected to sufficient heat and pressure to cause the natural gums to bind the cork particles into one solid mass. This material makes a really first class floor where traffic is not abnormally heavy.

It is limited as to colour range, as mentioned before, but has a good appearance and is pleasant and quiet to walk upon.

Linoleum, etc.

These materials are composed of cork dust, wood flour and vegetable oils and gums. The main difference between them lies in the quality of the constituents and finished thicknesses. Floors such as "Cellulin" or "Korkoid," which in appearance are a superior type of lino, retain their good appearance under the usual wear in shops longer than any other type normally in use except the very hard tile or mosaic floors.

Rubber has much the same appearance as the floors mentioned above, but it is, if anything, too non-slip, and, in the authors' experience, it does not appear to retain its good appearance as long. It must not be used in hairdressers' shops or other places where grease is likely to be spilt.

For special small areas, for instance, the floor of a lift, rubber with sorbo underneath, makes a resilient and comfortable surface to walk on.

(*c*) *Tiles, Mosaic, Travertine, Marble, etc.*

The exceedingly good wearing qualities of materials in this class is more than offset by their

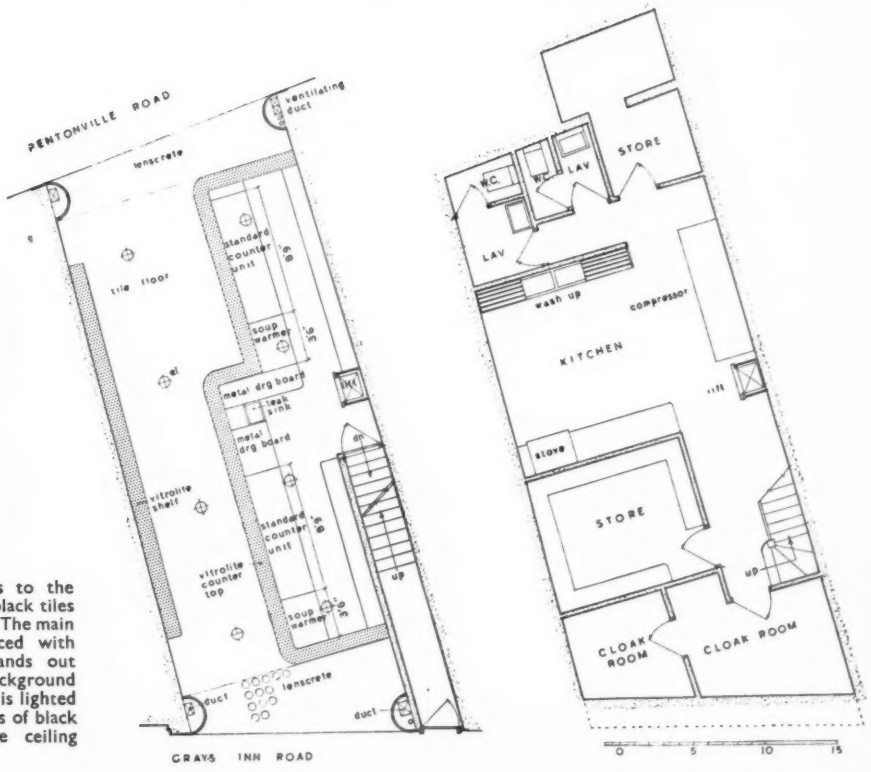
SHOPS

MILK BAR, GRAY'S INN ROAD • *By Sir John Brown and A. E. Henson*

The site for this milk bar has two frontages, one in Gray's Inn Road and the other in Pentonville Road, and has the additional advantage of being near St. Pancras and King's Cross Stations.

As it remains open day and night no real doors are required, and folding screens, which can be opened or closed according to weather conditions, are provided instead.

The semi-circular columns to the entrances are faced with black tiles with a surface of matt glaze. The main lettering is of wood faced with chromium plate and stands out in silhouette against a background of ribbed opal glass which is lighted from behind. The floor is of black and white tiles, and the ceiling enamelled.



Messrs. Fanchon's shoe shop in Old Bond Street, designed by Mallet-Stevens. The carpet is fawn, chairs are finished in lacquered brass and bright red tapestry, fixtures are natural mahogany and fireplace is in Roman brick and black Vitrolite.

noisiness in use and lack of resilience. For these reasons, except for travertine which has particularly good non-slip qualities, the use of materials in this class should be confined to shops where special circumstances make them particularly suitable. For instance, black and white marble squares to a dairy floor give an effect of scrupulous cleanliness which accentuates the particular quality which is most to be desired in such a shop. Again all these materials are unaffected by water and so are often used in flower shops, but in most shops they are not so suitable as those in groups (*a*) and (*b*).

Wall Coverings

Materials for covering walls are not subject to practical limitations to anything like the extent of floorings, consequently far more are available. In fact there are so many suitable alternatives that we cannot possibly deal with more than a nucleus of them. But in spite of this variety, floor coverings like linoleum and cork are being increasingly used on walls.

In passing, it should be noted that where the floor is washed it is extremely difficult to keep any polish on the skirting. It is therefore desirable to use a metal or painted finish rather than polished wood.

(*a*) *Vitrolite, Glass, Tiles, etc.*

Suitable for all work where cleanliness is the characteristic on which the shopkeeper wishes to lay the greatest stress. Dairies, butchers, hairdressers, etc.

Where food is kept in glass cases they are sufficient to give this hygienic effect ; and enamel or some such finish gives a more subtle sense of cleanliness to the walls.

Vitrolite, opaque glass and similar materials are bedded in mastic on screeding for fixing and are thus a permanent and substantial job. Where panels have to be removable, for inspection of plumbing in a barber's shop, they are best framed in a narrow metal frame and screwed to bearers. Vitroflex, consisting of small pieces of such materials on a flexible backing, permits their use on curved surfaces. Needless to say it is relatively expensive.

Wall-papers are still not to be despised for special purposes and large photographs illustrating uses of products sold, applied as wall-paper in all-over pattern, can be one of the best forms of decoration. (See Viennese interior illustrated.) American cloth and Rexine (a material resembling leather in appearance) are two further useful and durable materials which can be applied like wall-paper.

LAW REPORTS

LIABILITY FOR FATALITY IN FALL OF TRENCH

Hunt v. Rice and Son, Ltd.—King's Bench Division. Before Mr. Justice Mackinnon

MRS. BETTY THERESA HUNT, of 19 Southville, Wandsworth Road, S.W., unsuccessfully sued Messrs. Rice and Son, Ltd., building contractors, of Stockwell Road, S.W., to recover damages in respect of the death of her husband, Sidney Hunt, which was said to have been caused through injuries he received in January last year when the sides of a trench in which he was working collapsed.

The mishap occurred in Streatham Hill while a block of flats was in the course of erection.

Mrs. Hunt claimed under the Fatal Accidents Act, and also, on behalf of herself and her two children, under the Employers' Liability Act, alleging that her husband's death was caused through negligence or breach of duty on the part of the defendant company or their employees.

It was contended that the defendant company were liable because when the trench was dug no timber or other supports were used for propping up the sides in a proper manner and that the trench was opened near to an old and decayed drain encased in concrete.

There was a further allegation that the defendant company had failed to employ a competent foreman to supervise the work.

The defendant company denied liability for the accident and pleaded that if it was caused through an act of negligence or breach of duty, it was the negligence or breach of duty of a fellow servant of the late Mr. Hunt and, therefore, the doctrine of common employment applied and Mrs. Hunt could not recover damages.

They further contended that no claim lay under the Employers' Liability Act and they denied that their foreman, Mr. Charles Osborne, was guilty of any negligence.

Giving judgment, after hearing evidence, his lordship said it appeared that a little way away from the trench was an old drain encased in cement. He thought the real reason for the collapse of earth and material into the trench was because the heavy weight of the drain was influenced by vibration. The weight of the drain suddenly overcame the resistance of the earth outside it and the earth and part of the concrete of the drain all came down into the trench.

Had it not been for the unknown existence of the old drain the judgment of Mr. Osborne that the earth did not need timbering would have been sound. It was only because this feature, of which he did not know, existed that it was possible to say that it would have been prudent and that it would have prevented an accident if timbering had been done to the sides of the trench.

It was obvious, continued his lordship, that the doctrine of common employment applied, Mr. Osborne being a fellow servant of the unfortunate Mr. Hunt. Mr. Osborne was an experienced and competent foreman.

The question arose as to whether there was negligence on the part of Mr. Osborne through his failure to have the sides of the trench timbered and whether, by the exercise of reasonable care, he ought to have anticipated what happened and avoided it by timbering.

It was easy to say after the accident that it would not have happened if timbering had been done, but the question was whether in the circumstances there was an indication to Mr. Osborne as a reasonable man that he ought to have the sides of the trench timbered and that it would be dangerous to abstain from doing so.

"I do not think that it was negligent on the part of Mr. Osborne to abstain from timbering this trench" said his lordship. The disaster unhappily occurred, he added, because there was this unusual incident of the old drain. The claim failed and there must be judgment for the defendant company.

Judgment was accordingly entered for Messrs. Rice and Son, Ltd., with costs. It was intimated that there might be an appeal.

SHORING

Smith v. Benabo.—King's Bench Divisional Court. Before the Lord Chief Justice and Justices Swift and Goddard

IN this case Mr. Henry Smith, Street Inspector of the Stepney Borough Council, appealed from a decision of the magistrate sitting at the Thames Police Court, dismissing an information which Mr. Smith had preferred against the respondent, Mrs. Rebecca Benabo, who trades as Charles Benabo and Sons, for unlawfully setting up in March, 1936, at No. 4 Wicker Terrace, Stepney, two "dead shores," without the licence in writing of the Borough Engineer and Surveyor.

It appeared that the shores were set up by the respondent for the purpose of securing the safety of her premises, which were in danger of falling down, and as a preliminary to repairs of a structural nature being executed to the premises. The shores consisted of two baulks of timber 8 ft. in length and between 6 or 7 ins. square, set upright on the footpath of the street between the kerb and the front of the premises. The shores were set up or erected about 12 ft. apart from each other and set up in the centre of the footway, which was about 5 ft. wide, at a distance of 2 ft. 6 ins. from the building line of the premises. The shores were resting upon another baulk of timber which was about 15 ft. in length, about 12 ins. wide and 4 ins. thick.

The appellant's case was that the erection of these shores was prohibited by Section 75 of the General Paving Metropolis Act, 1817, unless the leave or licence therein mentioned was first obtained, and that the shores in question came within the description of "bolts, bars, rails, boards or other things."

Further, in the alternative, it was contended that the shores were scaffolding within the meaning of Section 75 of the Act.

On behalf of the respondent, it was argued that Section 75 of the Act was impliedly repealed by the effect of the enactment of Sections 122 and 123 of the Metropolis Management Act, 1855, that no licence was required and that the shores were not scaffolding within the meaning of the Act and had not been erected by way of enclosure and did not form any enclosure and were incapable of being used as an enclosure for any purpose.

The magistrate dismissed the information, holding that in the circumstances the dead shores could not be considered to come within the category of scaffolding, inasmuch as they were not used, or capable of being used, as an appliance for the accommodation of workmen, and/or materials, there being no platform on which the workmen could stand or materials be placed.

From this decision the present appeal was brought.

Mr. Macaskie, K.C., and Mr. Dawson appeared for the appellant and Mr. J. H. Goldie for the respondent.

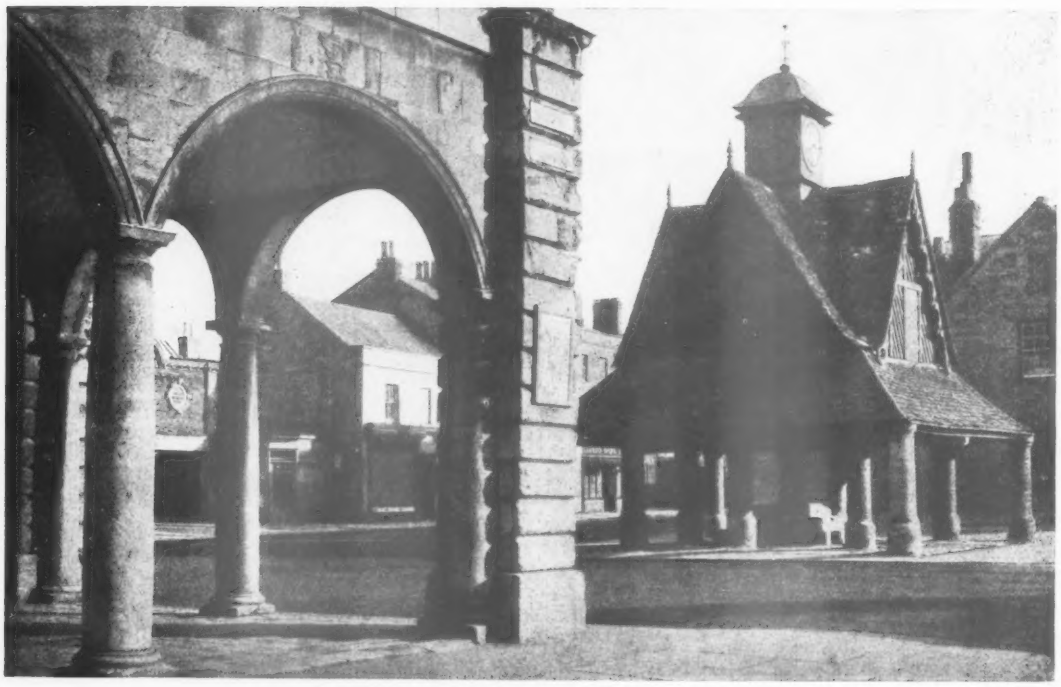
Judgment

Mr. Justice Goddard read the considered judgment of the Court. His lordship said the information preferred against the respondent charged her with setting up two dead shores without obtaining a licence from the borough engineer and surveyor, contrary to Section 75 of the Statute 57 George III. c. 29, commonly called the General Paving Metropolis Act, 1817. At the hearing the facts were not in dispute. The contentions of the respondent could be grouped under two heads. First, it was submitted on her behalf that the section under which she was summoned was repealed by the effect of Sections 122 and 123 of the Metropolis Management Act, 1855, and secondly that the dead shores were not hoards or scaffolding, and that in so far as the section prohibited the erection of posts, bars, rails, boards or other things, without a licence, these dead shores were not put up by way of enclosure, and therefore, no licence was required. The learned magistrate, who did not have the advantage of an argument as full as that which counsel addressed to that Court, ruled against the respondent on the first point and in her favour on the second. The Court had already intimated that in their opinion the contention of the respondent that the section had been repealed was correct, and it was therefore unnecessary to express any opinion whether the learned magistrate was right in his view that the prohibition affecting posts, boards and the like, applied only where they formed an enclosure. But in the opinion of the Court these dead shores could properly be described as hoards or scaffolding for the purpose of the Paving Act and also of the Metropolis Management Act.

The Act of 1817 was a private Act known as Michael Angelo Taylors Act and there were a number of other private Acts prior to 1855. This, no doubt, led to the passing of the Metropolis Management Act in that year to secure a uniform code and uniform administration in the metropolis. Section 122 of that Act dealt with the erection of hoards, scaffolding, etc., without a licence and Section 123 dealt with the question of penalty. Section 247 repealed all Acts in force in any parish to which the Act extended, so far as their provisions were inconsistent with those of the later Act.

In the opinion of the Court Section 122 of the Metropolis Management Act in substance described exactly the same offence as that which was described by Section 75 of the General Paving Act, 1817.

It followed that, in the opinion of the



Witney, Oxfordshire : a corner of the Town Hall and the Butter Cross. From "The Old Towns of England."

Court, Section 75 of the General Paving Act was repealed both by reason of the rule to which he had referred and also by Section 247 of the Metropolis Management Act. But, so that there might be no misapprehension, the Court thought it well to emphasize that this judgment gave no countenance to the idea, if it existed, that persons were at liberty to erect such structures as were erected in this case without a licence from the local authority. All that the Court decided was that proceedings were taken under a statute which had been repealed instead of being taken under one which was now in force.

The appeal, therefore, failed, and was dismissed with costs.

L I T E R A T U R E

TOWNS AND CHURCHES

[*By G. E. CHARLEWOOD*]

The Old Towns of England. By Clive Rouse. London: B. T. Batsford, Ltd. Price 7s. 6d.

THE size of the theme is given in the preface as a reason for necessary omissions; but in fact it is astonishing to find how much the author has managed to include in 116 pages of *The Old Towns of England.*

Most readers will have visited a number of old towns, but few can have discovered local associations as successfully as Mr. Rouse. Nowhere has he been content with a superficial visit to "the sights" of these historical places, for, as he says with reference to the Cinque Ports, "it is no good rushing through them in a car or even spending a hurried day there, and imagining you have seen them. You should stay there for a week or more to appreciate to the full their charm and absorb their atmosphere." Is even a week enough?

The book is divided into five chapters, the first introductory and full of historical knowledge. The author then deals successively with The Cathedral City, Market Towns and Country Towns, Ports and Harbours, Resorts and Spas.

He tells of the Prince Bishop dominating the North from his stronghold at Durham, and of the outcry in 1351 when Adam de Carleton erected his cookhouse in the middle of the street of Wells. The sounds of iron-shod hoofs on cobbles, of the town-crier's bell, and of the wind in the rigging of the merchant ships at Lynn and Boston are all there for those who like them.

The last chapter, on the Resorts and Spas of England, is highly entertaining. Bath during the Regency period, the Bath of Mrs. Delany, and Mr. C. E. Vulliamy's vivid description of "the day of a Bath lounger," are included. The rush to the seaside at the end of the eighteenth century, the early ceremonial of sea bathing as practised at Scarborough, are described in a manner that is both interesting and humorous.

Perhaps the most memorable paragraph in the whole book is that in which the author insists that "only by jealously preserving old customs and buildings, and by controlling new development in proper situations, shall we preserve the vital character of our towns, which are as integral and characteristic a part of the English Heritage as the Countryside itself."

Mediæval Styles of the English Parish Church. By F. E. Howard. London: B. T. Batsford, Ltd. Price 12s. 6d.

LOVERS of old churches and students of mediæval architecture will be grateful to the late Mr. F. E. Howard for this work.

Without being pedantic, the writer explains the causes that influenced the successive changes from style to style, and few details are overlooked.

Mr. Howard places himself definitely in opposition to that older school which maintained that no progress was made in mediæval building after the Mid-Gothic or early fourteenth century period, and he touches upon a number of controversial points in a manner which shows that his views are the result of careful research and close reasoning. He refuses to take on trust the opinions of Victorian archæologists as to the merits of this or that style, and he introduces an interesting theory when he asserts that in the years

preceding the Norman Conquest, Saxon architecture was already developing rapidly into the style known as Norman, and that many features of the Anglo-Norman style were probably evolved not in Normandy but in England. He points out that Repton crypt had a groined vault at the end of the tenth century, while none of the groined vaults in Normandy were earlier than 1050. He also awards to Anglo-Norman Durham the honour of initiating the ribbed vault.

"Norman," he states, "represents the perfection of centuries of Romanesque building. Early English is the first phase of Gothic, and as such is experimental, immature, . . . the truth is, of course, that Gothic was progressive to the last, and was never more alive and vigorous than when church-building came to a sudden halt at the Reformation."

Although containing much technical matter, this work is intended to be more a guide for the enthusiastic amateur than a text-book for the professional architectural student. Nevertheless, the latter would do well to read it in conjunction with volumes of a more definitely technical character, as it conveys much good information in a pleasant form.

Publications Received

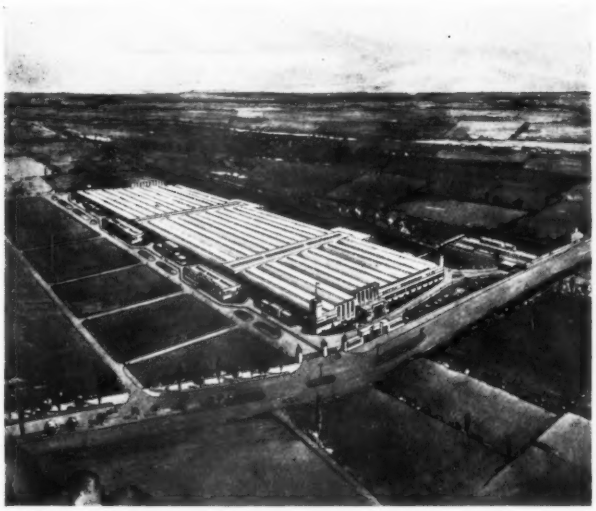
Protection of the Public from Aerial Attack. By a Group of Cambridge Scientists. London: Victor Gollancz. Price 2s. 6d.

Metropolitan Man. By Robert Sinclair. London: Allen and Unwin. Price 10s. 6d.

Applied Perspective. By John Holmes. London: Pitman. Price 6s. 6d.

Cathedral. By Helen H. Parkhurst. London: Lovat Dickson. Price 15s.

Sutton, Cambridgeshire. From "Mediæval Styles of the English Parish Church."



B.I.F., BIRMINGHAM

On Monday last, February 15, the "Heavy Industries" Section of the British Industries Fair was opened at Castle Bromwich, Birmingham. The Exhibition will remain open until February 26. Below are some notes on the principal exhibits; the usual Trade Notes section, edited by Mr. Philip Scholberg, will be resumed next week.

A SPECIAL feature of the Stands (B. 609 and 508) of Aga Heat, Ltd., is the Aga boiler for domestic hot water. There is also exhibited a complete range of the latest Aga heat storage cookers for domestic and catering requirements.

●

Allied Ironfounders, Ltd., are exhibiting, on Stands B. 609 and 508, fireplaces in various finishes, dog grates, combination grates, mantel registers, portable ranges, domestic and portable boilers, heat storage cookers and boilers, baths, lavatory basins, rain water heads and general castings.

●

D. Anderson and Son, Ltd., are showing, on Stand B. 618, a full range of their products. The firm are the manufacturers of "Red Hand" roofings, linings, dampcourses, "Thermotile" patent insulated flat roofing, "Macasfelt" flat roofing, wood preservatives, paints, bituminous compounds and "Stoniflex" plaster boards for walls and ceilings.

●

Steel constructional materials, steel plates, steel sheet piling, etc., are exhibited by Appleby-Frodingham Steel Co., Ltd., on Stands D. 713 and 612.

●

Ascot Gas Water Heaters, Ltd., are showing, on Stands Ca. 505 and 404, a complete range of instantaneous gas water heaters for domestic purposes. On view are single-point bath and sink heaters, multi-point heaters serving bath, basin and sink (automatic in operation), instantaneous boiling water heaters, and other new developments.

●

Bakelite, Ltd., are exhibiting, on Stand Cb. 508, their synthetic resin products, moulding materials, varnishes, lacquers, cement, spirit and oil soluble resins, laminated sheet, rod and tube, silent gear material, etc.

●

Baldwins, Ltd. (Midland Branch), on Stand Cb. 412, show their steel sheets for automobile work, furniture and enamelling work, lead-coated sheets and all grades of electrical sheets and stampings.

●

A wide range of "Belling" electric portable and built-in fires for the home are exhibited by Belling and Co., Ltd., on Stand Cb. 413. Also shown are the "Baby Belling" cooker and other models, with and without double-glass oven doors and thermostats.

●

On the Stand (Cb. 307) of Berry's Electric, Ltd., there is exhibited a complete range of the firm's domestic heating apparatus, including the Magicoal Plus and Haloberry fires, modern and period light fittings and low tension heavy switchgear.

●

The Tenby wiring systems and accessories are shown by S. O. Bowker, Ltd. The exhibits include: Bakelite ceiling roses and switchplates, brass and rubber bushes, porcelain connectors,

insulated staples, Tenbyluxe and Tenby pilot switches, switchplugs and bell pushes. The firm's Stand number is Cb. 417.

•

The exhibits on the Stand (Ca. 806) of Bratt Colbran, Ltd., include : gas fires and portable heaters, overhead radiant panel heaters, surrounds and mantels for gas fires in marble tiles and metal.

•

The latest developments in aluminium are shown by the British Aluminium Co., Ltd., on their Stands D. 911 and 808. These include : "Brytal" reflector process, anodic coatings, free-cutting alloy Ba. 35, super-purity aluminium.

•

The electrical enquiry bureau of the British Electrical Development Association is located in the centre of the Electrical Section (Cb. 507 and 406) where information on the electrical exhibits is obtainable.

•

Advice and information on any matter relating to the uses of gas for domestic or industrial purposes may be obtained from the Gas Industry's Information Bureau (Ca. 507 and 406).

•

The British Gas Federation are giving (on Stands Ca. 709 and 608) working demonstrations of the town gas fired heat treatment furnaces, aluminium and non-ferrous metal melting and glass manipulation, gas fired steam and hot water boilers and temperature measuring and control apparatus.

•

A complete range of electric wires and cables, for all purposes is exhibited by British Insulated Cables, Ltd. (on Stands Cb. 501 and 400). They are members of the Cable Makers' Association.

•

Stands D. 511 and 410 contain, as in past years, a complete and comprehensive range of the products of the British Oxygen Co., Ltd. An important feature of the firm's display is the arc-welding equipment of the single and multiple operator type for both portable and stationary use. The equipment includes a single operator AC/DC motor generator having a current range of 15/150 amps., also a double operator motor generator set with regulators to give a current range of 60/220 amps. per operator. These machines are of unit construction, having a combined frame for both motor and generator, while the armatures are mounted on a common shaft supported in ball and roller bearings. This method of construction is claimed to reduce the floor space to a minimum. Metal spraying exhibits are shown on the firm's other Stand (D. 324).

•

The exhibits of the British Thomson-Houston Co., Ltd., on Stands Cb. 607 and 504 include : Mazda Mercra, Mazda gas-filled and Mazda vacuum lamps, B.T.H. street lighting lanterns, Mazdalux floodlight projectors, B.T.H. industrial fittings, and Mazda light tubes for architectural lighting.

•

On the Stand (B. 418) of British Trane Co., Ltd., are working models of Vectairs on low pressure steam, hot water and electricity. A self-contained unit shows the models in actual operation. A wide range of electric models, both thermostatic and non-thermostatic, and including the glow light, are also shown in operation. A new combined heating and cooling floor type cabinet is also exhibited. This model has a fan capacity of 300 c.f.m., the twin centrifugal runners being belt-driven by a small electric motor. These cabinets are available either with hot water, steam or electric heating elements, and the cooling coil can be made for water, brine or direct expansion refrigeration. The model is fitted with an electric heating element and D.E. coil, both of which are of the Vectair finned-tube construction.

•

Self-Stoke gravity feed boilers, Thermidair heaters, gas, steam and hot water boilers, "Two-in-one" coke fires, gas coke fires and porcelain baths are exhibited by Brockhouse Heater Co., Ltd., on Stands Ca. 909 and 808.

•

The Stand (B. 416) of J. B. Brooks & Co., Ltd., contains examples of the firm's products, including the following : steel shelving, storage equipment, racking bins, lockers, cupboards, tables, benches for works and factories operatives, steel stools and chairs, canteen furniture, steel conveyor tables for packing and assembly, etc.

•

The exhibits on Stands Cb. 501 and 400 have been prepared by members of the Cable Makers' Association, and are intended to be generally representative of the various types of cables and accessories for power, lighting and telephone purposes manufactured by members of the Association.

•

Callenders Cable and Construction Co., Ltd., are exhibiting, on the Stands of the Cable Maker's Association (see note above) a complete range of electric wires and cables which may be used for all purposes.

•

The Stands (B. 913 and 814) of the Canadian Government Exhibition are intended to be representative of Canadian manufacturers and Government displays of Canadian timber and minerals.

•

The "Devon Fire" faience and tile fireplaces, wall tiling and floor quarries and a display of Candy hand-thrown pottery in a variety of coloured glazed effects are exhibited by Candy & Co., Ltd., on Stands B. 607 and 506.

•

The Stands of Carron Co., contain the following exhibits : D. 841 and 740—Ash elevators (steam), brassfoundry (ships'), castings, ferrous and non-ferrous, drop forgings and stampings, metal windows, etc. Cb. 304.—Electric cookers, domestic appliances, fires, grills, irons, kettles, ovens, radiators and heaters. B. 725 and 624.—Firegrates in various finishes, kerbs, combination grates, kitchen ranges, stoves, electric fires, cookers, gas fires, baths, portable boilers, drop forgings and structural ironwork.

•

Cellactite and British Uralite, Ltd., exhibit the following products : Stands B. 823 and 734.—"Cellactite" asbestos protected metal roofing and roof ventilators, "Urastone" imperishable air ducts, "Molerboard" wallboard, "Asbestone" flat and corrugated sheets, and "Uralite" fireproof sheets. Stands Ca. 821 and 720.—"Urastone" incorrodible flue pipes and fittings, cowls, bafflers, etc., in service form, new "Urastone" for high temperature work, enamelled "Urastone" to match coloured appliances and "Asbestone" fire surrounds.

•

Cellon, Ltd., exhibit (Stand B. 625) their "Cerric" cellulose lacquers for wood, metal, leather, etc.; "Cerrux" synthetic lacquers (air-drying or stoving for industrial purposes), "Cerrex" anti-corrosive primers, etc.

•

Claughton Bros., Ltd., on Stand B. 608, are exhibiting architectural lead work, flushing cisterns, low level cistern fittings, drawn lead traps and bends, cast lead plumbers' fittings, cast lead traps, washers, laboratory wastes, etc.

•

Claygate Brickfields, Ltd. (Stand B. 808) are exhibiting "Claygate" old English fireplaces built of hand-made sand-faced briquettes, either loose or slabbed in section.

The Stands (B. 715 and 614) of the Coal Utilization Council exhibit several modern domestic and industrial appliances for the utilization of solid fuel. Information can also be obtained on modern methods of combustion.

•

The "Lavalect" panelled basin (with built-in hot water unit), and the "Augustan" cupboard basin are specially displayed by M. Cockburn & Co., Ltd. (Stands B. 609 and 508).

•

W. H. Colt (London), Ltd., display, on Stands B. 913 and 814, their Colt Canadian Cedar Wood Tiles for roofs and walls. These are claimed to be economical, durable and easy to lay. The minimum life is said to be 60 years.

•

Steel equipment for office and factory use, bathing pool cubicles and lockers, the "Coronation" clothes locker, partitions, planfiling cabinets, racks, shelving, strong room doors, work benches, etc., are shown by Constructors, Ltd. (Stand Cb. 608).

•

New concealed radiators form the chief exhibit of Crane, Ltd., on Stand B. 308. Other products shown include their "Whitehall" and "Carlton" sectional heating boilers, radiators, valves and fittings.

•

Croft "Adamant" reconstructed stone and marble, Croft "Hydromant" solid reconstructed stone, Hopton Wood terrazzo floors and wall linings, "Acme" stone window surrounds and stone fireplace surrounds are shown by the Croft Granite Brick and Concrete Co., Ltd. (Stand A. 533).

•

The exhibits of the Davis Gas Stove Co., Ltd. (Stands Ca. 603 and 502), include : Alpine New World Regulo-controlled gas cookers, Nautilus coke-heated domestic boilers, Davis geysers, Health Ray gas heaters for infra-red irradiation, Panella built-in and other gas fires.

•

The exhibit of the Dunlop Rubber Co., Ltd. (Stand D. 609), shows the many varieties of colours and qualities available in the firm's tiling, long length flooring and plastic rubber materials.

•

Eagle Range and Grate Co., Ltd. (Stands B. 601 and 500) show their coal and coke fired ranges, combination grates and two-room grates and Eagle gas coke grates and interiors.

•

On the Stand (D. 600) of Earl, Bourne & Co., Ltd., is shown a large selection of brass, copper and Sebalin aluminium alloys in strip, sheet, tubes, angles, channels, sections, mouldings and ornamental tubes.

•

Electrolux, Ltd., are exhibiting, on Stand Ca. 606, their gas refrigerators. These refrigerators operate by a tiny gas flame, automatically. Also on view are their paraffin oil-operated models suitable for country dwellings, etc.

•

Easiwork, Ltd., are showing, on Stands B. 303 and Cb. 205, their Easiwork kitchen cabinets and built-in kitchen units, dinner wagons, tradesmen's delivery hatches, etc. Also, the Easiwork health cookers, Easiwork pressure cookers, etc.

•

Elsan Manufacturing Co., Ltd., exhibit, on Stands B. 803 and 714, their Elsan non-flush sewerless chemical closets for bungalows, works, aeroplanes, etc.

•

A selection of enamelled cast iron fireplaces are on view on the Stands (B.609 and 508) of the Falkirk Iron Co., Ltd. Also exhibited are the

firm's "Boilanbake" cooker and "Homepride" portable range.

•

A comprehensive range of the stoves manufactured by Falk, Stadelmann & Co., Ltd., is on view on their Stand, A. 506.

•

On Stands D. 513 and 412 Firth-Vickers Stainless Steels, Ltd., are showing "Staybrite" and stainless steels in every variety of application to art and industry. Also, heat resisting steels and their applications to furnace construction and other industrial uses. On Stand D. 727 they show "Staybrite" steel in all forms, as fabricated by various manufacturers.

•

Thos. Firth and John Brown, Ltd., are showing, on Stand D. 408, products of their Engineers' Tool Department, including the new drill point grinder, files, hacksaws, "Insto" metal saws, milling cutters, reamers, and other items made from Firth Speedicut high speed steels.

•

The "Kabineat" all-porcelain enclosed gas cooker, "Kitchen-Grand" stainless steel enclosed cooker, "Elf" wall-type cooker, "J" series cookers, "Radiant-Panel" gas heaters, built-in and independent gas fires, "Metro" gas-ignited coke fires, "Metro-Log" gas fire, and the "Paradise" gas grill are included in the exhibits of Sidney Flavel & Co., Ltd. (Stands Ca. 607 and 506).

•

George H. Gascoigne, Ltd., are showing (Stand B. 712) their "Ke-Klamps" which, they claim, provides a quick, easy method of tubular construction.

•

A complete exhibit of lighting for all purposes, with particular reference to highway illumination, comprises the Stands (Cb. 617 and 514) of the General Electric Co., Ltd. The exhibits on view include: Magnet electric cookers, water heaters, switchgear, Osram and Osira lamps, and overseas radio and welding.

•

J. Halden & Co., Ltd., are showing (Stands Cb. 823 and 722) their drawing office specialities, including the new "Type 36" electric copying machine, developing machines, drafting tables and machines, photo processes for plan reproduction and all drawing office equipment.

•

An exceptional range of sheet metal products is shown by G. A. Harvey & Co., Ltd. (Stands B. 723 and 622). One of the developments of this firm has been the manufacture of steel equipment for offices and works, and their exhibit includes steel filing cabinets, cupboards, adjustable shelving, storage bins and racks, and clothes lockers. The range of metals perforated or woven by the firm includes steel, copper, brass, bronze, stainless steel, nickel and duralumin, and the perforations range from round holes ·015 ins. diameter in brass to slots $1\frac{1}{2}$ ins. long, $\frac{3}{8}$ in. wide in $\frac{1}{8}$ in. steel. Many examples of perforated work in various metals are on view, including a large number of ornamental patterns suitable for radiator and electric heater covers, grilles, ventilating panels and steam or hot-water pipe guards.

•

W. T. Henley Telegraph Works Co., Ltd., are showing, on Stands 501 and 400, their electric wires and cables for all purposes. (See note under Cable Makers' Association.)

•

Due to the particular success of last year's exhibit, Hills Patent Glazing Co., Ltd., are showing their products this year in a similar manner (Stand B. 422). Their display is comprehensive and shows patent glazing, steel partitions, steel casements and lay lights. They have introduced a new type of fusible link gear for use in cinemas and theatres. Board of Trade Regulations demand the use of a Haystack Lantern over the stage and operating box. Hand operation of the gear is permitted for ventilation purposes; and provision has to be made for severance of the gear in case of fire by means of a link fusing at 150° F. Difficulty has previously been experienced in satisfactorily incorporating both methods, and they claim that the principle governing their new system overcomes all past troubles. A miniature Haystack and set of gear in operation is on view.

•

The central feature of the exhibit of Henry Hope and Sons, Ltd., consists of a kiosk composed almost entirely of standard types of metal windows and doors made by this firm. There is also a special exhibit of pressed steel door frames. Another interesting exhibit is the large sliding folding doors which have been manufactured by this firm; together with many others, for the West Ward Block of the new Birmingham Hospitals Centre. These actual sliding doors will be used in this building immediately after the Fair.

Forming part of the same exhibit is a Hope's sliding folding window which is designed to give a clear view when open and the maximum of fresh air. These windows operate on bronze runners and can be folded to either side leaving the centre of the window space entirely free. The firm's stand numbers are B. 717 and 616.

•

The exhibits of Hope's Heating and Lighting, Ltd. (Stands B. 815 and 726) consist of mechanical stokers for Lancashire boilers and heavy general purpose underfeed types. Automatic domestic heating equipment is also exhibited.

•

The Hurry Water Heater Co., are exhibiting, on Stand Ca. 407, all kinds of water heaters for domestic and light industrial uses. These include: automatic heaters for circulatory systems; heating units for central heating; domestic wash boilers of every type, including the "Dual-Purpose"; and storage heaters (automatic).

•

I.C.I. Metals, Ltd. (Stands D. 503 and 402), show, for the first time, aluminium alloy in various forms. Brass, copper and other non-ferrous alloys are shown in plates, sheets, strip, wire, rods and sections, and an interesting exhibit is that of an all-welded locomotive firebox.

•

A selection of Ideal boilers, radiators, Rayrads, and accessories for central heating and hot water supply, standard sanitary appliances, etc., is shown by Ideal Boilers and Radiators, Ltd., on Stands B. 419 and 318.

•

The Stand (D. 306) of Imperial Chemical Industries, Ltd. (Cassel Cyanide), shows the following:—Cassel salt bath processes, furnaces and salts for case-hardening and heat treatment of metals, including heat treatment of high speed steel and of cast iron.

•

The Stand of Imperial Chemical Industries, Ltd. (Degreasing) (D. 405) shows: Stationary and continuous plant for removing oil, grease, swarf, polishing compound, from metal parts before overhaul, enamelling, electro-plating, painting, lacquering, rust-proofing, etc.

•

The Ioco Rubber and Waterproofing Co., Ltd. (Stands Cb. 831 and 730) show the following: "Formapex" products (Bakelite type), cable cottons, boards (cloth and paper), tubes, oiled papers, bearings, gear blanks, slot insulation, "Artoco" interior panelling, varnishes, adhesive tape, treated paper, metallized fabric, "Linapex" insulating cloths and silk.

•

The Stands of Edward Lloyd Wallboards, Ltd., (B. 809 and 720) show many practical uses to which Lloyd fibre boards, both insulation and hardboards, can be put.

•

On the Stand of Loft Ladders, Ltd. (B. 312) is shown one of many models made by the firm, which specializes in the manufacture of loft ladders, roof ladders, fire escape ladders, etc.

•

Architectural and ornamental ironwork, including building front panels, lamp-pillars, coat-of-arms, illuminated bollards, railings, rainwater pipes, heads and gutters, soil drain and hot water pipes and connections are shown by Walter Macfarlane & Co., Ltd. (Stands B. 909 and 810).

•

Metropolitan-Vickers Electrical Co., Ltd., are showing (Stand Cb. 806) "Metrovick electric" battery vehicles, chassis and components, representative of a range of models of 7–9 cwts., 10–12 cwts. and 15–20 cwts. load capacity.

•

Automatic stokers for boilers, central heating and industrial furnaces, circulation pumps, for central heating, centrifugal pumps for all purposes and the Mirrlees "Imo" rotary pumps for oil pressures up to 3,000 pounds are exhibited by Mirrlees, Bickerton and Day, Ltd. (Stand B. 420).

•

Displays of Fosalsil heat insulating products, bricks, mortar, blocks, insulating powders, aggregates for heat insulating concrete, etc., are shown by Moler Products, Ltd. (Stands D. 913 and 810).

•

Nu-Way Heating Plants, Ltd., are showing, on Stand D.907, a working Rotavac oil burner running on 200 seconds cold oil, and demonstrating the thoroughness of the atomization, ease of control and simple assembly. Underfeed stokers for hot water and steam boilers are also shown.

•

The Parkinson Stove Co., Ltd., have, on Stand Ca. 600, a comprehensive range of gas cookers, fires, radiators, and water heaters. The exhibit includes their latest modern gas cooker—the "Renown"—and a new series of automatic ignition gas fires.

•

On Stand B. 320 Powell Duffryn Associated Collieries, Ltd., have a display of Presotim wood preservative, Presomet rust-resisting paint, Synthaprufe liquid waterproofing and jointing material, Synthaflex plastic material for filling crevices before final sealing with Synthaprufe. Synthacold cold dressing for paths, drives and roads.

•

Radiation, Ltd., have arranged, on Stands Ca. 603 and 502, a comprehensive display of Regulo-controlled New World gas cookers, "High Beam" gas fires, gas radiators, gas operated hot water apparatus, and large cooking apparatus for hotels and boarding houses.

•

On Stands D. 725 and 624, the Reynolds Tube Co., Ltd., are showing a full range of seamless steel precision tubes, in plain and alloy steels; seamless tubes, extruded bars and sections, in high strength aluminium and magnesium alloys; and manipulated tubes and sections and built-up components.

•

The Rheostatic Company, Ltd. (Stands Cb. 511 and 410) are showing automatic temperature controls, including thermostats for electric water heaters, cookers and room heaters, and

complete controls for automatic firing apparatus and central heating and electric valves, relays and thermal safety devices.

•

The Riley Stoker Co., Ltd., are showing, on Stands D. 206 and D. 303 and 202, a full range of automatic stoker equipment suitable for central heating and vertical or horizontal steam boilers. The exhibit includes No. 11 Robot to fire large hot water boilers and industrial steam boilers, B. 3 stoker, underfeed machine for all flue type boilers, and the Baby Robot for heating private houses.

•

On Stand B. 411 the Ruberoid Co., Ltd., have a display of bitumen roofings for every type of roof and building—Ruberoid for large buildings, Starex and Pluvex for smaller buildings, bitumen damp courses, Hessian based and lead-lined, asbestos roofings and slaters' felts.

•

Rubery, Owen & Co., Ltd. (Stands D. 903 and 802) are showing steel equipment of all kinds, including shelving, bins, cupboards, lockers, benches, stackpans, racks, partitioning, filing cabinets, desks, tables, tubular furniture, motor houses, pressed steel pulleys, pressings, bright bolts, nuts, drawn steel, and structural steelwork.

•

Joseph Sankey and Sons, Ltd., have arranged, on Stand B. 707, a full range of steel pressings of every description. Bath panels, wheels, axles, barrow bodies, "Sankey-Sheldon" steel furniture, Partitions, doors and miners' lockers, architectural metal trim, door frames, radiators, and steel flooring.

•

Serck Tubes, Ltd. (Stand D. 614) are this year displaying many new sections which hitherto they have been unable to show. In addition to their range of non-ferrous tubes in brass, copper, aluminium, gilding metal, bronze and Admiralty metal, they are making a further display of alloys which have been found to reduce to a minimum the corrosion met with in circulating and cooling plants.

•

The Simplex Electric Co., Ltd., have arranged, on Stands Cb. 515 and 414, a large exhibit of Simplex installation products, comprising conduits, fittings, switchgear, industrial lighting equipment, flameproof lanterns, floodlights, Mersey cables, Creda cookers, fires, water heaters, tubular heaters, wash boilers, irons, kettles, toasters and canteen equipment.

•

The exhibit of Spencer-Bonecourt, Ltd., on Stands D. 501 and 400, consists of catalogues and photographs showing the scope of their work as waste heat recovery specialists and as suppliers of boilers operating on industrial gas.

•

The Spiral Tube and Components Co., Ltd. (Stand D. 910) are showing plenum type air heaters, a new semi-portable oil-fired cabinet type air heater, unit heaters using steam or water, cooling coils for refrigerators, air-cooled condensers and copper spiral gilled tube for heat transmission.

•

Herbert Terry and Sons, Ltd., are showing on Stand B. 520, Anglepoise lamps and mirrors, and springs of all kinds for every imaginable purpose.

•

On Stands D. 909 and 806, John Thompson (Wolverhampton), Ltd., and Associated Companies are showing super Economic boilers, fusion welded boiler drums, vertical Economic boilers, mechanical chain grate stokers, submerged type ash conveyors, stainless steel pans, superheater pipework, Kennicot water softeners and metal windows.

•

Tube Products, Ltd. (Stand D. 615) are showing electrically welded steel tubes ⅜ in. to 3½ in. outside diameter in any length, for all branches of engineering and manufacturing.

•

Turners Asbestos Cement Co. (Branch of Turner and Newall, Ltd.) have arranged, on Stand Ca 401, a large exhibit of asbestos cement building materials, pressure pipes for gas and water mains, rainwater and soil goods, gas flues and fittings, bath panels, fire surrounds, and fire-resisting materials for building construction and other purposes.

•

The display arranged by the United Steel Companies, Ltd., on Stands D. 713 and 612, includes a complete model cinema, where films are shown of the manufacture of certain products. One of these films shows the mining of hematite ore at the company's Beckermet mines, another deals with the making of acid Bessemer steel rails. The various other companies of the group will show a selection of their own specialised manufactures.

•

The materials which United Strip and Bar Mills (D. 713 and 612) are showing include examples of Stribar reinforcement in the hooked and bent condition and hot-rolled steel strip in various finishes. One of the latest products manufactured by this branch of the United Steel Companies is Stribar Pearlite barrel hoops, designed to replace and give longer service than ordinary hooping; examples of these hoops in use are shown.

•

The Stand (No. B. 912) of the Universal Asbestos Manufacturing Co., Ltd., shows a large range of handcraft asbestos-cement products, comprising corrugated and flat sheets, slates, decorated sheets, rainwater materials and soil pipes, also reinforced troughing for semi-flat and decking for flat roofs.

•

The exhibit of Venesta, Ltd. (Stands B. 811 and 772) demonstrates the use of Plymax for industrial purposes. The centre part shows two alternative designs of Plymax standard lavatory compartment, one in all-metal construction and the other with teak door posts. Incorporated in this central part are examples of Plymax partitioning for factory and stores, and two Plymax doors of different designs. The canopy over the centre consists of copper Plymax carried on four sheets of the material, showing its rigidity.

•

The J. B. Gravily ladder is on view on the Stands (A. 423 and 318, and A. 425 and 320) of Walls Ltd.

•

Williams and Williams, Ltd. (Stand B. 413) are showing metal windows and doors of all types for every class of building.

•

Wilsons and Mathiesons, Ltd. (Stands Ca. 603 and 502, and B. 701 and 600) are showing "Regulo" controlled "New World" gas cookers, High "Beam" gas fires, stoves, back-to-back ranges, oven-over-fire stoves, domestic boilers, portable ranges and baths.

•

On Stands Ca. 603 and 502, John Wright & Co., Ltd., have a display of "Regulo" controlled "New World" gas cookers, High "Beam" gas fires, gas radiators, gas-operated hot-water apparatus and large cooking apparatus for hotels and boarding houses.

•

The stand of the Zinc Alloy Rust Proofing Co., Ltd. (B. 914) serves as a technical information bureau where particulars and prices for the rust-proofing of engineering and architectural ironwork and fittings by the Sherardizing process can be obtained.

On view are various samples which have been treated by this process, including such fittings as gate and door furniture, hinges, electrical conduit, ornamental ironwork, and a general range of builders' ironmongery, and engineers' stampings and forgings.

TOWN PLANNING IN THE CITY OF LONDON

The Court of Common Council of the City of London decided, by Resolution of June 11, 1936, to prepare a scheme under the Town and Country Planning Act, 1932, with respect to the whole of the City of London, excluding the Inner and Middle Temples. Following a Public Inquiry, this Resolution was confirmed by the Minister of Health on October 29, 1936. From that date the Town and Country Planning (General Interim Development) Order, 1933, by which the City Corporation (as the Authority under the Act for the City of London) is empowered to permit the development of the land in accordance with the terms thereof, therefore took effect. It became thenceforward statutorily necessary for intending developers to apply for such permission.

The Improvements Committee, to whom the powers of the Court of Common Council under the Interim Development Order have been delegated, has therefore sent us the following outline of procedure and requirements.

IN exercise of the powers conferred on him by Section 10 of the Town and Country Planning Act, 1932, the Minister of Health made, on March 21, 1933, a General Order with respect to the interim development of land within the areas to which resolutions to prepare or adopt a scheme apply. For this purpose, "Interim Development" means development between the date on which the resolution takes effect and the date of the coming into operation of the scheme; "development" in relation to any land, as defined by the Act, "includes any building operations or rebuilding operations and any use of land or any building thereon for a purpose which is different from the purpose for which the land or building was last being used."

The resolution of the Court of Common Council became effective on October 29, 1936, and it is thus necessary, in general terms, for an owner intending to develop or redevelop his land or property in the City, to apply for the permission of the City Corporation. Development in the following circumstances is, however, permitted pending the coming into operation of the scheme:—

(i) In the case of an existing building or a building permitted under or by an Interim Development Order made under the Act;

(*a*) Works necessary for the maintenance of the building;

(*b*) Works of alteration neither affecting the exterior of the building nor proposed in connection with a different use of the building.

(ii) Development carried out under powers conferred by an Act of Parliament or by an Order which has been approved by resolution of each House of Parliament on land specified in the Act or Order.

In any case of doubt the owner, for his

own protection, should make enquiry of the Corporation's officers as to whether or not his proposals come within the above categories before proceeding with the work.

Where a person desires to apply for permission under this Order, it is laid down that he shall apply in writing and furnish to the City Corporation, together with his application, a plan in duplicate sufficient to identify the land to which the application applies and the properties immediately adjacent (called the site plan) and particulars, illustrated where necessary by plans and drawings in duplicate (which should be on linen to ensure durability) requisite to show the proposed development.

Matters will usually be expedited and facilitated if, in the earliest possible stages of the preparation of drawings, the intending applicant consults with the officers of the Corporation in order to ascertain the basic principles on which the Order is being administered. It should be borne in mind, however, that although the Corporation's officers are in a position thus to assist on these principles, any opinion must not be taken in any way as an official consent and is without prejudice to the decision of the Corporation in regard to the formal application. Any action taken by applicants before the Corporation's decision is given is therefore entirely at their own risk.

It is of the utmost importance to the Corporation's prompt consideration of an application that the information contained therein be full and adequate with regard to principles concerned—space about buildings (including light, areas, etc.) : size, height, design or external appearance ; existing and proposed use ; building line ; traffic circulation and capacity of any loading docks, garage accommodation, etc. The drawings submitted need not have been developed beyond the sketch stage provided the aforementioned features of a proposal are clearly illustrated and adhered to in the ultimate details. The particular circumstances of building in the City also make it desirable that mutual agreements with adjoining owners for light and air or other easements likely to influence the general form of the building, together with a statement as to the owner's interest under which the applicant is acting, be set out in the application.

When a permission is granted, it is subject to compliance with any local acts, orders, regulations, bye-laws and general statutory provisions in force within the City, and nothing contained in it can be regarded as dispensing with such compliance or be deemed a consent by the Court of Common Council thereunder ; also, any personal or restrictive covenants applying to the land or the rights of any person entitled to the benefit thereof are not modified or affected thereby. Further, it does not relieve the applicant from compliance with the London Building Act, 1930 (including the obtaining of all necessary consents thereunder) in respect of the proposed works, nor from any requirement as to submission of plans under the Restriction of Ribbon Development (Provision of Means of Entrance and Egress to Buildings) London Order, 1936, and is without prejudice to any requirement which might be specified hereafter by the London County Council under that Order.

The Corporation is now proceeding with the preparation of the scheme, the object of which is to control and guide development and redevelopment in order to secure proper standards of amenity and convenience in the City as a whole. Existing premises and their present use are not affected so long as they remain unaltered and owners will be afforded opportunity at the appropriate stages to make representations or suggestions of the scheme itself. There is no implication at the present stage that the Corporation itself will acquire premises or execute works.

The above summarized explanation of procedure under the Town and Country Planning (General Interim Development) Order, 1933, and of the bases on which applications have to be considered is designed to assist those interested in the development of property in the City. To all developers, however, must remain as the ultimate and exhaustive sources of reference on their rights and obligations, the Town and Country Planning Act, 1932 (22 and 23 Geo. 5, Ch. 48), the Town and Country Planning Regulations, 1933, and the Town and Country Planning (General Interim Development) Order, 1933 (Statutory Rules and Orders, 1933, Nos. 742 and 236), together with any other Regulations and Orders made by the Minister, all obtainable from H.M. Stationery Office, Kingsway, W.C.2.

THE WEEK'S BUILDING NEWS

LONDON & DISTRICT (15 MILES RADIUS)

BATTERSEA. *Reconstruction.* The L.C.C. is to reconstruct the Winstanley Road School, Battersea, at a cost of £38,730.

CAMBERWELL. *Flats.* The L.C.C. is to clear the Linden Grove area of Camberwell and erect 200 flats at a cost of £32,000.

HACKNEY. *School.* The L.C.C. is to erect a new school at a cost of £51,430, to replace High Street, Stoke Newington, school. The new school will be erected on a site in Oldhill Street, Hackney.

ILFORD. *Houses, etc.* Plans passed by the Ilford Corporation : 16 houses, Huxley Drive, Mr. G. F. Siegerts ; 10 houses, Goodmayes Lane, Mr. J. T. Perrin ; 22 flats, Veronique Gardens, Roding Lane, Mr. W. M. Edwards ; licensed premises, Clayhall Avenue, Messrs. Whitbreads ; 60 houses, off New North Road, Davis Estates, Ltd. ; 16 shops, 14 flats and 7 showrooms, Eastern Avenue ; 19 shops, 16 flats and 10 showrooms, Cranbrook Road, Mr. J. Aldridge ; cinema and 16 lock-up shops and flats, Fulwell Cross, Mr. G. Coles ; 12 shops and flats, Rowallan Parade, Green Lane, Mr. H. J. Palmer : showroom, offices and store, Ilford Hill, High Road, Mr. J. Butterfield ; factory, High Road, Messrs. Lyons, Cleaners.

ILFORD. *Baths.* The Ilford Corporation is to obtain particulars of sites available in the northern part of the borough for baths.

LONDON. *Flats, etc.* The L.C.C. has prepared further housing schemes. In the Christian Street area of Stepney 260 flats are to be built at a cost of £157,000. In various areas of Stepney and Poplar rehousing is to be provided at a cost of £212,000, and in Lambeth and Southwark rehousing schemes will cost £34,000.

STREATHAM. *Central School.* The L.C.C. is to erect a central school for girls at Leigham Court Road, Streatham, at a cost of £31,550.

SHOREDITCH. *Rebuilding.* The L.C.C. is to rebuild the Shoreditch technical institute, at a cost of £85,500.

WANDSWORTH. *Redevelopment.* The Wandsworth B.C. has obtained sanction for a loan of £28,000 for the purchase of a clearance area at White Square for re-development.

MIDLAND COUNTIES

BIRMINGHAM. *Underground Car Park.* The Birmingham Corporation is to construct an underground car park on the civic centre site at a cost of £85,000.

BIRMINGHAM. *Houses.* The Birmingham Corporation is to erect 34 houses in Queslett Road at a cost of £14,635.

BIRMINGHAM. *Houses.* The Birmingham Corporation is to erect 36 houses at York Road, Hall Green, at a cost of £17,357.

BIRMINGHAM. *Houses.* The Birmingham Corporation is to erect 266 houses on the Kettlehouse Farm estate at a cost of £82,655.

BIRMINGHAM. *Erdington Institution.* The Birmingham Corporation is to modernise the Erdington institution at a cost of £306,245.

BIRMINGHAM. *Houses.* The Birmingham Corporation reports that it will be necessary during the next six years to erect 10,000 houses.

DUDLEY. *Houses.* The Dudley Corporation has approved the lay-out of an estate at Bowling Green, provision being made for the erection of 342 houses.

NOTTINGHAM. *Police Station.* The Notts C.C. has obtained a site at the junction of Bridgford Road and Rectory Road, West Bridgford, for the erection of a police station.

NOTTINGHAM. *County Hall and Offices.* Notts C.C. has approved an estimate in relation to the new County Hall and offices, Nottingham, of £216,160, and given instructions for the work to proceed without delay. The architect is Mr. Vincent Harris.

WEST BROMWICH. *Extensions.* The West Bromwich Corporation is to enlarge the depot to provide accommodation for motor buses or trolley buses, at a cost of £33,000.

THE BUILDINGS ILLUSTRATED

BUNGALOWS AT WHIPSNNDE (pages 299–303). The general contractors for these two bungalows were J. L. Kier & Co., Ltd., who were also responsible for the excavation, foundations, reinforced concrete, plumbing and plaster for bungalow A. The principal sub-contractors and suppliers included : Bungalow A :—Permanite, Ltd., roofing and pumice tiles ; G. R. Speaker & Co., Ltd., conit partitions ; Thermolux Glass Co., Ltd., and Vitrea Drawn Sheet Glass Co., Ltd., glass ; Armstrong Cork Co., Ltd., cork flooring tiles ; G. N. Haden & Co., Ltd., electric panel heating and electric wiring ; Oswald Hollmann, electric light fixtures ; Oscar Kanter, Ltd., door furniture ; Williams and Williams, Ltd., window furniture and casements ; F. A. Norris and Co., Ltd., iron staircases : D. Burkle and Son, Ltd., joinery and furniture ; Shanks & Co., Ltd., sanitary fittings. Bungalow B :—Permanite, Ltd., roofing pumice tiles ; Thermolux Glass Co., Ltd., and Vitrea Drawn Sheet Glass Co., Ltd., glass ; Duncan, Watson & Co., Ltd., electric heaters and electric wiring ; Troughton and Young, Ltd., electric light fixtures ; Shanks & Co., Ltd., sanitary fittings ; Oscar Kanter, Ltd., door furniture ; Williams and Williams, Ltd., casements and window furniture ; D. Burkle and Son, Ltd., joinery ; Plan, Ltd., furniture.

NEW THIRD COURT, BOW STREET POLICE COURT (pages 304–306). The general contractors were Sims and Russell. The sub-contractors and suppliers included : Crittall Manufacturing Co., Ltd., glass and casements ; Dunlop Rubber Co., Ltd., patent flooring ; E. Fitton & Co., extensions of existing L.P.H.W. system ; Troughton and Young, Ltd., electric light fixtures : James Keith Blackman & Co., Ltd., ventilation ; Modern Surfaces, Ltd., fibrous plaster and sandstone paint finish ; Corinthian Bronze Co., Ltd., metalwork ; Central Perivale, Ltd., joinery and furniture ; Celotex Co., Ltd., acoustic tiles.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for labourers. The rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

			I. s.	I. d.	II. s.	II. d.
A	ABERDARE ...	S. Wales & M.	1	7	1	2½
A	Aberdeen ...	Scotland	1	7	1	2½
A_1	Abergavenny ...	S. Wales & M.	1	6½	1	2
A_2	Abingdon ...	S. Counties	1	5½	1	1½
A	Accrington ...	N.W. Counties	1	7	1	2½
A_2	Addlestone ...	S. Counties	1	6	1	1½
A	Adlington ...	N.W. Counties	1	7	1	2½
A	Airdrie ...	Scotland	*1	7	1	2½
C	Aldeburgh ...	E. Counties	1	3		11½
A	Altrincham ...	N.W. Counties	1	7	1	2½
B_3	Appleby ...	N.W. Counties	1	2½		11½
A	Ashton-under-Lyne	N.W. Counties	1	7	1	2½
B	Aylesbury ...	S. Counties	1	5	1	0½
B	BANBURY ...	S. Counties	1	5	1	0½
B_1	Bangor ...	N.W. Counties	1	4½	1	0½
A_3	Barnard Castle ...	N.E. Coast	1	5½	1	1½
A	Barnsley ...	Yorkshire	1	7	1	2½
B	Barnstaple ...	S.W. Counties	1	5	1	0½
A	Barrow ...	N.W. Counties	1	7	1	2½
A	Barry	S. Wales & M.	1	7	1	2½
B	Basingstoke ...	S.W. Counties	1	5	1	0½
A_2	Bath	S.W. Counties	1	6	1	1½
A	Batley ...	Yorkshire	1	7	1	2½
A_2	Bedford ...	E. Counties	1	6	1	1½
A_3	Berwick-on-Tweed	N.E. Coast	1	6	1	1½
A_2	Bewdley ...	Mid. Counties	1	6	1	1½
B	Bicester ...	S. Counties	1	5	1	0½
	Birkenhead ...	N.W. Counties	*1	8	1	3
A	Birmingham ...	Mid. Counties	1	7	1	2½
A_1	Bishop Auckland	N.E. Coast	1	6½	1	2
A	Blackburn ...	N.W. Counties	1	7	1	2½
A	Blackpool ...	N.W. Counties	1	7	1	2½
A	Blyth	N.E. Coast	1	7	1	2½
B	Bognor ...	S. Counties	1	5	1	0½
A	Bolton ...	N.W. Counties	1	7	1	2½
A_2	Boston ...	Mid. Counties	1	5½	1	1½
A_2	Bournemouth ...	S. Counties	1	6	1	1½
B_2	Bovey Tracey ...	S.W. Counties	1	4	1	0
A	Bradford ...	Yorkshire	1	7	1	2½
A_1	Brentwood ...	E. Counties	1	6½	1	2
A	Bridgend ...	S. Wales & M.	1	7	1	2½
B	Bridgwater ...	S.W. Counties	1	5	1	0½
A	Bridlington ...	Yorkshire	1	6½	1	2
A	Brighouse ...	Yorkshire	1	7	1	2½
A	Brighton ...	S. Counties	1	6	1	1½
A	Bristol ...	S.W. Counties	1	7	1	2½
B	Brixham ...	S.W. Counties	1	5	1	0½
A	Bromsgrove ...	Mid. Counties	1	7	1	2½
B	Bromyard ...	Mid. Counties	1	5	1	0½
A	Burnley ...	N.W. Counties	1	7	1	2½
A	Burslem ...	Mid. Counties	1	7	1	2½
A	Burton-on-Trent	Mid. Counties	1	7	1	2½
A	Bury	N.W. Counties	1	7	1	2½
A_1	Buxton ...	N.W. Counties	1	6½	1	2
A_1	CAMBRIDGE...	E. Counties	1	6½	1	2
B_1	Canterbury ...	S. Counties	1	4½	1	0½
A	Cardiff ...	S. Wales & M.	1	7	1	2½
A	Carlisle ...	N.W. Counties	1	7	1	2½
B	Carmarthen ...	S. Wales & M.	1	5	1	0½
B	Carnarvon ...	N.W. Counties	1	5	1	0½
A_1	Carnforth ...	N.W. Counties	1	7	1	2½
A	Castleford ...	Yorkshire	1	7	1	2½
A_2	Chatham ...	S. Counties	1	5½	1	1½
A_2	Chelmsford ...	E. Counties	1	5½	1	1½
A_2	Cheltenham ...	S.W. Counties	1	5½	1	1½
A	Chester ...	N.W. Counties	1	7	1	2½
A	Chesterfield ...	Mid. Counties	1	7	1	2½
B	Chichester ...	S. Counties	1	5	1	0½
A	Chorley ...	N.W. Counties	1	7	1	2½
B_1	Cirencester ...	S. Counties	1	4½	1	0½
A	Clitheroe ...	N.W. Counties	1	7	1	2½
A	Clydebank ...	Scotland	1	7	1	2½
A	Coalville ...	Mid. Counties	1	7	1	2½
A_2	Colchester ...	E. Counties	1	6	1	1½
A_1	Colne	N.W. Counties	1	6½	1	2
A_2	Colwyn Bay ...	N.W. Counties	1	6	1	1½
A_1	Consett ...	N.E. Coast	1	6½	1	2
A_2	Conway ...	N.W. Counties	1	6	1	1½
A	Coventry ...	Mid. Counties	1	7	1	2½
A_2	Crewe	N.W. Counties	1	6	1	1½
A_2	Cumberland ...	N.W. Counties	1	5½	1	1½
A	DARLINGTON	N.E. Coast	1	7	1	2½
A	Darwen ...	N.W. Counties	1	7	1	2½
B_1	Deal	S. Counties	1	4½	1	0½
A_2	Denbigh ...	N.W. Counties	1	5½	1	1½
A	Derby	Mid. Counties	1	7	1	2½
A	Dewsbury ...	Yorkshire	1	7	1	2½
B	Didcot ...	S. Counties	1	5	1	0½
A	Doncaster ...	Yorkshire	1	7	1	2½
B_1	Dorchester ...	S.W. Counties	1	4½	1	0½
A_2	Driffield ...	Yorkshire	1	5½	1	1½
A_2	Droitwich ...	Mid. Counties	1	6	1	1½
A	Dudley ...	Mid. Counties	1	7	1	2½
A_2	Dumfries ...	Scotland	1	6	1	1½
A	Dundee ...	Scotland	1	7	1	2½
A	Durham ...	N.E. Coast	1	7	1	2½
A_2	EASTBOURNE	S. Counties	1	6	1	1½
A_1	Ebbw Vale ...	S. Wales & M.	1	6½	1	2
A	Edinburgh ...	Scotland	1	7	1	2½
A_2	Exeter ...	S.W. Counties	*1	6	1	1½
B	Exmouth ...	S.W. Counties	1	5	1	0½
A_2	FELIXSTOWE	E. Counties	1	5½	1	1½
A_3	Filey	Yorkshire	1	5½	1	1½
A	Fleetwood ...	N.W. Counties	1	7	1	2½
B_1	Folkestone ...	S. Counties	1	4½	1	0½
A	Frodsham ...	N.W. Counties	1	7	1	2½
B_2	Frome ...	S.W. Counties	1	4	1	0
A	GATESHEAD	N.E. Coast	1	7	1	2½
B	Gillingham ...	S. Counties	1	5	1	0½
A_1	Glamorgan-shire, Rhondda Valley District	S. Wales & M.	1	6½	1	2
A	Glasgow ...	Scotland	1	7	1	2½
A_2	Gloucester ...	S.W. Counties	1	6	1	1½
A_2	Goole	Yorkshire	1	6	1	1½
A_2	Gosport ...	S. Counties	1	6	1	1½
A_2	Grantham ...	Mid. Counties	1	5½	1	1½
A_1	Gravesend ...	S. Counties	1	6½	1	2
A	Greenock ...	Scotland	*1	7	1	2½
A	Grimsby ...	Mid. Counties	1	7	1	2½
B	Guildford ...	S. Counties	1	5	1	0½
A	HALIFAX ...	Yorkshire	1	7	1	2½
A	Hanley ...	Mid. Counties	1	7	1	2½
A	Harrogate ...	Yorkshire	1	7	1	2½
A	Hartlepools ...	N.E. Coast	1	7	1	2½
B	Harwich ...	E. Counties	1	5	1	0½
B	Hastings ...	S. Counties	1	5	1	0½
A_2	Hatfield ...	S. Counties	1	6	1	1½
B	Hereford ...	S.W. Counties	1	5	1	0½
A_2	Hertford ...	E. Counties	1	6	1	1½
A	Heysham ...	N.W. Counties	1	7	1	2½
A	Howden ...	N.E. Coast	1	7	1	2½
A	Huddersfield ...	Yorkshire	1	7	1	2½
A	Hull	Yorkshire	1	7	1	2½
A	ILKLEY ...	Yorkshire	1	7	1	2½
A	Immingham ...	Mid. Counties	1	7	1	2½
A_2	Ipswich ...	E. Counties	1	6	1	1½
B_2	Isle of Wight ...	S. Counties	1	4	1	0
A	JARROW ...	N.E. Coast	1	7	1	2½
A	KEIGHLEY ...	Yorkshire	1	7	1	2½
A_2	Kendal ...	N.W. Counties	1	5½	1	1½
A_2	Keswick ...	N.W. Counties	1	5½	1	1½
A_1	Kettering ...	Mid. Counties	1	6½	1	2
A_2	Kidderminster	Mid. Counties	1	6	1	1½
B_1	King's Lynn ...	E. Counties	1	4½	1	0½
A	LANCASTER ...	N.W. Counties	1	7	1	2½
A_1	Leamington ...	Mid. Counties	1	6½	1	2
A	Leeds	Yorkshire	1	7	1	2½
A	Leek	Mid. Counties	1	7	1	2½
A	Leicester ...	Mid. Counties	1	7	1	2½
A	Leigh	N.W. Counties	1	7	1	2½
B	Lewes	S. Counties	1	5	1	0½
A_2	Lichfield ...	Mid. Counties	1	6	1	1½
A	Lincoln ...	Mid. Counties	1	7	1	2½
	Liverpool ...	N.W. Counties	*1	8½	1	3½
A_2	Llandudno ...	N.W. Counties	1	6	1	1½
A	Llanelly ...	S. Wales & M.	1	7	1	2½
	London (12-miles radius)		1	8½	1	3½
	Do. (12-15 miles radius)		1	8	1	3
A	Long Eaton ...	Mid. Counties	1	7	1	2½
A	Loughborough ...	Mid. Counties	1	7	1	2½
A_1	Luton	E. Counties	1	6½	1	2
A	Lytham ...	N.W. Counties	1	7	1	2½
A_1	MACCLESFIELD	N.W. Counties	1	6½	1	2
A_2	Maidstone ...	S. Counties	1	5½	1	1½
A_2	Malvern ...	Mid. Counties	1	5½	1	1½
A	Manchester ...	N.W. Counties	1	7	1	2½
A	Mansfield ...	Mid. Counties	1	7	1	2½
B_1	Margate ...	S. Counties	1	4½	1	0½
A_2	Matlock ...	Mid. Counties	1	5½	1	1½
A_1	Merthyr ...	S. Wales & M.	1	6½	1	2
A	Middlesbrough	N.E. Coast	1	7	1	2½
A_2	Middlewich ...	N.W. Counties	1	6	1	1½
B_2	Minehead ...	S.W. Counties	1	4	1	0
B_2	Monmouth ... & S. and E. Glamorganshire	S. Wales & M.	1	4	1	0
A	Morecambe ...	N.W. Counties	1	7	1	2½
A_2	NANTWICH ...	N.W. Counties	1	6	1	1½
A	Neath ...	S. Wales & M.	1	7	1	2½
A	Nelson ...	N.W. Counties	1	7	1	2½
A	Newcastle ...	N.E. Coast	1	7	1	2½
A	Newport ...	S. Wales & M.	1	7	1	2½
A	Normanton ...	Yorkshire	1	7	1	2½
A	Northampton	Mid. Counties	1	7	1	2½
A	North Shields...	N.E. Coast	1	7	1	2½
A	North Staffs ...	Mid. Counties	1	7	1	2½
A_1	Norwich ...	E. Counties	1	6½	1	2
A	Nottingham ...	Mid. Counties	1	7	1	2½
A	Nuneaton ...	Mid. Counties	1	7	1	2½
A_3	OAKHAM ...	Mid. Counties	1	5½	1	1½
A	Oldham ...	N.W. Counties	1	7	1	2½
A_2	Oswestry ...	N.W. Counties	1	5½	1	1½
A_1	Oxford ...	S. Counties	1	6½	1	2
A	PAISLEY ...	Scotland	*1	7	1	2½
B_3	Pembroke ...	S. Wales & M.	1	3½	0	11½
A	Perth	Scotland	*1	7	1	2½
A_1	Peterborough ...	E. Counties	1	6½	1	2
A	Plymouth ...	S.W. Counties	*1	7	1	2½
A	Pontefract ...	Yorkshire	1	7	1	2½
A_1	Pontypridd ...	S. Wales & M.	1	6½	1	2
A_2	Portsmouth ...	S. Counties	1	6	1	1½
A	Preston ...	N.W. Counties	1	7	1	2½
A	QUEENSFERRY	N.W. Counties	1	7	1	2½
A_2	READING ...	S. Counties	1	6½	1	2
B	Reigate ...	S. Counties	1	5½	1	1½
A_3	Retford ...	Mid. Counties	1	5½	1	1½
A_1	Rhondda Valley	S. Wales & M.	1	6½	1	2
A_3	Ripon	Yorkshire	1	5½	1	1½
A	Rochdale ...	N.W. Counties	1	7	1	2½
B	Rochester ...	S. Counties	1	5	1	0½
A_1	Ruabon ...	N.W. Counties	1	6½	1	2
A	Rugby	Mid. Counties	1	7	1	2½
A_2	Rugeley ...	Mid. Counties	1	6	1	1½
A	Runcorn ...	N.W. Counties	1	7	1	2½
A_1	ST ALBANS ...	E. Counties	1	6½	1	2
A	St. Helens ...	N.W. Counties	1	7	1	2½
B_3	Salisbury ...	S.W. Counties	1	3½	0	11½
A_1	Scarborough ...	Yorkshire	1	6½	1	2
A	Scunthorpe ...	Mid. Counties	1	7	1	2½
A	Sheffield ...	Yorkshire	1	7	1	2½
A	Shipley ...	Yorkshire	1	7	1	2½
A_2	Shrewsbury ...	Mid. Counties	1	6	1	1½
A_2	Skipton ...	Yorkshire	1	6	1	1½
A_2	Slough ...	S. Counties	1	6	1	1½
A_1	Solihull ...	Mid. Counties	1	6½	1	2
A_2	Southampton	S. Counties	1	6	1	1½
A_1	Southend-on-Sea	E. Counties	1	6½	1	2
A	Southport ...	N.W. Counties	1	7	1	2½
A	S. Shields ...	N.E. Coast	1	7	1	2½
A_1	Stafford ...	Mid. Counties	1	6½	1	2
A	Stirling ...	Scotland	1	7½	1	2½
A	Stockport ...	N.W. Counties	1	7	1	2½
A	Stockton-on-Tees	N.E. Coast	1	7	1	2½
A	Stoke-on-Trent	Mid. Counties	1	7	1	2½
B	Stroud ...	S.W. Counties	1	5	1	0½
A	Sunderland ...	N.E. Coast	1	7	1	2½
A	Swansea ...	S. Wales & M.	1	7	1	2½
A_2	Swindon ...	S.W. Counties	1	5½	1	1½
A_1	TAMWORTH ...	N.W. Counties	1	6½	1	2
B	Taunton ...	S.W. Counties	1	5	1	0½
A	Teeside Dist. ...	N.E. Counties	1	7	1	2½
A_2	Teignmouth ...	S.W. Coast	1	6	1	1½
A	Todmorden ...	Yorkshire	1	7	1	2½
A_1	Torquay ...	S.W. Counties	1	6½	1	2
B_2	Truro	S.W. Counties	1	4	1	0
A_2	Tunbridge Wells	S. Counties	1	5½	1	1½
A	Tunstall ...	Mid. Counties	1	7	1	2½
A	Tyne District	N.E. Coast	1	7	1	2½
A	WAKEFIELD	Yorkshire	1	7	1	2½
A	Walsall ...	Mid. Counties	1	7	1	2½
A	Warrington ...	N.W. Counties	1	7	1	2½
A_1	Warwick ...	Mid. Counties	1	6½	1	2
A_1	Wellingborough	Mid. Counties	1	6½	1	2
A	West Bromwich	Mid. Counties	1	7	1	2½
A_2	Weston-s.-Mare	W. Counties	1	6	1	1½
A_2	Whitby ...	Yorkshire	1	6	1	1½
A	Widnes ...	N.W. Counties	1	7	1	2½
A	Wigan ...	N.W. Counties	1	7	1	2½
B	Winchester ...	S. Counties	1	5	1	0½
A_2	Windsor ...	S. Counties	1	6	1	1½
A	Wolverhampton	Mid. Counties	1	7	1	2½
A_2	Worcester ...	Mid. Counties	1	6	1	1½
A_3	Worksop ...	Yorkshire	1	5½	1	1½
A_1	Wrexham ...	N.W. Counties	1	6½	1	2
A_3	Wycombe ...	S. Counties	1	5½	1	1½
B	YARMOUTH	E. Counties	1	5	1	0½
B	Yeovil ...	S.W. Counties	1	5	1	0½
A	York	Yorkshire	1	7	1	2½

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

The rates for every trade in any given area will be sent on request. The rates of wages have been revised consequent upon the increase in wages which came into operation on February 1, together with all revisions following authorized annual regradings.

CURRENT PRICES

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

WAGES

		s.	d.
Bricklayer	per hour	1	8½
Carpenter	„	1	8½
Joiner	„	1	8½
Machinist	„	1	9½
Mason (Banker)	„	1	8½
„ (Fixer)	„	1	9½
Plumber	„	1	8½
Painter	„	1	7½
Paperhanger	„	1	7½
Glazier	„	1	8½
Slater	„	1	8½
Scaffolder	„	1	4½
Timberman	„	1	4½
Navvy	„	1	3½
General Labourer	„	1	3½
Lorryman	„	1	6½
Crane Driver	„	1	7½
Watchman	per week	2	10	0

MATERIALS

EXCAVATOR AND CONCRETOR

		£	s.	d.
Grey Stone Lime	per ton	2	2	0
Blue Lias Lime	„	1	18	6
Hydrated Lime	„	2	5	0
Portland Cement, in 4-ton lots (d/d site, including Paper Bags)	„	1	19	0
Rapid Hardening Cement, in 4-ton lots (d/d site, including Paper Bags)	„	2	5	0
White Portland Cement, in 1-ton lots	„	8	15	0
Thames Ballast	per Y.C.		6	6
¾" Crushed Ballast	„		7	0
Building Sand	„		7	6
Washed Sand	„		8	6
2" Broken Brick	„		8	0
¾" „ „	„		10	3
Pan Breeze	„		6	6
Coke Breeze	„		8	9

DRAINLAYER

BEST STONEWARE DRAIN PIPES AND FITTINGS

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

BRICKLAYER

		£	s.	d.
Flettons	per M.	2	12	0
Grooved do.	„	2	14	0
Phorpres bricks	„	2	15	0
„ Cellular bricks	„	2	15	0
Stocks, 1st quality	„	4	11	0
„ 2nd „	„	4	2	6
Blue Bricks, Pressed	„	8	14	0
„ Wirecuts	„	7	12	6
„ Brindles	„	7	0	0
„ Bullnose	„	9	0	0
Red Sand-faced Facings	„	6	18	6
Red Rubbers for Arches	„	12	0	0
Multicoloured Facings	„	7	10	0
Luton Facings	„	7	10	0
Phorpres White Facings	„	3	17	3
„ Rustic Facings	„	3	12	3
Midhurst White Facings	„	5	0	0
Glazed Bricks, Ivory, White or Salt glazed, 1st quality:				
Stretchers	„	21	0	0
Headers	„	20	10	0
Bullnose	„	27	10	0
Double Stretchers	„	29	10	0
Double Headers	„	26	10	0
Glazed Second Quality, *Less*	„	1	0	0
„ Buffs and Creams, *Add*	„	2	0	0
„ Other Colours	„	5	10	0
2" Breeze Partition Blocks	per Y.S.		1	7
2½" „ „ „	„		1	10
3" „ „ „	„		2	1
4" „ „ „	„		2	6

MASON

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

SLATER AND TILER

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

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

CARPENTER AND JOINER

		£	s.	d.
Good carcassing timber	F.C.		2	2
Birch	as 1" F.S.			9
Deal, Joiner's	„ „			5
„ „ 2nds	„ „			4
Mahogany, Honduras	„ „		1	3
„ African	„ „		1	1
„ Cuban	„ „		2	6
Oak, plain American	„ „		1	0
„ Figured „	„ „		1	3
„ plain Japanese	„ „		1	2
„ Figured „	„ „		1	5
„ Austrian wainscot	„ „		1	6
„ English	„ „		1	11
Pine, Yellow	„ „		1	0
„ Oregon	„ „			4
„ British Columbian	„ „			4
Teak, Moulmein	„ „		1	3
„ Burma	„ „		1	2
Walnut, American	„ „		2	3
„ French	„ „		2	3
Whitewood, American	„ „		1	1

Deal floorings,		Sq.	18	6
¾"	„	1	1	6
1"	„	1	2	0
1¼"	„	1	5	0
1½"	„	1	10	0
Deal matchings, ¾"	„		14	0
1"	„		15	6
Rough boarding, ¾"	„	1	4	0
1"	„		16	0
1¼"	„	1	6	0

Plywood, per ft. sup.

Thickness	¼"			⅜"			½"			⅝"		
Qualities	A	B	BB	A	B	BB	A	B	BB	A	B	BB
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Birch 60 × 48	4	2½	2	5	3	2½	7	5	4	8	6	5
Cheap Alder	–	2	1½	–	3½	2	–	–	–	–	–	–
Oregon Pine	–	2½	–	3	2½	–	4	3½	–	5	4½	–
Gaboon Mahogany	4	3½	–	5	4½	–	7	6½	–	8	7	–
Figured Oak	6½	5	–	7½	5½	–	10	8	–	1/–	9	–

		d.
Scotch glue	lb.	8

SMITH AND FOUNDER

Tubes and Fittings

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

	¼"	⅜"	½"	¾"	1"
Tubes 2'–14' long per ft. run	4	5½	9½	1/1	1/10
Pieces, 12"–23" long each	10	1/1	1/11	2/8	4/9
„ 3"–11½" long „	7	9	1/3	1/8	3/–
Long screws, 12"–23½" long,,	11	1/3	2/2	2/10	5/3
„ „ 3" M—½" long,,	8	10	1/5	1/11	3/6
Bends	8	11	1/7½	2/7½	5/2
Springs not socketed	5	7	1/1½	1/11½	3/11
Socket unions	2/–	3/–	5/6	6/9	10/–
Elbows, square	10	1/1	1/6	2/2	4/3
Tees	1/–	1/3	1/10	2/6	5/1
Crosses	2/2	2/9	4/1	5/6	10/6
Plain sockets and nipples	3	4	6	8	1/3
Diminished sockets	4	6	9	1/–	2/–
Flanges	9	1/–	1/4	1/9	2/9
Caps	3½	5	8	1/–	2/–
Backnuts	2	3	5	6	1/1
Iron main cocks	1/6	2/3	4/2	5/4	11/6
„ with brass plugs	—	4/–	7/6	10/–	21/–

Discounts	TUBES. Per cent.		Per cent.
Gas	68⅔	Galvanized gas	61⅓
Water	66⅔	„ water	55
Steam	63⅔	„ steam	50
	FITTINGS.		
Gas	61⅓	Galvanized gas	55⅔
Water	58⅔	„ water	50
Steam	53⅓	„ steam	46⅔

		s.	d.
Rolled steel joists cut to length	cwt.	14	6
Mild steel reinforcing rods, ¾"	„	10	6
„ „ ⅝"	„	10	3
„ „ ½"	„	10	0

SMITH AND FOUNDER—*continued*

		s.	d.
Mild steel reinforcing rods, ⅜"	cwt.	9	6
„ „ ¼"	„	9	6
„ „ 1"	„	9	6
„ „ 1¼"	„	9	6
„ „ 1½"	„	9	6

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

PLUMBER

		£	s.	d.
Lead, milled sheets	cwt.	35	3	
„ drawn pipes	„	34	9	
„ soil pipe	„	37	9	
„ scrap	„	22	9½	
Solder, plumbers'	lb.		9	
„ fine do.	„	1	0	
Copper, sheet	„		10½	
„ tubes	„	1	0½	

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

PLASTERER

		£	s.	d.
Lime, chalk	per ton	2	0	0
Plaster, coarse	„	2	15	0
„ fine	„	4	7	6
Hydrated lime	„	3	0	9
Sirapite	„	3	6	0
Keene's cement	„	5	0	0
Gothite plaster	„	3	6	0
Pioneer plaster	„	3	6	0
Thistle plaster	„	3	6	0
Sand, washed	Y.C.		11	6
Hair	lb.			6
Laths, sawn	bundle		2	4
„ rent	„		3	9
Lath nails	lb.			3

GLAZIER

		s.	d.		s.	d.
Sheet glass, 24 oz., squares n/e 2 ft.	s.	F.S.				2½
„ „ 26 oz.	„	„				3½
Flemish, Arctic, Figures (white)*	„					7½
Blazoned glasses	„				2	6
Reeded: Cross Reeded	„					11
Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite	„					6
Crown sheet glass (n/e 12" × 10")	„				2	0
Flashed opals (white and coloured)	„			1	0 and 2	0
¼" rough cast; rolled plate	„					6
¼" wired cast; wired rolled	„					10½
¼" Georgian wired cast	„					11½
¼" Polished plate, n/e 1 ft.	„			†10 to ‡1		1
„ „ 2	„			†1 2 „ ‡1		4
„ „ 4	„			†2 3 „ ‡2		6
„ „ 8	„			†2 9 „ ‡3		2
„ „ 20	„			†3 1 „ ‡3		9
„ „ 45	„			†3 3 „ ‡4		0
„ „ 100	„			†4 0 „ ‡4		10
Vita glass, sheet, n/e 1 ft.	„				1	0
„ „ „ 2 ft.	„				1	3
„ „ „ over 2 ft.	„				1	9
„ „ plate, n/e 1 ft.	„				1	6
„ „ „ 2 ft.	„				3	8
„ „ „ 5 ft.	„				4	6
„ „ „ 7 ft.	„				5	0
„ „ „ over 15 ft.	„				7	6
"Calorex" sheet 21 oz., and 32 oz.	„			2	6 and 3	6
„ rough cast ¼" and ⅜"	„				8½ „ 1	0
Putty, linseed oil	lb.					3

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

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

PAINTER

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

CURRENT PRICES FOR MEASURED WORK

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

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

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

BRICKLAYER		£	s.	d.
Brickwork, Flettons in lime mortar	Per Rod	26	10	0
" " in cement	"	27	12	6
" Stocks in cement	"	34	0	0
" Blues in cement	"	50	0	0
Extra only for circular on plan	"	2	0	0
" backing to masonry	"	1	10	0
" rising on old walls	"	2	0	0
" underpinning	"	5	10	0
Fair Face and pointing internally	F.S.			1½
Extra over fletton brickwork for picked stock facings and pointing	"			8
" " " red brick facings and pointing	"			11
" " " blue brick facings and pointing	"		1	4
" " " glazed brick facings and pointing	"		3	6
Tuck pointing	"			7½
Weather pointing in cement	"			3
Slate dampcourse	"			10
Vertical dampcourse	"		1	1

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

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

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

CARPENTER AND JOINER		£	s.	d.
Flat boarded centering to concrete floors, including all strutting	Sqr.	2	2	6
Shuttering to sides and soffits of beams	F.S.			7
" to stanchions	"			7
" to staircases	"		1	6
Fir and fixing in wall plates, lintols, etc.	F.C.		3	9
Fir framed in floors	"		4	6
" " roofs	"		6	6
" " trusses	"		7	6
" " partitions	"		8	6
¾" deal sawn boarding and fixing to joists	Sqr.	1	14	6
1" " " " " "	"	1	17	6
1½" " " " " "	"	2	3	0
¾" × 2" fir battening for Countess slating	"		9	6
Do., for 4" gauge tiling	"		12	0
Stout feather-edged tilting fillet	F.R.			4½
Patent inodorous felt, 1 ply	Y.S.			3
" " " 2 "	"		2	9
" " " 3 "	"		3	3
Stout herringbone struttir , 5" joists	F.R.			10½
1" deal gutter boards and bearers	F.S.		1	2
1½" " " "	"		1	6
2" deal wrought rounded roll	F.R.			8
1" deal grooved and tongued flooring, laid complete, including cleaning off	Sqr.	2	1	0
1½" do.	"	2	10	0
1¾" do.	"	2	17	0
1" deal moulded skirting fixed on, and including grounds plugged to wall	F.S.		1	6
1¼" do.	"		1	9

CARPENTER AND JOINER—*continued*		s.	d.
1½" deal moulded sashes of average size	F.S.	1	9½
2" " " " "	"	1	11½
1½" deal cased frames double hung, of 6" × 3" oak sills, 1¼" pulley stiles, 1¼" heads, 1" inside and outside linings, ¾" parting beads, and with brass faced axle pulleys, etc., fixed complete	"	3	7
2" " " " " "	"	3	10
Extra only for moulded horns	Each		6
1½" deal four-panel square, both sides, door	F.S.	2	0
2" " " " " "	"	2	8
1½" " but moulded both sides	"		4
2" " " " " "	"	3	0
4" × 3" deal, rebated and moulded frames	F.R.	1	0
4½" × 3½" " " " "	"	1	4
1½" deal tongued and moulded window board, on and including deal bearers	F.S.	1	9
1½" deal treads, 1" risers in staircases, and tongued and grooved together on and including strong fir carriages	"	2	6
1½" deal moulded wall strings	"	2	1
1½" " outer strings	"	2	4
Ends of treads and risers housed to string	Each	1	0
3" × 2" deal moulded handrail	F.R.	1	3
1" × 1" deal balusters and housing each end	Each	2	0
1½" × 1½" " " "	"	2	9
3" × 3" deal wrought framed newels	F.R.	1	3
Extra only for newel caps	Each	6	0
Do., pendants	"	6	0

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

PLUMBER		£	s.	d.
Milled lead and labour in flats	cwt.	2	7	0
Do. in flashings	"	2	10	6
Do. in covering to turrets	"	2	16	6
Do. in soakers	"	2	1	9
Labour to welted edge	F.R.			3½
Open copper nailing	"			3
Close " "	"			4

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

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

PLASTERER AND TILING		£	s.	d.
Expanded metal lathing, small mesh	Y.S.		2	0
Do. in n/w to beams, stanchions, etc.	"		2	9
Lathing with sawn laths to ceilings	"		1	3
½" screeding in Portland cement and sand or tiling, wood block floor, etc.	"		1	5
Do. vertical	"		1	7
Rough render on walls	"		1	3½
Render, float and set in lime and hair	"		1	9
Render and set in Sirapite	"		1	11
Render, backing in cement and sand, and set in Keene's cement	"		2	9
Extra, only if on lathing	"			4
Keene's cement angle and arris	F.R.			6
Arris	"			1½
Rounded angle, small	"			3
Plain cornices in plaster, including dubbing out, per 1" girth	"			1½
1" granolithic pavings	Y.S.		3	6
1½" " " "	"		4	6
6" × 6" white glazed wall tiling and fixing on prepared screed	"		17	6
9" × 3" " " " "	"	1	2	6
Extra, only for small quadrant angle	F.R.			8

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

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