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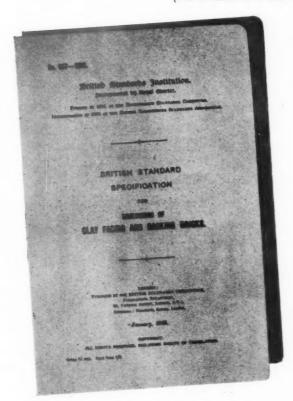


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#### ARCHITECTS'



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

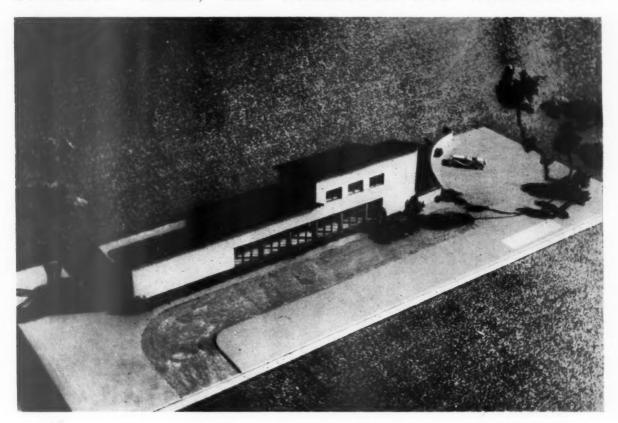
#### THURSDAY, AUGUST 4, 1938

Number 2272: Volume 88

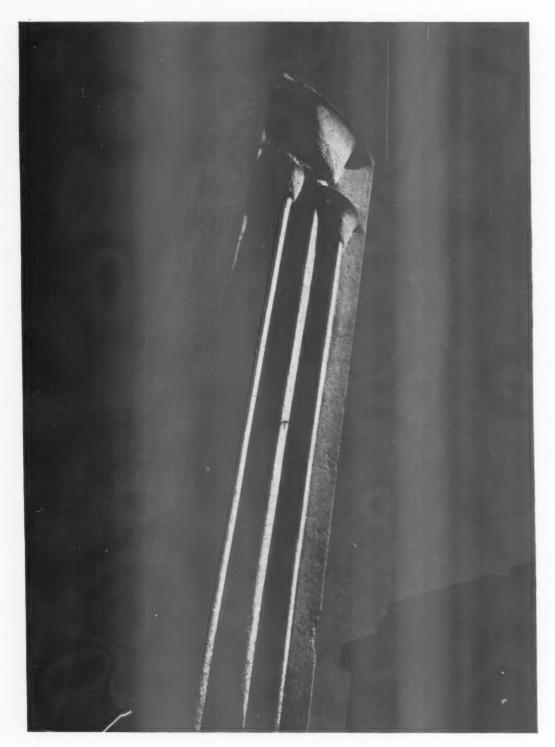
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### STUDENTS' WORK, THE ARCHITECTURAL ASSOCIATION



From the exhibition of students' work, Architectural Association, recently held at 36 Bedford Square, W.C.: Model of a Demonstration Dairy. By B. Greenfield (Second Year). The photograph shows a view from the north-west.



KARNAK

 $\begin{array}{lll} A \ column \ in \ the \ Hall \ of \ Records \\ of \ Tutmosis \ I, \ Karnak. \end{array}$ 



## URBANIANA

N this page during the past two weeks has been discussed the report issued by the National Survey and National Planning Committee set up by the Town Planning Institute. Divided into three parts, the report dealt with: I.—History and Present Position of Planning; II.—The Need for National Planning; III.—Proposed National Planning Commission. Running through the report—an entirely admirable and farseeing, if a little over-cautious, document—was the feeling that in dealing with the most important factor of planning—the Town—we suffer badly in this country from insufficient data. How far this will be put right by a forthcoming report, entitled Location of Industry, from that energetic body Political and Economic Planning we cannot say, but meanwhile the same body has issued an interesting broadsheet (No. 128) on the problems of the Town.

How large a factor the Town looms in any scheme for national planning is shown by a study of the population census figures. In 1931, for example, 80 per cent. of the population of England and Wales was living in local government areas classed as urban. Until 1901 there had been a rapid rise in the urban percentage, to be followed by a relative stability during the next thirty years. From the 1936 estimates it appears that the rise has now been resumed. Thus throughout Great Britain (the urban percentage figure for Scotland being similar to that for England and Wales—80·1—against 57·7 in 1861) four out of every five inhabitants are town dwellers. To some extent, the concentration of population is even more thorough than these figures suggest. In evidence before the Royal Commission on the Geographical Distribution of the Industrial Population the Garden Cities and Town Planning Association showed that, in 1934, more than 20 million persons out of the 45.4 millions in Great Britain lived in or near no more than fourteen chief urban centres; 15.25 millions living in the six largest towns.

A consequence of this congestion is the severe shortage

of open spaces for recreation; a district of the importance, for instance, of Shoreditch (in 1931 147.5 persons per acre, compared with Reading and Brighton's 10–12) has no public open spaces at all. The National Playing Fields Association considers seven acres of open space necessary for the recreation needs of every 1,000 of the population; the present figure for urban areas throughout the country is 1 acre per 1,000 population; the County of London making a poor showing with half-an-acre for the same number of persons.

A further consequence of this congestion, and perhaps the most important factor mitigating against the broadly conceived town plan, is that land values in the central areas of the largest towns rose to remarkable levels. It was estimated by the President of the Surveyors' Institution, in November, 1935, that properties occupying the best positions in the City of London had approximately doubled their value during the past fifty years, and Sir Charles Bressey, who quotes this in his "Greater London Highway Development Survey, 1937," states that the cost of comparatively insignificant street widening sometimes works out at a rate exceeding £2,000,000 per mile.

Concerning the effect on housing, the Garden Cities Association has pointed out that in Manchester the cost of land for the Hulme working-class rehousing scheme is over £7,000 per acre, and the total cost per flat, including site, is over £800.

The cumulative results of unplanning and lack of statistics are weakness and lack of adaptability in local government services that any rapid change in custom (such as, for example, a suddenly developed habit among lower wage earners for taking daily baths) is liable completely to upset.

The need for complete and precise data for the requirements of the future cannot be too strongly emphasized by architects, who, until such are obtainable, have to do their own research into questions which should be answered for them by the economist and the sociologist.



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NOTES

## T O P I C

MODERN ARCHITECTURE

"EVERYBODY is interested in modern architecture, but does everybody know where it can be seen?" Thus the publishers' blurb on the cover of "New Sights of London," by Hugh Casson, which proceeds to tell you. Imagine it if you can, dear reader, a guide book, a guide book to London, which introduces you not to the Beefeaters at the Tower, but to the Burlington School for Girls.

This is what Mr. Casson has done in one of a series called the London-in-Your-Pocket books. In fifty pages filled with addresses and the names of architects, he takes the intelligent stranger to 700 new or newish buildings, illustrating those he considers particularly worthy, by immaculate Architectural Review photographs or still more immaculate Casson line drawings. Thus for the first time we have all—it must be all—the modern buildings within 30 miles of the Adelphi included in one survey.

The odd thing is that they look worth going to see. Mr. Casson has created for them that priceless thing scarcity value, and the publishers, London Transport, have made them seem worth travelling on the Underground for, like the Zoo. Mr. John Gloag's contribution consists in writing a foreword without mentioning the word "modern." If, as I suspect, it is a book that is going to be in every client's pocket, the sale should be brisk. Price 6d. from all bookstalls and newsagents.

#### BRIGHTER PARKS

The L.C.C. Parks Committee, under the inspiration of Mrs. Hugh Dalton, is to try and brighten up the park restaurants. Two students from the Central School of Arts and Crafts have dealt quite adequately with a Georgian

house in Clissold Park, and the next to be attacked is Lauderdale House, Waterlow Park. Hyde, Kensington, and the other Royal Parks will presumably remain as before under the care of H.M.O.W., with restaurants which shut down on some mystic date towards the end of September whatever the weather is like.

Meantime, whilst the Parks Committee is concerning itself with park restaurants, the L.C.C. is discussing the proposal to erect blocks of flats on the site of Pentonville Prison, which is to be demolished under the authorization of the Home Secretary.

Pentonville, built at the beginning of the last century, was considered to be the *ideal* prison. A Probation Officer—a friend of mine—tells me that it is not—now. That,however, is by the way. The problem is: what is the point of the L.C.C. Parks Committee discussing park restaurants when there is a far more vital problem to be considered—the ultimate use for the site of Pentonville Prison? The adjacent area, it is true, is overcrowded. But—and far more important—there is no open space within half-an-hour's walk. Why not develop the site as an open space as the *Daily Sketch* suggests, and build the flats on the area now occupied by dilapidated property?

#### RESTAURANTS IN FLAT BLOCKS

In a note last week I asked why restaurants are only provided in those flat blocks large and expensive enough to house a resident maid. A correspondent writes:

SIR,—Astragal enquires why restaurants are only provided in those flats large enough for a resident maid. While this is not strictly true, there are more in this type of building than any other, and the reason is as follows:

Flats that have accommodation for maids are for the well-to-do; only they can afford to pay for full-time services. The flat erector usually considers the restaurant accommodation as a source of rent and as a letting bait. His aim is to let it on a long lease to a firm of caterers who will pay him a rent, provide a letting factor, and relieve him of responsibility.

The caterer, before taking on a restaurant, considers his potential customers. The well-to-do can afford better prices for food, and can afford to do more entertaining. The moneyed flat dweller will eat in the restaurant as a change, will order meals from the restaurant to avoid extra work for the maid, and will eat there on the maid's nights out.

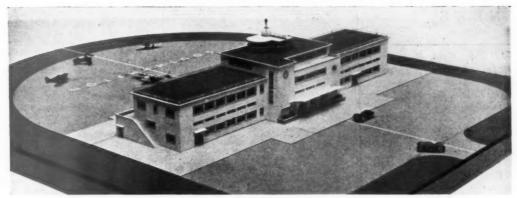
#### DEBRIS AS TREASURE

One of our more diligent daily newspaper reporters has unearthed ("Treasure As Debris"), in a Bermondsey builders' backyard, what should prove a useful source of supply for that sweet racket, the antique trade. Lying unheeded, he found literally tons of old oak and mahogany from early Bermondsey and Rotherhithe houses, including linenfold panelling and the oak doorway (1702) from Angel House, now demolished, in the adjoining Curlew Street.

#### SUPERFLUOUS FLECHE

In a letter to the B.M.A. Journal, a doctor makes some sound criticisms of the proposed new extension to the B.M.A. headquarters—in particular he objects to the asymmetrical position of the fleche, and the use of circular brick columns.

I feel sure that were Sir Edwin Lutyens the architect of the extension to his original building, he would have had a ready answer. The trouble about adding to a



A model of the proposed airport at Southampton.

Lutyens building is that you inherit the motifs, but rarely the witty justification for them.

#### STREET SCENE

I forgot to mention last week that Connell, Ward and Lucas's house at Frognal, Hampstead ("One of the greatest pieces of vandalism ever perpetrated in London"), had a successful private view last Friday week. C., W., and L. sent a card round to those who had been connected with the building, as well as to some of their, and the client's, friends. About a hundred arrived during the course of the day and a good time was had by all. The excellent planning and the famous ventilators were duly admired. Sir Robert Tasker, quoted above, and neighbour Sir Reginald Blomfield were non-arrivals.

#### HESTON AIRPORT

My note concerning the new airport at Heston has brought in a picture of the proposed new Southampton Terminal building. This block, containing the offices of what will soon be one of the most important airports in the world, has been designed by the Borough Engineer of Southampton.

#### SOVIET SUBSOIL

Some friends of mine, recently returned from Russia, visited the site of the Palace of Soviets, about which I wrote recently.

I understand that the subsoil is marshy, and that in order to consolidate it, concrete piles were driven in. The problem is complicated by the fact that every pile driven in disappears immediately and for ever from sight. It would have to be a stout-hearted pile indeed to bear the thought of carrying upon it the largest building in the world.

#### PARKING METERS

More than fifty American cities, I learn, have adopted the "parking meter," a device which holds up a flag for one hour provided that it is first fed with a nickel. One meter for each space on the car park and a standard two-dollar fine for any car found parked next to a meter which hasn't got its flag up. Simple and apparently effective, for the Manchester Guardian says that even the shop-keepers are pleased because their customers are no longer kept away by the parking problem, while the municipalities are also happy at a new and surprisingly

large source of revenue. In fact the companies which make the meters are prepared to install them free if they can have the takings for the first three months,

Better, I think, than the decrepit old gentlemen here who fill in endless forms of which nobody takes any notice.

#### LET 'EM STAY IGNORANT, DAMMIT

#### To the Editor of the T\*m\*s

Sir,—It would appear that the Prime Minister cannot be aware of the reckless expenditure on the part of local authorities in spite of the warning given by him that every effort should be made to exercise economy.

The country is now going through a somewhat similar experience to that at the outbreak of the Great War, when all work other than that which was absolutely necessary was stopped. In spite of that fact it is now proposed to build what are termed senior schools at tremendous expense in various parts of the country. If the local authority is questioned on the matter, the answer is always the same—namely "It has to be done in order to comply with the requirements of the Board of Education." Is it possible that a Government Department is running counter to the warning given by the Prime Minister?

If these senior schools are wanted in the country, my contention is, this is not the time to think of building them.

I have the honour to remain your obedient servant,

W. O. E. MEADE-KING

#### T. S. (YOU CAN BE SURE OF) ELIOT

For some years past Shell Mex and B.P. have been among the best patrons of modern art, employing young artists, and supplying on their posters every kind of gaiety and ingenuity for the delight of the public. An impressive exhibition of pictures in their advertising from 1935 to 1938 was recently opened at Shell Mex House by Mr. T. S. Eliot, who made a cool, diffident speech, lasting seven minutes, in what can only be called a Herbert Read manner. He declared that he knew little about petrol, but that when challenged he always said it was a sort of shell.

ASTRAGAL

The Registration Act received the Royal Assent on Friday last, July 29

#### NEWS

#### POINTS FROM THIS ISSUE

" Throughout Gt. Britain, four out of every five inhabitants are town dwellers

" One of the greatest pieces of vandalism ever perpetrated in London" had a successful private view last Friday week

" In the event of the assessor (of the Newcastle-upon-Tyne competition) being satisfied that there is some valid objection to the employment of any one or more of the authors whose designs are placed first, second, or third, the author or authors to whose employment such objection is made by the assessor shall not be entitled to ask for the grounds of such objection, but shall accept the assessor's objection as final"...

> . A NEW COMPETITION

The directors of the Falkirk and District Royal Infirmary invite chartered and/or registered architects in private practice in Scotland to submit designs in competition for a nurses' home proposed to be erected on a site in the infirmary grounds. The directors have appointed Mr. Charles G. Souter, F.R.I.B.A., Dundee, as assessor, and the following premiums are offered: First, £150, Second, £100, and Third, £50. The latest date for submission of designs is Monday, October 31. Conditions, etc., are obtainable from Mr. Duncan Kennedy, Hon. Secretary, Falkirk and District Royal Infirmary, Major's Loan, Falkirk. (Deposit, £1 1s.)

PRESERVATION OF FLAMBOROUGH HEAD

The Minister of Health has approved a resolution to prepare a planning scheme for 65,000 acres of the Bridlington Rural The area includes Flamborough Head and large portions of Filey and Bridlington Bays. Henceforth, it will be possible to control building in the interests of amenity over the whole of this large area of the East Riding of Yorkshire.

#### THE ARCHITECTS' DIARY

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Thursday, August 4
REDPERN GALLERY. Summer salon of French
and British paintings. Pricate view. Hours,
10 to 6. Until Oxfober 1.
ROYAL ACADEMY. Summer Show at Burlington
House. Until August 6.
POLYTECHNIO SCHOOL OF ARCHITECTURE.
Exhibition of students' designs. At the Building
Centre, 158 New Bond Street. Until August 26.
DESIGN AND INDUSTRIES ASSOCIATION. Visit
to Holland. Depart 6.30 p.m. from Victoria.
Return August 6. to Holland, Depa Return August 6.

Wednesday, August 10
LONDON SOCIETY. Visit to London House,
Guilford Street, W.C.1. 2.45 p.m.

HOUSING IN SCOTLAND

circular issued by the Department of Health for Scotland draws attention to the provisions of the Housing (Agricultural Population) (Scotland) Act, 1938, which received the Royal Assent on July 13.

The Act offers special assistance to encourage the provision of new housing accommodation for the agricultural population in Scotland. The assistance is available for houses for occu-pation by persons of the working classes who are engaged in agriculture. Outside large burghs persons engaged in an industry mainly

burghs persons engaged in an industry mainly dependent on agriculture, and persons who have retired from agriculture, are also included.

Under Part I of the Act local authorities may provide new houses, not only to replace unfit houses or put an end to overcrowding, but also to meet a shortage where more houses are needed for the agricultural population. The needed for the agricultural population. The State will make an annual contribution for each house over a period of forty years varying from £10 10s, to £15 according to the cost of building, the rent obtainable and the local authority's housing commitments and general financial resources. In fixing rents local authorities must have regard to the rents ordinarily payable by persons of the agricultural population in the locality.

locality.

Under Part II of the Act local authorities may give substantial grants to private persons to assist them to build new houses for the agriassist them to build new houses for the agri-cultural population to replace unfit houses in certain categories. The houses that may be replaced with the aid of the grant include houses, bothies and similar premises on a farm where the farm worker cannot conveniently be housed off the farm ground, houses occupied by owner-occupiers of small farms, statutory small tenants, landholders and agricultural workers of similar status. The grants will be given under schemes of assistance made by local authorities with the Department's approval, and may amount to £160 for a house of three apartments and £200 for a larger house.

The Secretary of State refers to the preservation of amenity and the wisdom of planning developof amenity and the wisdom of planning developments, especially in villages, so as to involve no sacrifice of desirable features. He recommends recourse to skilled architectural advice, and draws attention to the competition recently held to obtain designs of good but not expensive houses suitable for occupation by working-class families in Scottish rural areas. The competition attracted entries from all over Scotland, and it is intended to put on sale full working drawings prepared by the successful competitors. They will be obtainable from H.M. Stationery Office at a reasonable cost in the course of a few weeks.

A.A.'s STARTLING COME-BACK

The recent match between the A.A. and the R.I.B.A. had a finish which deserves to be recorded. Batting first, the R.I.B.A. scored 201 (Golding 55 not out) and by tea had taken five A.A. wickets for 75 runs. At this point two A.A. batsmen, Hirst and Norton, took charge of the bowling and added 110 runs before the next wicket fell at 188 for seven. Time 6.50—stumps drawn 7.0 p.m. Fairbairn, then coming in, hit one six and two fours, and the A.A. won the match at precisely 6.59½ p.m.

The game was played at the A.A.'s ground at Elstree. The scores were as

Follows:

D. Taylor, b. Cross ... 33
A. Savill, b. Tetley ... 13
A. S. Savill, b. Tetley ... 13
A. S. Knott, b. Cross ... 14
G. R. Linfield, b. Tetley ... 23
F. Napolitano, c. Dickie, b. Norton ... ... 24
B. Norton ... 25
F. C. Kadleigh, Lb.w. b. Tetley ... ... 14
W. J. Golding, not out ... 55
T. Hoare, b. Norton ... 07
The Hon, H. Pakington, c. Norton, b. Cross ... 15
P. A. Robson, c. Norton, 16
Extras ... 19 Total

Total (for 7 wickets) 215
P. I. D. Tetley and R. D.
Gordon did not bat.

INNS AND HOTELS

Architects will find much to interest them in the list of inns and hotels in the British Isles recommended by members of the Wine and Food Society. Although the first object of the list is to grade hostelries from the gastronomic point of view, the list shows that men who like good food and good wine are often also interested in architecture. The list, for example, praises a late Georgian hotel at Bedford, which was built by a former Duke of Bedford, to replace the older inn associated with Bunyan.





A cricket match between the A.A. and the R.I.B.A. was played recently at Elstree. team. (Photo: E. R. Jarrett).

Left, the A.A. team; right, the R.I.B.A.

seventeenth-century staircase once graced Houghton House. Naturally, Mr. Clough Williams-Ellis' modern hotel at Portmeirion is particularly praised and is said to be "equally ideal for honeymooning, literary creation or complete rest." A fifteenthcentury inn, carefully restored and modernized inside, in the beautiful grey stone village of Minster Lovell is also recommended.

#### AERODROMES AND TOWN PLANNING

The Minister of Health has circulated to all planning authorities known to be interested, copies of a pamphlet\* prepared and issued by the Air Ministry on the planning of aerodromes. It explains, in the light of the recommendations in the Maybury report, what are the minimum requirements for the landing area, flightways and approaches for a "standard aerodrome" and approaches for a "standard aerodrome defined as an aerodrome which can be used for regular air line services in all weathers. The pamphlet shows how different the modern "planned" aerodrome is from the grass field out of which it has grown. It lays emphasis on the necessity for preventing building develop-ment near the boundaries of the aerodrome in a position which might constitute a perpetual danger to aircraft

The provision for an aerodrome has to be thought out long before a need arises for its use. When the time comes when it would actually pay to construct and run an aerodrome, all the suitable land may be built over. Accordingly, the powers which local authorities have or can obtain under the Town and Country Planning
Act, 1932, should prove very valuable to them
in preserving suitable land for this purpose and in preserving suitable land for this purpose and in controlling building development round it so that the air approaches are not blocked up. The pamphlet contains a note contributed by the Minister of Health explaining how these powers can be used in the preparation of planning schemes.

#### ANNOUNCEMENTS

Messrs. Harrison and Porter, chartered quantity surveyors, of 3 Robert Street, Adelphi, W.C.2, have opened a branch office at 21 Quay Street, Newport, Isle of Wight. Tel.: Newport 2640.

#### TOWN PLANNING INSTITUTE

The twentieth annual country meeting of the above Institute will be held at Leeds from September 30 to October 2, 1938, inclusive, under the chairmanship of the President of the Institute, Mr. J. E. Acfield, A.M.INST.C.E. (M). The meeting will open on Friday afternoon, September 30, which will enable members to travel to Leeds on

will enable members to travel to Leeds on the morning of that day.

The Lord Mayor of Leeds (Alderman John Badlay, J.P.), will extend an official welcome to the delegates; matters of town and country planning interest will be discussed; and visits will be made to places of interest.

places of interest.

Hotel accommodation can be arranged if early application is made to the Secretary. Special terms have been arranged at the Queen's Hotel at 13s. 6d. per person for bed, bath and breakfast. Delegates will pay their own hotel bills.

The meeting is not confined to members of the Institute only-friends are invited. Full details are obtainable from Mr. Alfred R. Potter, Secretary, 11 Arundel Street, Strand, W.C.2.

#### CORRECTION

The caption describing the photograph at the bottom of page 182 of last week's issue should have read: "the managing director's office."

## VAT YOU TINK, EH?

A story for aspiring professional gentle-men, translated and adapted for con-temporary use in "The Architects" Fournal."

#### [By Malcom Mactaggari]

HE death of poor old dear Uncle Jasper made itself automatically the occasion for a gathering of the members of his family, and it so happened that I-one of the two executors appointed under the terms of his Will-thereupon met for the first time my cousin and co-executor, Horatio Blatherstan-a Commander in His Majesty's Royal Navy

The funeral having duly concluded and the mourners being upon the point of departing, Commander Blatherstan accepted my invitation to spend a few days with me in London, the more expeditiously to discharge the initial stages of our joint obligation to the memory of Uncle Jasper. We were soon upon the best of terms, and, the business of the Will once out of the way, were not long in coming to a conversational exchange of the more salient happenings and emotional experiences

of our respective lives.

Little of what passed between us needs now to be recorded. In fact, the only topic of unexceptionable relevance is the reason given by Commander Blatherstan to account for his failure, by the mature age of forty-seven, to have risen to the rank of Captain or of Admiral. "My own personal interests," he said, "I put second to those of His Majesty's Royal Navy. Had I been content to say ves more often and more readily, my career been correspondingly must have illustrious."

"Is it too late to begin now?" I asked. He was silent. "Horatio," I said, "I am going to give to you that chance in life which you have never had. I am going to introduce to you an old friend of mine-Herr Unterhundt-founder of the celebrated Institute of that name, and our leading exponent to-day of the principle of ascent by assent. Look at me! Here am I, many years your junior, and already clambering sturdily up the rungs of the ladder of architectural departmentalism! Naturally, tectural departmentalism! you ask: what have I done to merit such success? Ask me, rather, what have I not done! I will tell you. I have refrained from saying no to those whose position demanded that they should know better than I. Whatever has come my way-a trap or a kick-I have accorded to it my unhesitating complicity. Unterhundt taught me the wisdom of behaving like that. I was in a terrible extremity when I first went to him—full of confidence in my brother architects and believing that in archi-

tecture was an ideal to be pursued with fidelity and resolve! Unterhundt quickly showed me the folly of such beliefs. Within a month of commencing his treatment, the no's I uttered had fallen by at least a dozen a day, and nowwell—I hardly ever find it necessary to say no at all!" I paused, the better to lend effect to my words. "Yesterday," I said, "I was consulted about a moulding!" Commander Blatherstan was silent. "You must know," I said, "that a moulding is one of the most sacred of all institutions in my profession. It demands temperament—it calls for soul! Why not let Unterhundt try his

hand at moulding you?"
Fifteen minutes later, in a taxicab,
Commander Blatherstan and I were bowling merrily through the purlieus of Bloomsbury which lay between us and our destination, the Unterhundt Institute, arrived at which, I lost no time in obtaining audience with Herr Unterhundt himself. "This," I said, " is my cousin, Commander Blatherstan, of His Majesty's Royal Navy. He has

need of your services."

greeted Unterhundt us warmly. "Meestair Blazzerstein," he said, " eet ees tomorrow ze day for ze Navy Royaal—eet ees today ze day for ze arschitects royaal. Bot eet makes be'aps nod so moch difference-ze glass for ze Navy Royaal unt ze glass for ze arschitects royaal gom boz unter ze zame brinciples."

"Why not let Commander Blatherstan see for himself, Herr Unterhundt?" I interjected. "I am sure he would be immensely interested to learn how you

obtain your wonderful results."
"Ja, ja," said Unterhundt, "es dient eben so gut. Gom zis vay, Schentelman, ze glass haf already gommence. Already zey vait on me. Alvays I ditch my bubils 'ow zey must vait." Commander Blatherstan and I were

conducted down a passage at the end of which was a door inscribed in large gilt lettering with the words ICH DIEN. Unterhundt pointed to it. "Meestair Blazzerstein," he said, "eet ees 'ere ve go in." We found ourselves in a lecture hall-rows of benches fronting a raised dais. Unterhundt pointed to a couple of empty seats. "You, mine friendt," he said, "unt you, Meestair Blazzerstein, zit 'ere." Thereupon, mounting the dais, he turned and faced the class-a class from which I caught a glimpse of many vaguely familiar faces. "Schentel-man," said Unterhundt, "ze glass man," said Unterhundt, "ze glass gommence." With a slight bow in our direction, he threw himself into the (to me) familiar incantation:

" Soffer ve no onrest In blonders acquiesced; Ze Law ees blain. Long ere ze Vorld pigan Gott vos decide 'is blan: Yes shall leeft op e man, Unt no be vain."

Drawing a tuning fork from the pocket of his waistcoat, he struck a note, and

<sup>\* &</sup>quot;The Principles Governing the Planning and Zoning of Land Aerodromes." Published for the Air Ministry by H.M. Stationery Office, price 6d, net.

the entire class took up the incantation to the tune of a well-known hymn:

> " Let us our hearts disguise, Let us our lives despise, And learn to crawl; Here are we to obey, Never to answer nay, You, Sir-you know the way Best for us all.

"What if our pants be kicked? What if our trust be tricked?-Such is our cause; Teach us docility, Teach us humility RESPONSIBILITY-That, Sir, is yours."

Almost as the first notes declared themselves, Commander Blatherstan had risen to his feet and was standing at attention. I tugged at his sleeve. "Read that," I whispered, and pointed to a notice screwed to the top rail of the bench immediately in front of us. In the manner of a travel text, it bore the words TAKE IT SITTING DOWN. "I'm damned if I do," said Commander Blatherstan, and remained standing until

the music was concluded.

Unterhundt affected not to have noticed the incident. He waved genially in our direction. "All mine own vork, like ze pigvig arschitects vos glaim. You like eet, eh Meestair Blazzerstein? "he said, "I gif you eftervards e gopy ob ze vords." He turned to the class. "Schentelman," he said, "ve vos go tonight into ze gwestion ob zoopervision! Ze Vorld, eet ees voll ob ze zooper, bot ze vision, ver you find heem, eh? You, Smees, vat you tink, eh?" A tall youth in spectacles shuffled to his feet and stammeringly suggested that it would be more fitting if Herr Unterhundt were to undertake the answer himself. Unterhundt beamed approval. Smees," he said, "eet ees ze gorrect pi'afiour. You haf agwire ze zense to zee dat ze gwestion eet ees nod for ze answer bot for ze gompliment. Now I gif ze answer. You tink, be'aps, ze vision you find heem novere! Ach, bot eet ees vorse den dat you find heem novere. Ze vision, you find heem ad ze boddom. Ad ze boddom, Schentelman!" Unterhundt paused to straighten his cravat. "I gif you enozzer gwestion," he went on, "for your vork ees enozzer 'oo vos take ze gredit. Vat you tink, eh?" The class remained mute. Unterhundt turned to Commander Blatherstan. "Gom, Meestair Blazzerstein," he said, "vat you tink, eh?" "Such a one," answered Commander Blatherstan, "I should call a twit—an utterly despicable swipe." From somewhere in the state of the sta where in the room came a snigger, but Unterhundt was too horror-struck to hear it. He raised his hands in obvious dismay. "E tvit—e svipe!" he gasped, "you nod tink heem e zooperieur obizzer-e kapitan ob induzz'ry! Ach, Meestair Blazzerstein, you nod tink like dat ven you agwire ze Unterhundt brinciples Zen eet begom ze gompli-

ment-ze ungwestionable gompliment. 'Oo schteel vat ees nod vorth to schteel, Commander Blatherstan was silent. Unterhundt's logic, as always,

was unanswerable.

Ve vos schpeek ob zoopervision," said Unterhundt, again directing his attention to the class, "unt now I dell you zometing dat interescht you. Ze appetit for ze zooper, ees eet ze zame like ze appetit for ze food? Nein! Ze von eet go into ze stomach, ze ozzer eet go into ze 'ed, unt ze 'ed haf ze room for more unt more unt more. Ach, Schentelman, ven only viz ze stomach eet ees ze zame like viz ze 'ed! Zen ve nod make ze offer ze von to ze ozzer-ze budder, ze tcham, ze vater, ze delikatessen.

I have always held Unterhundt's preordinate liking for material sustenance to be his worst failing (if, indeed, he has any other) and there is to my mind, therefore, an undeniable element of poetic justice in the otherwise entirely deplorable incident which now ensued. For the second time on that eventful evening, Commander Blatherstan rose to his feet. Loudly and angrily he addressed Unterhundt. "You are a horrible old man, Herr Unterhundt," he rasped, "the suggestion of what your table manners must be like is indescribably disgusting. I am an English Gentleman—an Officer in His Majesty's Royal Navy-and it is offensive to me that I should be thought capable of profiting by such an outpouring of vulgarity as you have this moment indulged in. I shall *not* require your services." He turned to me. "Let us get out of this," he said.

There was an unforgettable pause. Nobody moved—nobody spoke. Unterhundt himself waited in respectful silence for Commander Blatherstan-his guest of the evening-to make whatever move he might think fit next to make. From the back of the room came a snigger.
"Let us get out of this," said Commander Blatherstan for the second time. He stamped from the room. I followed him, close at his heels. My parting impression of Herr Unterhundt was of that imperturbable genius calmly reverting to the business of his class. "Ach, Schentelman," he seemed to be saying, "ze stomach 'ee haf nod be saying, for ze delikatessen. Vat you tink,

eh ? . . . "

The return journey to my apartments was fraught with uncomfortable silences. For some time neither of us ventured to speak, then Commander Blatherstan made the only reference which has ever since passed between us concerning the episode in which he had just been the principal actor. "I am sorry," he said, but you must admit that he went a bit too far." I nodded gloomily-I know the English temperament too well to attempt to tamper with its more deeplyrooted preconceptions. "Yes," I con-curred, "I have warned him repeatedly-not to draw his metaphor from the discourse of the cuisine.

me, what do you intend to do?" "I shall rejoin my ship," said Commander Blatherstan.

Two years have passed away, and it is now quite a commonplace occurrence for me to find myself consulted about a moulding. So you see, I am getting on
—most undoubtedly. "And Commander Blatherstan?" you ask, "what
progress has he been making?" I must confess that I am in some doubt how to interpret the only sign of his continued existence which has reached me since that fateful day when I brought him and Herr Unterhundt together. He has sent me a post-card. On one side is a photograph of himself wearing the uniform of a Rear-Admiral of His Majesty's Royal Navy. On the other, there is written a question. It reads: VAT YOU TINK, EH? So I must leave you to draw your own conclusions.

### **NEWCASTLE - UPON - TYNE** NEW TOWN HALL COMPETITION

The conditions reviewed

PROBLEM.

A large public rates hall, Council Suite, and Municipal Offices.

Mr. Verner O. Rees, F.R.I.B.A.

QUESTIONS.

Last day was July 13, 1938.

Sending in.
12 noon, Wednesday, November 30, 1938.

COST.

£450,000.

PREMIUMS.

£750, £500, £300.

N this competition, if the assessor considers there is some valid objection to the winner, he goes by the board. If the assessor considers there is some valid objection to the unfortunate man placed second, he also goes.

The same with the third.

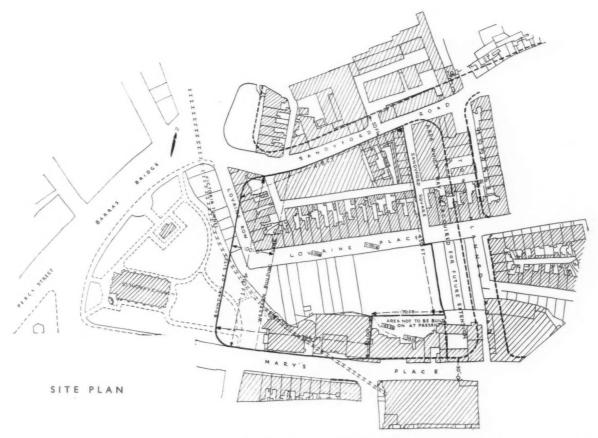
But the really interesting part is to come. If the assessor happens to have some valid objection to all three of these gentlemen, then the competition shall be regarded by all parties as cancelled. A still more interesting fact is that none of these poor fellows can ask the assessor for the grounds of his decision, but shall accept his decision as final.

But what about the payment of the premiums to these poor unfortunate gentlemen; and to whom will their rejected designs belong?

Is this a new departure of the R.I.B.A.

Competitions Committee?

This matter appears to me so important that I will quote the precise words used: Clause 6, second paragraph: "In the event of the assessor being satisfied that there is some valid objection to the employment of any one or more of the authors whose designs are placed first, second, or third, the author or authors to whose employment such objection is made by the assessor shall not be entitled to ask for the grounds of such



objection, but shall accept the assessor's objection as final.
"In which case the competition shall be

regarded by all parties as cancelled."

The writer of this review happens to have just completed the designs for another large building — not a Town Hall-curiously enough will cost £450,000. Town Hall-which

It has taken over nine months since the first sketch plans were made, working on an

average 12 hours a day.

If architects are still willing to do this work with but small, very small, chance of success, surely they are at least entitled to be treated with courtesy by those who will profit by their labour.

#### THE SITE

The site is in Barras Bridge, and the south side stands over what used to be Pandon Dene, which has been filled in. Barras Bridge once spanned the Dene

The West boundary to Barras Bridge has a

frontage of 410 feet approximately.

The building line on this frontage has to be set back 100 feet, which, along with the grounds of St. Thomas' Church, is to form the approach to the Town Hall.

The north boundary will be Sandyford Road (another relic of the old "Dene" days) which has a frontage of 4.18 feet approximately. This road will be widened to 50 feet, in the dim and distant future. The west boundary "may" eventually be

a town-planned road 60 feet wide; and the strip between this proposed new road and the present west boundary "may be the present west boundary "may be acquired for future extension." The present west boundary is a narrow lane Sandyford Square about 18 feet wide on the north, and some vacant land on the southern

The south boundary is St. Mary's Place, which is, or will be, about 48 feet wide.

The south west corner of the site may not

be built upon at present, it is 170 feet long by 100 feet wide, and is the Newcastle-

upon-Tyne Eye Hospital.

The length of the south boundary which may be built upon is 266 feet, and the 170 feet referred to above which may not, at present.

#### FUTURE EXTENSIONS

The building is to be designed to be complete in its present form on all fronts; but competitors are to show in outline on the Block Plan how a wing or wings containing a 50 per cent. increase of the departmental office accommodation can be added without injury to the general grouping.

#### ACCOMMODATION

By far the most important item in a very extensive list is a large public hall (not for concerts or civic receptions), but for all public cash transactions, having direct access from the main entrance hall. As this hall will require to be at least 140 feet long by 70 feet wide to house the various offices asked for, which have a total area of 9,410 super. feet without counting public space, it will easily dominate this scheme on plan.

#### OTHER ACCOMMODATION

				Sq	uare feet
Council Suite					25,825
Town Clerk					17.590
City Treasurer			×		30,000
City Engineer				*	12,760
Education					13,020
Health					10,425
Transport					16,780
Cleansing					1,815
Architect					7,245

4,620 Estate and Property Superintendent's Flat, etc. 1,950

142,025

(Not my addition) Such part of the site as is not occupied by buildings is to be laid out as gardens, parking space, etc., as competitors may consider appropriate.

#### DRAWINGS

No undue strain will be put upon the competitor with regard to the drawings required, but he must put a scale upon all his plans, so as to show precisely how much they have swelled in mounting, one presumes.

That ½-in. scale detail is asked for, however, the last straw that breaks the camel's back. Exterior elevations to be camel's back. Exterior elevations to be faced with local stone! I did not know there was one. Anyhow, there is doubt if there is one which is capable of delivering anything like the quantity that will be required here.

#### "GRANDEUR" CALLED FOR

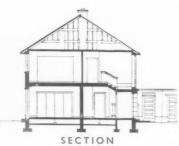
Modernists will be interested to hear this. The Council particularly desire that competitors should give careful consideration to the expression of the grandeur of the architectural programme, both in the composition of the masses, and in the detailing of the elevations."

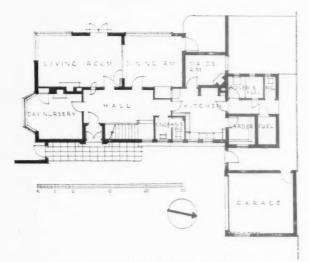
#### and

"The magnitude and importance of the services undertaken under the National system of administration should be reflected in the design of the building, as should also the importance of the City as the centre of a great industrial population." H. T. W.

### HOUSE NEAR WOLVERHAMPTON:









GROUND FLOOR PLAN

FIRST FLOOR PLAN



SITE AND GENERAL—The site, at Compton, consists of a rather narrow plot running eastwest, with a pleasant outlook to the west. Main rooms are therefore given a west aspect, with the addition of a south window to the living room. The nursery faces due south. The question of outlook, and the client's desire for six coal fireplaces, were the main factors controlling the plan.

CONSTRUCTION—Externally, 11-in. hollow brick walls are used, with internal walls in bricks and hollow block construction. Facings are in a golden buff, hand-made brick. The house itself is roofed with dark red hand-made pantiles; the loggia roof being in reinforced concrete, cantilevered out under the main wall.

Above, a view of the garden front. Left, the entrance front.

### BY LAVENDER AND TWENTYMAN



INTERNAL FINISHES — The two main ground floor rooms— the living— and dining-rooms— are finished in a natural coloured buff rough plaster, with oak board floors and flush, painted doors. Fireplace surrounds are in Clipsham marble. Kitchen cloakrooms and larder are floored with red quarries; the nursery floor in rubber.

HEATING—In addition to coal fireplaces provided in the living-room, nursery, maid's rooms, and the three main bedrooms, central heating is installed to the whole of the ground floor and to passages on the first floor; built-in convector-type radiators being used.

Right, a detail of the garden front. Bottom, left, a view of the staircase landing; bottom, right, the living-room.

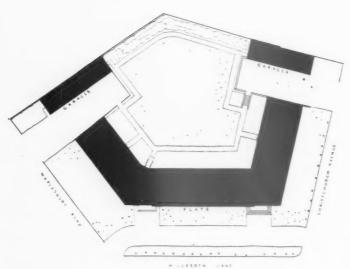
For list of general and subcontractors, see page 225.





### BLOCK OF FLATS AT WILLESDEN:





SITE PLAN

GENERAL PROBLEM AND SITE—A block of 57 residential flats, varying from bed-sitting room flats to 5-room flats with two bathrooms. The building stands in 2½ acres of ground, and the site is bounded on three sides by roads, all of which had building lines well set back, and the problem was to plan an economically sound

building with this restriction, together with the 40-ft. limit of height set by the ground landlords.

Above, a view showing the main front to Willesden Lane, and, on the right, the return elevation to Christchurch Avenue.

## DESIGNED BY ADIE, BUTTON AND PARTNERS

CONSTRUCTION — Reinforced concrete frame with special patent floors. The walls are faced with 14½-in. brickwork. There are double partitions between all flats and between living rooms and main corridors.

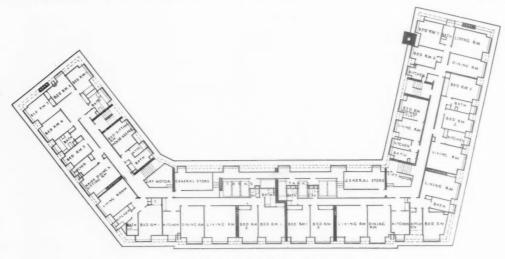
EXTERNAL FINISHES — The ground landlords insisted on a simple but traditional façade in keeping with the neighbourhood. The external walls are faced with hand-made, sand-faced bricks with a rough way surface, set with wide flush joints. Dark red sand-faced tiles were used for the mansard roof. In the flat roof behind are lantern lights lighting the kitchens, bathrooms and corridors. The porticos are in Portland stone. The reinforced concrete cornice is treated with a stone finish.

Right, a view in the internal courtyard. Below, the main entrance.

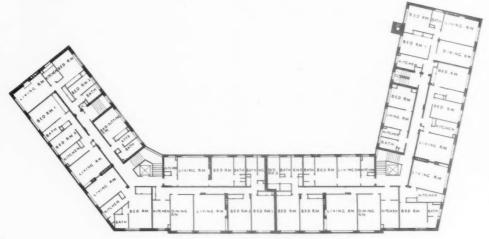




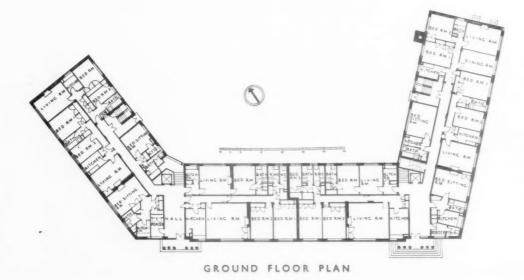
## BLOCK OF FLATS AT WILLESDEN: DESIGNED BY



FOURTH FLOOR PLAN



TYPICAL UPPER FLOOR PLAN



PLAN — The plan was adopted to give the maximum degree of privacy and to avoid light wells. It is a condition of the lease that all tenants must close carpet the rooms. Separate quarters for housekeepers and maids are provided on the top floor.

#### PARTNERS ADIE, BUTTON AND



INTERNAL FINISHES AND EQUIPMENT—The entrance halls have a fibrous plaster cornice and pilasters, and the walls are off white throughout; they are covered with a dark red carpet, which has also been used for the corridors and stairs. The doors and skirtings are painted Mediterranean grey. The service staircase is finished with rubber and rubber nosings. Bathrooms and kitchens are tiled with white tiles, and all pipes are concealed. The concrete floors have carpet battens set in near the skirting for fixing tenants' carpets. Kitchens are fitted with dressers and store cupboards and ventilated larders; and fitted mahogany wardrobes are built into each flat.

SERVICES—Two silent passenger lifts with automatic self-closing doors have been installed, and two service lifts off the service staircases for the carriage of coal and dustbins and heavy goods. Dust-bins are provided in all the flats, and special access cupboards allow the tenants to put their dust-bins and coal-bins into the cupboard from the flat and for them to be removed from the public corridor side by the porter. Hot water and heating to all flats. Garages have been provided at the rear of the building. Above, a view in the internal courtyard.

For list of general and sub-contractors, see page 225.

#### R. I.B. A.



Notes from the Minutes of the Council held on

Appointment of Vice-Presidents.—The following were appointed as Vice-Presidents for the Session 1938–1939: Professor Patrick Abercrombie, M.A., and Messrs. Howard Robertson, M.C., S.A.D.G., and A. H. Moberly.

Appointment of Hon. Secretary and Hon. Treasurer.

—Mr. W. H. Ansell and Mr. L. Sylvester Sullivan were appointed as Hon. Secretary and Hon. Treasurer, respectively, for the Session 1938–1939.

Appointments.—The National House-Builders'

1938-1939.
Appointments.—The National House-Builders' Registration Council: Mr. G. E. Streatfeild (F) for a further period of three years. Housing Standards Joint Committee of the R.I.B.A. and the Housing Centre: Mr. Stanley C. Ramsey (F), in place of Mr. A. W. Kenyon (F). R.I.B.A. Architecture Bronze Medals: Jury for the Area of the Royal Society of Ulster Architects: Mr. A. G. Henderson (F).

Henderson (F).

Whole-time Officials and Architectural Competitions. —It was agreed on the recommendation of the Competitions' Committee and Salaried Members' Competitions Committee and Salaried Members Committee to add a note to the memorandum on "Whole-time Officials and Private Work," making it clear that the principles set out in the memorandum were not intended to debar whole-time officials from taking part in competitions provided that Clause (C) of the R.I.B.A. Regulations was not infringed, i.e. that they did not take northing committee and Salaried Members

Committee and Salaried Members

Committee and Salaried Members

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Regulations was not infringed, i.e. that they did not take part in competitions promoted by the authorities for whom they were working.

Model Form of Conditions for Architectural Competitions.—On the recommendation of the Competitions' Committee, Clause 14 of the Model Form of Conditions for Architectural Competitions was amended to read as follows:

"The deposit of £,... paid by the applicant for these Conditions will be returned to him on receipt of a bona fide design, or in the event of the applicant declining to compete, on the of the applicant declining to compete, on the return of the Competition documents at least two weeks before the date for submitting

designs."
Reinstatement.—The following ex-members were reinstated: As Fellow: Major William Henry Dashwood Caple (Retd. F). As Associate: Mr. Richard Arthur Fielding Riding. As Licentiates: Messrs. John Anderson, Llewellyn Charles Edwards and Raymond R. Hammond. Resignations.—The following resignations were accepted with regret: Messrs. Frank Reginald Gould Wills (F); Samuel Denman (Retd. F); Guy Reginald Linfield (A); Allan Ferguson Duncan (L); John L. Kirk (L); George William Curzon Lane (L); John Harry Francis North (L).

William Curzon Lane (L); John Harry Francis North (L).

Transfer to the Retired Members Class.—The following members were transferred to the Retired Members Class: As Retired Fellows: Messrs. Edwin Percy Cameron and Walter Vernet Quilter. As Retired Licentiate: Mr. Walter Christie Cooper.

Election of Students.—The following Probationers were elected as Students of the R.I.B.A.: Intermediate Examination: A. H. Abbot; D. H. Bamber; P. J. Barbary; G. W. Barrell; S. P. Bowen; S. W. Brown; F. J. Budd; E. L. Cathery; E. J. Cavanagh; L. T. Channing; J. B. Lawson; J. Crowther; D. Darbison; E. H. Davie; R. Dobson; A. B. Drought; A. W. Duncan Jones; T. C. Eaton, J. M. Edwards; P. W. Edwards; E. A. Fosbury;



On this page a reader recounts a successful appeal on behalf of a client against the refusal of the Bournemouth Corporation to approve plans of four blocks of six flats in Redhill Avenue, Bournemouth, on the grounds of "amenities." The photograph shows the adjoining property with a portion of the site in the foreground.

O. W. Fox; G. E. Freeman; W. E. Godfrey; J. Goldthorp; E. Gomersall; C. Grierson; G. A. Halse; P. D. Hammond; G. Harrison; A. E. Harvey; A. Hodgson; W. H. Irwin; S. A. Johnson; D. E. Johnstone; F. J. Judson; G. L. Julius; S. J. Kinsman; G. A. Kirby; C. Knapper; F. S. Knight; V. C. Launder; J. B. Lawson; H. Lever; A. P. Levy; D. H. Lewis; H. R. Lewis; W. S. Lewis; H. R. Lister; E. Loasby; R. C. Lusty; P. J. Mabley; J. D. Maidment; W. Morris; L. G. Neaves; C. K. Parker; J. S. Pearson; S. B. Poel; F. B. Pooley; H. J. Pratt; W. G. Raiker; P. H. Rexilius; H. Ross; G. A. Rowe; E. V. Royle; J. F. Rusted; R. J. Samuel; G. G. Simpson; J. Smith; W. G. Steele; H. Thomas; R. B. Thomas; F. R. Thorne; R. H. Treleaven; R. W. Ward;

F. B. Warren; G. E. Webster; H. H. White; A. Whitehead; R. A. Wilkie; and C. Woodward. Special Exemption: E. E. Brown; and M. H. Seward. Sir J. J. School of Art, Bombay; M. V. Ananckan; D. M. Godbole; J. D. Gokhale; C. S. Gupte; and T. V. Isaacs. School of Architecture, Southend-on-Sea: E. R. Collister. Glasgow School of Architecture: J. M. Cowie; A. Green; W. W. Hillhouse; R. F. Kennedy; and J. Stevenson (Jnr.). Edinburgh College of Art: H. Curtis; and C. M. Mackenzie. Birmingham School of Architecture: D. B. Hague; and G. W. Lawson. Leeds School of Architectural Association: E. M. Lobban. Liverpool School of Architecture: J. L. Thomas. R. W. A. School of Architecture, Bristol: K. J. Williams.

## LETTERS

#### Registration

SIR,—The Architects' Registration Act, 1938, received the Royal Assent on July 29, and is now law. An announcement will be made in due course as soon as the Council are in a position to receive and consider applications for registration from practising architects.

Under Section 2 of the Act, any person making application to the Council before August 1, 1940, in the manner prescribed by the Regulations of the Council, will be entitled to be registered if he proves to the satisfaction of the Council on the report of the Admission Committee that on July 29, 1938, he was, or had been, practising as an architect in the United Kingdom or some other part of His Majesty's Dominions.

The necessary Regulations to give effect to the Act will be drawn up by the Architects' Registration Council and submitted for approval to the Privy Council in due course. Until that approval has been obtained, it will not be possible for the Council to consider

PEMBROKE WICKS, Registrar, Architects' Registration Council of the United Kingdom.

G. E. MAGNAY, Chairman 1937-1938, A. A. Students' Club.

R. THORNE

any applications for registration under Section 2 of the Act nor to provide applicants for registration with the necessary forms.

PEMBROKE WICKS
Registrar, Architects' Registration
Council of the United Kingdom

#### A. A. School

SIR,—It has been suggested on numerous occasions that the students of the A.A. School have been responsible for, or have influenced, the insertion of matters concerning the school in Astragal's column, during the past few weeks.

May I, on behalf of the students, take this opportunity of repudiating any such suggestions and disclaiming any responsibility?

> G. E. MAGNAY [Chairman, 1937–1938, Architectural Association Students' Club]

[Disclaimer and repudiation are unnecessary. -Ed., A. J.]

SIR,-I am sending you herewith some information concerning a successful appeal on behalf of a client against the refusal of the Bournemouth Corporation to approve plans of four blocks of six flats in Redhill Avenue, Bournemouth, on the grounds of "amenities," which may, or may not, be of interest to you for publication. The details are briefly these. The site is a disused gravel pit adjoining Redhill Drive, Bournemouth. The surrounding properties on either side and at the rear are detached or semi-detached villas and bungalows Opposite is a common and recreation ground. The plans were rejected by the Bournemouth Corporation on the grounds that "The Council is of the opinion that flats in this position are undesirable and would be detrimental to the amenities of the locality; and that dwelling-houses only should be erected on the site." Previous to this, plans for bungalows were rejected on the grounds that they were "undesirable" and a block of ten houses also rejected as "undesirable and detri-mental to the amenities." The appeal was heard on May 5 last by A. R. Dent, A.R.I.B.A., and Mr. L. C. Marrow, of Messrs. Trevanion and Curtis, appeared on behalf of my client and Mr. A. R. Eaton for the Bournemouth Corporation.

The Minister, in forwarding me the Instrument giving effect to his decision sent me a copy of the letter sent to the Town Clerk, Bournemouth, and in this he stated:—

The site was admittedly one difficult to develop on account of its contours and the need for filling in. Previous applications to develop it by means of blocks of houses and by bungalows had been rejected by the Council. He also fully appreciated the view of the Council that the provision of flats should be carefully supervised so as to secure preservation of amenities. He has come to the conclusion, however, that in the present case, where the site fronted on a wide avenue opposite a fairly large public open space, the proposed development by three-storeyed flats, the height of which would to some extent be minimized by the contours of the ground, would not be out of harmony with existing development in the neighbourhood and that injury to its amenities would not be likely to accrue.

R. THORNE

Poole.

#### LONDON SOCIETY

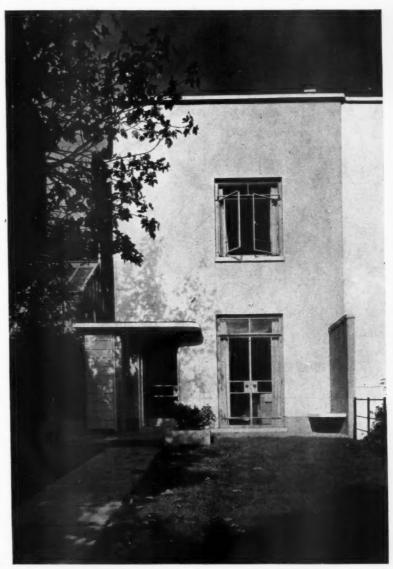
On August 24 the London Society has arranged a coach drive during which visits will be made to some modern churches in South London, including St. Peter, St. Helier; the Barn Church, Cheam; Church of The Good Shepherd, Carshalton; and St. Augustine, Tooting. Full details of the drive (price 3s. per person) are obtainable from the Secretary of the London Society, Lancaster House, St. James's, S.W.I.

## WORKING DETAILS: 671

ENTRANCE PORCH 

HOUSE AT HAMPSTEAD 

M. J. H. AND CHARLOTTE BUNNEY

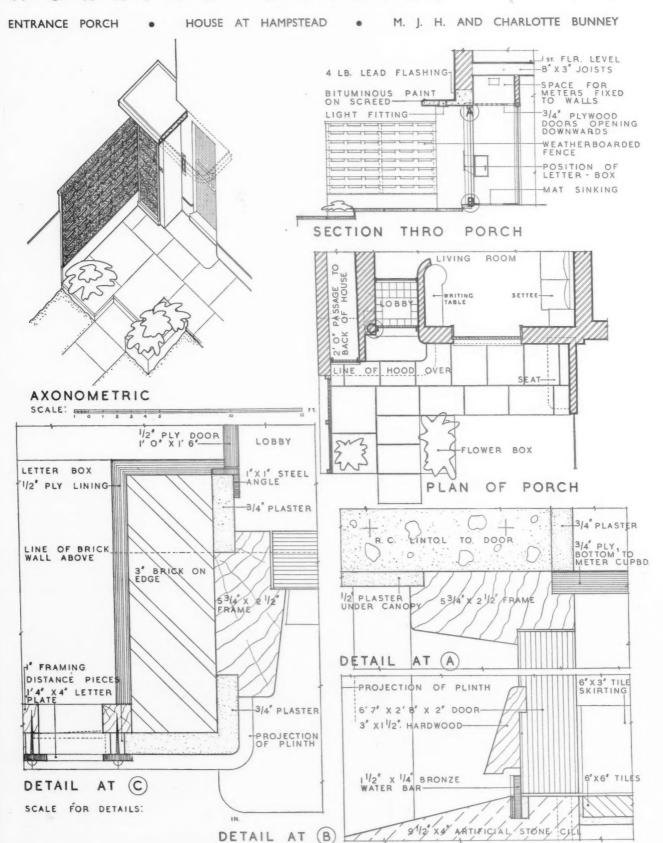


The main entrance and tradesmen's entrance are designed as one unit under a reinforced concrete canopy. The main door gives access to a small lobby with meter space over, and thence to the living-room, while the tradesmen's door opens on to a 2-ft. passage leading to the kitchen at the back of the house. Both doors are of wood in wood frames, painted, the tradesmen's door being weatherboarded. At the side of the main door a letter-box is incorporated in the thickness of the external wall, with letter plate in aluminium finish.

There is an artificial stone paved terrace with flower boxes in front of the entrance doors. Details are shown overleaf.



## WORKING DETAILS: 672



Axonometric and details of the entrance porch illustrated overleaf.

The Architects' Journal Library of Planned Information

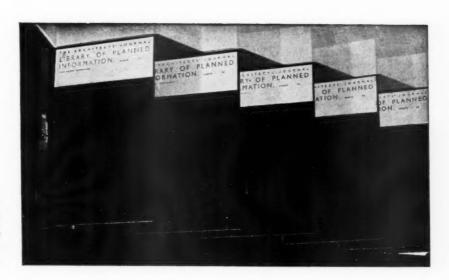
# SUPPLEMENT



SHEETS IN THIS ISSUE

649 U.S.A. Plumbing—VI

650 Ventilation of Factories and Workshops-I



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

#### Sheets issued since Index:

- 601 : Sanitary Equipment
- 602 : Enamel Paints
- 603 : Hot Water Boilers-III
- 604 : Gas Cookers
- 605 : Insulation and Protection of Buildings
- 606: Heating Equipment
- 607 : The Equipment of Buildings
- 608 : Water Heating
- 609 : Fireplaces
- 610 : Weatherings-I
- 611: Fire Protection and Insulation
- 612 : Glass Masonry
- 613: Roofing
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#### THE ARCHITECTS JOURNAL LIBRARY OF PLANNED INFORMATION

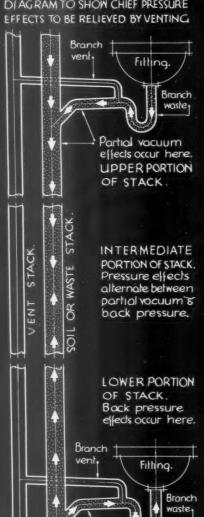
#### U.S.A. DEPI OF COMMERCE, RECOMMENDATIONS REGARDING VENT STACK SIZES.

The table given below is published by the U.S.A. Department of Commerce Sub-Committee on Plumbing. It indicates the most efficient sizes for vent-pipes to soil or waste stacks.

The table shows the relationship between the diameter of the soil or waste stacks to be vented, the waste load in terms of fixture Units (see Information Sheet  $N^2$  518,) and the diameter of the appropriate vent pipe according to its length.

(It is assumed that the vent stack is vertical throughout its length. See notes on the back of this Information Sheet for modifying factors.)





Back pressure effects occur here

SELF-SIPHONAGE. Liability to self--siphonage is not influenced by the position of the filting on the stack.

Diam. soil or waste	Number of			Dian	neler	of ver	nt (in	inche	s.)		
nasie stack. Inches.	Fixture Units.	11/4.	11/2.	2.	21/2.	3.	4.	5.	6.	8.	10.
11/4.	T.	4.5.		5.0	0.4	7.40	<b>F</b> •0				*
11/2.	Uplo 8	3.5	.60.								
2.	Upto 18.	3 a	50.	90.							
21/2.	Upto 36.	2 5.	45.	75.	105.	•	•		•	•	1.00
	12.		34.	120.	180	212.	3.0				
	18.		18.	70:	180.	2   2.					
3.	24.		1 2.	50	130.	2   2.					
	36.		8.	35.	93.	212				*-	
	48.		7.	32.	80.	212					
	72.	1.	6.	2 5.	65.	2   2.				•	**
	24.			2 5.	110	200.	300.	3 40.			
	48.			16.	65.	1.15.	300.	3 40.			
	96.			1 2.	45.	84.	300.	340.		•	
4.	144.			9.	36.	7 2.	300.	3 40.			
	192			8.	30	64.	282.	340.			
	264.			7.	20.	° 5 6.	245.	3 40.			
	384.			5.	18.	47.	206.	340.		•	•
	72.				40	65	250.	39a	440.		
	144.				30.	47.	180	390	440.		
5.	28 8.				20.	32	124.	390.	440.		
	432.				16.	24. 16.	94.	32O. 225.	440.		
	720. 1020.	1			10.	1 3.	5 8.	180.	440.		
	144.		10000	5.5	ple 0	27.	108.	340.	510.		Dieg
	288.	1 .				15.	70.	220.	510.	630.	
	576.					10	43.	150.	425.	630.	
6.	864.					7.	3 3.	125.	320.	630.	
	1296.					6.	25.	92.	240.	630.	
Basi	2070.					4.	2 1.	75.	186.	630.	
100	m 320.		•		7 * 7		42.	144.	4 00.	750.	900
	640.	1					30.	86.	260,	750	900
	960.						2 2.	60.	190.	750.	
8.	1600,	1 .					16.	40.	1 20.	5 2 5.	900
	2500.						12	2 8.		370.	
	4160.						7,	2 2.	62.	252.	840
	5400.						. 5.	17.	5 2.	212.	70

NOTE. The London County Council regulations allow no vent stack less than 3! in internal diameter.

Extracted from a report made by a sub-committee on Plumbing, U.S.A. Dept. of Commerce.

INFORMATION SHEET EXPERIMENTS ON THE EFFICIENCY OF WASTE PLUMBING.6
SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI-BIGG. G. BAY A

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

## INFORMATION SHEET • 649 •

### U.S.A. PLUMBING-VI

Subject:

Plumbing Systems

This series of Sheets is based on extracts from a report, Recommended Minimum Requirements for Plumbing, issued by the sub-committee on Plumbing of the United States of America Department of Commerce, which carried out a series of tests on plumbing systems specially erected for experimental purposes.

This Sheet summarizes certain of the conclusions of the committee with regard to the sizes of vent stacks required to relieve pressure effects in soil and waste stacks.

#### Vent requirements :

The purpose of the vent stack and its branch vents is to allow the entrance of pure air to the waste stacks and branch wastes, and the discharge of unwholesome gases at a suitable point above the building, and also to relieve the pressure effects which are generated within the system by the discharge of the fixtures it serves. This function is of the first importance as unless these pressure effects are relieved through the vent system they will tend to find their own relief through the traps of individual plumbing fixtures, either by discharging foul air through the

of self-siphonage will be dealt with in a later sheet of this series.

It was found by the committee that any vent system that was adequate to relieve pressure effects was more than adequate to allow of the circulation of pure air and the discharge of corrosive gases. It is therefore not necessary to give separate consideration to these latter questions.

#### Sizes of vent stacks:

The table on this Information Sheet shows the diameter of vent pipe needed to relieve pressure effects, given the diameter of the soil or waste stack, the volume of waste to be carried by the stack (reckoned in terms of fixture units) and the height (in feet) of the vent stack.

The table was compiled by the committee as a result of tests and calculations. Any vent supplying air to the soil or waste pipes at a volume rate equal to that of a fixture discharging into it will prevent a pressure effect on the trap. The vent sizes recommended in the table are considered adequate for this purpose, with a generous margin of safety.

#### Modifying factors:

It was found that in practice  $I_{\frac{1}{4}}$  in. was the minimum diameter suitable for a vent stack (note: L.C.C. regulations insist on a minimum of 3 ins.).

The lengths of vent-stack of various diameters allowed by the table apply only to vertical vents. Any bend in the stack sets up a point of resistance to the free passage of air, and limits its capacity for ventilation, and this must be taken into consideration. The following figures show the length (in feet) of straight pipe which sets up a resistance equivalent to that set up by one elbow or tee:—

Diameter (Inches)	1	11	11/2	2	21/2	3	31/2	4	5	6	8
Length (in feet) of straight pipe equivalent to one elbow or tee	2	2.5	3	5	7	9	11	13	19	24	35

water seal, or sucking the water seal away, and thus leaving the fixture unprotected.

The three principal pressure effects are backpressure (an increase within the system above atmospheric pressure); partial vacuum (a decrease below atmospheric pressure), and self-siphonage (of individual fixtures).

These factors do not occur with equal intensity throughout the system. Back pressures occur only towards the base of the stack, the region of back pressure extending upwards as the volume of discharge is increased. In the upper parts of the system, below the entrance of the highest fitting, partial vacuums only are encountered. The pressure effects in the intermediate regions alternate between back pressures and partial vacuums.

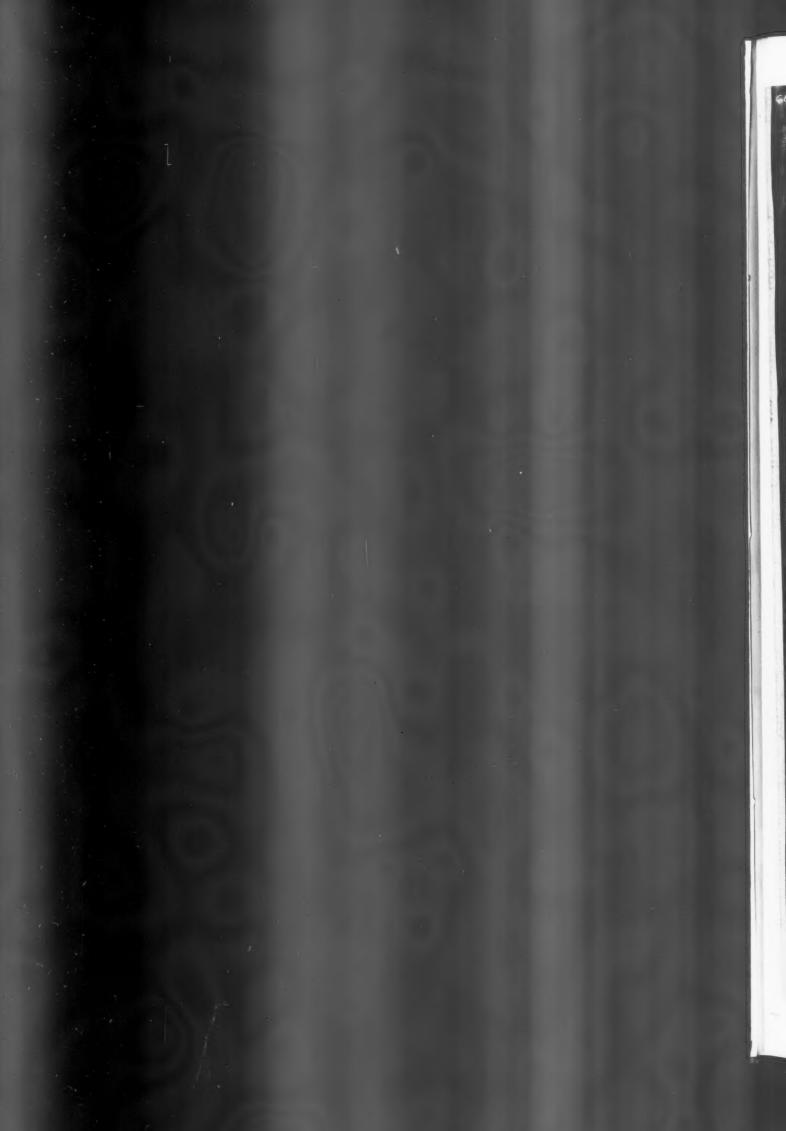
Self-siphonage is a purely local effect, liable to occur individually in any trap which is not suitably designed or vented. The question

For example, supposing that a vent 62 ft. high is required to a 3 ins. soil pipe which serves a number of fittings rated at 72 fixture units (see Information Sheet No. 518). According to the table on the front of this Sheet a  $2\frac{1}{2}$  ins. vent is adequate, provided that it is vertical throughout its length. Supposing that two bends occur in the vent, reference to the table of equivalent straight lengths shows that 7+7 ft. must be added to the actual length to give its true venting capacity. The vent now rates as 62+7+7 ft. in height (i.e. 76 ft.), and therefore should have a diameter of 3 ins. as 65 ft. is the limit of height for a  $2\frac{1}{2}$  ins. vent pipe serving a 3 ins. soil or waste stack with a load of 72 fixture units.

#### **Previous Sheets:**

The first five Sheets in this series are Nos. 484, 518, 547, 551 and 648.





10"

685

#### THE ARCHITECTS JOURNAL LIBRARY OF PLANNED INFORMATION

TYPICAL DETAILS OF AIR INLETS AND EXTRACTORS FOR NATURAL VENTILATION SYSTEMS.

Wall finish.

Metal window frame.

Concrete lintel

Horizontally pivotted sash capable of being fully opened

Horizontal glazing bar.

AREA OF OPENINGS. At least 5 square feet of opening per 100 square feet of floor area should be provided.

RATE OF AIR INLET: Generally, air should not enter windows or other openings at a speed exceeding 250 feet per minute.

Bottom hung hopper sash opening inwards, with glazed cheeks to prevent side draughts.

AIR CHANGE in ordinary circum--stances, the air in aroom should be changed at least six times per hour

· Fixed boltom light

SECTION THROUGH A WINDOW WITH HOPPER AND SWIVEL SASHES. Scale: 1" to 1:-0"

This type of inlet is useful in rooms in which the chimney flue is used as an outlet.

An upward. current of air is secured at this point.

The lower sash is kept raised and a board covers

the opening.
SASH WOCHING AIR
INLET VENTILATOR.

Louvre blades

Roof

covering.

The area of the outlet should be as large as possible.

Regulating flap.

The air may be warmed by a heater at this point if necessary.

TUBE AIR VENTILATOR.

This type of ventilator if extend-ing the whole length of the roof, provides a large outlet area.

The louvres may be filted with adjustable shutters which can be closed against adverse winds

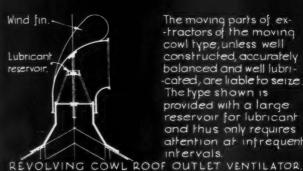
The louvre blades may, with advantage, be shaped as shown.

DOUBLE-SIDED RIDGE LOUVRE OUTLET VENTILATOR.

Roof ventilators, unless carefully designed, are liable to cause downdraught under certain

conditions.
The type shown provides free outlet for the air, and utilizes the action of wind passing horiz--ontally across it to maintain extraction under all conditions.

ROOF OUTLET VENTILATOR



The moving parts of ex-tractors of the moving cowl type, unless well constructed, accurately balanced and well lubri--cated, are liable to seize The type shown is provided with a large reservoir for lubricant and thus only requires attention at infrequent intervals.

Extracts from Ventilation of factories and Workshops, Home Office Welfare Pamphlet Nº 5., 1937.

NFORMATION SHEET: THE VENTILATION OF FACTORIES AND WORKSHOPS:

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

#### INFORMATION SHEET

650 •

#### THE VENTILATION OF FACTORIES AND WORKSHOPS—I

Subject:

Natural Ventilation

#### General:

The following information is largely extracted from "The Ventilation of Factories and Workshops," Home Office Welfare Pamphlet No. 5, issued by His Majesty's Stationery Office, 1937 (price 1s.), and is reproduced here by permission of the Controller. It is a requirement of the Factories Act, 1937, that effective and suitable provision shall be made for securing and maintaining by the circulation of fresh air in each workroom the adequate ventilation of the room. Effective provision shall be made for securing and maintaining a "reasonable temperature in each workroom, but no method shall be employed which results in the escape into the air of any workroom of any fume of such a character and to such extent as to be likely to be injurious or offensive to persons employed therein.

#### Ventilation may be provided either :-

- (i) by natural physical forces, e.g. winds or air currents due to fires or other heating arrangements or a higher temperature indoors than externally, or
- (ii) by mechanical means, e.g. fans, by which the air is changed or circulated.

#### **Conditions for Satisfactory Ventilation:**

The following characteristics have been put forward as being desirable for the atmosphere of workrooms:—

- (a) Cool rather than hot.
- (b) Dry rather than damp.
- (c) Diverse in its temperature in different parts and at different times rather than uniform and monotonous.
- (d) Moving rather than still.

The human body generates heat continuously and under normal circumstances body cooling is effected partly by imparting heat to the air which comes in contact with the clothes and body, partly by radiation to cooler surroundings and partly by the evaporation of moisture from the skin and respiratory surfaces. The movement of the air surrounding the body is a governing factor, in the rare as which bear is body is a governing factor in the rate at which heat is lost from the body.

#### Air Change :

It is usual to provide a definite number of air changes per hour. In ordinary circumstances the air should be changed at least six times per hour. If this is im-practicable, adequate air movement should be secured by means of fans, etc.

In workrooms of moderate size, the air is normally changed in warm weather more often than 6 times per hour by the natural flow of air through the open windows or other ventilators, provided they are of sufficient area and are suitably distributed. At least 5 square feet of opening per 100 square feet of floor area should be provided.

The change of air should be effected without creating unpleasant draughts; this is not possible unless the inlets are of large area and are suitably placed. In general, the air should not enter at a speed greater than 250 ft. per minute. In workrooms of moderate size, the air is normally

#### Air Movement at Working Positions:

For a temperature range of from 60° F, to 65° F, air velocities of from about 20 to 30 ft. per minute are suitable for sedentary workers. Workers engaged in heavy muscular work, for the same temperatures, require greater air velocities.

#### Temperature:

In general, air temperatures of not less than 60° F. for sedentary workers, should be maintained. This temperature is now compulsory after the first hour in each workroom, where a substantial proportion of the work is done sitting. Temperatures for sedentary workers should not exceed 68° F. in winter. In thin walled buildings higher temperatures than would otherwise be required may be needed in winter to compensate for the chilling effect of the cooler wall surfaces.

#### **Humidity**:

Values from 50 per cent. to 65 per cent. humidity are not considered objectionable at normal room temperatures. Discomfort is experienced when the wet bulb temperature exceeds 70° F., and every effort should be made to prevent the wet bulb temperature rising above this figure.

#### Natural Ventilation:

This Sheet, the first of a series, is intended to suggest Inis sheet, the first of a series, is intended to suggest how adequate ventilation may be attained by natural means. Natural ventilation cannot be efficient unless there are openings of adequate size and suitably arranged for the inflow and outflow of air. The details on the front of this Sheet show various typical types of inlets for natural ventilation.

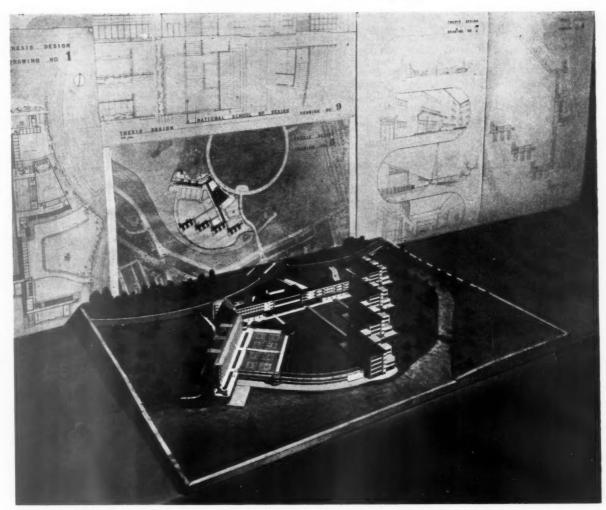
Tobin tube ventilators should be as large as possible. Small ventilators are of little value in a large room. In factories of the shed type and on the top storey of a multi-storey building, outlet ventilators are usually provided in the roof, the fresh air entering at

windows or other ventilating openings in the sides.

Three typical roof outlets are shown on the front of
the Sheet, the bottom two being especially designed
to prevent down draught, and to take effective advan-

to prevent down draught, and to take effective advan-tage of horizontal wind currents to maintain extraction. In rooms of moderate width, dependent in summer upon cross ventilation, the window openings on both sides should be as large as possible. The detail on the front of the Sheet shows a typical modern factory arrangement, with a horizontally pivoted window at high level capable of being fully opened, and a hopper at a lower level, opening inwards about 10 ins. at the top, with plazed side cheeks to prevent down draughts top, with glazed side cheeks to prevent down draughts from the sides.

In many cases, adequate ventilation cannot be obtained by natural means, particularly in winter time, when windows are kept closed, either for warmth or to avoid draughts. In these circumstances, a correctly planned system of mechanical ventilation is generally found necessary, and this will be dealt with in later Sheets of this



From the exhibition of students' work, Regent Street Polytechnic, now being held at the Building Centre, London: A National School of Design. By Stanley Jordan (Fifth Year).

## L I T E R A T U R E

## AERIAL DEFENCE

[By JOHN BERRING]

Air Defence and the Civil Population. By H. Montgomery Hyde and G. R. Falkner Nuttall. London: The Cresset Press. Price 12s. 6d.

THE most cursory glance through the architectural or 'the civil engineering papers of Germany, France, Switzerland or Italy is enough to show that a good deal of interest is being taken by technical people in the problem of defence against aerial attack. In this country little has so far been published; there are the handbooks issued by the Air Raid Precautions Department of the Home Office, but these deal only in a semi-popular way with the subject, though a further handbook on the mechanical and structural side of the problem has been "in preparation" for some

months. One might justifiably assume, therefore, that a well-arranged and properly documented account, not only of the dangers to be expected from aerial attack, but of the means adopted by other countries to combat them, would be of great value to engineers, architects and factory managers, many of whom are anxious to do something but who have no sources to consult beyond the excellent but not exhaustive report of the A.A.S.T.A. recently published in this JOURNAL.

Messrs. Hyde and Nuttall have evidently appreciated the demand for information, but they appear to have been over-hasty in their production of the appropriate supply. Designed, so the publishers say, "for the benefit of the man in the street as well as for those who require more detailed and technical information," the book starts off with a rather inconclusive chapter

on the relative air strengths of the world powers, the figures, as the authors admit, showing little more than that aerial rearmament is being intensified all over the world, the numerical tables of first-line machines meaning little or nothing. The second chapter has the somewhat grandiose title of "The Strategy of Bombardment," but contains only a brief survey of the 1923 Hague agreement (which no nation seems likely to keep), the rest being descriptions of raids carried out during the last war, quoted either from the official history or from the literary efforts of our more loquacious generals. After a fairly objective chapter on the gases likely to be used in the next war and their effects, the authors then consider possible methods of protection, both for the individual and for essential services, the chapters on structural precautions and the town-planning aspect of defence being of the most importance to the architect. there is a certain amount of useful information, but not nearly enough: "a 4-in. layer of reinforced concrete on the attic floor" is suggested to resist the penetration of small incendiary bombs, but of what use is it to say that, "a layer of sand will give some protection" without specifying any thickness? It is stated, too, that in Italy, "leading architects and experts have produced an extensive literature on the subject of . . constructional and building problems as affected by air raid protection," yet in a two-page bibliography (which includes such authors as Sir Malcolm Campbell and Air Commodore L. E. O. Charlton) only one Italian book is mentioned.

One or two chapters in this book read as though they had been rather hurriedly dictated, and there are no signs of any subsequent polishing; while it would be captious to expect the English of Addison or Swift, one has a right to demand some knowledge of the more elementary rules of grammar. Fortunately, however, it is generally possible to guess what the authors mean, even when they have not said it. A book to borrow—once.

## SIR BANISTER FLETCHER

A History of Architecture on the Comparative Method. By Sir Banister Fletcher, M.ARCH., F.S.A., PP.R.I.B.A. London: B. T. Batsford, Ltd. Price, £2 2s.

THIS new issue is the tenth edition of this book which was first published in 1896. By making extensive additions to each succeeding reprint, since it was originally produced, Sir Banister Fletcher has now built up a fascinating volume which in its way

must be quite unique.

The book is too well known for it to be necessary to recount the many eulogies it certainly merits. Suffice it to say that it would seem impossible for a work of this kind to be surpassed. It fulfils every requirement—a history of architecture in all ages and all countries, containing over a thousand pages and four thousand illustrations, monumental and exhaustive; and yet the publishers not only publish this at a comparatively low price, but, above all, they have contrived to produce what is termed a "handy" volume.

The general format and size of page of this new edition is the same as previously. The text has been revised and corrected, and new illustrations have been added. One very important improvement that has been made is that all the half-tone photographs of buildings and the drawings are printed on a special paper, thereby giving a clarity to the views which previous editions lacked. Many of the photographs have also been reproduced afresh to a larger scale, and the two hundred new illustrations now included greatly add to the

value of the book. These comprise aerial views, models and restorations, and some more of the specially prepared drawings, which are such a useful feature. The new subjects include restored models of Egyptian, Greek and Roman buildings, numerous Byzantine and Gothic examples, additional Renaissance subjects and a number of recent buildings to bring the book up to the present day.

With regard to this last new insertion, there is one criticism to make. In the section towards the end of the book dealing with modern English architecture, it seems a pity that both in the text-matter and the illustrations this has not been quite sufficiently brought up to date. More recent examples than buildings such as the Underground Railway offices and the B.B.C. might have been chosen from the many fine new buildings built during the last few years, for inclusion among the illustrations.

This; is, however, a small disturbance in such a vast and otherwise unruffled ocean. The book is now a classic. It remains, as it has done for a long time, the most indispensable work of reference for all those interested in, or who practise architecture. It stands almost alone, indeed, as being one of the greatest achievements of any author or any publisher who has attempted to produce in one volume a thoroughly efficient compendium.

A. W. H.

#### PAINTERS EXPLAIN

[By D. COSENS]

The Painter's Object. Edited by Myfanwy Evans. London: Gerald Howe. Price 10s. 6d.

THE economic factors of sale and living are as large in a painter's life as in anyone else's, and his temptation to please in order to live raises problems which, though urgent, do not affect the æsthetic argument, and which throughout history have not been allowed to affect it. The greatest painters, even while serving the strictest patrons have, in their work, defied them.

An architect more than any other artist is dependent on a patron, and that architecture is throughout the land what it so often is, is a comment on the inevitable compromise between ideal and expedient. For today's patron is not the cultured dilettante of the past.

The artist's problem and his outlook both in relation to his work and to society is very ably discussed in "The Painter's Object," a collection of short articles by contemporary painters, arranged by Myfanwy Evans, the editor of Axis. Here eighteen well-known artists explain their approach to art or interpret Courbet, Poussin or the Impressionists in terms of their individual reactions to their work. But the

painter's object is perhaps impossible of definition, for in words, however fluent and well considered, a painter is no more articulate than the rest of us, and only in his own medium can he really define his aim. Henry Moore realizes this in his chapter on sculpture, Léger also when he says "to try and explain the why and the how is impossible. It is a thing we feel, and reasons only risk confusing rather than clarifying the issue," and his chapter is constructive in discussing the relation between contemporary art and life. John Piper is perhaps the most instructive, Hélion explains his selective processes very clearly, while Picasso insists that a picture cannot be explained and only lives through the man who is looking at it.

This last is my view. Excellent and extremely interesting as is this book, neither the painter's object, nor painting, can be explained. Schools, derivations, influences, colour or design, yes; but whatever it is that the painter can translate for us to see can be said in no other way. Neither Flaubert nor Hemingway, Beethoven or Bartok can exactly transcribe the image of El Greco

or of Ernst.

## E. & O. E. [By GEORGE FAIRWEATHER]

Planning, 1938. By E. & O. E. London: Architect and Building News. Price 5s.

THE architect who is about to design a building of a kind he has not encountered before must necessarily start with a search for all the information on the subject that is available so as to avoid the risk of making mistakes that have already been avoided by others.

E. & O. E. have made a critical examination of plans for different buildings and presented their conclusions in the form of an analytical survey giving facts and principles considered always from the point of view of general planning.

The plan in relation to site, aspect and the other factors of a particular project must rest with the architect, but this notebook of planning gives him very useful help by pointing out certain essential factors that come into the problem and which require to be taken care of in a particular way.

In addition to the very full range of buildings covered by the 1937 edition, "Planning, 1938" presents six new titles:

Law Buildings

Law Buildings
Fire Stations
Museums and Art Galleries
Sports Pavilions
Office Buildings
Crematoria

On page 165, the areas given over to netball pitches are figured 100 yards by 50 yards; surely this should read 100 feet by 50 feet.

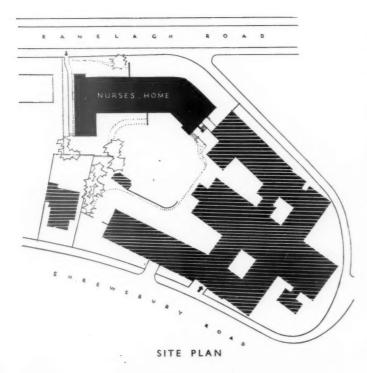
#### Publications Received

The Minor Architecture of Worcestershire (Domestic Architecture of Old England Series). By W. M. Ingemann. London: John Tiranti, Ltd. Price 21s.

New Sights of London. By Hugh Casson. London Transport. Price 6d.

#### NURSES' HOME, EAST SURREY HOSPITAL





GENERAL—The purpose of the Home is to provide sleeping accommodation and recreation rooms for the nurses of the East Surrey Hospital. It was necessary that the building should be arranged so that an additional floor could be added.

SITE—The site falls steeply from the south towards the north. The interior of the site was kept free of building so as to act as a lung to the hospital.

PLAN—Nurses' bedrooms are planned to face east as far as possible, and sisters' bed-sitting rooms to face west. The staircases are placed at each end of the building so that they also serve as escape stairs. The sitting-rooms are arranged at the north end to give access at ground level to garden and street, and to keep noise away from the hospital. The general sitting-room ts planned with southern aspect; bathrooms and w.c.'s are arranged as centrally as possible.

CONSTRUCTION—Steel frame, with 11-in. brick cavity external panel walls. Floors and roofs are of hollow tile construction; internal walls of 9-in. brickwork, and partitions of 3-in. and 2-in. hollow block.

Above, a general view taken from the hospital.

REDHIL

HOSPITAL,

EY

K

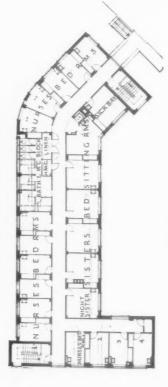
SUR

## H A S 回 HOME, S H S × ON

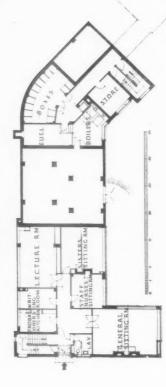
EXTERNAL FINISHES—The building is faced with warm grey stock bricks similar to those used on the hospital. Window cills, heads, surrounds and copings are in concrete with a paint finish; windows are standard steel case-ments, painted wory. It was desired that all nurses' bedrooms should have tophung vents.

Right, a view from the lawn, showing the general, staff nurses' and sisters'

For the list of general and sub-contractors see page 226.



FIRST FLOOR PLAN



GROUND FLOOR PLAN LOWER

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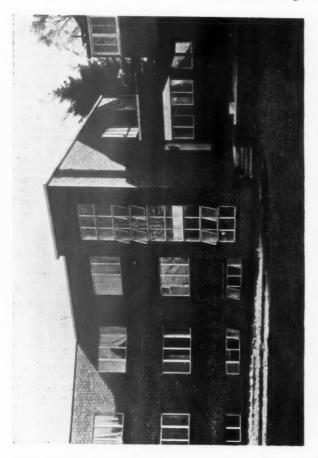
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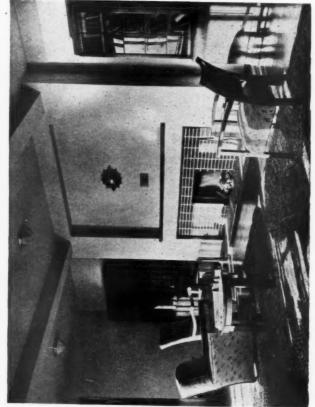
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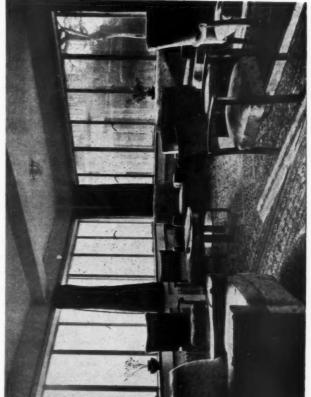
Above, left, the south stair; centre, the north stair; right, a view from the lawn showing a staircase window. Below, two views of the general sitting-room.













Progress photograph of Church House, Gt. Smith Street, Westminster, S.W.

#### LAW REPORTS

RIGHTS OVER BUILDING LAND—QUESTION OF DEVIATION OF PIPE LINE FROM PLAN

Pitt and others v. Durham County Water Board.— Chancery Division. Before Mr. Justice Farwell

In this case the plaintiffs, Mr. H. E. Pitt, a contractor, Mr. R. R. Nelson, a slate merchant, and Mr. C. H. Snowden, decorator, as the owners of land at St. Oswald, sought a declaration against the Durham County Water Board, that the rights claimed by the Board for a pipe line over their land were ultra vires and ineffective because it deviated from the line indicated on the plans deposited at the time the grant was made in 1880 by predecessors in title of plaintiffs.

in title of plaintiffs.

The case for the plaintiffs was that they now desired to develop the land as a building estate and the pipe line in question interfered with the plans. The plaintiffs now suggested a diversion of the pipe line in order to carry out the development of the estate, and the Board agreed, but the point at the back of the litigation was as to who should pay for the diversion.

The plaintiffs contended that the Board should pay inasmuch as the pipe line was not in accordance with the original plan.

The defendants, in reply, said they had a legal easement over the land to lay the pipes as they did under the agreement of 1880, under which they paid £3 a year for the right. This they paid in the place

of seeking compulsory powers over the land. They further pleaded that the deviation made was agreed to by the then owner of the land.

His lordship held that the indenture of 1880 was binding upon the plaintiffs as successors in title to the land. The defendants were possessed of a grant of easement over the land and could therefore enforce it against the plaintiffs as successors in title. There was nothing ultra vires in the defendants acquiring the rights they did and carrying out their objects, though they had made a deviation from the plans that were originally deposited. He granted a declaration to this effect.

ARCHITECT'S CLAIM FOR FEES, EXPERT EVIDENCE

Harrington v. Jones.—Official Referee's Court. Before His Honour S. R. C. Bosanquet, K.C.

THIS was an action by Mr Denis Edmond Harrington, A.R.I.B.A., of Harpowes Mead, Edgware, against Capt. W. H. Jones, to recover money for work done as an architect in making drawings and plans for Dartmouth Court, Forest Hill, and elsewhere. Plaintiff claimed £300 for the plans and drawings, £105 for other work done, and £250 for the copyright of the drawings.

The defendant challenged the claim and set up that there were errors which made the plans of no use to him.

Plaintiff gave evidence in support of his

Mr. S. J. Tatchell, F.R.L.B.A., of Tatchell and Wilson, gave evidence on behalf of the plaintiff. He said he had examined the drawings and schemes made by the plaintiff, and satisfied himself that they had been prepared in such a manner as a competent architect would have prepared them, and that they were in such a condition as would enable a quantity surveyor to prepare quantities. He was much impressed with the plaintiff's survey plan. In his plans plaintiff had taken every reasonable precaution, and the whole scheme was about as complete as it could possibly be. Any competent surveyor could prepare quantities from the drawings. The work was well within the category of the scale of charges of the R.I.B.A., and justified the charges made.

With regard to copyright he took the view that this was creative work.

The Official Referee pointed out that the question of copyright had not yet been decided in the Courts.

Mr. Tatchell considered £250 a reasonable amount for the copyright. The design was a skilful one and creative work. The plaintiff's evidence made it clear that he had done a lot of work with the County Hall authorities. His charges for his services were reasonable. As a matter of fact, all the charges made were fair and reasonable for very competent work.

Counsel for the defendant cross-examined and challenged the correctness of the plans for the shops, the layout being some feet more than the land. Mr. Tatchell did not regard that as a serious matter. The plans could be used by the builders subject to modifications.

Counsel: They would have to be re-

drawn.
Mr. Tatchell: Oh dear, no. Slight modifications would not involve re-drawing of the plans. Plans have to go through many alterations and are always subject to adjustment.

This was the case for the plaintiff.

Later, it was announced that the parties had come to terms. There would be judgment for the plaintiff for £550 with costs to be taxed, but if £400 were paid to the plaintiff by the defendant within seven days, the plaintiff undertook to accept that sum in settlement. Judgment accordingly.

LONDON BUILDING ACT. DEFENCE TO ACTION

Isaacs v. Spokes.—Chancery Division. Before Mr. Justice Simonds

THIS action arose out of a dispute between a landlord and his tenant as to the rights of the landlord to pull down and erect a wall, cut down a tree and dig a trench.

The property is situate in Clapton Square, London, and the tenant, Mr. I. Isaacs, sought an injunction to restrain his landlord, Mr. N. Spokes, from acting as he had done. The defendant also owns property adjoining defendant's house and garden, and desiring to extend his premises he took possession of part of plaintiff's garden and later he pulled down the garden wall and erected a 14-ft. wall. Plaintiff also complained that the defendant's contractors had trespassed on his garden and dug a trench, partly on his premises, erecting a hoarding for its protection.

Defendant denied that he had been guilty of trespass and pleaded that the plaintiff had no rights in the wall he had demolished. In the alternative, defendant pleaded that

if he had committed the acts alleged they were done in the exercise of his rights under the London Building Act, 1930. What defendant did, he said, was to carry out

repairs to his premises.

His lordship, in giving judgment, said when defendant took part of the plaintiff's garden he had to pay plaintiff compensa-tion. With regard to the action of the defendant in pulling down the wall, his lordship was of opinion that it was not a party wall, as he thought the two houses had not been built contemporaneously. Therefore, defendant had not committed any trespass in this respect. With regard to the trespass in making the trench and erecting the hoarding and the cutting down of a tree, his lordship characterised this as an arbitrary act of the defendant, and he awarded the plaintiff 40s. damages for these acts, the plaintiff's tenancy depending on the Rent Restrictions Acts. He had no hesitation in granting the plaintiff an injunction restraining defendant from further trespassing on his premises, and he awarded him the costs of the action.

#### DILAPIDATION CLAIM

H. Yager (London), Ltd. v. London Timber and Plywood Co., Ltd.—Official Referee's Court. Before His Honour S. R. C. Bosanquet, K.C.

THIS was an action for damages for dilapidations to a factory at Wharf

Road, Ponder's End.

In 1934 plaintiffs demised to the defendants a factory at Ponder's End for three years, expiring in June, 1937, at a rental of £100 a year. Defendants remained in possession till June, 1937, and plaintiffs' case was that in breach of the implied terms of the agreement defendants removed fixtures and machinery, and had failed to keep the premises in fair and tenantable repair in accordance with the implied terms of the agreement. As a result, plaintiffs alleged it would cost some £760 to carry out the repairs now necessary. Plaintiffs also claimed £482 for goods sold and delivered and a sum for rent and storage.

Defendants contested the claim for repairs

and set up a substantial counter-claim.

Mr. Geoffrey Howard appeared for the defendants. The plaintiffs were repredefendants.

sented by Mr. T. Roche.

His honour, in giving judgment, said plaintiff claimed damages for breach of an implied covenant to repair the factory. The position was peculiar as there was no written agreement between the parties, but only a letter setting out that the premises were let to the defendants for three years at £100 m year. Apart from any specific covenant, the tenants were liable to occupy the premises in a tenantable manner. The plaintiff had been unable to produce any evidence that the premises were in any better condition at the commencement of the tenancy than they were at the end of the tenancy. Defendants alleged that for many years the premises were in a ruinous condition. The result was that the plaintiffs had failed in regard to a large part of the claim. His honour had come to the conclusion that the plaintiffs were entitled to £87 damages in regard to their claim for repairs. With regard to the claim for goods sold and delivered, that sum had been agreed at

Plaintiffs were therefore entitled to recover from the defendants £472 odd, with costs on the County Court scale up to the date

of the consolidation of the two actions, and thereafter costs on the High Court scale. The counter-claim in each action was dismissed with costs.

Judgment entered accordingly.

#### LONDON BUILDING ACT

Burlington Property Co., Ltd., v. Odeon Theatres, Ltd.—Court of Appeal. Before Lords Justices Greer, Slesser and Mackinnon

HIS was an appeal by the Burlington Property Co., Ltd., from a decision of Judge Dumas, sitting at the Westminster County Court, in favour of the Odeon Theatres, Ltd., in an action by plaintiffs

over the rights of a party wall.

The Burlington Property Co. were the owners of the Cameo Cinema, Charing Cross Road, and the defendants are the owners of the Odeon Cinema. The dispute The dispute related to rights over Hunts Court, which is a narrow public right of way running between the two cinemas. Plaintiffs claimed to be the owners of the land and the court, and also part of the party wall which abutted on the court on the side on which the defendants' cinema stood. This wall had windows in it, but the defendants had re-built it and had replaced the windows by arches. Defendants had used these arches as exits from their theatre into

Hunts Court.

Before the County Court judge the plaintiffs contended that the defendants had acted wrongfully in removing the wall, but that the plaintiffs would not have objected if their rights had been protected.

Judge Dumas held that what defendants had done was reasonable under an award

under the London Building Act. Mr. Voisey appeared for the Burlington Co., and Mr. E. J. Rimmer for the Odeon

Mr. Voisey submitted that the County Court judge arrived at a wrong conclusion. The Odeon Co. had no right to do as they had done under the cover of an award under the Act. No rights were conferred under the Act on the Odeon Co. over and above their common law rights. The Odeon Co. could not suggest any right entitling them to take the steps they did and put a neighbour's land into the highway.

Mr. Rimmer supported the finding of the

County Court judge and claimed that the whole wall was on the defendants' freehold. If his contention was right that this was not a party wall, then defendants had acted within their rights in rebuilding the wall

as they had.

The Court allowed the appeal.

Lord Justice Greer said in his view the County Court judge was wrong in affirming the arbitration award under the London Building Act. It was clear that in the 1905 conveyance of the Odeon Co.'s property, was reserved a right to half a party wall then erected or to be erected by the new owner of the property on the site. He had not the slightest doubt that that was a reservation on that wall from its foundation. Under those circumstances, the appellants succeeded. Failing an agreement between the parties, the award would have to go back for alteration in accordance with the views he had expressed.

Lords Justices Slesser and Mackinnon

concurred.

#### ANCIENT LIGHTS CASE

Legard and Sons, Ltd. v. Barnsley Brewery Co., Ltd.—Chancery Division. Before Mr. Justice Bennett

HIS lordship was engaged for some five days in hearing an action by Legard and Sons, Ltd., of Back Queen Street, Barnsley, against the Barnsley Brewery Co., Ltd., for an injunction or damages for an alleged infringement of their rights to light by the rebuilding of the Wine Shades Hotel, when the parties arrived at a settlement of the dispute.

The defendants stoutly resisted the action and pleaded that the rebuilding of the hotel constituted no nuisance as to light and said that plaintiffs were entitled to no

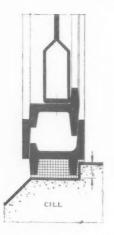
The settlement was announced by counsel, who said that following consultations between counsel and solicitors, the parties had arrived at terms of settlement. would be endorsed on counsels' briefs, and there was no need to mention them to the Court.

His lordship thought the parties had acted wisely in settling the dispute, as it was a case very near the border line.

An order was made staying all proceedings.



From the R.A. Exhibition (No. 1312). Ballam Telephone Exchange and Tooting Employment Exchange. By Christopher Bristow. (Drawing by Maurice H. Bristow.)



## TRADE NOTES

[By PHILIP SCHOLBERG]

Standard Metal Windows and Doors

WO or three weeks ago a note appeared in these columns on the new showrooms of Messrs. Henry Hope & Sons, and it was then stated that various new products of theirs would be dealt with in further issues. So far as can be seen from a second and more careful tour of the Berners Street display, the most important new point is that the standard door is now made in medium universal section No. 2, a much heavier section than was used before, and one which makes the whole door very much stiffer. Jamming one foot against the bottom of the door it is possible to shake the top about an inch or so either way, but it requires a good deal of force to do so, and when one considers that a door is an almost completely unbraced frame it is obvious that the section is a fairly stiff one. The cremorne bolt is also, I think, a new departure, and holds the door more firmly than the usual latch.

All standard windows are fitted with cleaning hinges at no extra cost, and the hardware generally is good. Larder windows with internal fly screens are operated through the hurdy-gurdy type handle, which used to be fitted only to the more expensive windows, and which gives a steady movement, and is an improvement on the older type which gave only four or five positions between open and closed. I should, perhaps, add that what I call a hurdy-gurdy handle Hope's call a geared stay, but it's the same thing, though it sounds more respectable their way. I see, too, that Hope's recommend an ordinary boiled linseed putty for glazing, with gold size added in the proportion of 1½ pints to every 100 lb. of putty. No doubt Hope's have been recommending this mixture for many years, and I have merely been unobservant, but now that the addition of manganese dioxide as a dryer is so common when glazing on metal frames, this departure seems to be worth noting.—

(Henry Hope and Sons, Ltd., Smethwick, Birmingham.)

Lead Weatherings

From time to time the Technical Bureau of the Lead Industries Council produces excellent bulletins on the use of lead for various purposes. Number 8 deals with weatherings for the protection of exposed surfaces. After some brief and really very fair notes on the whole question of weatherings, there follows a collection of photographs and drawings to show details of the weathering of windows, doorways, spandrels, hoods, shop fronts and old stonework generally, the Office of Works having provided a most useful example of the latter use, by sheathing nearly the whole of the upper surface of a Portland stone-faced building in Whitehall. The drawings, owing to the method of reproduction, are not always as clear as they might be, but this is none the less a useful booklet and was well worth the trouble which must have been taken with its production.—(The Lead Industries Development Council, Rex House, 38 King William Street, London, E.C.4.)

The Technique of Propaganda

The lead organization has also recently been responsible for a pamphlet on lead paints for ship work. Again a reasonably fair production, though nowhere in it can find any reference to the quite widely held belief that lead paints tend to discolour under the action of sulphur, and that there are, as a result, some jobs for which zinc base paint might be more suitable. This criticism is admittedly a little pernickety, but it brings up the whole question of what is and what is not justifiable in propaganda, and as the lead people are less guilty of wilful distortion than almost anyone else, injustice suggests that they may as well be made m peg on which to hang the discussion, added to which the copper and the zinc interests, covering much the same ground, also maintain information bureaux of much the same kind. Now these information bureaux are set up by the industries concerned with the very laudable intention providing a convenient source where information may be obtained about a material, and about the best ways of using it. Fair enough. But, however altruistic the manufacturers concerned may be they naturally expect some return for the money they spend on the maintenance of these

bureaux, and this is where propaganda as distinct from information begins to creep in. Not that there need necessarily be anything pernicious about propaganda, but there i always the tendency to make the most of all the good points, and to slur over any possible disadvantages. For the architect this method has certain drawbacks, for he wants to know not only how to use the material, but also whether some other material altogether might not produce a better result, or as good a result more cheaply. It seems rather unfair to expect the protagonists of one material to recommend something else, but it is a service which is of immense value to the architect. Given a clear statement of the problem, the degree of protection required, the amount of money available, the life necessary, and all the other relevant details, the lead and the copper bureaux will both give an honest opinion even if it may not be to the immediate advantage of their own pet material. The zinc bureau has not been running long enough for me to know whether it would do the same, though I think it is likely. It may be assumed, therefore, that the London architect can nearly always arrange a friendly discussion over the drawing board and arrive at a satisfactory result, but the provincial man is reduced to letters, which in themselves tend to be laborious, added to which the bureaux are naturally not inclined to put in writing statements about a particular job when they know that what they say will be taken as universally applicable.

The provincial man is thus left with these propaganda booklets, excellent productions which tell the whole story and which carefully refrain from knocking their competitors. What happens in practice? The architect is faced with, say, a flashing for a parapet wall; he reads the three booklets produced by the lead, copper and zinc bureaux, after which he knows a lot more about flashings than he did before, but he still isn't sure which to use here. Given the evidence he ought to be able to make up his own mind? Of course—but he also knows that any of the materials will probably be quite satisfactory in actual practice, even though one of them may be slightly better than the other two. But life is short and the contractor is camped on the doorstep squealing for details, so in goes the section which most nearly corresponds to the job in hand and that is that.

Can the information bureaux themselves do anything about it? The problem is more than difficult, and it would obviously be childish to try to produce some agreed statement that one material was the best for some particular job. But would it be possible to have a handbook on, say, metal roofings, to be sponsored by the lead, copper and zinc interests? Knowing only too well the hours which committees can waste discussing whether the word may should be altered to might, I realize that this is an unkind suggestion, for the representatives of each group will inevitably be in a lunatic asylum in less than six months. I am not suggesting that the handbook should become a three cornered slanging match, but the result might be more valuable than the present method of private tramlines avoiding anything likely to give offence to anyone else.

These information bureaux are so much better than the older system where every manufacturer cried his own wares that it seems a pity not to take the next logical step and produce handbooks jointly. manufacturer can sell a pound or two of whatever it is and fade away when the maintenance period is up, but the bureaux may have their mistakes thrown back at then almost for ever, and are therefore compelled to take a much longer view. Co-operation between the different industries would be correspondingly better. understand that the lead and tin groups are already working together on the question of solders, so there may not be too many difficulties in the extension of the idea. At least it seems worth while asking these three interests why it can't be done.

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#### Keys for Plaster

The problem of providing an efficient key for plaster is no new one. Many methods are in current use, from simple hacking via the retarding liquids to the more elaborate methods of tacking rubber tubing to the inside formwork of concrete walls, the removal of the tubes leaving a nice undercut groove for a key. Another method has recently been evolved by a firm called Newtonite, whose material is best described in the section reproduced



here. It is supplied in rolls I yard wide and 5 yards long, and is simply nailed to the walls or woodwork and rendered up in plaster or cement, a simple, economical and comparatively quick job. 'The backing material is stated to be impervious, and it is recommended as a cure for damp walls, while the air spaces at the back should also tend to reduce sound transmission. As a cover for steelwork the material can easily be wired round columns or beams, providing a convenient base for the final finish. It is also claimed to be vermin proof. As an alternative to the more usual wood lath it seems worth serious investigation.—(Newtonite, Ltd., 12 Verney Road, London, S.E.16.)

#### Manufacturers' Items

"W.B." Air Raid Shelters, of 92 and 94 MacDonald Street, Birmingham, 5, have sent us a four-page leaflet illustrating and describing their new shelter. The firm state: "The shelter is intended to provide adequate refuge against the dangers of air-attack from shell

splinters, gas and incendiary bombs, and to be within the means of persons of moderate income. The shelter can be erected without expert assistance in the gardens or yards of any house in England and will be found cheaper and more convenient than gas-proofing or protecting against incendiary bombs the existing rooms and roofs of a house.

"In its simplest form the shelter consists of a beehive-shaped shell composed of eight steel plates, of 22 gauge, weighing  $2\frac{1}{2}$  cwt.; one plate has a special attachment forming a frame for a steel gas-proof door. An inner door provides a second line of protection. The steel plates are of suitable thickness and are flanged at the edges and fitted with slotted holes suitable for bolting together, the joints being made airtight with felt and bitumastic solution.

"The whole shell stands on a concrete base

"The whole shell stands on a concrete base and is then surrounded with concrete from about six to twelve inches thick, as desired. In suitable soil it can be partially sunk in the ground, and where desirable the whole of the exterior can then be turfed over or covered with soil or rocks to blend with the surrounding garden.

"The smallest refuge is circular about seven feet in diameter and about five and a half feet high. In this form it will comfortably shelter five people.

five people.

"To make the structure adaptable to any size and purse it can be enlarged both in length and width by extra plates of standard size, about two feet wide. These sections are flanged and jointed to the curved pieces. There is practically no limit to the number of sections which can be inserted, and to the size of the shelter.

"The whole arrangement, while not providing against the contingency of a direct hit from a high explosive bomb, will secure the occupants against shell and bomb splinters and incendiary bombs, and will provide a certain refuge in case of gas attack."

Copies of the leaflet are obtainable from the firm at the address given above.

The "Robustis" solid flush door is now being marketed by Messrs. Pharaohs (Distributors), Ltd. This genuinely solid flush door eliminates resonance, produces sound insulation and defies warping and casting. The door is being manufactured in England by the Tyne Plywood Works, Ltd., of Northumberland, in blockboard construction and of Gaboon mahogany throughout. Both long edges are solid-lipped. The core consists of 1-in. strips firmly glued with a wide solid edge and covered with an inner cross-grain ply, finished with a long grain outer face ply of Gaboon or special veneer. The doors are obtainable in a very wide range of veneers, and immediate deliveries from stock are guaranteed. The standard sizes are as follows: 6 ft. 9 ins. by 1½ ins.; 6 ft. 8 ins. by 2 ft. 8 ins. by 1½ ins.; 6 ft. 6 ins. by 2 ft. 6 ins. by 1½ ins.; 6 ft. 6 ins. by 2 ft. 4 ins. by 1½ ins.

The fourth annual general meeting of the British Oil Burner Manufacturers' Association was held recently at the Connaught Rooms, London, when Mr. W. A. Hubbard (Combustions, Ltd.), was elected president for the

current year, in succession to Mr. O. Meikle (May Oil Burner [England], Ltd.), who was elected a vice-president. Mr. R. Sutton (Urquhart's [1926], Ltd.) was re-elected a vice-president, and Mr. A. G. Dobbs (Wallsend Slipway and Engineering Co., Ltd.) was appointed to a seat on the Council.

to a seat on the Council.

The President, reviewing the activities of the Association during 1937, referred to the recent publication of the British Standard Code for Fully Automatic Equipment. The Association had been represented on the Technical Committee of the British Standards Institution which had drawn this up, with the aid of the Association's draft specification. In this connection, the Council of the Association were considering the possibility of issuing a brochure which, whilst calling attention to the British Standard, would also provide other technical data for architects and consulting engineers. It was also the intention to discuss with insurance interests the question of fixing a name-plate to every oil-burner which complied with the British Standard Code.

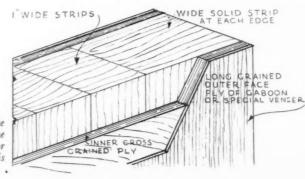
British Standard Code.

A luncheon preceded the annual meeting.
The President proposed "Our Guests," to which Mr. G. R. Llewellyn (fuel oil sales manager of Shell-Mex and B.P.) and Mr. W. Mumford Bailey (President of the National Association of Heating and Ventilating and Domestic Engineering Employers) responded.

## THE BUILDINGS

HOUSE AT COMPTON, NEAR WOLVER-HAMPTON (pages 202–203). Architects: Lavender and Twentyman. The general contractors were F. J. E. Tooby and Sons, Ltd., who were also responsible for the joinery. Sub-contractors and suppliers included: Himley Brick Co., bricks; Colthurst Symons, Ltd., pantiles; Manley and Regulus, Ltd., central heating, plumbing; Atkin and Evans, Ltd., electric wiring; Parker, Winder and Achurch, Ltd., sanitary fittings; James Gibbons, Ltd., door furniture and casements; Venesta, Ltd., doors; Craven Dunnill, Ltd., tiling.

FLATS, WILLESDEN LANE (pages 204–207). Architects: Adie, Button and Partners, The general contractors were Y. J. Lovell and Son, who were also responsible for excavation, foundations and reinforced concrete work. Sub-contractors and suppliers included: Salter, Edwards & Co., Ltd., asphalt; Trussed Concrete Steel Co., Ltd., reinforced concrete; W. T. Lamb and Son, bricks, tiles: Saunders Stonemasons (Ipswich), Ltd., Liverpool Artificial Stone Co., artificial stone; Truscon Concrete Steel Co., Truscon Floors; London Brick Company, Phorpres 2-in. partitions; Chance Bros., glass; Hills Patent Glazing Co., Ltd., patent glazing, skylights, lantern lights; Bearfoot and Bryett, central heating; A. Grant and Sons, gasfitting; The Leeds Fireclay Co., Ltd., sanitary fittings; Walter Cassey, Ltd., door furniture; C. E. Welstead, Ltd., casements, window furniture; General Post Office, telephones; Pioneer, plaster; Maple & Co., Ltd., decorative plaster, furniture; The Pringle Art Metal Co., Ltd., metalwork; R. Cattle, Ltd., joinery;



Detail showing the construction of the "Robustis" door described on this page.

The Liverpool Artificial Stone Co., stonework; F. Burbridge & Co., Ltd., tiling; Jackson and Sons, shrubs and trees; Marryat and Scott, Ltd., lifts.

NURSES' HOME, REDHILL (pages 221). Architects: Crickmay and NURSES' HOME, REDHILL (pages 219—221). Architects: Crickmay and Sons, The general contractor was Charles Head, and sub-contractors and suppliers included: Ledkore, dampcourses; Engert and Rolfe, asphalt; William Brown and Son, bricks; T. C. Jones & Co., Ltd., structural

steel; The Helical Bar and Engineering Co., floors; Oranham blocks, partitions; The Limmer and Trinidad Asphalte Co., patent flooring; J. Wontner Smith and Gray, central heating; East Surrey Gas Co., gas fixtures, gasfitting, boilers; Buchanan and Curwen, heating; East Surrey Gas Co., gas income, gasfitting, boilers; Buchanan and Curwen, electric wiring, electric light fixtures; Pontifex and Emanuel, sanitary fittings; Roanoid, door furniture; Crittall Manufacturing Co., Ltd., casements; Telematic, Ltd., telephones; James Ritchie and Sons, Ltd., lifts; East Surrey Water Co., water supply.

#### THE WEEK'S BUILDING NEWS

BRISTOL. Electricity Buildings. The Bristol Corporation is to proceed with the provision of buildings and equipment at the Cairns Road electricity station, at a cost of £284,974. CHELTENHAM. Bungalows. Plans passed by the Cheltenham Corporation: 22 bungalows, Noverton Lane, Prestbury, Western Estates (Lawes Cherry), Ltd. CHESTERFIELD. Clinic. The Chesterfield Corporation has approxyed revised plans for the

poration has approved revised plans for the erection of a clinic in Edmund Street, at a cost of £5,192.

of £5,192.

HASTINGS. Bungalows, etc. Plans passed by the Hastings Corporation: 35 bungalows, Harley Shute Road, Lancing Estates, Ltd., per Mr. A. C. Draycott, architect.

HOYLAND NETHER. Houses, etc. The Hoyland Nether U.D.C. has obtained sanction to borrow

Nether U.D.C. has obtained sanction to borrow £26,722 for the erection of 32 houses and 42 bungalows at Stead Lane.

HULL. Flats, etc. The Hull Corporation has obtained sanction to borrow £46,163 for the provision of 78 flats, eight shops and street works at Porter Street area.

HULL. School. The Hull Education Committee has acquired a site on the Bilton Grange Housing Estate for a new elementary school

school.

school.

ILKESTON. Houses. Plans passed by the Ilkeston Corporation: 56 houses, Oakwell Estate, John E. Mitchell and Sons; six houses, Portland Road, J. W. Stapleton and Sons, Ltd. KEIGHLEY. Purchase of Land, etc. Keighley Corporation has obtained sanction to borrow £16,415 for the purchase of land and buildings at 1 and 3 Bow Street, and 58, 60, 62, 64 and 66 North Street, for the extension of the Town

Hall.

KEIGHLEY. Houses, etc. Plans passed by the Keighley Corporation: Bungalow, Hill Top Road, Mr. Booth Waddington; four houses, Beechwood Avenue, and two houses and shops, Grange Road, Mr. Jas. Wharton; two houses, Barley Cote Road, W. and H. Whitaker; additions, Lawkholme Lane, Clapham Bros.; 27 houses, Mitchell Street Cross Roads, Exors. of S. Thompson and R. Sunderland; six houses, Oakworth Road. Albert Sharp, Ltd.; houses Oakworth Road, Albert Sharp, Ltd.; house, Lee Lane, Oxenhope, Bradford Corporation; warehouse, Colne Road, Oakworth, Mr. John

KIVETON. Houses. The Kiveton Park R.D.C. is to erect 18 houses at South Anaton, eight at Dinnington, 26 at Harthill, 16 at Kiverton Park and eight at Woodcotts, at a cost of

Park and eight at Woodcotts, at a cost of £24,700.

LEEDS, Housing. The Leeds Corporation has approved plans by the housing director for the re-development of the Marsh Lane areas by the erection of 442 flats, 54 ageing persons' flats, and 12 single women's flats.

LICHTIELD. Houses. The Lichfield Corporation is to erect 90 houses on the Ponesfields site, LINCOLN. Housing. The Lincoln Corporation is to erect 152 houses on the Monks Tower estate at a cost of £56,006.

is to erect 152 houses on the Mohas Fower estate at a cost of £56,906.

MORECAMBE. Houses, Plans passed by the Morecambe Corporation: 18 houses, Woodhill Lane and Nicholson Crescent, G. and W. Taylor.

MORPETH, Houses. The Morpeth R.D.C. is to erect 68 houses on the Lynemouth estate at a cost of £23,912.

NEWTON ABBOT. School. The Devon Educa-NEWTON ABBOT. School. The Devon Education Committee is to erect an elementary school at Newton Abbot, at a cost of £27,053.

NORTHAMPTON. Houses. Plans passed by the Northampton Corporation: Nine houses, The

Headlands, and 20 houses, off Welford Road, A. Glenn and Sons, Ltd.; 12 houses, Malcolm Drive, Chowns, Ltd.; 14 houses, Southfield Avenue, R. H. Hewins, Ltd.

OLDBURY. Schools. The Oldbury Education Committee has appointed Mr. J. E. Bagnall, of Birmingham, as quantity surveyor for the

of Birmingham, as quantity surveyor for the Albright School gymnasium and the new school at Brandhall.

Albright School gymnasium and the new school at Brandhall.

OLDBURY, Houses, Plans passed by the Oldbury Corporation: 28 houses, Hurst Green, Mr. W. Parkes; office and labour station, Tat Bank Road, British Industrial Plastics, Ltd.; house, Elsma Road, Mr. H. M. F. Hughes; alterations, Old George Inn, Pottery Road, Mr. A. Pugh; four houses, Kingsway, Mr. E. C. Whaler; 58 houses, Park Avenue, Walker and Son; 16 houses, Wolverhampton Road, Mr. A. J. Grayer; house, Brandhall Road, Mr. P. J. Sadler; 48 houses, Tinkers Farm Estate, Mr. S. H. Rowe; alterations, Prince of Wales Inn, Rounds Green, and the New Hotel, Whiteheath, Holt Brewery Co.; 54 houses, Wood Norton Road, Mr. C. McWhirter.

OLDBURY, Houses, The Oldbury Corporation has now accepted the tender of Messrs. J. Harper and Sons (Blackheath), Ltd., £37,504, for the erection of 100 houses on the Moat Farm Estate.

Farm Estate.

Farm Estate, OLDBURY, Houses. The Oldbury Corporation has asked the borough surveyor to submit plans for 276 houses on the Causeway Green Estate, of which at least 100 to be provided at economic rentals.

economic rentals.

ROMFORD. School. The Essex Education
Committee has approved amended plans for
the erection of a junior school in Straight Road,
Romford, at a cost of £9,207.

ROMFORD. School Enlargement. The Essex
Education Committee has approved plans for
the enlargement of Clockhouse Lane Council
Junior School, Romford, at an estimated cost
of £0,307. of £0.307

ROTHERHAM. Hospital Extensions. The Rotherham Corporation is to erect an administration block and out-patient department, at Alma

block and out-patient department, at Alma Read hospital, at a cost of £19,000.

ROTHERHAM. Houses. Plans passed by the Rotherham Corporation: 96 houses, Bent Lathes Avenue and Sitwell Park Road, Mr. O. Parkin; 20 houses, Barnsley Road, Thorpe, Mr. A. Watson.

SALOP. Police Station. The Salop C.C. is to erect a police station at Market Drayton at a cost of £10,270.

cost of £12,370.

Houses. The Scarborough SCARBOROUGH. SCARBOROUGH. Houses. The Scarborough Corporation is to erect 104 houses on the Barrowcliff Housing Estate, at a cost of £36,400.

SHEFFIELD. Houses, etc. Plans passed by the Sheffield Corporation: 236 houses and 76 flats, Sheffield Corporation: 236 houses and 76 flats, Parson Cross Estate, Estates Committee; eight houses, Hollinsend Road, Mr. W. A. Wright; 21 houses, High Storrs Drive, Mr. A. Shaw; 64 houses, Cooks Wood Road, J. Copley and Sons, Ltd.; 21 flats and four houses, Westbourne Road, J. H. Judge & Co. (Builders), Ltd.; eight houses, Cockayne Place, Mr. T. Leadbeater; 16 houses, Jepson Road, Mr. F. Clifton; eight houses and shops, Greystones Road, W. Malthouse, Ltd. sheffield Corporation has obtained sanction to borrow £43,650 for the erection of 64 flats and five stores on

the erection of 64 flats and five stores on

the Edward Street site.

STANLEY. Houses. The Stanley (Yorks.)

U.D.C. is to erect 104 houses on the Outwood

Park Estate, and 68 on the Wrenthorpe Estate,
at a cost of £55.433.

STOKE-ON-TRENT. School. The Stoke-on-Trent Education Committee has obtained sanction to borrow £28.912 for the erection of the second portion of Carmountside senior council school

STOURPORT. Houses. The Stourport-on-Severn U.D.C. is to erect 108 houses on the Manor Farm estate at m cost of £45,400.

sutton Coldfield. Houses. Plans passed by the Sutton Coldfield Corporation: 14 houses, Barnard Road, Castle Bromwich Estates, Ltd.; 22 houses, Darnick Road, Mr. F. H. Wilkinson; eight houses, Silvermead Road, Mr. A. P. Johnson; eight houses, Lichfield Road, Mr. R. Jacobs; 53 houses, Westwood Road, British Ensign Builders: 11 houses, Westwood Road, Mr. T. E. Grove. Houses SUTTON COLDFIELD. Plans passed by

Mr. T. E. Grove.

TORQUAY. Houses, etc. Plans passed by the
Torquay Corporation: 30 houses, Coombe
Lane, Mrs. E. Jerram; 16 houses, Sherwell
Rise South, Chelston Building Co.

UTTOXETER. School. The Staffordshire Educa-

UTTOXETER. School. The Staffordshire Education Committee is to erect an elementary school at Uttoxeter at m cost of £25,025.

WAKEFIELD. Houses. Plans passed by the Wakefield Corporation: Six houses, Belle Isle Avenue, Duncan Mann and Son; six houses, Pinderfield Road, Mr. A. Squire.

WARRINGTON. Houses. Plans passed by the Warrington Corporation: 158 houses, Hallows Avenue, R. and S. Smith: 10 houses, Rhodes Street, Tomlinson and Norbury.

WARRINGTON. Houses. The Warrington R. D.C. is to erect on houses, in various parishes.

WARRINGTON. Houses. The Warrington R.D.C. is to erect 99 houses in various parishes, at a cost of £32,665.

WEST THORNEY. School. The West Sussex Education Committee is to erect a junior school at West Thorney, at an estimated cost of £5,365.

of £,5;305.

WHITEFIELD, Houses, etc. The Whitefield U.D.C. has obtained sanction to borrow £25,697 for the erection of 82 houses and development works in connection therewith on the Moss Lane site.

WIDNES. Houses. The Widnes Corporation is to erect 60 houses on the Hale Bank Estate,

at a cost of £25,600.

WORTHING, Houses, at a cost of R. 23,400.

WORTHING, Houses, Plans passed by the Worthing Corporation: Two houses, Downside Avenue, Monks Farm Estates, Ltd.; two houses, Pevensey Road, Mr. H. P. Brazier; four houses, Canterbury Road, Kenrite Estates, Ltd.; alterations and additions, "The Dragoon" p.h., Market Street, Kemp Town Brewery, Linkshampton Road, Ltd.; alterations and additions, "The Dragoon" p.h., Market Street, Kemp Town Brewery, Brighton, Ltd.; house, Littlehampton Road, Mr. E. Masters; alterations, 68 Montague Street, E. Snewin and Sons; 50 houses, Crow-Street, E. Snewin and Sons; 50 houses, Crowborough Drive, Compton Avenue, West Sussex Coast Development, Ltd.; 15 houses, Ham Way, G. Baker and Son; house, Lansdowne Road, Pottonia Homes, Ltd.; four houses, Angola Road, Mr. D. C. Payne; six flats, Sea Place, Mr. E. W. Owen: two houses, Rosebery Avenue, Mr. M. R. Fletcher; five houses, Meadow Road, Wylie and Berlyn, Ltd.; club, Cotswold Road, Mr. E. Kilner Berry, for Durrington Conservative Association: 13 for Durrington Conservative Association; 15 flats, Farncombe Road, Potter and Trower; house, Stone Close, Sands & Co., Ltd.; six houses, South Farm Road, Hasler Estates; two houses, Pendine Avenue, Worthing Estates Building Co.; addition, Bull Inn, Goring Street, Tamplin and Sons Brewery (Brighton), Ltd.; alteration sand additions, High Street, Brighton alteration sand additions, High Street, Brighton Equitable Co-op. Society, Ltd.; four houses, Stone Close, Goldsmith and Pennells; house, Marshall Avenue, Mr. A. E. Stephenson; four houses, Glebeside Avenue, Mr. W. A. Lloyd Jones; house, Amberley Drive, Mr. H. C. Wolledge; house, Compton Avenue, Mr. H. W. Lee; house, Chute Avenue, Mr. A. Wheeler; house, St. Lawrence Avenue, Mr. F. G. Scrace; six houses, Sullington Gardens, Mr. W. W. Howard; alterations, 1, 3 and 5 Broadwater Street East, Westminster Bank, Ltd.; three houses, Alinora Crescent, Princes (Worthing), Ltd.; two houses, Arlington Avenue, H. Tier Ltd.; two houses, Arlington Avenue, H. Tier and Son; two blocks of flats, Anscombe Road, Messrs, Woodwards; three houses, Findon Road Mrs. Richman.

Plans passed by the York YORK. Houses. YORK. Houses. Plans passed by the York Corporation: Eight houses, 142–147 Malvern Avenue, etc., Simpson Bros.; six houses, 59, 61, 63 and 65, and 62 and 64 Maple Grove, Mr. J. R. Dunn.

On the following pages appears Prices for Measured Work-Part I, with prices last published on June 30, brought up to date.



ANSWERS TO QUESTIONS

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

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

- 1. Current Market Prices of Materials, Part I.
- 2. Current Market Prices of Materials, Part II.
- 3. Current Prices for Measured Work, Part I.
- 4. A. Current Prices for Measured Work, Part II. B .- Prices for Approximate Estimates.
- Prices are for work executed complete and are for an average job in the London Area; all prices include for overhead charges and profit for the general contractor.

## PART 3

## CURRENT PRICES FOR MEASURED WORK—I

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

#### **PRELIMINARIES**

Water for the works Third party and other insu property, employer's lia and Public Health insurances (based on val	yment 1½%
Single scaffolding	super   2/-
Independent scaffolding	super   2/8

EXCAVATOR		
	Ordinary Ground	Clav
Surface digging average 9" deep and wheeling and	1	Clay
depositing on spoil heap, not exceeding two runs		,
per yard supe	er -/9	1/1

#### EXCAVATOR—(continued)

	Ordinary Ground	Clay
Excavating not exceeding 5' 0" deep to form	1	
basement and getting out per yard cube		2/10
Ditto, exceeding 5' 0" deep and not exceeding	2	
10' 0" deep per yard cube		3/6
Excavating not exceeding 5' 0" deep, to form	1	
surface trenches and getting out per yard cub	e 2/7	3/10
Ditto, exceeding 5' 0" deep and not exceeding	3	
10' 0" deep per yard cube	e <b>3/7</b>	5/0
Ditto, not exceeding 5' 0" deep to form basemen		
trench excavation commencing 10' 0" deep		
and getting out per yard cub	e 3/41	4/6
Returning, filling in and ramming around founda		
tions per yard cub	e 1/1	1/5

## CURRENT PRICES BY DAVIS AND BELFIELD, P.A.S.I.

## EXCAVATOR, CONCRETOR AND BRICKLAYER

EXCAVATOR—(continued)	-	BRICKLAYER
Ordinary		Blue
	Clay	Second Staffordshire Flettons Stocks Wirecuts
Filling barrows and wheeling and depositing excavated soil not exceeding two runs		£ s. d. £ s. d. £ s. d.
per yard cube 1/1	1/5	Reduced brickwork in lime mortar 1 : 3 with per rod 23 0 4 32 9 0
Spreading and levelling from excavated heaps in layers not exceeding 12" per yard cube -/9	1/-	½" joints
Filling into carts or lorries and carting away	1/-	Ditto, 3 joints per rod 22 13 4 31 7 3 Reduced brickwork in
per yard cube 4/6	4/10	cement mortar 1 : 3 > per rod 24 15 4 34 3 8 51 15 8
Planking and strutting to sides of basement, excavation, including strutting per foot super 1/-	-/9	with \( \frac{1}{2} \) joints
Planking and strutting to surface trenches (both	-10	Ditto with % joints per rod 24 14 0 33 7 0 50 6 4 Add if lime mortar
sides measured) per foot super $-/4\frac{1}{2}$	-/3	hand mixed } per rod 5/8 5/8
Hardcore, broken brick, filled in under floors and well rammed and consolidated per yard cube 6/6		Ditto cement mortar per rod 12/9 12/9 9/- Half brick walls in
Hardcore, broken brick, deposited, spread and		lime mortar 1: 3 ¼" >per yard super 5/1 7/2
levelled, and rammed to a true surface 6" thick		Ditto in cement mortar
per yard super 1/4		1:3 per yard super $5/5\frac{1}{2}$ $7/6\frac{1}{2}$ $11/3$
CONCRETOR		Labour forming 2" cavity to hollow walls including wall
CONCRETOR		ties, etc. per yard super 9d.
Foundations and Mass Concrete		£ s. d. Add to the price of reduced brickwork for brickwork in
Portland cement concrete 1:6 with unscreened		underpinning per rod 4 0 0
ballast, in foundations and masses exceeding 12" thick per yard cube	20/6	Ditto, for brickwork circular on plan to flat sweep per rod 5 0 0 Ditto, ditto, to quick sweepper rod 10 0 0
Ditto, 1:3:6, with one part of cement and three parts	20/0	Extra for Internal fairface and flush jointing
of sand and six parts of clean gravel per yard cube	21/-	$\begin{array}{ccc} & & & & & & & \\ & & & & & \\ Extra for grooved bricks as key for plaster per yard super & 3d. & \\ \end{array}$
Ditto, 1:2:4 with one part of cement, two parts of sand	25/10	Raking out joints ditto per yard super 4dd.
and four parts of \(\frac{2}{3}\)" crushed graded shingle per yard cube  Add if mixed by hand labour per yard cube	25/10	Hacking concrete ditto per yard super 6d.
Add if in foundations not exceeding 12" thick		Horizontal double slate damp-proof course 4½" wide bedded in cement mortar per foot run 4d.
Add for mechanical hoisting per yard cube	2/3 1/6	Ditto exceeding 4½" in width per foot super 10d.
Add for mechanical hoisting per yard cube Add for hand hoisting per 10 feet per yard cube	2/3	Vertical ditto
		Plumbing angles per foot run 1d.
Surface Beds		Rake out joints and point to lead flashings per foot run 2d. Ditto stepped per foot run 3d.
Portland cement concrete 1: 6, bed 6" thick, spread and levelled per yard super	3/11	
Add or deduct for each inch over or under 6" in thickness	0/11	Ditto and pointing one side per foot run 2d.
per yard super	-/53	rarge and core nues each 4/-
Add for surface finished with spade face per yard super	$-/3\frac{1}{2}$	Set and flaunch only chimney pots each 5/-
Add if laid in two layers with fabric reinforcement (measured separately) per yard super	-/31	Hoisting and fixing metal windows size 3' 6" × 4' including cutting and pinning lugs to brickwork and
		bedding frames in cement mortar and pointing in
Upper Floors and Flats		mastic on one side each 5/- Ditto, including screwing to wood frame (measured
Portland cement concrete 1:2:4 as before described, 6" thick, packed around fabric reinforcement (measured		separately) each 3/-
separately) finished with spade face per yard super	5/31/2	Form opening for air brief including elete listed 0" v 9" 0" v 0
Add or deduct for each inch over or under 6" in thickness	inc 1	Form opening for air brick including slate lintol $9'' \times 3''  9'' \times 6$ and render around in cement and sand to $13\frac{1}{2}''$
per yard super	$-/7\frac{1}{2}$	wall and build in Terra Cotta air brick each 2/6 3/8
Casings		Galvanized cast iron School Board pattern air bricks and building in each 9d. 1/3
Portland cement concrete 1:2:4 as before, in encasing		Fixing only fireplace simple interior and surround
to steel joists per foot cube	1/3	each 27/6
Ditto, packed around rods (measured separately) in lintols, sectional area not exceeding 36 inches per foot cube	1/51	Partitions
Ditto, ditto, over 36 inches and not exceeding 72 inches		Breeze set in cement mortar
sectional area per foot cube	$1/4\frac{1}{2}$	per yard super 2/11 3/5 4/11 5/1
Ditto, ditto, over 72 inches and not exceeding 144 inches sectional area per foot cube	1/31	Clay tile ditto per yard super 4/5 4/11 5/8 6/4  Pumice ditto per yard super 4/6 5/2½ 6/8 7/2
Ditto, ditto, over 144 inches sectional area per foot cube		Plaster ditto per yard super 4/- 4/11 6/- 7/2
		White glazed both sides best quality bricks, set in cement mortar and
Walls in Situ		pointed in Parian cement
Portland cement concrete 1:6 with unscreened ballast in 9" walls packed around rods (m/s) per yard super	6/7	per yard super 42/5
Ditto, in 12" walls ditto per yard super	8/-	Facings
		Prices are extra over Fletton brickwork and are for raking ou
Reinforcement		joints and pointing with m neat struck weathered ¼" joint in cemer mortar. For raking joints and pointing in white cement add a
f" diameter and upwards mild steel rod reinforcement, cut to lengths, including bends and hooked ends and em-		extra 11d. per yard super to the following prices.
bedding in concrete lintols per cwt.	23/6	Flemish English Stretche Bond Bond Bond
Under & diameter ditto per cwt.	25/-	Stock facings p.c. 95/ per yard super 5/1 5/6 4/2
Formwork		Rustic Flettons p.c. 70/6. per yard super 3/4 3/6 2/11 Blue pressed p.c. 174/- per yard super 11/3 12/6 8/10
Close boarded formwork to soffites of floors and strutting		Blue pressed p.c. 174/ per yard super 11/3 12/6 8/10 Sand faced hand made reds p.c. 120/-
up per yard super	3/9	per yard super 8/- 8/7 6/4
Vertical formwork to sides of concrete walls, including	0/	White glazed, headers p.c. 470/- and stretchers 480/per yard super 32/- 36/- 24/8
struts, etc. (both sides measured) per yard super Formwork to sides and soffites of concrete lintols and beams	3/-	For a variation of 10/- per M. in p.c. of
per foot super	-/6	facing bricks size $8\frac{3}{4}'' \times 2\frac{5}{8}''$ on face with $\frac{1}{4}''$ joints add or deduct
Wrot ditto per foot super		per yard super 9d. 10d. 62d.

## CURRENT PRICES BRICKLAYER, DRAINLAYER,

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

## ASPHALTER AND PAVIOR

#### BRICKLAYER—(continued)

Facings—(continued)	
Rustie Stock Flettons Facings	Sand Faced Hand Made Reds
Half brick wall stretcher bond in cement mortar built fair and joints raked out and pointed in cement mortar on one side 9710½ 9/10½	12/-
Ditto and pointed both sides per yd. super 10/6 11/9	13/10
One brick wall in cement mortar built fair and joints raked out and pointed in cement mortar on one side	
per yard super 15/5 17/11	22/1
Ditto and pointed both sides per yd. super 17/3 19/9 Half brick wall built in best quality white glazed one side bricks, stretcher bond, in cement mortar built fair and	23/10
pointed in parian cement per yard super Ditto white glazed both sides and pointed both sides	31/-
per yard super	41/9
Labour and material in hand made sand faced red brick on end window head and pointing to face and 4½" soffite	7.10
per foot run  Hand made, sand faced brick on edge coping including double course of tile creasing with two cement angle	1/3
fillets to one brick wall per foot run	2/3

#### DRAINLAYER

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

Ordinary	
Prices per 12" average depth per foot run: ground Trenches not exceeding 3' 0" deep/2½ Ditto, exceeding 3' 0" and not exceeding 5' 0" -/5½ Ditto, exceeding 5' 0" and not exceeding 10' 0" -/8½	Clay -/3 -/7 -/9½
6" thick Portland cement concrete bed 6:1, 12" 4" wider than diameter of pipe, and flaunched halfway up sides of pipe per foot run 6" ditto, and completely eneasing per foot run 1.7"	6" pipes -/10 1/11
Agricultural land drain pipes, laid complete with butted joints, exclusive of 2" 3" 4" digging per yard run -/4 -/6 -/8	6" 1/1

British Standard Quality Salt Glazed Socketed Stoneware Drainpipes

Pipes jointed in 1:1 cement and sand per foot run Extra for bends each Ditto, single junction each Trapped yard gulleys with galvanized iron gratings, and setting in concrete		up- wards 1/3 1/7	Over 2-ton lots	1/10 2/4	Over 2-ton lots 2/8½ 3/6	up- wards 3/4 4/-
Pipes jointed in 1:1 cement and sand per foot run Extra for bends each Ditto, single junction each Trapped yard gulleys with galvanized iron gratings, and setting in concrete	2-ton lots 1/1 1/4	100 pieces up- wards 1/3 1/7	Over 2-ton lots 1/7 2/-	100 pieces up- wards 1/10 2/4	Over 2-ton lots 2/8½ 3/6	100 pieces up-wards 3/4 4/-
Pipes jointed in 1:1 cement and sand per foot run Extra for bends each Ditto, single junction each Trapped yard gulleys with galvanized iron gratings, and setting in concrete	2-ton lots 1/1 1/4	up- wards 1/3 1/7	2-ton lots 1/7 2/-	up- wards 1/10 2/4	2-ton lots 2/8½ 3/6	up- wards 3/4 4/-
Pipes jointed in 1:1 cement and sand per foot run Extra for bends each Ditto, single junction each Trapped yard gulleys with galvanized iron gratings, and setting in concrete	1/1 1/4	1/3 1/7	1/7 2/-	1/10 2/4	lots 2/8½ 3/6	3/4 4/-
Pipes jointed in 1:1 cement and sand per foot run Extra for bends each Ditto, single junction each Trapped yard gulleys with galvanized iron gratings, and setting in concrete	1/1 1/4	1/3 1/7	1/7 2/-	1/10 2/4	2/8½ 3/6	3/4 4/-
and sand per foot run Extra for bends each Ditto, single junction each Trapped yard gulleys with galvanized iron gratings, and setting in concrete	1/4	1/7	2/-	2/4	3/6	4/-
Extra for bends each Ditto, single junction each Trapped yard gulleys with galvanized iron gratings, and setting in concrete	1/4	1/7	2/-	2/4	3/6	4/-
Ditto, single junction each Trapped yard gulleys with galvanized iron gratings, and setting in concrete						
Trapped yard gulleys with galvanized iron gratings, and setting in concrete	1/10	2/2	2/-	2/4	3/6	4/-
galvanized iron gratings, and setting in concrete						
and jointing to drain	0/	11/0	10/	14/	10/	90/
each Ditto, with horizontal back	9/-	11/6	13/-	14/-	19/-	22/-
inlet each l	10/6	13/3	14/6	15/9	20/6	23/9
inlet each	11/3	14/-	15/3	16/9	21/3	24/9
Intercepting trap with Stanford stopper and setting in manhole and	•					
making good each ?	20/6	24/-	25/6	29/-	_	-

Coated Cast Iron Socketed Drain Pipes  4" 6" 9"  Pipes in 9' 0" lengths and laying in trench, including caulked lead joints  per foot run 3/6 5/3 9/3  Cutting and waste each 1/9 3/6 —  Extra for bends, including extra joints and cutting and waste on pipe each 10/10 20/9 59/5  Ditto, junction ditto each 17/5 32/6 99/5  Intercepting trap each 49/— 79/4 183/4	setting in manhole an making good eac		24/-	<b>25</b> /6	29/-	
trench, including caulked lead joints  per foot run 3/6 5/3 9/3  Cutting and waste each 1/9 3/6 —  Extra for bends, including extra joints and cutting and waste on pipe each 10/10 20/9 59/5  Ditto, junction ditto each 17/5 32/6 99/5	Coated Cas	t Iron S	Socketed	Drain 4"		9"
Cutting and waste each 1/9 3/6 — Extra for bends, including extra joints and cutting and waste on pipe each 10/10 20/9 59/5 Ditto, junction ditto each 17/5 32/6 99/5						
Extra for bends, including extra joints and cutting and waste on pipe each 10/10 20/9 59/5 Ditto, junction ditto each 17/5 32/6 99/5		per f	oot run	3/6	5/3	9/3
and cutting and waste on pipe each 10/10 20/9 59/5 Ditto, junction ditto each 17/5 32/6 99/5	Cutting and waste		. each	1/9	3/6	_
Ditto, junction ditto each 17/5 32/6 99/5				10/10	20/9	59/5
				17/5	32/6	99/5
			each	49/-	79/4	183/4

#### DRAINLAYER—(continued)

	4"	6"	9"
H.M.O.W. large socket gulley trap with 9" gulley top and heavy grating and one back inlet	5/5	79/6	_
H.M.O.W. gulley trap with 9" inlet with high invert outlet for use with raising		,	
pieces	3/5	48/-	_
branch	each	66/-	
4" ditto with two 4" branches one side	each	99/-	
6" ditto with one 4" branch e	each	95/3	
6" ditto with two 6" branches one side	each	140/-	
9" ditto with one 9" branch	each	212/6	
9" ditto with two 9" branches one side each		326/-	
		White	Salt
		glazed	glazed
4" half-round straight main channel 24" long each		5/10	2/1
Ditto, channel bends (ordinary)	each	8/6	3/-
4" Three-quarter round branch bends (shor	t)	,	,
	each	8/6	6/9
Manhole covers and frame bedded in grea	se and		,
set in cement mortar	4/-		

#### **ASPHALTER**

Cork tiles, polished

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

expensive asphalte obtainable.		
	Natural Rock Asphalte	
	Best Quality	Second Quality
Basement (Tanking).  1½" horizontal d.p.c. in three layers on concrete		
per yard super a" vertical ditto in three coats on brickwork or		6/10
concrete per yard super		10/-
Double angle fillet per foot run	-/61	-/51
Hard Graded Paving.  1" thick per yard super  ‡" thick per yard super	6/31	6/3½ 5/3½
½" dampeourse finish, with smooth surface to receive lino or other floor covering Roofing (Flat).	W 100	4/81
‡" thick in 2 layers per yard super 1" ditto per yard super		5/3 6/3
Extras. Felt supplied and fixed per yard super	,	-
Expanded metal reinforcement ditto	1/01	
6" skirting and fillet on brickwork per foot run		-/111
6" ditto on wood (reinforced) per foot run	$1/2\frac{1}{2}$	1/11
separately) per foot rur Parapet outlets each	$-/3\frac{1}{4}$ $4/2\frac{1}{2}$	
PAVIOR	1" 1	// O/
Granolithic paving per yard super : Add for dusting with carborundum powder	2,71 3	6 4/7
per yard super Cement and sand paving (1:3) per yard super July Jointless flooring, red, buff or brown, finished smooth trowelled surface, on concrete sub	to a	41 -/9
per yard a Ditto, in two coats on spade faced concrete or	super wood	5/3
sub floors	nised	6/7
wire netting per yard a Add for polishing per yard a Terrazzo paving, white chips set in white ceme into squares with 1½"×½" deep ebonite strincluding cement and sand screed. Total ti	nt, panel	and
	r yard su	per 19/5
Terrazzo tiles, white chips set in white cement Size $9'' \times 9'' \times \frac{1}{4}''$	r yard su r yard su	per 20/6 per 18/8 per 18/11
Rubber tiles per yard super 1	1/7 14	8 17/10 10 19/11

per yard super 12/101 11/- 10/-

## CURRENT PRICES BY DAVIS AND BELFIELD, P.A.S.I.

## MASON, SLATER, TILER AND ROOFER, AND CARPENTER

PAVIOR—(continued)	SLATER, TILER AND ROOFER—(continued)
Hard red paving bricks laid flat $(9'' \times 4\frac{1}{2}'' \times 2\frac{5}{3}'')$	Hand made sand faced 10½" × 6½" laid to 4" gauge,
Ditto, laid on edge per yard super 9/- per yard super 11/9  § " 2"	fourth course nailed with galvanized nails per square 65/-
6" × 6" best quality red quarry tiles per yard super 10/- 11/- 6" × 6" best quality buff quarry tiles per yard super 10/6 11/6 2" Yorkshire stone paving, square joints and bedding	Machine made ditto per square 56/7  Pantiles  Berkshire hand made surface red laid dry, per square 65/-
per yard super 22/ 2" Finished path of coarse gravel finished with good binding gravel to slight camber per yard super 1/7½ 3½" Path of clean hard clinker and 1½" gravel finished to slight camber per yard super 2/8 7½" Carriage drive of 3" clinker, 3" coarse gravel and 1½" binding gravel finished to slight camber per yard super 3/9 2½" Tar paving in two layers finished with Derbyshire spar per yard super 4/9	Bridgewater hand made red laid dry per square Bridgewater double Roman laid dry per square 48/3  Sundries  Stripping, slating down to and including, $18'' \times 9''$ per square Ditto smaller sizes per square 6/-Add for carrying down and stacking per square Ditto stripping battens down to and including $18'' \times 9''$ per square Ditto, ditto, smaller sizes per square 2/3
MASON	Cedarwood Tiles
Bath Portland	Canadian Cedarwood shingles laid to 5" gauge per square 47/4
Stone and all labours of usual character covering 7" on bed, roughly squared at back, fixed and cleaned down complete per foot cube 11/9 17/-	Asbestos Russet brown asbestos cement roofing tiles
Varladana	$15\frac{3}{4}'' \times 15\frac{3}{4}''$ laid diagonally with $2\frac{3}{4}''$ lap, per square 38/-
Yorkstone Thickness	CARPENTER
Templates tooled on exposed faces, sawn beds and joints, and set in cement mortar:—	Centering  Turning piece to flat soffites $4\frac{1}{2}''$ wide  (For Formwork see "Concretor.")
Size $9'' \times 9''$ each $1/8$ $2/3$ $3/4\frac{1}{2}$ , $14'' \times 9''$ each $2/7\frac{1}{2}$ $3/6$ $5/3$	Fir Sawn and Fixed
, $18'' \times 14''$ each $5/3$ $7/ 10/6$	*Plates, dragon ties, sleeper joists and lintols, ground floor
", $22\frac{1}{2}$ " $\times$ $14$ " each $6/6$ $8/8$ $13/-$ each $7/10\frac{1}{2}$ $10/6$ $15/9$	$(4'' \times 2'' \text{ and } 4'' \times 3'')$ per foot cube $3/7$ $*$ Floor joists $(7'' \times 2'')$ per foot cube $4/1$ $*$ Partitions (stud) $(4'' \times 2'' \text{ and } 4'' \times 3'')$ per foot cube $4/10$
Artificial Stone	*Rafters and ceiling joists $(4'' \times 2''$ and $4'' \times 3''$ ) per foot cube $4/7$ Purlins $(6'' \times 4'')$ per foot cube $5/3$
In steps, copings, band courses, etc., per foot cube, from 9/-  Reconstructed Stone	Purlins (6" $\times$ 4") per foot cube 5/3 Hand labour wrot face per foot super -/2 Machine ditto per foot super -/1 Rebates, grooves, beads, chamfers and splays, per foot run -/1
In steps, dressings, band courses, etc., per foot cube 12/6  Slate	$1\frac{1}{2}'' \times 9''$ ridge
Slate slabs, sawn to size, not exceeding 10 ft. sup. and planed, with rubbed face and fixing as shelving, etc per foot super $4/6$ $5/ 6/-$ Ditto, not exceeding 20 ft. sup. per foot super $5/4$ $5/10$ $7/-$	Extra labour trimming 6" × 2" floor joists around fireplace, including notching ends of joists at 14" centres to trimmer joist 7'0" long and two tusk tenons each 6/- Boring small hole per inch of depth per doz/6 Ditto large
Rubbed edges per foot run $-/4\frac{1}{2}$ $-/4\frac{1}{2}$ $-/4\frac{1}{2}$	Deal Battening for Slates and Tiles
SLATER, TILER AND ROOFER	$*2" \times 1"$ spaced for Countess (20" $\times$ 10") slates to 3" lap per square 10,8 $*2" \times 1"$ ditto for Ladies (16" $\times$ 8") per square 14/1 $*2" \times 1"$ ditto for Duchess (24" $\times$ 12") ditto per square 8/9
Bangor and Portmadoc Slates	$*2'' \times 1''$ ditto for randoms $24''/22'''$ to $12''/10''$ per square $11/10$ $1\frac{1}{2}'' \times \frac{3}{4}'''$ ditto for plain tiles $(10\frac{1}{2}'' \times 6\frac{1}{2}'')$ to a $4''$ gauge per square $13/7$
States laid to a 3" lap and fixed with zinc nails per square $79/ 77/ 80/-$	$1\frac{1}{2}'' \times 1''$ ditto for pantiles to approximately $11\frac{1}{4}''$ gauge per square $6/7$
Old Delabole Slates	Roof Boarding
20" × 12" 16" × 10"	★Deal roof boarding in batten widths close jointed per square 28/8 34/-
Grey medium gradings per square 86/- 84/6 Unselected greens (V.M.S.) (weathering greens and grey greens mixed) per square 96/6 94/6	*Ditto, prepared for patent flat roofing and including firrings to falls per square 39/1 44'4  Small tilting fillet per foot run -/2
No. 1 Gradings	Large ditto per foot run -/4
Randoms 24"/22" to 12"/10"	Felt
Ordinary grey greens	Sarking or slaters felt, fixed with 2" side laps and 6" end laps
Weathering greens (V.M.S.) per square 12"/10" 107/-	Weather Boarding
Westmorland Green Slates Bests 24" to 12"	*Rough deal feather edge boarding in batten widths ½" average with 1½" laps per square 30,5
Randoms long proportion- ate widths  No. 1 Buttermere, fine light green per square 122/9	Western Red Cedar ditto per square 32/10  Fascia and Soffite Boards
No. 2 Buttermere, light green (coarse grained) per square 120/9	$1'' \times 6''$ deal splayed fascia fixed to rafter feet per foot run $-/4\frac{1}{2}$ $1'' \times 9''$ deal soffite tongued both edges, including grooves per foot run $-/7\frac{1}{2}$
No. 5 Buttermere, olive green (coarse grained) per square 117/6	(To be continued in next Issue)
	e fallen in price since June 30.

\* Items marked thus have fallen in price since June 30.