

The inner leaf of the cavity wall, built of 'Phorpres' Cellulars, stands on the main floor slab, and the outer leaf of 'Phorpres' Rustics is carried on the concrete "lip" cast with the wall beam and shown in the accompanying photograph,

A flexible D.P.C. was used at each floor level and stepped up across the cavity and turned into the inner leaf one course above the floor slab.

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THE ARCHITECTS'



JOURNAL

THE ARCHITECTS' JOURNAL, with which is incorporated the builders' journal and the architectural engineer, is published every thursday by the architectural press (publishers of the architects' journal, the architectural review, specification, and who's who in architecture) from 9 queen anne's gate, westminster, s.w.i

THE ANNUAL SUBSCRIPTION RATES ARE AS FOLLOWS: BY POST IN THE UNITED KINGDOM.... \pounds I 3 10 BY POST TO CANADA \pounds I 3 10 BY POST ELSEWHERE ABROAD \pounds I 8 6 SPECIAL COMBINED RATE FOR SUBSCRIBERS TAKING BOTH THE ARCHITECTURAL REVIEW AND THE ARCHITECTS' JOURNAL: INLAND \pounds 2 6s.; ABROAD \pounds 2 10s.

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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, March 11, 1937.

NUMBER 2199: VOLUME 85

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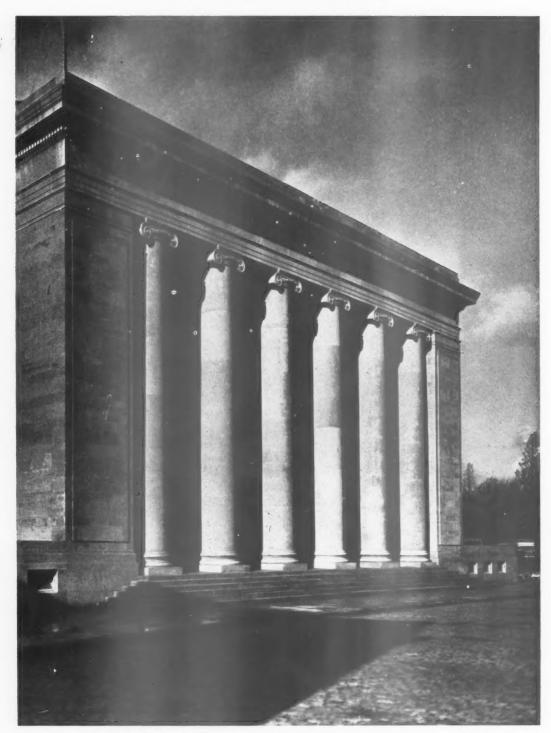
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UNDER CONSTRUCTION: FLATS IN LEEDS



A GENERAL view of the flats now in course of construction at Quarry Hill, Leeds. The architect is Mr. R. A. H. Livett, Director of Housing.



THE GUILDHALL, SOUTHAMPTON CIVIC CENTRE

The main entrance to the Guildhall, Southampton Civic Centre, which was opened last month by Lord Derby. The Guildhall is the third of the four blocks comprising the scheme to be completed. The Municipal and Law Blocks were opened in 1932 and the Art Block is now in course of construction. The architect is E. Berry Webber.

Further illustrations appear on pages 419-421 of this issue.



MR. HORE-BELISHA'S NEW IDEA

R. HORE-BELISHA has a great reputation as a go-getter. Under the impetus of his activity a Ministry whose sleep had seemed to be broken only by a ceaseless road versus rail bickering has become a fountain of front page news. A Press delighted by Sir Kingsley Wood's success in turning the Post Office into the family's closest friend, was equally pleased to see another energetic godmother setting about another pumpkin. So, over two and a-half years ago, Mr. Hore-Belisha started in on the Ministry of Transport amongst a chorus of well-wishing.

Political reputations are difficult things to establish, but even to them there is a bright side; once the public has got its ideas settled about a public man it dislikes changing them. Providing he avoids the suicide of plain speaking about fundamental problems, the established politician is established for a long time. The Minister of Transport had his reputation well fixed with the public when he took office. He was an able and energetic man-the kind of man who doesn't bother about elaborate theory but gets things done. He was, in fact, in a very enviable position; only a catastrophic mistake such as comes easier to Foreign Secretaries could lift him from office; the public expected active measures and were prepared to take some unpleasant medicine if told it was for their ultimate good. Everything seemed right for a Minister of Transport who meant business.

Two and a-half years later, and a month before the Ministry takes over the principal roads in Great Britain, the state of affairs does not look so rosy. Mr. Hore-Belisha has avoided the greatest fault of inactivity with the highest success. So continuously have he and his assistants carried on a wrestling match with the road traffic problem that the public have judged the situation rather from comments called from the centre of the fray than from cooler surveys of the state of the combatants. The fight has appealed to all. Each new sally has been cheered. Yet those who were prepared at the beginning to back Mr. Hore-Belisha with the greatest fierceness have now the largest doubts about the value of his battle.

We have had roads "restricted" in urban areas and unrestricted elsewhere; we have had major road signs and traffic lights made almost universal; we have had Belisha crossings and regulations concerning buildings being provided with their own traffic entrances. What we have not yet had is any general fall in road casualties, nor any appreciable reduction in traffic congestion in London. A sketch of a more basic measure has been shown to us in the gesture known

as the Ribbon Restriction Act. And the Minister has said that when he takes over the Trunk Roads the powers of this Act will be rigorously applied. So encouraged the public has waited; this man, they felt, would do something yet.

But at the delicate moment when Mr. Belisha's firmness is about to be given an opportunity of becoming effective, two disquieting developments have taken place.

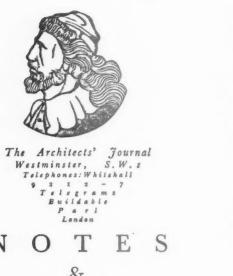
In January there was trouble over Westway, an unrestricted traffic avenue specially constructed as a western approach to London. After its completion, ribbon development was allowed to take place along it, accidents began to occur and residents to protest. After discussion and a personal inspection by the Minister, the problem was solved by the imposition of a speed limit upon Westway.

A section of the public had been expecting that under Mr. Hore-Belisha the Ministry would realize at last that roads were of two kinds: carriageways for slow speed access to houses, works, and places of public resort; and high speed traffic arteries. And the Westway indication that speculators were going to continue to be allowed to convert the latter (constructed at public and enormous cost) into the former at their own will and for their own profit, was not felt to be heartening.

The Minister of Transport, moreover, now looks like going in for a policy of defeatism on a far bigger scale. Hitherto he has been fighting for a new form of transport against deeply entrenched private interests, and trying to reduce the casualties caused by that transport running in increasing volume along tracks either unfitted for it, or being rapidly made so for private profit. Vested interests have so far won and road mortality continues.

Having failed to control that which adjoins roads, Mr. Hore-Belisha has apparently fallen back, right back to 1900, on an obviously simpler scheme. Speaking at the dinner of the Chartered Surveyors last week, he announced that in the future parking spaces in Central London would be steadily diminished in number. In short, he intends to prevent motor-car accidents in London by making it exceptionally difficult for motorists to use their cars at all.

The idea is masterly and London will probably be a much nicer place to live in when only those able to afford a chauffeur can use a car. But at a time when the public is prepared to support large ideas on roads in a way they never have before, it is very unfortunate for the Minister of Transport to appear to be adopting the easiest and most futile of all solutions.



T O P I G

THE "ROME"

THE Faculty of Architecture of the British School at Rome has just announced the admission of fourteen candidates to the final round. Practically all the principal schools are represented. The Rome Scholarship is a curious heritage that has come to us through the funds raised by the Great Exhibition of 1851; and it is open to question whether measuring Imperial ruins is considered as valuable as it was.

The "Rome" at any rate is not as popular as it used to be; this is a pity, really, since it is surely obvious that the breadth of view, cosmopolitan outlook and general experience gained in Rome are of great value.

Why then is the "Rome" unfashionable? The answer is fairly obvious. First of all, it is not sufficiently realized that the Rome scholar is not tied to the British School, but that, on the contrary, the "Rome" provides a unique opportunity for travel and research generally. On the other hand, it is, of course, only too true that the Faculty is diehard, and stupidly diehard at that.

. . AND THE "TITE"

The other Italian travel prize, the "Tite," is in quite a different category. Three or four weeks in Italy may ultimately come the student's way in any case and in the meantime fantastically unrealistic programmes do not attract.

I understand that Liverpool and the A.A. have decided, officially, to concentrate on the more realistic prizes; and that this is not so much "sour grapes" as a considered policy and a determination not to perpetuate an anachronism. The sense of proportion and the fine draughtsmanship which the Tite formerly inspired will no doubt find their place elsewhere in the complicated curriculum which is now necessary.

PRESERVING ENGLAND

Mr. Serge Chermayeff has won his appeal. The Ministry of Health has decided that an architect whose

views on design differ from those of democracy's local representatives should not necessarily be prevented from designing a house for himself.

A house which has the bad manners of refusing to parody past building forms with greater or lesser ghastliness is therefore to appear in Sussex. "Traditions" will be broken, "amenities" ruined; Il Press bored with these continuing architectural wrangles will make a few cheap witticisms, and the public, far from being instructed in the horrors of speculative imitation, will be strengthened in their conviction that architects are impossible people.

For those of a robust sense of humour there may be something funny in powers meant to be used to raise general standards of design being universally used to attack architects who depart from those standards. But it is a joke which architects should not enjoy for too long.

Very soon an architect's signature to any design for a house will be enough to ensure its rejection. And that will be extremely funny.

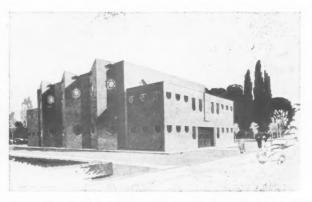
SIR OWEN WILLIAMS

How great is my admiration of Sir Owen Williams was, I think, made clear when I wrote a few weeks ago of his factory for Odhams. However, each man to his last and to every dog his day—in other words Sir Owen, in his new design for a Synagogue has let me down. Architects are bad at engineering but engineers are very good at architecture—provided always that they are not aware that it is architecture. Sir Owen has been consciously putting art on his Synagogue and he seems to be aware that it is art.

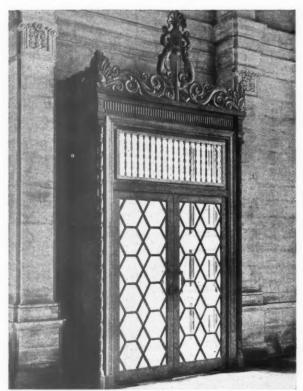
WATERLOO BRIDGE

Sir Giles Gilbert Scott is in the news this week in connection with Waterloo Bridge. The conclusion to which the L.C.C. brought this weary dispute nearly lost it my vote, and I shall therefore view with interest, if not with trepidation, the model of the new structure which they are going to exhibit.

The Chairman of the Highways Committee states that "the main characteristic of the design is the wide span and shallow rise of the arches, which has the effect of reducing bulk to a minimum and producing a light and



A perspective of the Dollis Hill and Gladstone Park District Synagogue, designed by Sir E. Owen Williams, K.B.E.



One of the doors in the entrance hall of the Guildhall, Southampton Civic Centre. Architect, E. Berry Webber.

graceful appearance . . ." This is interesting even if it means that the arches are not really arches at all.

"The first and last piers," the Chairman goes on to say, "will be placed out in the river, clear of the Victoria Embankment and of any future embankment on the south side of the river." This is most astonishing and unexpected forethought—may some of us live to see it justified.

Any mention of Waterloo Bridge reminds one of other Embankment changes, and we have now all seen Mr. Hamp's design for the new Adelphi. It was standing on Westminster Bridge, was it not, that Mr. Wordsworth wrote, "Earth has not anything to show more fair. . . "? I am quoting from memory.

ENGLISH MODERNISM

"A final burning of boats" was Mr. John Gloag's contribution when he started a discussion at last week's Architecture Club dinner. The subject seemed to be: "Is there such a thing as modern English architecture?" with the emphasis on the English rather than the architecture. Mr. Gloag, although admitting that there was some modern architecture in England, regretted that it was not English, that although it produced houses it didn't produce homes. ("And if there's one thing the English can do it's make a home.") His speech, of course, was excellently arranged, but at the end of it all I was still not quite sure which boat he had burnt.

Of the later speakers, Mr. Boumphrey justified large windows on the grounds that they are good to live behind, Mr. Richards quietly pointed out some of the more obviously gaping cracks in Mr. Gloag's armour, Mr. Fry talked sensibly about materials, while Mr. Connell seemed not quite to know the best angle for a really crushing attack.

So the finish of the evening was left to Mr. Noel Carrington, who said, in so many words, "You don't find any other profession yapping about what is the right or the wrong way to do things; why can't architects get on with their jobs and let each other alone?"

After which everyone seemed rather relieved and went away to think about something else.

DESIGN IN INDUSTRY AGAIN

An old subject, but I cannot resist quoting from the hundred years ago feature of *The Times*:—

We publish in another column a letter from Lord Howe, written by command of the Queen, and expressive of great sympathy with the distresses of the silk weavers . . . As far as regards the unfortunate workmen nothing can be more humane nor more just; but with reference to the general question, we beg to state that if our manufacturers had as much taste as they have industry, a yard of French silk would never find its way into the English market. . . The French manufacturers employ artists at a considerable salary to draw patterns for all the ornamental productions; the English, with dogged contempt for all that they have not been used to, jog on in their old way, and though impelled by the love of money, are still more powerfu'ly held back by prejudice, and will not employ an artist because their grandfathers did not.

STEEL

Sir Thomas Inskip hopes that we may be "prepared to forgo the pleasure of seeing new buildings erected . . . so that the Government may not be handicapped in the completion of its armament programme." When we heard of the employment that armaments would give we thought that there would be a catch somewhere—the catch, it seems, is the building industry.

However, we may, according to the Defence Minister, look forward to "a flow of remunerative contracts when the peak of the Government's programme had been passed." In other words, depression now and boom later.

MR. HORE-BELISHA RECOILS

Two and a half years ago Mr. Hore-Belisha took on a big job. He started to fight for a square deal for a new kind of transport; and incidentally to reduce the casualties caused by the tracks on which that transport ran not being properly planned.

His job had two sides to it—the encouragement of careful driving and planning for easy and fast driving. The first he has done as well as circumstances allow; how he was going to tackle the second was what really interested the public.

The latest development seems to show that it is Mr. Hore-Belisha that has been tackled. The traffic problem in London is to be solved by preventing most motorists from using their cars at all.

It is an excellent idea; the only drawback is that we have got the motoring habit and will probably keep it. So that, in the end, and after a much increased death-roll, we will still have to plan, and construct, proper routes for motor traffic: even in London.

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

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In connection with the new Architects' Registration Bill which is shortly to be considered by the House of Commons, the Council of the Royal Society of Ulster Architects has passed the following resolu-

tion:—
"That this Council fully approves the provisions of the Architects' Registration Bill which has been introduced in Parliament. This Bill, in their opinion, is not only in the interests of the architectural profession, but is also highly desirable to afford protection to the public, and they accordingly consider that it is very desirable that the Bill should be passed into law as soon as possible."

ANTI-GAS PRECAUTIONS AT WESTMINSTER

In the House of Commons on March 8, Mr. Muff asked the Home Secretary whether it was intended to make any parts of the Palace of Westminster gas proof; and, if so, which. Mr. R. St Hudson, who replied, said that

the taking of certain protective measures against gas and other air attack risks was under consideration.

INSTITUTION OF STRUCTURAL **ENGINEERS**

The annual dinner of the Institution of Structural Engineers is to be held at the Dorchester Hotel, Park Lane, W.1, on Tuesday, April 13, at 7.30 p.m.

IRISH ARCHITECTURE

"The main characteristic of Irish architecture today is senile eclecticism, that is, dabbling in the features of the historic 'styles,' with little scholarship and no conviction," stated Mr. John O'Gorman, B.ARCH., M.R.I.A.I., in an address on "Irish Architecture Today and Tomorrow," at II

THE ARCHITECTS' DIARY

Thursday, March 11

R.I.R.A., 66 Fortland Place, W.1. Exhibition:
"Airports and Airways." Until March 24.
10 a.m. to 8 p.m. (Saturdays, 19. a.m. to 8 p.m.)
ARCHITECTURAL ASSOCIATION, 36 Redford
Square, W.*C., Exhibition of examples of Industrial
Planning throughout the World. Aranged by the
A.A. School of Planning. Until March 12. Also
third of a series of talks to Junion Members,
"Licensed Houses—the Inn and the Road House."
BUILDING CYNTER, 158 New Bond Street.
WI. Exhibition: "Science and Building"
until March 25. 10 a.m. to 6 p.m. (Saturdays, 10 a.m. to 1 p.m.).
INSTUTUTION OF ELECTRICAL ENGINEERS,
Saron Place, W.C. "Modern Factors affecting
Electricity Costa and Charges." By J. A. Sunner.

Saroy Place, W.C. "Modern Factors affecting Electricity Costs and Charges." By J. A. Sumner.

Best State No. 18 Northern Polytechnic, Holloway, N.7.
Annual Speech Night and Presentation of Prizes.
7 p.m.
Society of Antiquaries, Burlington House,
Piccadilly, W.1. "Executions at Clarendon
Place," By Professor Tancred Borenius, 8.30 p.m.

Friday, March 12

LONDON SOCIETY. Visit to the Performing Rights Society, 33 Maryaret Street, W.1. 3 p.m. TOWN PLANNING INSTITUTE, at Carton hall, Carton Street, S.W.1. "Decentralization of Population and Industry." By Herbert Warren, 6 p.m.

Saturday, March 13

LONDON SOCIETY. Visit to the New University Buildings, Bloomsbury, W.C.1. 2.30 p.m.

Tuesday, March 16
CHADWICK TRUST. At 66 Portland Place, W.I.
"The Modern Treatment of Foundations on Difficult Sties." By A. Burnard Geen. 6 p.m.
ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.1. "Impressions of America." By Percy Thomas. 8.30 p.m. Also an exhibition of Rincetts, organized by the A.A. Students' Art Club. Until April 3.
ILLUMINATING ENGINEERING SOCIETY. Annual Dinner at the Trocadero Restaurant, W.I.

Wednesday, March 17

Vednesday, March 17

INCORPORATED ASSOCIATION OF ARCHITECTS
AND SURVEYORS, 43 Grovenor Place, W.I.

"Naming and Numbering of Streets and Houses."
By Dr. Richard R. Lyman. 7 p.m.
LOSDON SOCIETY. Visit to Well Hall, New
Elthum, N.F. 3 p.m.
ST. PAUL'S ECCLESIOLOGICAL SOCIETY. At 66
Portland Place, W.I. "Churches of the French
and Spanish Pyrenees." By W. Palmer. 8 p.m.

meeting of the Architectural Association of Ireland, held in Dublin last week.

The healthiest tendencies in Irish architecture were, in his opinion, to be found in the work of a relatively small number among the younger men who had been profoundly influenced by the writings of Gropius and Corbusier, and were more interested in contemporary Continental architecture than in the history books.

KING GEORGE V STATUE

It was announced last week that Sir William Reid Dick, R.A., is to be the sculptor of the statue of King George V which is to be erected near Westminster Abbey; and that Sir Giles Gilbert Scott, R.A., will be responsible for the architectural work in connection with the scheme.

SCIENCE AND BUILDING **EXHIBITION**

Mr. Percy Thomas, P.R.I.B.A., speaking at the opening of the "Science and Building" Exhibition at The Building Centre last week, said: "I believe that in organizing this exhibition the Department of Scientific and Industrial Research has performed a real service to the building industry, not only to architects and builders, but to the

one who is much more concerned with defects in building construction, and that is the poor building owner who has to live in the buildings which suffer from defects which we all know are possible in modern construction. When we realize that no fewer than, I think, between 150-200 million pounds worth of new work is built every year, quite apart from the amount spent on repairs and maintenance in this country, I think then we realize how important the building industry is to the whole community. I think that makes us realize how important it is that we should have scientific control not only of the manu-facture of building materials, but of their use, and although the Department of Scientific and Industrial Research, through the Building Research Station (a department which we architects know a little about and for which we are very grateful) has put so much information at the disposal of architects and others, I think that we may say the building industry as a whole do not realize that all this mass of information is at their disposal, and what is more, is at their disposal for a mere asking for it, which, I think, is something we do not get so much of these days."

R. GOULBURN LOVELL

We regret to record the death of Mr. Richard Goulburn Lovell, F.R.I.B.A., President of the South-Eastern Society of Architects. An appreciation will appear in our next issue.

MORLEY COLLEGE EXTENSION **OPENED**

On Saturday last, Queen Mary opened the new extension to Morley College in Westminster Bridge Road, S.E. The cost of the building, designed by Mr. Edward Maufe, was £22,000.

POPLAR TOWN HALL

The foundation stone of Poplar Town Hall is to be laid by Alderman C. W. Key on April 17.

EXHIBITIONS

The loan exhibition of drawings of Maritime Art at Colnaghi's, from the collection of Captain Bruce Ingram, is of interest to anyone who likes ships. It is not necessary to have a deep knowledge of naval history to appreciate the draughtsmanship of the sketches, which range from about 1590 to the middle of last century. To an expert there must be many interesting points in the evolution of the rigging and sail plans, though to the lay eye these appear to have changed remarkably little in principle from the earliest times right up to the advent of steam.

The early part of the exhibition, with the exception of one or two Spanish and Venetian drawings, is almost entirely Dutch, and is very largely composed of the drawings of the two van de Veldes. Van de Velde the elder, who died in 1693, studied and drew ships while he was at sea as one of the earliest war correspondents, and his work is lively and original, and owes little to the Dutch tradition in maritime painting. Being entirely based on observation, it is also very accurate in detail. His son was trained as a painter, and so was able to combine his father's accuracy with con-siderable technical skill. He was given a

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pension of £500 by Charles II for drawing ships of the Royal Navy.

Perhaps the charm of these drawings is partly due to the fact that, as well as the van de Veldes, so many of the artists went to sea and passionately loved ships. There was Everdingen (b. 1621) who was wrecked on the Norwegian Coast, Bakhusen (b. 1631) who used to persuade fishermen to take him out to sea in the worst storms, Nicolas Pocock (b. 1741) or Thomas Yates, who in 1780 was a lieutenant in the Royal Navy. Most of the drawings in this exhibition are quick sketches in line and wash; many of them give the impression that they were perhaps preliminary drawings for some larger work, and nearly all of them are of outstandingly good draughtsmanship.

The theme of the musical instrument in art is a curious one, and the London Gallery is devoting an exhibition to it—a very representative exhibition of the works of abstract painters in whose painting the stages of musical instruments form an essential part of the design. Their preusually with the pleasant occupation is shape of a violin or a guitar rather than with any musical significance, and these stages seem profoundly to affect, and recurin, the works of many abstract painters. Braque and Juan Gris have always used this motif, Picasso is very fond of it, and there are at the exhibition examples of its successful use by many others, the most

successful, perhaps, being Paul Vezelay's "Still Life," Chirico's "Composition," and two paintings by Ben Nicholson.

For the unregenerate there are also two very engaging musical boxes in which the puppets act a little scene, "Peeping Tom" and "Al Fresco," both made in England for the French market in 1830.

From Ingrès to van Gogh. Rosenberg and Helft, 31 Bruton Street, W.1. Till the end of March.

Fifty Drawings by Modigliani, Zwemmer Gallery, 26 Litchfield Street, W.C.2. Till

The London Group, Leicester Galleries. Till March 25.

Elie Lascaux. Mayor Gallery, 19 Cork Street, W.1.

Recent Paintings by R. O. Dunlop, and water colours by R. V. Pitchforth. Redfern Gallery, 20 Cork Street, W.I. March 27.

Exhibition on the Theme of Musical Instruments. London Gallery, 28 Cork Street, W.1. Till April 3. Masters of Maritime Art. Loan Exhibition

of Drawings. Colnaghi's Gallery, 144 New

Bond Street.
Still Life Paintings, by Ben Nicholson.
Paintings by Jan and Cora Gordon, and
by Fergus Graham. Lefèvre Galleries, IA King Street, St. James. Till April 3.

G. B. J. ATHOE, Secretary, Incorporated

Association of Architects and Surveyors

D. COSENS

LETTERS

FROM

READERS JOHN GLOAG

Registration

Sir,-Mr. Raymond Walker's letter in your last issue is one of the most sensible I have read on this complicated subject; nevertheless, he, like many other well-intentioned people, has fallen into the trap of believing that the proposed Bill is something which it is

Mr. Walker says that, had the original Bill met with less obstruction from "Major Athoe and his friends," the existing Act would have been more effective. I agree, but " effective " in a manner which, I am sure, would not have been appreciated by Mr. Walker and many of your readers. If the aim of the present Bill was " to restrict the use of the title of architect to those who can show reasonable qualification for this distinction " (the italics are mine), the I.A.A.S. would support it.

Mr. Walker and others may be pleased to know that my views in favour of the desirability of Registration making it impossible for Local Authorities to approve building plans prepared by unqualified persons remain unchanged. Again, I find myself in agreement with Mr. Walker, when he says that one cannot expect Parliament to re-arrange its Statutes every few years. Exactly; and that is all the more reason why the architectural profession should put its house (and Act) in order by producing

a worth-while measure.

Finally, I can assure Mr. Walker that I have not forgotten the public; but a public without class or creed, even though it gives architects only 10 per cent. of its building work. Mr. Walker is a member of the public; he is an "unattached" registered architect; but he urges a policy which would cancel out the liberty of the subject, and would ensure the end of the "unattached."

G. B. J. ATHOE

Advertising and the Architect

Sir,-I don't want to start correspondence; but Mr. John Michael's remarks in your issue of March 4 demand a letter of thanks. He makes one minor mistake; I was not defending anything; I was just explaining something which he obviously found difficult to understand. But he still clings to some illusions; it is nice to have illusions. Incidentally, he is wrong about the stigmata of those people who exude a spirit of enquiry, and who spell Research with a capital R. I know a number of earnest and able architects who talk constantly about research (and even sometimes indulge in this activity); but only about fifty per cent. of them wear horn-rimmed spectacles, and most of them smoke cigarettes. It is clear that Mr. Michael and I agree about everything, except the superficial classifications of the two professions which were under discussion.

JOHN GLOAG



AUNT JANE AND THE **PYRAMID**

[By John Verney]

THE Alhambra fallen in dust about our ears, another who knows how soon to fall; it is time we stepped a minute off the path-by-pass I should say-of dreadnought efficiency, to cast an eye back and around.

Here was a setting, gaudy and sham no doubt, illusional stage-property architecture if you like; I believe it pretended no more. But a good illusion. Who has sat among those gilded and fretted galleries, seen through a mystic haze the performance of strange choreographic rituals, or heard refracted from the roof the lost-call of Vaudeville, Miss Gracie Fields' top-note, and not felt that here, prejudices apart, was an atmosphere both intimate and initiatory, a theatre. The stage, the circle, the pit, the dome, they were priests, we, young neophytes privileged to watch some fresh esoteric spectacle.

Pictorial architecture, you sniff. Quite. A fine picture and which of you would not at heart prefer to sit in it, than in one of your new-distempered empty

antiseptic saloons?

grandfathers, Strange men our thorough, full-blooded in their pursuits, their fancies, their errors. Narrow, dishonest, moneyed men, but great. they conceived a theatre in Moorish, then, even to the wall tiles in the lavatories, Moorish it was. For had not one of their greatest said, "There are some faults slight in the sight of love, some errors slight in the estimate of wisdom; but truth forgives no insult and endures no stain." But we distinguish sharply between Streamline and Sentiment. We may decorate a cinema to suggest a forest, but hygiene rules in the offices. A cinema hall is legitimate ground for a little art, but plumbing must be kept—just plumbing. A petrol station may be in the style of a thatched château. But the pumps stare at us like red Martians. "Shell this way" they grin. If our grandfathers had built a petrol station in Gothic, the pumps I am sure would have worn suits of armour. Theirs was a spirit, to misuse Ruskin again which of two marbles equally beautiful applicable and durable, would choose the more costly, because it was so, and of two kinds of decoration,

equally effective, would choose the more elaborate because it was so, in order that it might in the same compass present

more cost and more thought.'

All good architecture, we hear on good authority, is pictorial, to a point. The "pictorial" is clothes. Two thousand years ago or so, among the ancients, they were not, in all cases, considered necessary. But ever since they have been. Until recently for two excellent reasons, health and freedom, we threw them off again. Now nakedness, as the ancients knew, is very well for some people. But today, after 2000 years, no one has a very clear idea what a fine nude building should look like. It is brave I maintain, but not honest, to pretend that what in the heat of enthusiasm we have disclosed necessarily beautiful or worthy not to be covered up. Architecture at present is not a fine athletic figure at all. Let us be frank. More nearly he is a mis-shapen old man without his pants. I, who am at heart a "gamin, cannot resist pointing.

Though architecture is bare, originally for health and freedom, a school of worshippers has duly arisen to claim beauty, even apart from that new special sense of efficiency, for this flatchested scrimpshank panopticon. Consider, in his elements, what he is. cube, the sphere, the cylinder" as Cézanne said of painting. Today nearly

always the cube.

Now any fool can admire a pyramid, and any fool can admire the portrait of his Aunt Jane. For a good long time, 2,000 years near enough, that is what every fool has admired, from the Mausoleum at Halicarnassos to the Albert Memorial in Kensington Gardens. This being so, what exactly does the best of our modern work represent? These bleak all-too-soonweatherstained "blocks of flats," these funny little houses, resembling nothing so much as the matchboxes we stuck together in our childhood, what are they? Just the old stuff stripped, a compilation of the old tricks without the old fancies? Or something new and rather exciting, built on principles of a purer though still solid-alas too, too solid-geometry?

How can we poor 2,000-year-old Aunt Jane-cum-Pyramid worshippers

be sure?

COMPETITION NEWS

COMPETITION RESULT

Mr. Charles G. Soutar, F.R.I.B.A., the assessor of the competition for the Muirhead Housing Scheme for the Troon Town Council, has made his award as follows:

Design placed first (£150): Mr. John A. W. Grant, F.R.I.A.S., of 25 Rutland Square, Edinburgh, 1.

Design placed second (£100): Mr. James McNab, L.R.I.B.A., of 216 West Regent Street, Glasgow, C.2.

Design placed third (£50): Mr. Alexander Mair, L.R.I.B.A., 20 Wellington Square, Ayr. Commended: Messrs. Lowe and Barrie, L.R.I.B.A., F.R.I.A.S., and Mr. Max Tetlow, B.A., A.R.I.B.A., of 104 Commercial Street, Dundee; and Messrs. Ninian R. J. Johnston, A.R.I.B.A., and Adam Paton, DIP.ARCH. (GLAS), of 117 Loanfoot Avenue, Glasgow,

The estimated cost of the scheme is £,149,000.

MACCLESFIELD GENERAL INFIRMARY

The President and Governors of the Macclesfield General Infirmary invite architects to submit, in open competition, designs for a new Nurses' Home, proposed to be erected in the Infirmary Gr Westminster Road, Macclesfield. Westminster Road, Macclesfield. The Governors have appointed Mr. R. A. Cordingley, M.A., F.R.I.B.A., to act as assessor. The following premiums are assessor. The following p offered: £100, £50 and £25.

Copies of the conditions of the competition may be had on application to the Secretary, Macclesfield General Infirmary. Deposit:

£1 1s. The last day for questions is April 17, 1937, and the last for the submission of designs is June 12.

Competitions Open

MARCH 27 - Sending-in Day. Physical Training Centre, Manchester, for the Building Trades Exhibition, to be held Building from April 6 to 17 next (open to architects who are British subjects). Assessors: W. A. Johnson, F.R.I.B.A., Francis Jones, F.R.I.B.A., and R. A. Cordingley, M.A., F.R.I.B.A. Premiums: £75, £50 and £25. Conditions (free) of the competition from Provincial Exhibitions, Ltd., City Hall, Deansgate, Manchester 3. All designs must be addressed Competition Manager, Architectural Competition," City Hall, Deansgate, Manchester 3, and be delivered not later than Saturday, March 27 next.

APRIL 1. — Sending - in Day. Mental Hospital for Mental Defectives, near Orms-kirk, Lancs. Assessors: C. E. Elcock, John Kirkland and Professor Abercrombie. Premiums, £500, £400 and £300. Designs to: The Clerk of the Board, County Hall, Preston, Lancs. (The closing date for this competition has been extended to April 1.) APRIL 20.—Sending-in Day. Central Health Clinic for the Bilston Corporation. (Open to architects in England and Wales.) Assessor: W. T. Benslyn. Premiums: £40, £35 and £25. Conditions are obtainable from the Town Clerk, Town Hall, Bilston. (Deposit £1 1s.). The last day for questions was February 27.

APRIL 28. - Sending-in Day. Hospital, Dawlish, for the Building Committee of the Dawlish Cottage Hospital. (Open to architects of British nationality practising within 200 miles of Dawlish.)
Assessor: Leslie T. Moore. Premiums: £100, £75, and £50. The latest date for questions was February 6. Conditions, etc., obtainable from the Honorary Secretary, Dawlish Cottage Hospital, Devon. (Deposit

APRIL 30 — Sending-in Day. Technical College, Commercial College and College of Art and Crafts, Birmingham, for the Corporation of the City of Birmingham. Assessor: James R. Adamson, F.R.I.B.A. Premiums: £750, £500 and £250. The last day for questions was October 19, and

the conditions, etc., are obtainable from the Chief Education Officer, Margaret Street, Birmingham, 3. (Deposit £2 2s.). (The date for sending in designs for this competition has been extended to April 30, 4 p.m.)

MAY 6 — Sending-in Day. Designs for the planning of a portion of the late Lord Northcliffe's North Foreland estate for the Broadstairs and St. Peter's U.D.C. Assessor: Professor W. R. Davidge, F.R.I.B.A., PP.T.P.I. Premiums: £100, £50 and £25. Conditions, etc., are obtainable from the Clerk of the Council, Pierremont Hall, Broadstairs. (Deposit £1 is.). The last day for questions was February 20. (The date for sending in designs has been extended to May 6.)

MAY 7—Sending-in Day. Public Elementary School for the Education Committee of the Borough of Gosport. (Open to architects resident or practising in Gosport and Portsmouth.) Assessor: Geoffrey C. Wilson, F.R.I.B.A. Premiums: £100, £50, Wilson, F.R.I.B.A. Premiums: £100, £50, and £25. The last day for questions was March 4.

MAY 14-Sending-in Day. enclosure on the sea-front for the Borough of Weymouth and Melcombe Assessor: Professor H. S. Goodhart-Rendel. Premiums: £150,£100 and £50. The last day for questions was February 19. Conditions, etc., obtainable from Percy Smallman, Town Clerk, Town Clerk's Office, Weymouth. (Deposit £1 1s.)

MAY 27 - Sending-in Day. Secondary School for Boys, Podsmead, for the Governors of the United Schools, Gloucester. Open to all registered architects.) Assessor: H. Stratton Davis. Premiums : £200, £100, and £50. Last day for questions: March 20. Conditions of the competition may be obtained on application to Dr. H. J. Larcombe, M.A., Clerk to the Governors, Gloucester United Schools, Belsize House, Brunswick Road, Gloucester. (Deposit

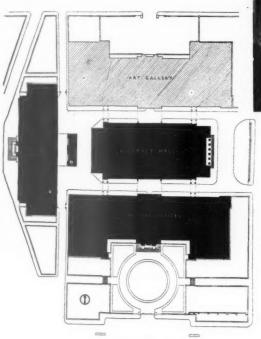
MAY 31—Sending-in Day. Central Baths, Clapton Square, Hackney, for the Hackney £500, £300 and £200. Last day for questions: March 18. Conditions are obtainable from R. H. R. Tee, Town Clerk, Town Hall, Hackney, E.8. (Deposit £ 1 1s.)

JUNE 1 — Sending-in Day. Extension of St. Andrew's Cathedral, George Street, Sydney, for the Authority in the Diocese of Sydney of the Church of England. (Open to architects who are British subjects, and members of the Royal Australian Institute of Architects, the R.I.B.A., or the Allied and Associated Societies.) Assessors: His Grace the Architects. bishop of Sydney, Sir Giles Gilbert Scott, R.A., F.R.I.B.A., and Bertrand J. Waterhouse, F.R.I.B.A. Premiums: £500, £300 and £200. The last day for submitting designs which must be forwarded direct to Sydney) is June 1, 1937. The last day for questions was August 11, 1936.

JUNE 21-Sending-in Day. Municipal Buildings, Friern Barnet, for the Friern Barnet U.D.C. Assessor: C. Cowles-Voysey, F.R.I.B.A. Premiums: 150 guineas, 100 guineas, and 50 guineas. Applications for the conditions and site plan should be made to Mr. G. T. Fletcher, Clerk of the Council, Council Offices, The Priory, Friern Barnet, N.11. (Deposit £1 1s.) The Priory, The latest date for submission of designs is 5 p.m. on June 21 next.

THE GUILDHALL, SOUTHAMPTON CIVIC CENTRE





SITE PLAN



PROBLEM—The building is the principal assembly hall of Southampton, and has been designed to serve all purposes—assembly hall, theatre, cinema performances, organ recitals, orchestral and choir performances, dances and banquets.

SITE—The Civic Centre is situated upon a large open site at the south of the Marlands, a public park. It is, therefore, open towards the north, and a large forecourt and public gard n are situated to the south. Its east and west sides are bounded by West Marlands Road and Havelock Road. The principal elevation of the Guildhall faces the former.

Top, a general view of the Civic Centre from the south; the roof of the Guildhall can be seen in the centre of the illustration immediately over the entrance to the Municipal Block. The Law Courts are on the left. The other photograph shows the main front of the Guildhall.

THE GUILDHALL, SOUTHAMPTON CIVIC CENTRE:





PLAN—The main factor in planning the Civic Centre was the compact grouping of all departments with simple, direct and easy communication one to the other. The Guildhall is designed as a central dominating feature surrounded by the other blocks and communicating with them.

DE

CONSTRUCTION — The buildings are steel framed upon reinforced concrete foundations, the raft form of substructure being used entirely in the case of the Guildhall. All external walls are faced with Portland stone, and this stone is used largely in the entrance halls and main staircasses. The floors are of hollow tile construction. Partitions are of block brick and timber. The flat roofs are covered with either insulated asphalt or tiles. The sloping roofs are covered with copper. The windows are of steel and grilles and balustrading are of iron, bronze, and white metal. The carving, both stone and wood, was carried out by Mr. George Alexander.

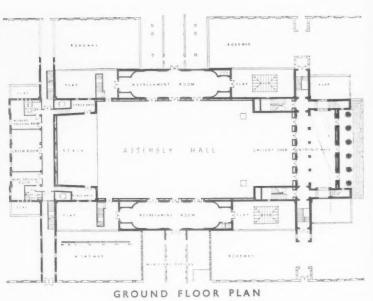
FINISHES — The walls of the entrance hall are faced with Painswick stone, the floor is of marble, and the ceiling is of fibrous plaster, painted. Corridors and staircases are floored with terrazzo. The assembly hall is panelled to a height of 15 feet in English walnut and, above, finished with acoustic plaster up to the underside of the projecting balcony. The ceiling is finished in fibrous plaster, painted. The two refreshment rooms are panelled in English walnut, with engraved mirror recesses lighted at their bases.

EQUIPMENT—The furniture generally is in English walnut, with the exception of the choir, dressing and green rooms, which are in oak, and the canteen furniture, which is in polished beech. The auditorium seating consists of enamelled tubular nesting chairs.

SERVICES—Cooking is by electricity, and it is possible to cater for 900 persons at a banquet. The serving of food for a large banquet is from the north refreshment room, by means of a large electric lift.

COST-£158,989. Price per cubic foot 1s. 9d.





The photographs show two views in the assembly hall and the entrance hall.

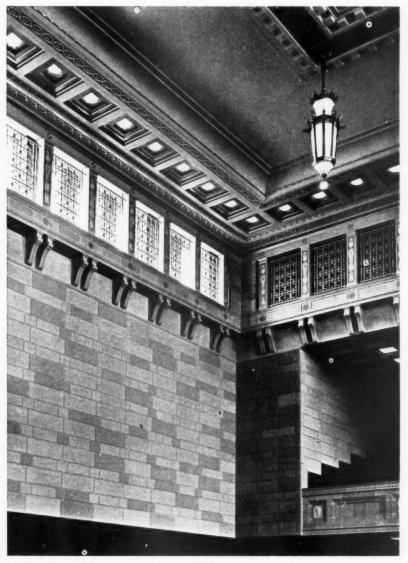
DESIGNED BY E. BERRY WEBBER

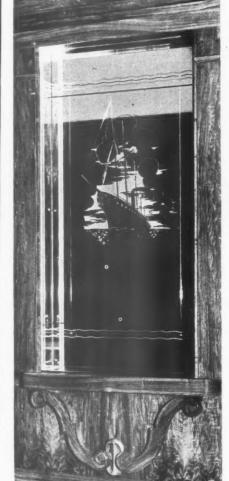


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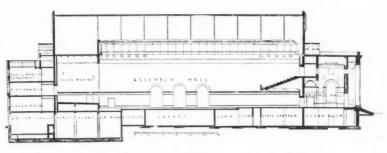
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The photographs show: Top, left, refreshment room; left, an engraved mirror recess in the refreshment room, v^*e of a series depicting shipping through the ages; above, a detail of the cornice in the main hall.



LONGITUDINAL SECTION

R. J. B. A.



GENERAL MEETING

At a general meeting of the R.I.B.A. on Monday, Mr. G. L. Pepler, M.T.P.I., F.S.I., and Mr. G. H. Jack, F.R.I.B.A., read papers entitled respectively "Town and Country Planning Under the Act," and "The Working of the Advisory Panels System." Extracts from the papers are printed on this page.

G. L. PEPLER

THIS paper is to consider town-planning practice in England and Wales, within the limits of the Town and Country Planning Act, 1932.

Authorities

The authorities who may prepare schemes are, as respects the City of London, the Common Council of that city, as respects the county of London, the London County Council, and elsewhere, the councils of county boroughs and county districts.

It will be noted that county councils are not included in the above list, but they can—and happily many of them do—take an active part in the preparation of schemes by joint planning committees, or can themselves prepare schemes if the councils of county districts agree to relinquish that power in their favour.

At the present time schemes are in course of preparation for some 22,235,000 acres by 1,050 local authorities, about 600 of which are members of some 130 executive joint planning committees.

Regional Planning

The first Housing and Town Planning Act of 1909 gave individual authorities the power to plan, but it was not until 1919 (the war caused a few years' interruption) that they were enabled to combine and form joint committees for the purpose, and it was not until 1930 (Local Government Act, 1929) that county councils were enabled to take a hand in the game.

Since the Act of 1932 came into operation county councils have been increasingly active county councils have been increasingly active in promoting joint planning. In several cases schemes are now being prepared at county headquarters, either by a consultant or planning officer, or by the two in combination, for the whole county. In some cases the county has been divided into executive groups, and in others the power to prepare schemes has, by agreement, been relinquished to the county council by the councils of the county districts.

General Development Plan

A planning scheme is a printed document, necessarily somewhat complicated and voluminous, illustrated by a map, and a considerable amount of routine procedure must be gone through in the course of its preparation.

This may lead either to absorption in clauses

and procedure, to the neglect of planning, or to planning without regard to the instrument by which alone it can be made effective.

Either of these alternatives is to be deprecated

and can, I think, be avoided if the planner begins with a survey or careful study of all relevant factors concerning the area he has to plan, followed by a general development plan in which he indicates the ideal form of development to be aimed at.

As regards many comprehensive schemes that are in course of preparation, as a rule in con-

sultation with the principal landowners, I think the following is a correct summary of their chief characteristics:—

First, areas are selected for development, First, areas are selected for development, taking into account existing towns, villages and settlements, availability of services or possible economic provision thereof, etc., the areas selected being sufficiently large to accommodate any development likely to take place within, say, the next twenty years round each centre.

With regard to roads, the Restriction of Ribbon Development Act has introduced a new factor. Consideration as to new roads that may

or. Consideration as to new roads that may required, widenings of existing roads, De required, widenings of existing roads, building lines, stoppings up and diversions, is still an essential part of planning, but the implementation of some items may now be more expedient under the new Act than by means of a planning scheme.

Many planners hold the view that the only practicable way of stopping the piling up of pressure on the centre is by decentralization pressure on the centre is by decentralization into properly planned satellite towns. This solution has, however, not yet, I think, been adopted as a planning policy by any town, and to-night we are considering present practice under the Act, so far as it has gone.

Most authorities are beginning with zoning with the object of securing an arrangement of the parts of the town according to an appropriate general functional pattern that will allow opportunity for growth and change in an orderly fashion.

Coverage and height zoning are obviously

closely related to use and to the street pattern and one finds that, except in rather limited sections where drastic rearrangement is considered to be essential, the general tendency is to endeavour to prevent harmful change rather than to attempt radical alteration.

Authorities appear to be studying each part of their built-upon areas with a view to prescribing for each part (other than any areas where drastic rearrangement is essential) restrictions as to use, coverage and height based on existing circumstances; relying on their power of consent, subject to conditions, not to discourage progress, but to secure that any change shall not disrupt the part, but shall, as far as possible, form part of a process of orderly evolution.

As already suggested, zoning for use, number, coverage, size and height of buildings is not only related to appropriateness for purpose in relation to the town pattern, but also to the street system. Each zone has different traffic requirements, and the nature and volume of traffic in any street are directly related to the number, use and size of the buildings served that street.

With regard to the provision of parking spaces and of inner playgrounds, I find that several authorities are discovering odd pieces of semiderelict land that can be readily and economically adapted for one or other of these purposes, and that it is a matter to which they give particular attention in relation to slum clearance

G. H. JACK

THE two points I want to raise in this THE two

Is the existing panel procedure the best which could be devised, or can it be amended or extended so as to strengthen and simplify it?

(2) Is the service of real national and local value? If so, what can be done to assure its recognition? and can it be reinforced by legal backing?

My own answers to these questions are :-As to (1): Good and useful as the existing As to (1): Good and useful as the existing procedure is, it is not nearly strong enough to make any impression upon the mass of poor building which is everywhere in evidence, and it must receive more support and recognition if it is to become the force it ought to be and

fully deserves to be.
As to (2): I submit that there is no doubt as to the value of the panel organization, both from a national and local point of view. It is not only of value, it is a necessity. The whole question as to how the panels may be strengthened and supported will arise when the enquiry is held as to the shortcomings of existing legislation in its contact with the whole question of amenity in town and country. The debate in the House of Commons on February 10 last proves conclusively that there now exists a determination to set matters right in this respect.

I may be asked in what way could the organization be strengthened? and what is meant by

official recognition?

In the Scottish Housing Acts of 1930-35 it is laid down that "if required by the Department" the local authority shall appoint a local advisory committee, including representatives of architectural and other artistic interests, and the local authority shall furnish to the Department a copy of any representation, recommendation or report made to them by the committee.

In section 38 of the English Act of 1930, if the Minister decides to give any directions to the local authority as to any matter connected with the provision of new houses or in demolishing old ones, the local authority must comply with his directions. Would it not be reasonable and desirable to direct them to use the panels? If this were done "the Advisory Panel Comdesirable to direct them to use the panels? If this were done "the Advisory Panel Committee" would be identical with the "local Advisory Committee" in the Scottish Act, and that body would be willing and able to—

(1) Support, direct and encourage any existing area panel which was already doing good work.

(2) Arrange panel service for regional planning committees or any committee set up under section 48 of the Town and Country Planning Act to deal with the control of elevations.

(3) Arrange for panel service in the matter of consultation with local authorities in the discharge of their duties under section 19 of the Housing Act of 1930, in the matter of demolition and slum clearance.

(4) Enquire into and report to the local authority on any matter affecting housing and amenities.

It is very important that the statutory duty of having regard to "the beauty of the landscape or countryside and the other amenities of the locality" should be enforced where building operations are contemplated, and it is certain that in this connection the panels would be an

immense help.
It has been suggested in some quarters that in the event of the panel scheme as at present constituted receiving statutory support, we should find it impossible to guarantee a sufficient number of architects willing to bind themselves to a regular service; and I am bound to admit that the doubt has some foundation. My suggestion of the statutory recognition of suggestion of the statutory recognition of panel advisory committees on the lines of the Scottish actions committees on the lines of the Scottish Act would remove this difficulty by placing a recognized panel in direct touch with both the local authorities and the Ministry; and, further, the conception of a national panel organization would be realized in a simple and workship form. workable form.

Announcements

Messrs. C. Redgrave and Son, Architects and Surveyors, have removed their offices to No. 6, The Quadrant, Warwick Road, Coventry.

Mr. J. Hedley Simson, Architect and Surveyor, has opened an office in Central Exchange Buildings, 128 Grainger Street, Newcastle-on-Tyne, 1, where he will be pleased to receive trade catalogues.

STEEL HOUSE, TOTHILL STREET, S.W.

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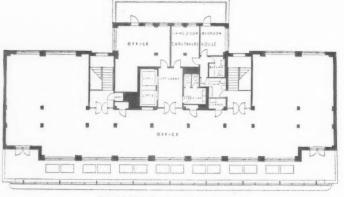
GENERAL PROBLEM—Office building for the British Iron and Steel Federation. In the basement are the boiler, main switch and telephone, transformer and pump rooms; on the ground floor, facing Tothill Street, are shops; and the remainder of the building is devoted to offices, committee room and board room, and a caretaker's flat.

The photograph shows a general view of the Tothill Street front.

STEEL HOUSE, TOTHILL STREET, S.W.: DESIGNED



The photograph shows part of the Tothill Street front. The sculptured reliefs were modelled by W. Aumonier and are cast in stone panels.



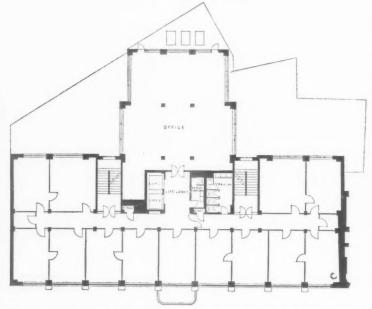
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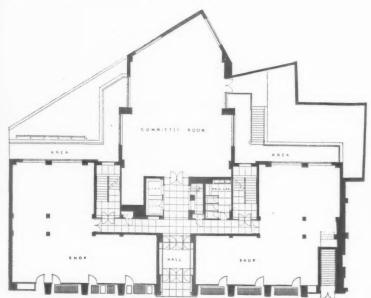
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SEVENTH FLOOR PLAN



ABOVE: FIRST FLOOR PLAN; BELOW: GROUND FLOOR PLAN



BY SIR JOHN BURNET, TAIT AND LORNE

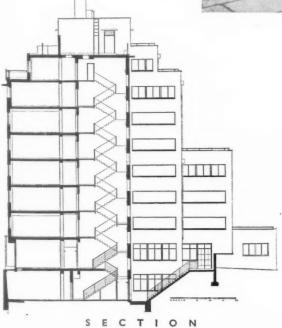
construction—The building stands on a concrete raft foundation, the basement being tanked in supercement concrete. The superstructure is steel frame, with hollow tile floors and internal partitions in foam slag blocks. External walls are brick, faced with stone carried on shelf angles and cramped back to the brickwork with bronze cramps. Windows are metal.

D

INTERNAL FINISH — The floors of the offices and corridors are finished in oak blocks. The entrance hall is finished in travertine martle, all the lavatories are in terrazzo. The internal lavatories are mecl a ically ventilated. Doors, frames and furniture are steel. There are two electric passenger lifts and one hand-power service lift. The main entrance and vestibule doors are steel; other doors are flush panelled in steel frames.

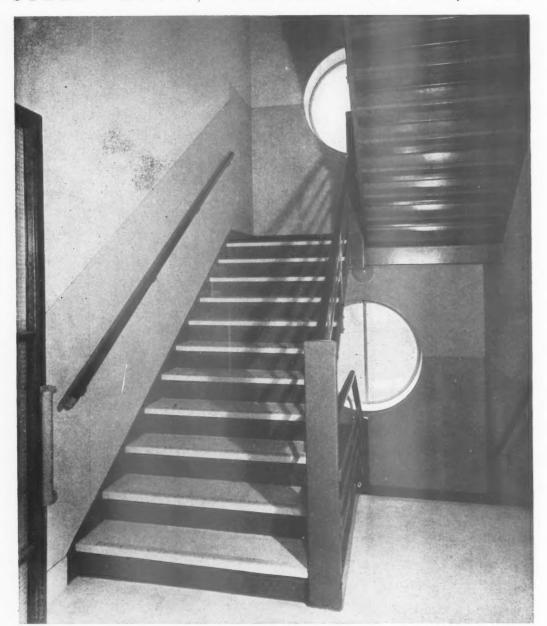
The photographs show: right, the entrance from Tothill Street; below, in the entrance hall, looking towards the lift doors, and the doors leading to the committee room.

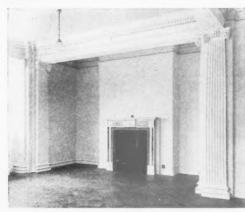






STEEL HOUSE, TOTHILL STREET, S.W.





D E S I G N E D B Y
S I R J O H N B U R N E T,
T A I T A N D L O R N E

The photographs show: above, one of the two stair-cases and, left, the fireplace in the board room. Both staircases and landings are of pressed steel, finished in terrazzo.

For list of general and sub-contractors see page 449.

INFORMATION SHEET

SUPPLEMENT

The Architects' Journal Library of Planned Information



ECENT developments have brought up for reconsideration the question of the looseness of Information Sheets.

When the series was first started, it was felt that readers of the Journal would have some grounds for complaint if in a feature that was clearly meant for it, no facilities for filing were provided: and the Sheets were therefore inserted loose in the paper.

This method has obvious advantages for filing, but it has also obvious disadvantages, which our readers have not been slow to point out.

As a permanent feature, loose inserts are a nuisance in a paper, since they have a way of dropping out in the street or the train, if not before they get into the reader's hands (we have periodical complaints that Information Sheets for such a week have not been delivered with the paper).

Or, what is nearly as bad, they have a way of sticking out slightly, and getting bent or torn.

Furthermore, those architects who collect the sheets, and there are a great many, are often human enough to delay the act of filing for several days after receiving their copies, in which time the sheets again have a good chance to commit literary hara-kiri.

For all these reasons, it has been decided to make an obvious improvement.

By binding in the Information Sheets in the Journal so that they cannot fall out, their powers of self-destruction will be curtailed. And to insure that they can be as readily filed as before, the pages are now being perforated.

INFORMATION SHEETS

48 | Lead Flashings

482 Approximate Estimating-VII

483 Flue Linings



Sheets issued since Index:

- 401: Plumbing to Baths
- 402: Waterproofing
- 403 : Asbestos-aluminium Foil--I
- 404: Roofing
- 405 : Joinery
- 406: Asbestos-aluminium Foil—II
- 407: Roofing
- 408 : Joinery
- 409: Rubber-faced Building Slabs
- 410 : Places of Public Entertainment-II
- 411 : Electric Switchgear
- 412: Lead Soakers to Valleys
- 413: Plumbing in Welded Copper Pipe
- 414: Electric Switchgear
- 415: Electric Switchgear
- 416: Insulating Board
- 417: Work on Glass
- 418: Plumbing in Welded Copper Pipe
- 419 : Places of Public Entertainment—III
- 420: Tentest Metal Cover Strip
- 421: Wood Preservatives
- 422: Welding Sheet Copper Work
- 423: Garages and Drives-II
- 424: Roof Glazing
- 425 : Places of Public Entertainment-IV
- 426: Asbestos-cement Roofing Tiles
- 427: Asbestos-cement Roofing Tiles
- 428: Welding Sheet Copper Work
- 429: Flat Roofing
- 430: Asbestos-cement Roofing Tiles
- 431: Automatic Boilers
- 432: Plumbing
- 433 : Places of Public Entertainment—V
- 434 : Plumbing
- 435 : Lifts-I
- 436: Lead Soakers to Hips
- 437: Coloured Cement Renderings
- 438: Wallboards
- 439: Wall Finishes
- 440 : Roofing
- 441: Sash Operating Gear
- 442: Roofing
- 443: Wallboards
- 444: Rainwater Goods and Fittings-1
- 445 : Roofing
- 446: Rainwater Goods and Fittings-II
- 447 : Bathroom Cabinets
- 448 : Roof Glazing
- 449 : Places of Public Entertainment-VI
- 450: Telephone Cabinets
- 451: Hardboard
- 452 : Escalators
- 453 : Automatic Boilers

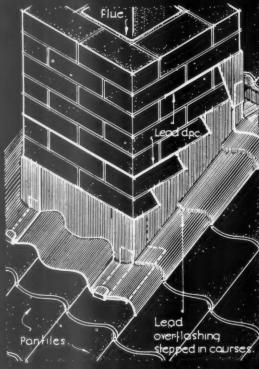
- 454 : Places of Public Entertainment-VII
- 455 : Places of Public Entertainment-VIII
- 456 : Ellipses
- 457 : Roofing
- 458 : Sanitary Equipment
- 459: Hoods and Canopies
- 460: Expansion Joints
- 461: Roof Pitches, etc.
- 462 : Gas Refrigerators-I
- 463: Asbestos Cement Rubber Floor Tiles
- 464 : Approximate Estimating-I
- 465 : Gas Refrigerators-II
- 466 : Approximate Estimating-II
- 467: Gas Refrigerators-III
- 468 : Approximate Estimating-II
- 469 : Gas Refrigerators—IV
- 470: Stopstara Glazing Compound
- 471 : Gas Cookers
- 472: Lead Insulation against X-Rays
- 473 : Electrical Equipment-I
- 474 : Asbestos-Cement Ventilating Ducts
- 475 : Asbestos-Cement Glazed Panels
- 476: Approximate Estimating-IV
- 477: Monel Metal Sink Units
- 478: Approximate Estimating-V
- 479 : Roofing
- 480 : Approximate Estimating-VI



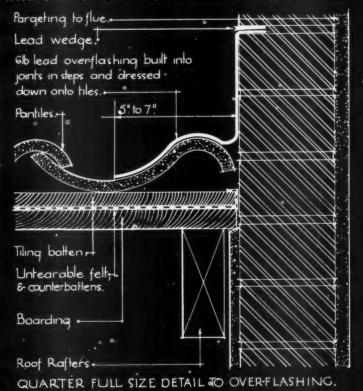


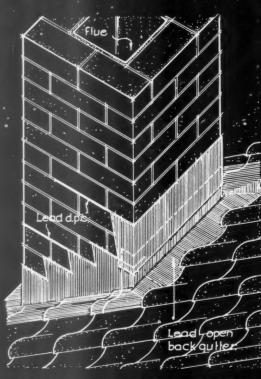
THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

LEAD OVER-FLASHING TO CHIMNEY WHEN PAN-OR INTERLOCKING TILES ARE LISED

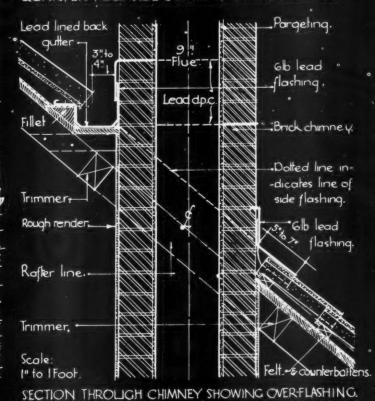


SKETCH SHOWING OVER FLASHING.





SKETCH SHOWING BACK GUTTER.



Information from Lead Industries Development Council.

INFORMATION SHEET: LEAD OVER-FLASHING TO CHIMNEY AT ROOF LINE: Nº 32. SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WGI. BJAN. A. B. MANTAGUE PLACE BEDFORD SQUARE LONDON WGI. BJAN. A. B. MANTAGUE PLACE BEDFORD SQUARE LONDON WGI.

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INFORMATION SHEET

· 481 ·

LEAD FLASHINGS

Subject: Lead flashing to chimneys when Pantiles or Interlocking tiles are used.

This Sheet is devoted to the flashing and waterproofing of chimneys, when pantiles are used as the roof covering. The flashing in this case is dressed over the tiles and is wholly visible except at laps and at back.

Flashing at sides:

As shown on the detail, the lead flashing at each side of the chimney is in one piece, wedged securely into the brick joints and stepped to follow the rake of the roof. The free edge is then neatly dressed down over the tiles from 5 ins. to 7 ins., depending on what part of the tile is to be covered.

Flashing at back:

The lead flashing to the back of the chimney is in two pieces. One piece is fixed by copper nails to a tilting fillet under the tiles, dressed down on to boarding supported on brackets and turned up the back wall of the chimney. The second piece is fixed into a brick joint with lead wedges and turned down over the first piece to form the over-flashing.

Flashing at front:

The lead apron is dressed on to the tiles and up against the front of the chimney, being kept in position by means of lead tacks which may either be secured by nailing to a batten or fixed into a brick joint by means of a wedge. The over-flashing is secured to a joint by means of lead wedges and turned down over the apron.

Dampcourse :

A 6-lb. lead dampcourse in two separate pieces is shown on the drawings, and these pieces should overlap on plan as indicated, and be cut around the flue as required.

Weight of Lead:

6 lb. lead is recommended for use as flashings of the types described, but 4 lb. lead has been used with satisfactory results.

Lapping:

In no case should the lap of two pieces of lead flashing be less than 4 ins. The length of one piece of flashing should not exceed 7 ft. Lead should be turned into joints at least $1\frac{1}{4}$ ins.

Protection of Lead:

It is generally recommended that lead be protected by a bituminous coating where it comes in contact with mortar.

Previous Sheets:

Previous Sheets dealing with chimney flashings are Nos. 283, 288, 324 and 349.

Issued by: The Lead Industries Development

Address: Rex House, 38 King William

Street, E.C.4

Telephone: Mansion House 2855 (3 lines



624. THE ARCHITECTS JOURNAL LIBRARY OF PLANNED INFORMATION

BASEMENT WALLS, INTERNAL WALLS, AND PARTITIONS.

PRICES ARE THOSE CURRENT DURING JANUARY, 1937.

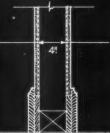
outer skin

APPROXIMATE ESTIMATING:

The following are approximate prices per yard superficial for basement walls, internal walls and partitions with finishes complete. Prices are for a medium sized job in the London area and include for overhead charges and profit. Measurements should be taken along the centre lines of walls and partitions.

BASEMENT WALLS	INTERNAL WALLS.	P P	+
TYPE A: 36/4. PER YARD SUPER.	TYPE B: 44:13/5. PERYARD SUPER 9:19/3.	TYPE C: 10/10½. PERYARD SUPER.	TYPE D: 12/9½. PER YARD SUPER
\$ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	44:69.	- 2º	2.
SE BASEMENT WALL IN STOCK SRICKS IN CEMENT INCLUD-	INTERNAL WALL IN FLETTON BRICKS IN	2" BREEZE PARTIT-	2" PUMICE PARTIT-
NG EXCAVATION, WATER- ROOFED RENDERING XTERNALLY, LIME PLASTER, CLEARCOLLE, & TWO COATS DISTEMPER AND 6"x 1" DEAL SKIRTING PAINTED.	CEMENT, BOTH SIDES WITH LIME PLASTER CLEARCOLLE AND TWO COATS DISTEMPER, AND 6" x 1" DEAL SKIRTING PAINTED.	BOTH SIDES WITH LIME PLASTER, CLEARCOLLE AND TWO COATS DISTEMPER, AND 6' x 1" DEAL SKIRTING PAINTED	BOTH SIDES WITH LIME PLASTER, CLEARCOLLE AND TWO COATS DISTEMPER AND 6" × 1" DEAL SKIRTING PAINTED.
TO TYPE A, ADD FOR: per yard super.	TO TYPE B, ADD FOR: per yord super.	TO TYPE C, ADD FOR: per yard super.	TO TYPE D, ADD FOR: per yard super.
ach 4½" additional hickness 9/4. ertical asphalte	Each 4½" additional thickness 5/10.	3" breeze	3' pumice partition 10d.
anking	Hardwall plaster & paint, each side 1/7.	Hardwall plaster & paint, each side. 1/7	Hardwall plaster & paint, each side. 1/7.
above ground 9/10. lardwall plaster painting three	radius, each side. 9d.	Coved cornice to 4." radius, each side4d.	Coved cornice to 4. radius, each side. 9d.
coats internally 1/7.	skirting polished,	6"x1" Austrian oak	6" x 1." Austrian ∞ak
1" radius 9d. 5"x!" Austrian oak kirting polished 11d.	6" x 1" Teak skirting polished, each side. 10%d.	skirting polished, each sidelld.	skirting polished, each side lld.
5"x1" Teak do 10½d. 5" quarry tile kirting 4d.	6" quarry tile skirting, each side 4d.	6"x1". Teak skirting	6".x1". Teak skirting
OMIT FOR:	OMIT FOR :	polished, each side. 10%d.	polished, each side. 10%d.
airface & distemper	Fairface & distem-	6" quarry tile skirting, each side 5d.	G" quarry tile skirting, each side. 5d.
Grano, coved skirting 2d	per, each side. 1/8.	OMIT FOR:	OMIT FOR:
Deduction of	Grano. coved	Grano. coved	Grano, coved
acings to	sturting each eide 2d	skirting each side Id	skirting each side Id

TYPE E:
15/1/2. PERYARD SUPER



4" STUD PARTIT-ION, BOTH SIDES
WITH LIME PLASTER
CLEARCOLLE AND
TWO COATS DIS-TEMPER, AND
6" x 1" DEAL
SKIRTING PAINTED.



TO TYPE E , ADD FOR

Hardwall plaster & paint, each side... 1/7.

Coved cornice to 4!

radius, each side... 9d.

G"x!! Austrian oak
skirting polished,

6° x 1° Teak skirting polished, each side 10%d

each side. . Ild.

6" quarry tile skirting, each side. . 5d.

OMIT FOR:

Grano. coved

Skirting, each side. . Id.

Skirting, each side. . Id.

Figures by Davis and Belfield, PRASI, Charlered Quantity Surveyors.

skirting, each side. 2d.

INFORMATION SHEET: UNIT SYSTEM FOR APPROXIMATE ESTIMATING: 7. SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI. OKA. 2. Bay.

skirting, each side... Id.

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INFORMATION SHEET • 482 •

APPROXIMATE ESTIMATING—VII

Subject :

Unit System for Approximate Estimating

This sheet deals with typical examples of basement walls, internal walls and partitions. Basement walls should be measured from basement floor level up to the horizontal damp-proof course, above ground level; the actual height of internal walls and partitions should be measured. All measurements should be taken on the centre line and deductions should be made for door and window openings.

Skirtings have been included in with the price per yard super of walling and variations in type must be dealt with on a yard super basis, as described for sheet No. 6 of this

Examples of the methods of using this sheet are given below:—

 Approximate estimate for basement walls of house 40' 0" × 25' 0" on plan, externally, with basement one end, 15' 0" long internally and the full width, having 18" walls on all sides, with asphalte tanking. (Height from basement floor level to horizontal damp-proof course, above ground, 9' 0").

Whole area using $13\frac{1}{2}$ " stock brickwork (36/4 + 9/4) with vertical asphalte tanking (+9/4), $4\frac{1}{2}$ " outer skin, faced above ground, (+9/10) fairface and distemper internally (-1/11) and granolithic coved skirting (-2d.)

80 yards super @ 62/9 ... 251 0 0 Less Deduction for facings to

internal wall.
24 yards super @ 5½d ... 0 11 0

Total ... 250 9 0

£ s. d.

Approximate estimate for one 4½" brick cross wall 9'0" high in basement.

£ s. d.

Whole area using $4\frac{1}{2}$ " fletton wall (13/5) with fairface and distemper both sides (-3/4) and granolithic coved skirting (-4d).

15 yards super @ 9/9 ... 7 6 3

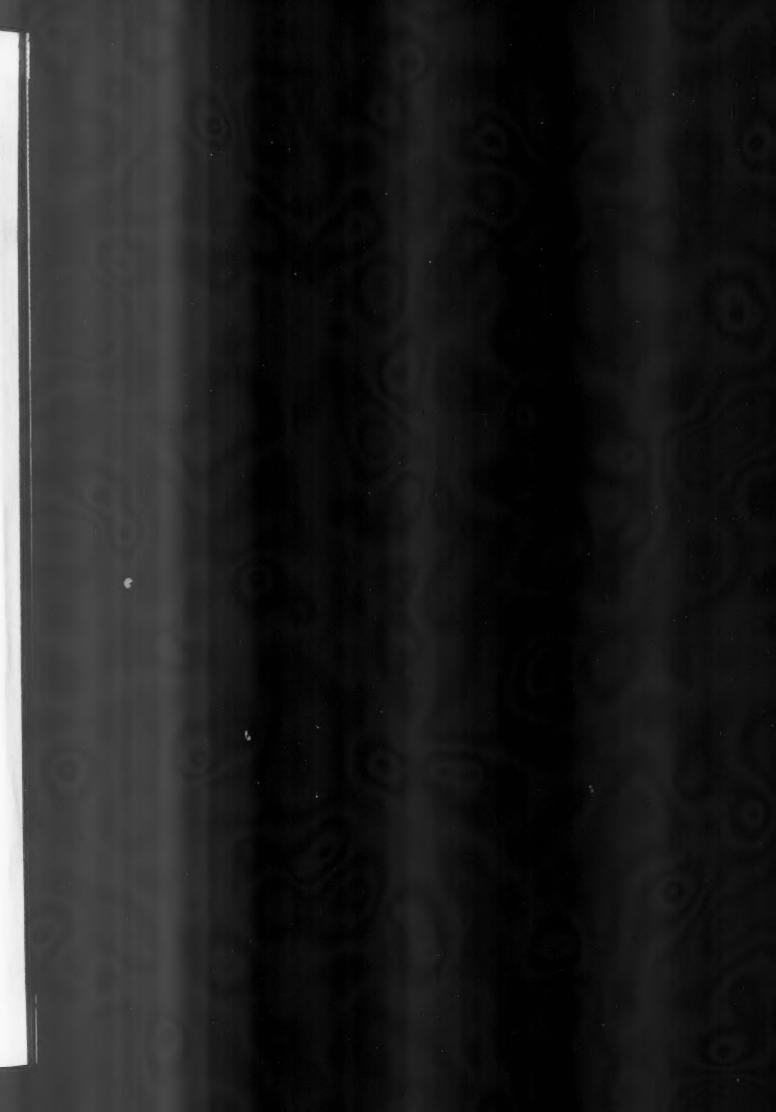
NOTE—Deductions from the areas given should be made for door and window openings.

This series of sheets, taken as a whole, forms a complete system for the preparation of detailed estimates. Alternatively, less detailed estimates can rapidly be made, merely by multiplying the areas or quantities of the different component parts of the building by the appropriate unit prices, varied by judgment alone.

For all normal estimates, and whenever time permits, account should be taken of the difference in cost of the various types of finish, etc., shown with each typical form of construction. These have been kept to a minimum for the sake of simplicity, but other materials, if the prices are known, may easily be compared. The estimate is only intended to show definitely that a certain building with a certain class of finish can be built for a certain sum of money, but it also shows approximately the way in which the cost is apportioned, e.g., the amount allowed for an increase in the thickness of a partition wall. Such items as doors, windows, stairs, etc., which cannot be priced per yard super, will be dealt with in later sheets.

The system is not intended to replace the complicated pricing data necessary for a very close estimate, but it should, in all cases, prove more accurate than cubing, and it should be found particularly useful in alteration work, or work where the price per foot cube is not well established. An additional advantage is that firm estimates obtained for lifts, plumbing or other services, fittings, etc., can be used in conjunction with this system much more readily than with the cubing method.

Sheets Nos. 1 to 6 dealt with ground floors, upper floors, roofs, parapets and eaves, foundations, and external walls, respectively, and future sheets will show the cost analysis of doors, windows, etc.



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PHYSICAL PROPERTIES OF FOSALSIL BRICKS:

CRUSHING STRENGTH : EXPANSION :

The crushing strength of all shapes of fosals if flue bricks is 985 lbs. persquinch (Building Research Board Test).

The coefficient of expansion of a Fosalsil brick from 0°to 500° F is 0.0000014.

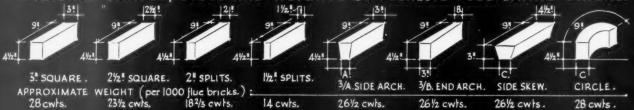
HEAT RESISTANCE:

The resistance to the passage of heat by Fosalsil bricks is approximately ten times that of firebrick. Bricks may be used in temperatures up to 1860°. F. in furnaces, boilers, kilns, stovesetc.

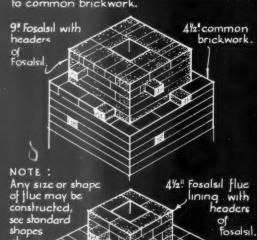
STACK DRAUGHT :

A 14" x 14" stack 60ft high lined with Fosalsil hasa draught equal to a cavity constructed stack 72 ft. high, with a floor area of approximately one half.

STANDARD SHAPES, SIZES AND WEIGHTS OF FOSALSIL FLUE LINING BRICKS:

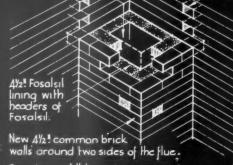


ISOMETRIC DETAILS Showing stand-ard methods of bonding Fosalsil Flue Linings to common brickwork.





shopes above.



Bonding: All bonding must be done by means of headers of Fosalsil.

DIAGRAMS OF VARIOUS FLUE CONSTRUCTIONS, giving the comparative weights for different flue dimensions .

DIAGRAMMATIC PLANS OF FLUE WALLCONSTRUCTION	INTERNAL DIMENSIONS OF FLUE: 91.49. 91.14. 91.18. 14.14. 14.18. 18.18. 18.14. WEIGHT OF FLUE IN POUNDS/FOOT RUN
Shock brick 94 Air space. 2: Fire brick lining 4/2:	NOTE * Any of the constructions shown in which fosolsil is used has greater resistance to the passage of heat than this cavity method. 1135. 1248. 1339. 1361. 1442. 1544
Stock brick bonded 1 4/2! to Fosalsil lining.	394. 456. 497. 516. 558. 600
Fosalsil alone. 99	189. 218. 236. 247. 265. 283.
Stock brick bonded 1 9! 4½ to Fosalsil lining. 1	NOTE: It is recommended that Fosalsil Nº 6 Powder be used for the mortar for Fosalsil Bricks, see back hereof. 882. 983. 1041. 1085. 1143. 1200
Stock brick bonded } 4½! 9! to Fosalsil lining.	669. 733. 784. 797. 848. 899.
Fosalsil alone. 13/12	357. 396. 428. 435. 466. 498.

Information from Moler Products Ltd.

INFORMATION SHEET: BONDED FLUE LINING BRICKS.Nº1

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INFORMATION SHEET 483 •

FLUE LININGS

Product :

Fosalsil Flue Lining Bricks

General:

The Fosalsil brick possesses high heat resisting qualities and considerable crushing strength, it may, therefore, be used as the insulating lining of a flue and also to form part of the structure of the stack.

Cavity construction in flues:

In the past it has been common practice to build the inner lining of a flue entirely separate from the structure of the stack, thus providing a cavity or air-space between the two.

This method of construction is not recommended by the Company as it can now be shown that the introduction of a cavity is only necessary if a flue lining of high expansion coefficient or of low crushing strength is used. The cavity, if sealed at the top and bottom to form a dead air space, has some insulating value, but if, on the other hand, the cavity is ventilated to produce air movement around the flue lining, the result is that an excessive amount of heat is drawn offthrough the flue lining, thus increasing the temperature drop in the height of the flue and correspondingly reducing the strength of the draught.

Fosalsil construction:

The construction recommended is to eliminate the independent lining and the air space, and to replace the first $4\frac{1}{2}$ ins. or 9 ins. Telephone:

of common brickwork with Fosalsil flue bricks. This gives a saving in the floor space required for the flue of as much as 13 ins. in each direction, thus minimizing the quantity of materials used. Owing to the lightness of Fosalsil bricks, this also gives a large reduction in the weight of the flue and consequently a considerable saving in the foundations.

Non-conduction of heat:

Owing to the exceptionally low thermal conductivity of Fosalsil bricks, the temperature on the outside of the flue will not be more than a few degrees above atmospheric.

Bonded flue linings:

With Fosalsil bricks it is possible to bond the lining with the structural brickwork with consequent saving in material and labour. The low coefficient of expansion of the material ensures freedom from expansion troubles, and its strength renders it suitable for use as part of the structural brickwork.

Jointing Mortar:

Mortar of similar insulating value and characteristics to the insulating bricks should always be used to achieve a homogeneous insulating structure. The similarity of material and bond reduces to a minimum the possibility of cracking, shrinkage or disintegration, and the mortar recommended is made from Fosalsil No. 6F Powder, mixed with Portland cement (it must be emphasized that no sand is to be added to the mix).

Flue construction:

For further details of flue construction, raking flues, etc., see future Sheets of this series.

Manufacturers:

Moler Products, Ltd.

Address :

103 Kingsway, London, W.C.2

Holborn 2961/2

SHOPS

The Architects' Journal Library of Planning

Electric Lighting-I

[By Bryan Westwood and Norman Westwood]

IGHTING is no longer merely a substitute for daylight but has to be considered as a decorative medium as well, and in a recent American example has been used as the sole source of heat; though difficulties can be foreseen when cold and darkness do not coincide. Since the time of the carbon filament lamp, efficiency has been increased by six times and the careful design of reflectors reduces the wastage of light and increases the actual light on the goods by a further three times. This is bettered again by using special prismatic plates, described later, below the lamps so that about thirty times as much light can be thrown on the goods displayed whilst using the same amount of current as was obtainable from the naked carbon lamp; and current is far cheaper per unit. Efficiency decreases rapidly as fittings get dirty, but even assuming a considerable deterioration in this respect, when one takes into account the general raising of standards of lighting, bright light is a cheap salesman.

Though daylight is fighting a losing battle, customers are certainly not reconciled to choosing colours under any form of artificial light whether scientifically correct or not. Evening gown shops are one of the very few examples where daylight can be ignored entirely.

The subject of lighting is too wide to be dealt with in great detail in a series of articles such as this, so we shall confine our attention to aspects which particularly concern the smaller retail shop. While the architect is not concerned with the *intricacies* of switches and fuses he will find it useful to know the functions of the main components of the switchboard and how much room they usually occupy. In the following notes we have endeavoured to give necessary information of this kind.

For instance, we give the intensity of light generally thought necessary in shop interiors. Provided the architect knows the intensity he requires, the electrical engineer can soon furnish him with the figures of lamp sizes and spacing to achieve this object. However, tables giving the spacing and size of lamps to achieve a given intensity of lighting are not necessarily complete in themselves, because they do not take into consideration evenness of light. Spacing in this case depends on the height of the lamp above the plane to be lighted. For normal reflectors, distance between lights should not exceed $1\frac{1}{2}$ × the height mentioned above.

In shop windows, lighting is so far above the minimum that this factor does not arise, but it may well do so in the general interior lighting or where so-called "Architectural lighting" is

Shop in Conduit Street, W. By Gerald Lacoste. An example of background illumination with lettering in relief.



used, and panels of glass are to be evenly lit from behind.

Exterior Lighting

Floodlighting .- To be effective, floodlighting needs to be done on a generous scale. In the small shop it tends to detract from the windows themselves without any conspicuous compensating advantage, but the moderate intensity of white or coloured light obtainable from a series of concealed neon tubes provides a quiet form of floodlighting which has possibilities. Colour control is simple and such a system could well be applied to window lighting. The current consumption is low and quite a variety of colour is obtainable from the three or four tubes necessary to give an approximation to white light.

Neon Lighting

Where luminous discharge tubes of any kind are used, it is advisable to keep the tubing normally inaccessible to avoid risk of breakage, but there is no danger in touching the tube, provided the installation is properly carried out. In spite of the fact that high tension current is used, as far as we can ascertain there are no definite regulations as to minimum height. and there is an electricity showroom in London where tubing is only 4 or 5 ft. from the ground. As a protection in case of fire all "Neon" lighting on the exterior must be controlled by a fireman's switch" painted red, and placed in a conspicuous position on the outside of the building 10 ft. above the pavement.



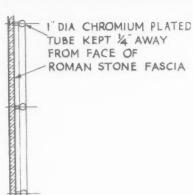
Q-OPAL RED NEON METAL PAINTED WHITE opal to show up - TEAK BASE

Lettering made large enough to house electrodes; the script type of lettering lends itself to this form of illumination. The neon tube is when not illuminated.

Transformers

The size of transformers for installations normally in use on the small shop is $8'' \times 4\frac{1}{2}'' \times 10^{-1}$ to conform to the regularity such a transformer is sufficient for 15 ft. of of Electrical Engineers.



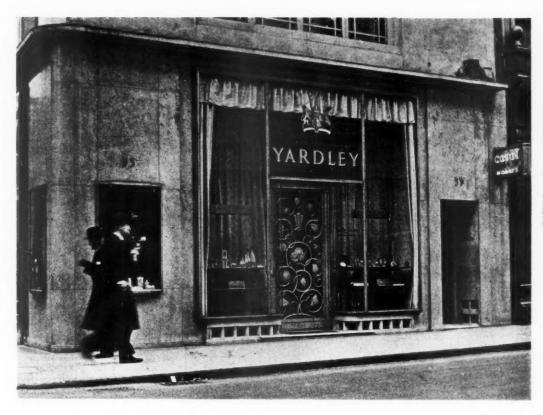


tubing. In the case of projecting box signs the transformer is often placed inside the sign itself. Access must be arranged for both transformer and wiring. For other neon lighting it is generally placed on the cornice and forms an untidy blot on the façade. If lighting of this kind is to be used it must be considered as part of the design and include proper provision for component parts. In addition to the transformer, there is the power factor correcting condenser which is housed in a box about $15'' \times 4'' \times 7''$. This is usually placed inside the building near the switch gear. If the current is D.C. provision must also be made for a rotary converter about $12'' \times 8'' \times 7\frac{1}{2}''$. It is most desirable that this should be inside the building, and preferably placed where the sound will not be noticed. The whole installation is usually controlled by a

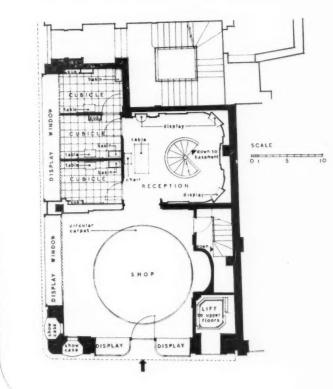
The electrodes, or contacts at the ends of each section of tubing, must also be considered if the sign is to be neatly finished. They are $\frac{2}{4}$ " diameter, and should be $4\frac{1}{2}$ " long if full life is to be assured from the tube. The holes in the background through which these electrodes pass should not be less than 1" in diameter, so that an air space is left. Where glass is used it is advisable that it should be "Armour Plate," as otherwise cracking is likely to occur, owing to the number of holes required. Any background must be non-inflammable in order to conform to the regulations of the Institute

71 **SHOPS**

BEAUTY SHOP IN BOND STREET • By Wimperis, Simpson and Guthrie



The front is faced with Roman beige stone, the show windows being glazed in plate glass, with gilded metal surrounds. The entrance door is in bronze, and there are ventilating grilles under the main show windows. Internally, the main showroom has a large circular carpet with marble surround, and the reception room is close carpeted. The cubicles are separated from each other by sound-proof partitions, and from the display window by heavy curtains. They have a floor finish of 12-in. by 12-in. rubber tiles. The walls throughout are finished in plaster.



OLD BOND STREET



Restaurant by Raymond McGrath showing illumination of fascia and front by Moore tubes. The rough glass breaks up the light, giving an unusual molten effect; the lighting playing a very important part in the design.

If possible a space of several inches should be left behind the fascia for housing the electrodes and for wiring. In large letters it is simple to conceal the electrode, but in small curved ones, such as "C," "O" or "S," this element, being straight, cannot be placed under and parallel to the tube, and concealed in the stroke, as is usual with straight letters.

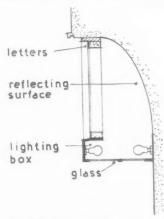
The range of colours now obtainable is considerable, and it should be stressed that the most brilliant ones are not necessarily the most legible. Some of the less intense and to our mind more pleasing colours, such as green or golden yellow, are less likely to cause the confused glare which arises when red lights are viewed at an oblique angle.

Another form of gas discharge tubes, known as Moore Tubes, are sometimes used (see illustration of Fischers Restaurant). These are filled with gas at low pressure. For a number of reasons, but particularly because the tubes have to be worked on the site, being impracticable in small lengths, these tubes are very expensive, but in special cases they are particularly effective.

It is difficult to persuade clients that haphazard tangles of neon are of doubtful value to trade, or that the outlining of architectural features designed to be lit by the clear sunlight of Greece is not the best way to emphasize a building. Fortunately, these things have been

overdone to such an extent that they no longer possess the same appeal to the shopkeeper.

In the notes and series of photographs and diagrams of lettering which have appeared in previous articles, attention has been drawn to the use of lighted backgrounds to show up the lettering in silhouette. Lighting used for this purpose can be arranged to throw light downwards on the façade as shown in diagram (a).



(a) Diagram showing method of silhouetting letters and illuminating façade from one lighting box.

L A

Pease v THI P House. seeking and M Bembri her ris of For Bembri Defen way th It ap to 190 Freeze low. it and ance. Conve Mr. W claime was se right : 1903 1 true t in 190 Mr. his ca grant questi Freeze as all right drawn costs. right (he wa define could should

INTER

Conve

opera

plain Cour again house deed deliv prop Defe inter inter dispu decla unde It wa there tions

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was

LAW REPORTS

RIGHT OF WAY AND COVENANT DISPUTE

Pease v. Preston .- Chancery Division .- Before Mr. Justice Bennett

THIS was an action by Mrs. C. F. D. R. Pease, who as tenant for life of Ledge House, Bembridge, Isle of Wight, was seeking an order against Mr. C. H. Preston and Mr. A. O. Preston, of Foreland Farm, Bembridge, to remove an obstruction from her right of way through the farmyard of Foreland Farm, to Lane End Road,

Defendants, whilst admitting the obstruction, denied that there was any right of

way through their farm.

It appeared that plaintiff's land and defendants' was in common ownership up to 1903, when a close known as Fuzzy Freeze was conveyed to Mr. P. L. Water-Mr. Waterlow erected a house upon it and plaintiff's case was that the conveyance, operating under section 6 (1) of the Conveyancing Act, 1881, conveyed to Mr. Waterlow the right of way which was claimed in this action. No express grant was set up, but plaintiff's case was that the right of way was continuously used from 1903 until its obstruction in 1935. It was true that another right of way was given in 1903.

Mr. Spens, K.C., for the defendants, said his case was that there was never any grant or demise of the right of way in question, and that the owners of Fuzzy Freeze had not the right to give an easement as alleged. The plaintiff had used the right of way by licence, which was with-

drawn in 1934. His lordship dismissed the action with He said the plans show no such right of way as alleged, and on the evidence he was satisfied that in 1903 there was no defined or apparent track. So far as he could see, there was no reason why one should have been made. The section of the Conveyancing Act relied upon did not operate.

INTEREST IN A MORTGAGE EXTINGUISHED

Lewis v. Plunket .- Chancery Division .- Before Mr. Justice Farwell

THIS action concerned a house known as Salwick, Seabrook Road, Hythe, and the plaintiff, Mrs. M. Lewis, of Cumberland Court, London, W., asked for a declaration against the Baroness Plunket, of Wilton Crescent, London, that her interest in the house was extinguished under the mortgage deed of 1921, and plaintiff asked for the delivery up of the title deeds relating to the property.

The house was purchased for £2,000 and was mortgaged to the plaintiff for £1,600. Defendant had made one payment and interest in 1921, and her case was that her interest in the house under the mortgage

was not extinguished.

His lordship said it had not been seriously disputed that the plaintiff was entitled to a declaration that the defendant's interest under the mortgage had been extinguished. It was plain in the authorities that even had been an acknowledgment after the period prescribed in the Statute of Limitations, that would not operate to restore the mortgage or any interest in it. Here there was no acknowledgment and plaintiff had a title which was good as against the defendant and against the world, and his lordship granted her the declaration she sought.

The real issue in the case was as to the delivery up of the title deeds, and his lordship was of opinion that the plaintiff, in law and equity, was entitled to the title deeds. Here the defendant had long ceased to have any interest in the property at all, and there was no reason why she should retain the title deeds. They must be retain the title deeds. returned to the legal owner. He made an order on the defendant to hand over the title deeds to the plaintiff, and defendant must pay the costs of the action.

FAIR WEAR AND TEAR

 $[BY \ T. \ J. \ SOPHIAN]$

N what circumstances can a dilapidation be said to amount to "fair wear and tear?" The hitherto accepted notions on this matter have received a rude shock as the result of a Court of Appeal decision given in the case of Taylor v. Webb (February 5,

Wear and tear arises either from human agency or else from the operations of the elements, and the object of 'fair" or "reasonable" wear-andtear clause is to protect the covenantor, whether he be the landlord or the tenant, from liability in respect of dilapidations caused by normal human user or the operation of the elements.

But it is obvious that if some detailed and determinate meaning is not given to such a clause, there will be wide scope for differences of opinion as to whether particular dilapidations come

within its protection.

While such words as "fair" and "reasonable" can be used, no doubt to qualify human user, they cannot be used to qualify the forces of nature. It would be impossible, for example, to speak of "unfair rain" or "unreasonable frost.'

Any dilapidation, therefore, which was caused by natural forces, such as air, rain, frost and the like, must be regarded as being within the conception of a fair-wear-and-tear clause, and it would be immaterial that in such a case the action of the elements had been of an abnormal nature, as for example in the case of damage caused by abnormal drought or abnormal frost.

But, in order to come within the conception, is it essential to show that the extent of the dilapidations, whether caused by normal human user or by natural forces, is reasonable in amount? In the earlier case of Haskell v. Marlow (1928, 2 K.B. 45), the Court considered it necessary in order to take advantage of the conception that the dilapidations should be reasonable in amount having regard to the terms of the repairing obligation and the other circumstances of the case. The standard of wear and tear, just as the standard of repair, would, of course, in any case vary according to the locality of the premises. What would amount to fair wear and tear, for example, in Grosvenor Square, would not

necessarily amount to the same in Stepney (per Sankey, J., as he then was, in Citron v. Cohen, 36 T.L.R. 560).

According to the judgment of Talbot, I., in Haskell v. Marlow, reasonable wear and tear meant the reasonable use of the house by the tenant and the ordinary operation of natural forces. The conception of want of repair due to wear and tear accordingly had to be construed as limited to what was directly due to wear and tear, reasonable conduct on the part of the tenant being assumed. It did not mean that if there was a defect originally proceeding from reasonable wear and tear the tenant was released from his obligation to keep in good repair and condition everything which it might be possible to trace ultimately to this defect. He was bound to do such repairs as might be required to prevent the consequences flowing originally from wear and tear from producing others which wear and tear would not directly produce. Such has been the accepted principle of law for some time past, but it is otherwise now as the result of Taylor v. Webb. The extent of the dilapidations, according to this decision, is entirely immaterial, nor is there any duty on a covenantor protected by a wear-andtear clause from taking steps to prevent any increase in the area of the dilapidations, which otherwise must inevitably result from the original dilapidation due to wear and tear. He is equally protected by the clause from liability in respect of the supervening dilapidations. An illustration or two might help to make the above principles clearer.

Taking dilapidations caused by human user. The treads of a stone staircase are gradually rubbed away as the result of pedestrian traffic thereon. If the traffic is normal, having regard to the circumstances, the dilapidation would be due

to fair wear and tear.

Turning now to dilapidations caused

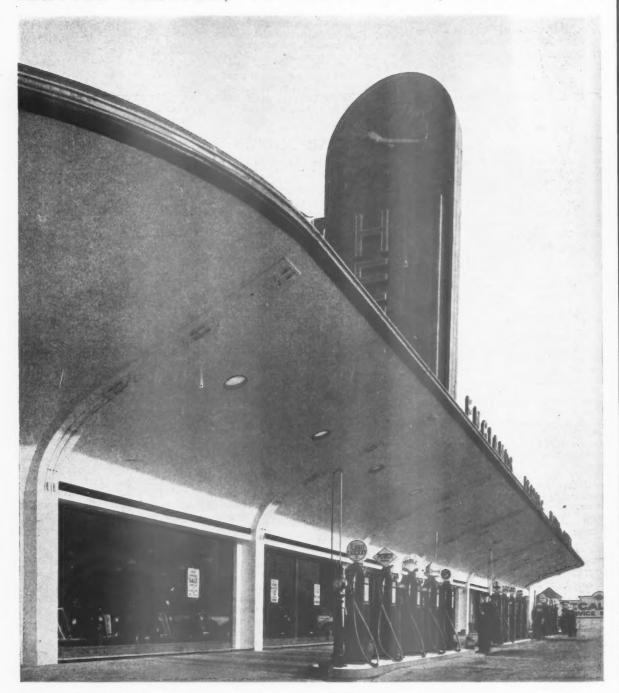
by the action of the elements.

A tile gradually becomes loose as the result of the friction of the air and other natural causes and falls off. This clearly is fair wear and tear. But supposing now that the tile is not replaced, water eventually gets through, with the result that, if no action at all is taken, the roof and the walls will decay, and the top floor and later the lower floors and the whole house, perhaps, will become uninhabitable.

Yet according to Taylor v. Webb, all these supervening dilapidations will be regarded as being protected by the fair-wear-and-tear clause since they are the natural consequences of the original dilapidation, the falling off of the tile, which was due to fair wear and tear.

Haskell v. Marlow, on the other hand, would have made the covenantor liable for these supervening dilapidations under his general covenant to repair, notwithstanding the fair-wear-and-tear clause, but Haskell v. Marlow can no longer be accepted as good law on this important point.

SERVICE STATION, GT. WEST ROAD, BRENTFORD:

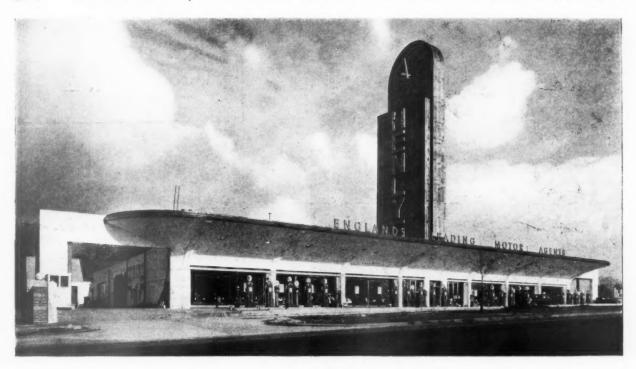


GENERAL PROBLEM—Petrol station comprising 22 petrol pumps etc., with double track for cars on either side of the island. The station is protected by a large over-hanging canopy which allows the showroom windows to be inspected with protection from the weather. The front portion of the building forms a showroom for the display of new and second-hand cars, and on the east side are the washing department and greasing and valeting services. The rear of the building contains the repairs and servicing and spare parts departments, and the boiler house and power house. The administrative department is housed near the front, together with the lavatories, which are elevated so that the whole of the showroom has an uninterrupted floor space.

construction—The advertising tower, constructed in steel, rises to a height of 130 ft. The sides of the tower are not at right angles to the road, and this angle has been reduced so as to make the word "Henly" on each side more easily readable from the main thoroughfare. The tower is covered in copper sheeting, lacquered so as to prevent copper corrosion, and to preserve as much as possible its natural brilliancy. It is surmounted by a neon clock, decorated with coloured chapters, the hands being white; the clock is illuminated by neon lighting at night. The fascia of the canopy is also in lacquered copper, the girth being moulded to receive a double strip of neon lighting.

The photograph shows a view from the west end of the petrol station.

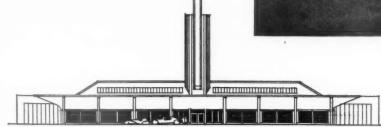
BY WALLIS, GILBERT AND PARTNERS



SERVICES—The building is heated by unit heaters, the steam being generated by two boilers of the single return tube type. Electrical power is derived from two steam engines of 80-h.p. each. In the washing department the floor has a grid construction so that, in combination with high pressure hoses, the floor remains dry and the sludge from the washing is carried to a collecting pit before passing to the drains.

The photographs show: above, a general view; right, showroom windows, taken from beneath the canopy.





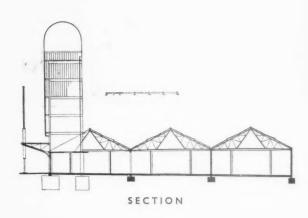
MAIN ELEVATION

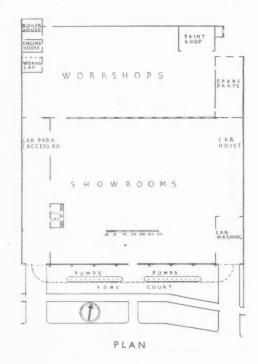
SERVICE STATION, BRENTFORD



The photographs are: above, head of a petrol pump. The indicator panel shows the price per gallon of the petrol, the number of gallons pumped into the car, and the total cost of the sale; right, inside the showroom.

For list of general and sub-contractors, see page 449.





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DESIGNED BY WALLIS
GILBERT AND PARTNERS





Perspective of a house in New Canaan. By F. F. Peters. From "Houses of Stone."

LITERATURE

BUILD YOUR STONE HOUSE

[BY JOHN MACKAY]

Houses of Stone. By Frazier Forman Peters. New York and London: G. P. Putnam. Price 15s.

AN American book with a misleading title, for the author is primarily concerned only with the method of building "in the Flagg manner," that is to say building a house, which is, to all intents and purposes, a concrete house, but which is faced with ordinary field stone, the stones being laid and set in concrete to make the necessary thickness of wall and structural stability.

This book is written in a disarming manner to such a degree that one wonders for whom it is intended, architect, builder, or client. The architect will be interested in the method, for the photographs show some very attractive buildings, but the numerous plans, if he is able to understand all of them, will only show him the vast difference between the requirements of middle class clients in England and America. The builder will be interested in the method also with a view to being able to run up a row of these houses in a few weeks as a speculation. An English client, if he were to read this book, would either prove more troublesome to his architect than he would normally be, or else he would set to and build the house himself indeed, full working directions are given so that a child could practically do the whole thing alone.

Mr. Peters is undoubtedly writing for a public which he knows exists in his country; that same public exists over here, but their requirements, their whole method of living are so different, our land, its cost and situation are so different that I cannot see that there can be the same enthusiasm in this country as Mr. Peters describes exists in America.

The book is illustrated with photo-

graphs, plans, elevations, perspectives and diagrams, and is written in such a novel and lucid style that it provides a most amusing relaxation from our stolid English Drawing Board Building.

CHESTER JONES [BY PETER SMITH]

The Writings and Diary of Chester Jones. By L. Haden Guest. London: Kegan Paul Trench Trubner & Co. The Psyche Monographs, No. 8. Price 7s. 6d.

IT is sad to read this story of a young man who put so much into life and then-died. Anyone who knew Chester Jones in his Cambridge days and later when he held the Commonwealth Studentship in America marvelled at his capacity for prolific work, and he was often held up as a model. His fellow students of architecture shied at such industry in the midst of their deliberations over the whys and wherefores of art. It was once said that Chester Jones, if debarred from all else on a wet afternoon, would get down to it and measure up his landlady's coal scuttle in his lodgings.

The author of this book tells that his subject persistently hid the secret of his real life and showed only his relentless hard work. Could it be that the energy of this life derived something of its stimulus from the seed of that disease which swept it away?

Chester Jones had a passionate awareness of the place of emotion in creative art. One remembers his enthusiasm in a speech, Ruskinian in its ardour as well as in quotation, on the then question of registration.

This book gives a part of his diary from his post-graduate days containing many astute remarks on architectural conditions and results here and in America. It includes a lecture delivered in 1931 on "Efficiency in Architecture" which shows acute understanding of the problems of planning in London. It

was written six years ago with a full grasp of our familiars Charing Cross and Regent Street. His diaries have a clear ruthlessness and he has a great deal to say on the inadequacy of the architect. He is much occupied with the problems of antique and modern suitability and he says that "Architecture must be experienced, experienced with an understanding of the materials of which it is built and of the social causes and mental processes which engender it."

This was the basis of his multifarious activity in research at Glastonbury Abbey, on Byzantine Architecture, on the minor arts of the Middle Ages, on the Parish Churches of England, and the rest. The thoroughness of his investigations earned him his F.S.A. while still at Cambridge as an undergraduate. I think one can believe that his work was not that of an antiquary, but that of an eager practical person who wished to "look around everything." Death came before he could assemble his discoveries in the light of quiet and wisdom, and we do not know what he might have done in contact with the problems of creation and practice. He admired many buildings in the modern style of efficiency.

His only surviving works are his lectures and diaries to be read with interest in this book. One wishes that the book could have given some of the earlier diaries to which the author alludes. His pre-student thoughts might have shed light for us on his personal life. We are told that he would have achieved much: it is certain that he meant to.

He had a sense of humour, rueful sometimes, sometimes bitter. What would this life have achieved?

STEEL RESEARCH GONE WRONG?

 $[BY \ W. \ E. \ J. \ BUDGEN]$

Final Report of the Steel Structures Research Committee. H.M. Stationery Office. Price 128, 6d.

THE Steel Structures Research Committee was appointed in August, 1929, "to review existing methods of design" of steel frame buildings. In March, 1931, it produced its first report, noteworthy as containing the Code of Practice, which was the first set of rules dealing with steel design since the L.C.C. "Steel Frame Act" of 1909. The adoption of this "Code" by many authorities effected an immediate saving in the cost of steelwork in buildings. Subsequently, in May, 1934, a second report appeared, chiefly of an interim character, and promising a fundamentally revised method of design in its next and final

report. This report has now appeared. It is in three parts—a foreword, a series of papers by two university professors, and the proposed new method

of design.

The foreword has a somewhat ironic touch, as it refers to the fact that the L.C.C. Advisory Committee for the Amendment of the London Building Act has suggested that the "Code" should become the new L.C.C. Byelaws, at a time when the L.C.C. has rejected this advice and is trying to introduce something more onerous.

The papers are of two types—records of tests on the steel frameworks of buildings and theoretical studies leading up to the new design method. They are heavy reading and the proposed design method is no simpler. Most architects will probably give up trying to understand either, and will only wish to know the answers to three questions. Is the present design method safe, and if so, what is the new method, and what are

its advantages?

As regards the first question, the tests show, what every thinking engineer has realized for some time, that the average beam to column connection is much stiffer than is assumed in calculations, and that because of this, in general, higher stresses exist in the columns and lower stresses in the beams than his calculations show. But, and some people seem to have forgotten this, no case of failure, or of threatened failure, has been observed on any properly designed steel frame building even when designed, on the old method, in accordance with the lighter floor loads and higher stresses introduced by the "Code.

As regards the second question: quite briefly, the new method takes advantage of the end fixity shown to be provided by the connections and so allows the beams to be designed to resist smaller moments at mid span, but makes it necessary to design the columns for larger moments than has been usual. In other words, it brings steel frame design more into line with reinforced concrete design. In addition, a higher working stress of 9 tons per sq. in. is allowed in the beams instead of the "Code" stress of 8 tons per sq. in.

At first sight this appears to answer the third question as to the advantages of the new method. The problem is not so simple as all that, however. There will, undoubtedly, be economies in the beams both as regards size and

depth, but at a price.

In the first place the cost of the steel framework is in itself a very small fraction of the total cost of a building, and in any case, where economy of frame is all that is being considered, then a reinforced concrete frame is admitted by all to be cheaper than a



Under construction: The central pavilion on the pier at Worthing.

steel frame. A steel frame has, however, several advantages over its rival. It is much simpler to calculate, it is better suited for awkward framing, its columns are smaller and, most important of all, it is more easily altered either during or after erection.

Now with the new method of design, most of these advantages would disappear—in particular the last, for two reasons. In the first place, the alteration of any member in a frame designed by the new method would have much more serious effects on adjoining members than in a frame designed by the old method. Secondly, it is no exaggeration to say that to use the new method, the final position of every beam in the structure needs to be known when the design is being made. This is an impossible ideal under present conditions; and indeed it is

not an ideal at all if it fetters the design of the rest of the structure at such an early stage.

Altogether, it seems regrettable that the steel industry has allowed the new design method in its present form to be published. Particularly as many engineers feel that there are many problems of detail design which will continue to bother them, even if the fundamental design is changed, on which the time and money spent on the production of the new design method could have been more profitably spent.

Publication Received

The Arts in Early England. By G. Baldwin Brown. London: John Murray. Price 30s.

SOCIETIES AND INSTITUTIONS

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CHARTERED SURVEYORS' INSTITUTION

Following are some extracts from π speech delivered by the Rt. Hon. Leslie Hore-Belisha, Minister of Transport, at the annual dinner of the Chartered Surveyors' Institution, held at Grosvenor House on Tuesday, March 2

"To try and evolve an orderly and congruous city out of the chaos of this Metropolis is an ambitious task. Yet when those parts of my work which now seem most insistent have fallen into perspective, I shall always be happy to remember that the National Government authorized me to appoint one single engineer, a member, incidentally, of your Institution, who, standing apart from the 130 independent highway authorities dividing responsibility between them, was instructed to make a survey and within three years to prepare a plan, of what London should be. I told him to disregard administrative boundaries completely and to base his design on the probable needs of a future generation.

"Sir Charles Bressey has a staff of his own, offices of his own and complete liberty of consultation. He has had special censuses taken to ascertain the origins, volumes and destinations of traffic, so that he can design communications which are adequate. He has charted the land and he has observed from the air. At the end of 1937 his plan is due to be completed and will include widenings and remodellings, new reads and tunnels, viaducts and bridges. To assure that his schemes shall not only be useful but shall be in harmony with the frame in which they are set, Sir Edwin Lutyens has from the outset been associated with him.

"I can only hope that his labour will be more fruitful than the still-born labour of that last Surveyor-General of London, whose plans, reposing aridly and reproachfully in All Souls' College, Oxford, remind us of what, but for neglected opportunities, this City might have been.
"It was the memory of Sir Christopher

"It was the memory of Sir Christopher Wren and a shortsighted generation that inspired me to appoint Sir Charles Bressey in the faith that both he and a succeeding generation would be more foreseeing.

generation would be more foreseeing.

"How much more formidable is his task than that of his forerunner! London was then smaller than a modern provincial city and was conveniently lying in ashes. Now within a radius of 25 miles from Charing Cross—the area of the plan—one-fifth of the population of the United Kingdom is concentrated and one quarter of the rateable value. This high density of population is a physical hindrance in the way of road improvements and this high rateable value is an almost equally formidable obstacle.

"In the country the making of great avenues is easier, because the populations are less dense and the rateable value less high. Furthermore, though it was difficult to secure by common consent so distinct a breach with the past, it has been found possible to centralize the administration of all the trunk roads in the Kingdom, and from April 1 next the Ministry of Transport will take over direct control. In the towns there is such a confusion between the local and the through traffic value of roads that we have not been able to devise a means of separating, on a distinct and convenient administrative principle, the one type from the other.

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"We are preparing for our new responsibilities in the counties by making a survey so that plans may be ready whereby the width, and where necessary, the new alignment of roads can be related to the calculated densities of traffic.

"The boundaries of roads should be expansible and not rigid. By means of the Ribbon Development Act passed eighteen months ago, one of the most enlightened pieces of legislation on any Statute Book, we have secured this room for expansion in the future, by making it illegal, without consent, to build or make any means of access within 220 ft. from the middle of any classified road or other roads to which these provisions may by resolution be applied.

"60,000 miles of highways and their setting are now in this way protected, and so great an importance do I attach to the restriction of indiscriminate access to, and freedom from building along, our roads, that I will not ordinarily be prepared to contribute to the construction of a new road, or the improvement of an existing one, unless the provisions of this Act, in the interests of movement, safety and amenity are applied.

"There are two other provisions in the Ribbon Development Act relating to urban areas which I hope local authorities will not forget. Local authorities now have power in approving building plans to require that arrangements shall be made for the taking up and setting down of passengers and goods, and they also have the power to provide and maintain garages on the ground, over the ground and under the ground.

"Here again I want to make another statement. I should have hoped that private enterprise would at any suitable point have offered cheap accommodation for stationary cars. Perhaps this is frequently the case, and it is the motorist who, neglecting such facilities as there are, prefers to take the cheaper course of leaving his vehicle on a carriageway built at vast public expense for the passage and not the parking of vehicles. In any case, as local authorities can now supplement private enterprise wherever necessary, shall consider fixing a date after which the leaving of cars in streets, except for the immediate purposes of taking up and setting down at houses or shops, will be prohibited. In other words, after the date in question, which would be when local authorities have had time to take advantage of the Ribbon Development Act, I shall appoint no more parking places and progressively diminish the number of existing parking

"I make this statement for two reasons: first, because I wish to make it possible for vehicles to move more easily and quickly—a stationary vehicle immobilizes a whole line of traffic; secondly, because I do not think it fair that the peace of inhabitants in pleasant squares and quiet streets should be invaded by cars which have no real claim to be there.

"Amenities are not only physical—they are spiritual. In this realization we stopped hooting at night. In this realization, too, I have asked British manufacturers, and they have agreed, to make no more cars or motor bicycles which exceed a scientifically defined standard of noise. In this realization also I have made grants liberally for the planting of trees and shrubs. By these and other means let us try and remind the motorist that his car, which can give him so much pleasure, should be used by him with the maximum regard for other people—for their safety and their peace."

NORTHERN ARCHITECTURAL STUDENTS' ASSOCIATION CONGRESS

The fourth Annual Congress of the Northern Architectural Students' Association was held at the Leeds School of Architecture on February 26 and 27. The total attendance was about 300.

After the official delegates had been entertained at a luncheon by the West Yorkshire Society of Architects, the Congress was formally opened by the Lord Mayor of Leeds at the City Art Gallery. Visitors had an opportunity to study an exhibition of work by Leeds students and an exhibition of recent architectural books which were arranged in the gallery. was served in the School of Architecture, where a number of interesting exhibitions were arranged, including perspectives, posters from the R.I.B.A. collection, photo-graphs, work by West Yorkshire architects, drawings submitted in the N.A.S.A. competitions, and the Cement and Concrete Association's Model of the City of the Future. A detailed criticism of the competition drawings was given by Mr. J.

Needham, DIPL. ARCH., A.R.I.B.A.

The prizes for a small inn, offered by the Leeds Fireclay Co., were awarded as follows:—

1st: Frank Booth and E. A. Heppenstall (of the Leeds School of Architecture).

2nd: D. G. Thornley (of Manchester University School of Architecture).

3rd: H. Lodge (of the Leeds School of

The prize for a Night Club Foyer, offered by Sir Edwin Airey, was withheld. Sir Owen Williams, the guest of honour

Sir Owen Williams, the guest of honour at the Congress, gave a lecture entitled "Nothing Changes."

On February 26, morning visits were arranged to recent buildings in Leeds, including the Leeds housing schemes, where the Mopin system of construction and the Garchey system of refuse disposal were inspected. Mr. R. A. H. Livett, A.R.I.B.A., the city housing director, conducted the tour. St. Augustine's Church, the University, Broadcasting House, St. Philip's Church, Osmondthorpe, and the Civic Hall were also visited.

After lunch there was the annual general meeting, and members of school staffs attending the Congress took the opportunity of discussing informally the future of architectural education.

In the evening the motion that national individuality in architecture should not succumb to an international uniformity was debated. Mr. G. Pickup and Mr. D. G. Thornley, of Manchester, supported the motion, which was opposed by Mr. F. M. Jones and Mr. P. F. Shephard, of Liverpool. The motion was defeated.

The Congress was organized by the Leeds Students' Union.

MANCHESTER SOCIETY OF ARCHITECTS

The annual dinner of the Manchester Society of Architects was held recently at the Masonic Temple, Manchester, under the chairmanship of Lieutenant-Colonel George Westcott, O.B.E., J.P., F.R.I.B.A. (President)

(President).
Colonel Westcott, proposing the toast of "The R.I.B.A. and its Allied Societies," said: "My first business tonight is to apologize for the absence of the President of the R.I.B.A., Mr. Percy Thomas. of you will remember that Mr. Thomas did attend last year and he accepted on this occasion, but unfortunately circumstances arose which made it impossible for him to come along. The President was elected just about the time when I was elected President of the Manchester Society some eighteen months ago, and since that time I have attended the monthly meetings of the Council of the Institute in London and I have been struck with the businesslike way in which the Council has conducted the affairs of the Institute. It is only what one would expect from architects. During the eighteen months I have been sitting on the Council, many representahave been made to the Government at Whitehall from the Institute which I think have had great effect in stirring up the different Ministries with which we are more closely connected, particularly the Ministries of Health and Transport.

"I cannot help thinking that in this great city of ours with the great clearances that are going on—they call them slum clearances—we are at the moment missing our way in the replanning and development of the cleared areas. I feel sure in my own mind that in Hulme, where we have made such a big clearance, we are missing an opportunity of providing open spaces and recreation grounds for those people who are going to work there instead of living

there. It is just as possible to have slum workshops and factories as it is to have slum dwellings, and I feel that it is up to the Corporation of this city to have our slum clearance areas properly planned so that those who follow us will not be ashamed of them in the next fifteen or twenty years. When Hulme was cleared I visualized that we should have a magnificent parkway going out towards All Saints as the beginning of such a road as we have at Wythenshawe. Instead, the area is being covered over by factories and workshops of such a kind as I will not say any more about. Then we have a huge area such as Collyhurst and others which we are going to clear, but we have no system.

and relaying out these areas. We are
apportunity. We have clear, but we have no system of replanning missing a great opportunity. We have some of the finest officials in the City of Manchester at the present time-the housing director, the city engineer, and the city surveyor-but we have not one of those expert town planners whom, I think, we should have employed to lay out the City of Manchester for the future.

Mr. W. H. Ansell, M.C., Vice-President of the R.I.B.A., responded to the toast. said: "You have mentioned very kindly the R.I.B.A. Without too much blowing of the proprietary trumpet, I think we must admit that the Royal Institute stands as high in the public estimation as ever it did, in fact it stands higher, and this is because of the ideals that it has followed during its hundred years of life, ideals which have led it to demand the highest standard possible in professional honour and probity, the best technical training for those who qualify for its membership, and the highest standard possible in the character and

quality of design.

Our new building has stood with credit through its maintenance period and with no alarming developments. passed through that very troubling time that comes to a man when he is just short of his century. We have passed the century and we are now well set and looking forward to the second century. Our rate of scoring is perhaps slow-slower even than Lancashire at its worst, one run a yearbut slow scoring is useful on occasion, and we are looking forward to another hundred

years of really good innings.

"The building industry as a human triangle of life, the ABC of lifearchitect, builder, client — and was it for nothing that an all-wise Providence ordained that the letter A should be first in the alphabet? We must ask ourselves what has the architect to give or sell to the community that others cannot? Organized planning is what the architect is trained in and is intended to accomplish. In London we have seen an example of how the introduction of the skilled architect can transform work even of the highest skilled engineer. In the electric railway stations, the simple planning of the architect in these later years, com-bined with the extraordinary skill of the engineer, has resulted in something vastly different from those tortuous alleyways we used to wander amongst in the tubes. We now find direct access to the escalators —an example of how planning is a matter on which the architect should be consulted. The architect's work is not merely the planning of buildings, but their grouping. In

my opinion, the traffic expert, the engineer and the architect should be present at the very inception of any scheme of develop-The pity is that development takes place so quickly that it gets ahead of the

planners.

Mr. Ansell then referred to the Registration Bill recently introduced by Lord Crawford in the House of Lords. He said : "It is not entirely a domestic matter. We have tried in this Bill to give you the Architects' Registration Bill of a few years ago, and not only to restrict a man from calling himself a registered architect if he is not on the Register, but also to protect the name of architect. We feel it is an honourable name and that the use of such a name by those unqualified to bear it is undesirable. We are trying to ensure that only qualified men in the future shall be able to call themselves architects. may carn a living by designing buildings, no doubt, but we say to them: 'You have no doubt, but we say to them: no right to call yourselves architects or to deceive the public to any extent in that way.' Whether the Bill will get through or not is on the lap of the gods, but the whole profession is united on the principle of the Bill, although there are those who have sought to make certain profit out of it conditional on their support."

In a reference to the work of the architect in designing not only great things, but little Mr. Ansell said: "I have been appointed advisory architect to the King George Memorial Fields Foundation, and my work will be concerned with gates and entrances to these fields. We hope you in Lancashire, and those in every part of the country, will see to it that this compara-tively small matter only gets into the hands of those really qualified to deal with it. The Foundation only wants the best architectural skill to be brought to bear on the design of the gates and entrances. They may be dreadful or they may be delightful - something with character, quality, simplicity. I appeal to you architects of Lancashire, wherever you have an opportunity, see to it that these gates and entrances are designed by the very best people you can get to do it. Do not leave it to anyone who is unqualified.

What recompense will the profession bring? You will not make so much money as to enable you to emulate the gifts of Lord Nuffield, but there are other compensations-compensations of the spirit-and always like to think of Sir Christopher Wren in his later years, when his royal patrons had deserted him, when even many of his friends were leaving him alone, when he was treated unfairly by certain of the Ministry, he went every year in his old age to London and sat under the dome of St. Paul's, and looked up at the building that his genius had devised and thought: Whatever they may take from me, they will never be able to take away the know-ledge that I designed this great building.' We shall not all design cathedrals, but there are other buildings, and this experience may occur even in the smallest works we have to do . . . it may happen to any one of us that that quality that is 'right'—unity of scale—which comes sometimes almost unsought for, yet comes, may come in our building. The consciousness of a in our building. The consciousness of a piece of work well done will compensate

us even though the greater prizes of life are outside our reach."

The toast of "The Victoria University of

Manchester" was proposed by Mr. Hubert Worthington, O.B.E., M.A., F.R.L.B.A., who said: "An old uncle was one of the first six students of Owen's College, and I was one of the first six students of the School Architecture. I know enough of the University to know something of the enormous ramifications of its activities. is one thing I would like to say in reference to the University-a university is nothing if it does not stand for freedom. I recently had the great privilege of going abroad on behalf of the University to examine other universities, and I came back profoundly thankful that I was connected with Manchester University and with England. University education abroad is becoming completely dominated by politics, and in such an atmosphere freedom of thought cannot blossom, and without that the whole of the intellectual life of the country is bound to perish.

There is freedom at Manchester for experiment and research which you do not get at the older universities. tremendous friendship and co-operation in this great University of ours. What about the visible expression of these activities? When one thinks of the block of buildings strung along the back streets of Chorltoncum-Hardy or Chorlton-cum-Medlock, it does make one wonder why the outward and visible signs should fall so far behind the inward and invisible graces of the brain. Bricks and mortar are not everything. It is said that a princely benefaction to an American university made possible the erection of magnificent buildings, there was no money left to pay the professors. All the same, we should like to see something of the cloistered quadrangles and lines of trees that you see in Oxford along the back streets of Chorlton-cum-Medlock. The whole thing is lack of plan. It is the fault of the Victorians who started Owen's College. They thought the world was going to stand still, and that if they built for sixty students that would be right for all time.

Sir Christopher T. Needham, chairman of the Council of the University, responded.
The toast of "The Guests" was proposed
by Mr. F. Leslie Halliday, A.R.I.B.A.,
A.M.T.P.I., and responded to by the Dean of Manchester.

Paddington Clearance

On Thursday last the Paddington Council received from its Housing Committee an estimate of approximately £600,000 for redeveloping the overcrowded Clarendon

Scotland: House Building by Private Enterprise

In 1936 private enterprise in Scotland built 7,328 houses of five apartments and less. This output is a record for the post-war Included in the total are 1,247 houses for letting; of these, 694 were built in Edinburgh, no doubt as a direct result of the encouragement given by the Corpora-tion, in the way of loans and sites, for houses of a working-class type to be let at rents which working-class tenants can afford.

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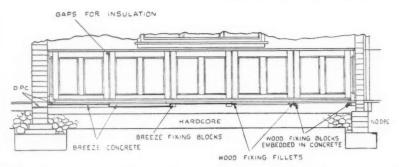
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T R A D E N O T E S

[EDITED BY PHILIP SCHOLBERG]

Dry Rot

SIX years ago a special experimental house was erected at the Forest Products Research Laboratory for the study of dry rot, and a report* giving results of the investigations in it was issued at the end of last month by the D.S.I.R.

The building is of brick and has two storeys. Only the ground floor, consisting of three experimental rooms and a small laboratory, has been used for the dry rot experiments. The first experimental room has a solid floor laid in ten sections, five pairs of which are of different construction. Some of these sections are of the type favoured by the speculative builder, and some are of better or good construction. The second experimental room has a hollow floor, but with no ventilation beneath it, and the floor of the third room is properly constructed with plenty of ventilation. Each room is panelled in sections of oak and deal up to a height of 7 ft.

The floors of all the rooms were infected, by nailing to a floorboard or joist, pieces of wood infected with dry rot fungus.

The floors were examined at intervals and the results show conclusively that if a floor has been well constructed with proper ventilation, dry rot fungus will not develop, even if active infection of the most virulent type is introduced.

"It is thus evident," the report states, "that it is more important that the construction of the building should be well designed than that the timber should be absolutely free of infection. It is, of course, highly desirable that the timber should be as far as possible free from infection, in case any subsequent leakage or accumulation of moisture should occur which might favour its development. It is, however, absolutely essential that, in designing a building, the precaution should be taken of ensuring that no moisture reaches any timber that is not thoroughly treated with preservative, since fungal infection is certain sooner or later to appear on any timber remaining in a condition suitable for its development."

From the experiments with solid floors, it is concluded that a certain amount of

moisture slowly penetrates through even the best mixed concrete and that it is essential to provide a continuous layer of completely waterproof material between the concrete and the boards to act as a damp-proof course. Where this has not been done, and the floor is covered with linoleum, or a similar impervious covering, moisture will accumulate and the floor will become sufficiently damp for decay to start.

Below is a table showing the conclusions arrived at for solid floors (see headpiece).

With a floor properly constructed, on lines suggested in the report, it is usually quite safe to lay linoleum; the washing of linoleum on solid floors, however, particularly if it is worn, should be avoided as far as possible, as any water which penetrates through joints and cracks in the covering may have difficulty in escaping. It is better to keep the linoleum oiled or waxed.

The type of floor, the report continues, in which the boards are nailed directly to battens embedded in concrete is a thoroughly bad one and numerous instances of decay of such floors have been reported.

It has been found that the insertion of a damp-proof course of bitumen between the boards and concrete provides a floor which, under the conditions of the experiments, is immune from dry rot except when fungus spreads from decayed floors adjoining. Bitumen should be laid directly beneath the boards. Severe decay occurred in the floor where the boards were laid on 2 in. of breeze concrete below which was the bitumen damp-proof course.

In the experimental room with the badlyconstructed hollow floor, growth of dry rot soon started from the infected boards

Types of flooring construction	Moisture content at time of infection 24/6/31 (as % of) oven-dry weight)	Moisture content when floors finally examined 22/11/34	Condition of floors at final examination 22/11/34			
Type 1 Boards \(\frac{1}{4} \) in, screwed through a continuous layer of bitumen to a 2-in, layer of breeze concrete lying on the foundation concrete.	17.0	18.2	Floor dry and entirely free from decay, except in one place where the fungus had spread across from an adjoin- ing decayed section. Screws slightly cor- roded, but boards firm			
Type 2 Boards screwed to a 2-in. layer of breeze concrete, below which was a con- tinuous layer of bitumen over the foundation con- crete.	19.6	35.4	Floor covered with fungal growth. Most of the boards badly decayed, chiefly by <i>Coniophora</i> cerebella.			
This			Breeze in places found to be softened and to con- tain fungal threads. Screws corroded, and floor boards all loose.			
Type 3 Boards screwed through a continuous layer of bitumen (as in (1)) to a strip or fillet of breeze let into the foundation concrete.	17.0	14.8	Growth of Coniophora only from adjoining floors. Boards all sound, except at ends adjoin- ing other floors, Screws slightly corroded, but boards firm.			
Type 4 Boards screwed to narrow fillets of wood lying on the concrete, i.e. between the boards and the concrete was a space (unventilated) about \(^3_4\)-in, deep,	19·2	24.7	Growth of Merulius and Coniophora over practically all the boards. Sap-wood of all the boards rotten and very moist. Fixing fillets rotten.			
Type 5 Boards screwed to fixing fillets embedded in con- crete.	22.0	23.3	Fungus growth all over boards. Boards rotted particularly in the sap- wood, mainly by Conto- phora.			

^{*} Forest Products Research Record 14, "Dry Rot Investigations in an Experimental House," H.M. Stationery Office, 6d. net.

and spread fairly rapidly over the boards and joists, particularly in the inner half of the room. In April, 1932, some of the boards were removed in a badly infected part of the room and were replaced with Western Red Cedar. After thirty-three months no fungus had grown on this timber.

In the room with the properly constructed and ventilated hollow floor, no growth whatever of dry rot fungus developed in the floor, although each section was infected three times by bringing into contact with the underside of the floor wood on which dry rot was in active growth. The boards remained absolutely sound and were perfectly clean and bright when examined three years after the house was completed.

No decay occurred behind the panelling in any of the rooms. It appears that infection of panelling occurs only when the walls are definitely damp and when fungus spreads upwards from the floor.

Flexible Plywood

Flexible plywood, in the form of a flexible veneer on a canvas backing, has been on the market for some years. There has, however, been a certain amount of trouble with the veneer peeling and bubbling owing to the type of glue often used for fixing. A new firm, called British Pliant Veneers, have, however, evolved a new form of fixing mastic which, they claim, will overcome these troubles. I have seen a room carried out comparatively recently with this material, and the results seem excellent, though I cannot, of course, guarantee their permanency.

The firm will not disclose the composition of their mastic, but it seems to contain some form of rubber solution, and, after application, is left until it is tacky before the veneer is fixed.

The firm has these finishes in all the usual figured hardwoods and prices vary from 2s. 6d. a yard upwards. Fixing is done by the firm, or under their supervision, and a guarantee against failure should convince the timorous.

Address

British Pliant Veneers, Ltd., 120 Middlesex Street, E.1.

IN PARLIAMENT

[BY OUR SPECIAL REPRESENTATIVE]

Ribbon Development

Sir R. Gower asked the Minister of Health if he could state the number of counties which had taken effective action under the Town Planning Act to prevent ribbon development; and, if so, whether he would state what had been done in the different cases.

Sir K. Wood said that wherever a planning scheme was in course of preparation the interim development authority (which was usually the borough or district council, not the county council) was empowered to control development, and schemes are, at present, being prepared over three-fifths of the whole country in the areas of over 1,000 local authorities. He was not in a position to give details of what was being done since this necessarily differed from

case to case. He had, however, no cause to think that authorities in general were not exercising their powers as effectively as could reasonably be expected.

Reconditioning

Mr. Hannah asked the Minister of Health if it would be possible this session to amend the law which allowed a grant for rebuilding, but none for restoring, old houses within the limits of towns.

Sir K. Wood said that this question was considered by the Departmental Committee on Housing, but it reported against a subsidy for urban reconditioning and he could not undertake to introduce legislation on the matter.

Building Materials

Mr. D. Adams asked the Minister of Health whether he was aware that the market prices of building materials required by Newcastle Corporation had advanced since the beginning of the year as follows: common bricks, 2s. 6d. to 4s. 6d. per 1,000; facing bricks, 9s. per 1,000; damp-proof course and asphalt materials, 7½ per cent. increase; timber £3 per standard, 12½ per cent. increase; steel and iron, 10 per cent. to 15 per cent. increase; lead, 40 per cent. increase; and whether steps were being taken to protect local authorities from exploitation

Sir K. Wood said he understood that there had been recent rises in the prices of certain materials in Newcastle, and that the Interdepartmental Committee on the Prices of Building Materials was in communication with its local correspondent at Newcastle as to the particular increases referred to. He also understood that the committee was giving its careful consideration to recent increases in the prices of building materials not only at Newcastle, but in other parts of the country.

Smoke Abatement

Mr. Parker asked the Minister of Health whether, in view of the difficulty of refuting the defence allowed in the case of the emission of smoke, other than black smoke, by Section 103, sub-section (3) of the Public Health Act, 1936, and as the said Act, according to the Consolidation Committee, was intended as a preparation for more substantial amendment of the law, he was prepared to take steps to bring the law concerning smoke, other than black smoke, into line with black smoke.

Sir K. Wood said he could not hope that any general measure of agreement would be secured for a proposal of this kind.

L.C.C. Housing

Mr. Sandys asked the Minister of Health what was the average number of dwellings built per week by the London County Council during the eight years ending March 31, 1934, and the average number built since that date.

Mr. Hudson said that the number of dwellings built during the eight-year period referred to represented a weekly average of 103. The number built in the period April 1, 1934, to January 31, 1937, represented a weekly average of approximately 97.

Foreign Pottery

Sir J. Lamb asked the Secretary to the Department of Overseas Trade whether he was aware that a large amount of foreign pottery was exhibited at the British Industries Fair camouflaged with part production of English manufacturers, the value of the articles from abroad being much more than the part made in Britain; and what steps he proposed to take to prevent this perversion of the object of the fair in future years.

Captain Wallace said that the answer to the first part of the question was in the negative. The regulations provided that goods, to be eligible for display, must have been "manufactured or produced mainly within the British Empire." If his hon, friend would give him details of any specific instances which he had in mind where the regulations appeared to have been contravened, he would have them investigated with a view to preventing a recurrence at future fairs.

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Manufacturers' Items

We are informed by the Noel Wood-Mosaic Co. that they have taken over all the patents, trade marks, plant and machinery of Noel Floor Co., and have also retained all the expert floor layers and technicians who were employed by the old company. Mr. Dennis Hill has been appointed manager, and he will be pleased to call upon architects on request and, if necessary, prepare designs and sketches for any particular job.

Noel Wood-Mosaic Co. have recently carried out numerous contracts for schools, hospitals, flats, hotels, railway station waiting-rooms, airports, etc. A brochure illustrating and describing their products, together with a list of woods available and prices, may be obtained from the firm at 27-29 Union Street, Borough, S.E.1.

Messrs. Douglas and Walls, Ltd., of Tithebarn Street, Liverpool, have just marketed a new tee-square attachment. It comprises a ball-bearing grooved pulley fixed to the underside of the head of the tee-square by one bolt and a rustless steel tension spring fitted to the drawing-board. The attachment is claimed to work smoothly and silently and to hold the tee-square in position with the drawing-board at any reasonable angle. The price is 7s. 6d.

Ideal Boilers and Radiators, Ltd., have just introduced a range of "Standard" sanitary appliances made of vitreous china, which has several advantages over the more usual fireclay type, as the fittings do not absorb water even if the glaze is chipped off

The glaze on the vitreous china is not merely a coating, it is an amalgam between a very fine glaze and a very fine piece of vitreous china. The glaze cannot be chipped away from the body, neither will it craze; should by accident a piece of the ware become broken at, say, the corner of a lavatory or other article, the vitreous china could not absorb water or water containing fecal matter, due to the fact that it is absolutely vitreous, i.e. impervious to moisture. In other words, it has no veneer, is solid throughout, and made of the finest pottery materials that can be procured.

THE BUILDINGS ILLUSTRATED

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THE GUILDHALL, SOUTHAMPTON. (Pages 412, 419-422).—The general contractors were W. T. Nicholls, Ltd., and the principal sub-contractors and suppliers included:
British Reinforced Concrete Co., Ltd.,
foundations; Ragusa Asphalt Co., Ltd.,
asphalt; Blokcrete Co., Ltd., concrete
blocks; British Reinforced Concrete Co., Ltd., reinforced concrete; Local and Colliers (Reading), bricks; Morant Bros., stone; Edward Wood & Co., Ltd., structural steel; Diespeker & Co., Ltd., hollow tile flooring, terrazzo patent flooring and stairtreads; Carter & Co. (London), Ltd., wall tiles and tiles; D. Anderson and Son, Ltd., special roofings; Mellowes & Co., Ltd., patent glazing; Hollis Bros. & Co., wood-block flooring; Diespeker & Co., Ltd., and Francis Morton, Junior, dance floor; Sika, Ltd., waterproofing materials; G. N. Haden and Sons, Ltd., central heating, ventilation and boilers; Grierson Ltd., bells, electric wiring; C. Harvey & Co., electric light fixtures and metalwork; Matthew Hall & Co., Ltd., plumbing; John Bolding and Sons, Ltd., sanitary fittings; James Gibbons, Ltd., door fur-niture; Luxfer, Limited, casements and window furniture; Dictograph Co., Ltd., and G.P.O., telephones; Potter Rax Gate Co., Ltd., folding gates and fireproof doors; Shutter Contractors, Ltd., rolling shutters and sunblinds; W. F. Thorn, iron staircases; W. T. Nicholls, Ltd., plaster and joinery; G. Jackson and Sons, Ltd., decorative plaster; Fenning & Co., Ltd., decorative plaster; Fenning & Co., Ltd., marble; Shepherd and Hedger, textiles, office fittings, cloakroom fittings and furniture; Messrs. Pel, Ltd., furniture; Express Lift Co., Ltd., and Watkins and Watson, Ltd., lifts; Synchronome Co., Ltd., clocks; Dene & Co., signs.

SERVICE STATION, GREAT WEST ROAD, BRENTFORD (pages 440-442). The general contractors were Fairweather and Ranger, who were also responsible for the granolithic paving and the erection of the steelwork. The principal sub-contractors and suppliers included: Pearce and Sons, neon sign work; Rashleigh Phipps & Co., electrical work; H. W. Dutton & Co., heating; Wayne Tank and Pump Co., petrol tank installation; Sissons, steam engines; L. Carter & Son, Ltd., copper tower; Courtney Pope & Co., Ltd., shop front; General Asphalte Co., asphalt; Mellowes & Co., patent glazing.

STEEL HOUSE, 11 TOTHILL STREET, S.W.1 (pages 423-426). The general contractors were Holland & Hannen and Cubitt, Ltd., who were also responsible for the electrical installation. The principal subcontractors and suppliers included: Willment Brothers, demolition, excavation and Co., Ltd., structural steelwork; Young, Austen and Young, Ltd., heating and hot water service plants; Matthew Hall & Co., Ltd., plumbing and drainage; Limmer and Trinidad Lake Asphalte Co., Ltd., asphalt work; Caxton Floors Ltd., hollow tile floors; Fredk. Braby & Co., Ltd., pressed steel stairs; John Ellis and Sons, Ltd., artificial stone; Henry Hope and Sons, Ltd., metal window and gearing; Alfred Goslett & Co., Ltd., glass and glazing; Fenning & Co., Ltd., ebony black granite; Henry Green, Ltd., barrel guard rails; Stevens and Adams, Ltd., European oak wood block flooring; Luxfer, Ltd., reinforced concrete pavement and roof lights; Diespeker & Co., Ltd., terrazzo work; Waygood-Otis, Ltd., lifts installation; Scaffolding (Great Britain), Ltd., suspended and tubular scaffolding; G. Johnson Brothers, stainless steel main entrance and vestibule doors; J. Whitehead and Sons, Ltd., marble work; W. A. Telling, Ltd., granolithic paving; Lichtwitz Veasey &

Co., copper work; Lamson Store Service Co., Ltd., letter chute; Geo. Johnson, Ltd., hand power service lift; Cement Marketing Co., Ltd., Portland cement and sand lime facing bricks; John Bolding and Sons, sanitary fittings; Harris and Sheldon, Sankey-Sheldon steel doors and frames; Central Perivale, Ltd., joinery; James Gibbons, Ltd., ironmongery; Eric Munday and Wm. Pickford, sign letters; Synchronome Co., Ltd., electric clocks.

We regret that in the list of contractors for the National Bank of Scotland, published in our issue for February 25, we omitted to state that Korkoid Decorative Floors were responsible for the Korkoid used in the

building.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICT (15 miles radius)

LONDON. Extension. The L.C.C. is to erect a special unit for the treatment of venereal disease at the Caterham Hospital at a cost of £15,000. LONDON, Tenements, The L.C.C. is to erect 230 tenements in Savona Street, Battersea, at

230 tenements in Savona Street, Battersea, at a cost of £123,800.

LONDON, Rehousing. The L.C.C. is to clear and provide rehousing on the East Street area of Greenwich at a cost of £143,000.

MARYLEBONE, Rehousing. The Marylebone B.C. is arranging for the L.C.C. to undertake the clearance of the Princess Street area and the provision of rehousing at a cost of £120,000. cucarance of the Frincess Street area and the provision of rehousing at a cost of £139,000.

MIDDLESEX. School. The Middlesex Education Committee has purchased land in Field End Road, Eastcote, for the erection of an elementary school.

MIDDLESEX, School, The Middlesex Education Committee has purchased a site on Minet Estate, Hayes, for the erection of an elementary

PADDINGTON. Re-development. The Paddington B.C. is to prepare a scheme for the re-development of the Clarendon Street area, at an

ment of the Clarendon Street area, at an estimated cost of £600,000.

PADDINGTON. Houses, etc. Plans passed by the Paddington B.C.: Houses, Southwick Cresent and Place, Mr. Septimus Warwick; houses, Gloucester Square and Radnor Place, Messrs. Wimperis, Simpson and Guthrie; flats, Edgware Road, Messr.. T. P. Bennett and Son. POTTERS BAR. Housing Scheme. The Potters Bar U.D.C. has purchased land at Pope's Farm, South Mimms, for a housing scheme. SouthGATE. Houses, etc. Plans passed by the Southgate Corporation: Addition to house, Raith Avenue, and 21 houses, Telford Road, Mr. H. A. Nash; 110 houses, Arnos Grove Estate, Davis Estates, Ltd.; six houses, Lakenheath, Mr. T. S. Rutter; 12 houses, Church Hill, Mr. W. J. Mitchell; eight houses, Broadfields Avenue, Messrs. Reader Bros.; eight houses, Vicars Moor Lane, Broadoak Building Co., Ltd. Co., Ltd.

THORNTON HEATH. Flats. Messrs. Riches and Blythin are to erect a block of 20 flats on the site of 853 London Road, Thornton Heath.

TOTTENHAM. Houses. The Tottenham Corpo ation is to erect a further 24 houses on the Weir Hall Estate.

WOOD GREEN. Municipal Buildings. The Wood Green Corporation has approved in principle the erection on the Stuart Crescent site of municipal buildings comprising Council Chamber, committee rooms, offices for all the departments, etc. and a public library (but departments, etc., and a public library (but excluding Courts), and left it to the Committee to consider the drawing up of plans and

estimates.
SOUTHERN COUNTIES

LEWES. Extensions. The East Sussex Education Committee is to erect extensions at the Lewes secondary school for girls, at a cost of £12,755. SOUTHPORT. Extensions. The Southport Education Committee has obtained sanction to

borrow £23,662 for the erection of an art school wing at the Technical College.
WEYMOUTH. Fire Station. The Weymouth Corporation has approved plans by the borough surveyor for the erection of a fire station at West Plainer to the left of the con-Plain at a total estimated cost of £17,000.

MIDLAND COUNTIES

MANSFIELD. Bungalows, etc. Plans passed by the Corporation: Four bungalows, Abbey Road, for Mr. F. C. Uphill; 18 houses, Jenny Beckett's Lane and Norbury, for Dr. J. P. Smith; eight houses, Bradforth Avenue, for Mr. J. Bradbury; shop, Nottingham Road, Mr. F. Hardy; barrel stores, etc., Littleworth, for Mansfield Brewery Co. Ltd.: two houses. Mr. F. Hardy; barrel stores, etc., Littleworth, for Mansfield Brewery Co., Ltd.; two houses, Murray Street, for Mr. C. L. Smith; three houses, Raleigh Road, for Mr. J. Ager. STOKE-ON-TRENT. Houses. The Stoke-on-Trent Corporation is considering an offer by Messra. E. Johnnson, Ltd., to erect 748 houses for sale to the Corporation on the New House Farm estate, Bucknall. STOKE-ON-TRENT. Community Hall, etc. The

Community Hall, etc. STOKE-ON-TRENT. Stoke-on-Trent Corporation has approved plans by the chief architect of the proposed community hall, branch library, maintenance department, etc., on the Abbey Hulton and Meir housing

STOKE-ON-TRENT. Public House. The Stoke-on-Trent Corporation has approved plans by Bents Brewery Co. for the erection of a publichouse on the Meir estate.

NORTHERN COUNTIES

RUNGORN. Cinema. The Jefton Entertainments Ltd., are to erect a cinema in Greenway Road,

Runcorn.

SHEFFIELD. Plans passed by Sheffield Corporation: 22 houses, Ledstone Road and Archer Road, Mr. C. W. Alflat; 45 houses, Hinde House Lane, Messrs. J. Copley and Sons, Ltd. SHEFFIELD. Houses, etc. The Sheffield Corporation has accepted the tender of Messrs. J. Laver and Sons, Ltd. (£160,738), for the erection of 410 houses and 44 flats at Parson Cross estate. SHEFFIELD. Cinema. The Sheffield Corporation

SHEFFIELD. Cinema. The Sheffield Corporation has leased land on the Arbourthorne estate to Sheffield and District Cinematograph Theatres, Ltd., as a site for a cinema.

SHIPLEY. Flats, etc. Plans passed by the U.D.C.: Flats, Bradford Road, for Mr. W. R. Potter; extension of Cricket Pavilion, Thackley Old Road, for the Windhill Cricket Club; 26 houses, Low Ash Drive, for the Low Ash Estate Co.; four houses, Low Ash Road, for the Wrose Hill Estate Co.; two houses and shops, Wrose Road, for Mr. F. Dalby.

TODMORDEN. Houses, etc. The Todmorden Corporation is seeking sanction to borrow £57,196 for houses, street works and sewers on the Carr House and Walsden Estates.

YORK, Repairs. The York Corporation reports that the estimated cost of repairing the damage to the Guildhall roof caused by the death watch beetle is £,12,000.

RATES OF WAGES

The initial letter opposite every entry indicates the grade under the Ministry of Labour schedule. The district is that to which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; Column II for

labourers. The rate for craftsmen working at trades in which a separate rate maintains is given in a footnote. The table is a selection only. Particulars for lesser localities not included may be obtained upon application in writing.

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A A,	Aberdeen Scotland Abergavenny S. Wales & M.	1 7 1 64	1	21	A ₁	EDDW Vale	S. Wales & M. Scotland	î	61	1 2	A	North Shields	N.E. Coast	1	7	1 2½ 1 2½ 1 2½
A ₃	Abingdon S. Counties	1 51		11	A ₀ B	Exeter	S.W. Counties	*I	6	1 11	A A ₁	North Staffs Norwich	E. Counties	1	7 6½	1 2
A	Addlestone S. Counties	1 6	1	2½ 1½	Б	Exmound ,	S.W. Counties	1	5	1 04	A	Nottingham Nuneaton		1	7	1 2½ 1 2½
A	Adlington N.W. Counties Airdrie Scotland	*1 7	1	2½ 2½	As	BLIXSTOWE	E. Counties	1	51	1 11		0				4
C A	Aldeburgh E. Counties Altrincham N.W. Counties	1 3	1	11½ 2½	A _a	Filey Fleetwood	Yorkshire N.W. Counties	1	5½ 7	1 11 11 1 21	A _s	Oldham		1	5±7	1 11
B _B	Appleby N.W. Counties Ashton-under- N.W. Counties	1 31		112	B ₁	Folkestone Frodsham	S. Counties N.W. Counties	1	48	1 01 1 21	A ₃ A ₁	Oswestry	N.W. Counties	1	51	1 2½ 1 1½
В	Lyne Aylesbury S. Counties	1 5	1		B_{n}	Frome	S.W. Counties	1	4	1 0	221		S. Counties	1	61	1 2
	_		*	-4	A	GATESHEAD	N.E. Coast	1	7	1 24	A	Paisley		*1	7	1 21
B B,	Bangor S. Counties Bangor N.W. Counties	1 5	1	01 ·	B A ₁	Gillingham Glamorgan-	S. Counties S. Wales & M.	1	5 6½	1 01	B _a	Perth	Scotland	•1	3½ 7	0 113 1 21 1 2
A _B	Barnard Castle N.E. Coast	1 41	1	11		shire, Rhondda Valley District			~2		$_{\mathbb{A}_{1}}^{\mathbb{A}_{1}}$	Peterborough	S.W. Counties	*1	6± 7	1 2 1 2½
В	Barnstaple Yorkshire Barnstaple S.W. Counties	1 5	1	04	A		Scotland S.W. Counties	1	7 6	1 2½ 1 1½	A A ₁	Pontefract Pontypridd	S Wales & M	1	7 6±	1 21
A	Barry N.W. Counties Barry S. Wales & M.	1 7	1	21	As As	Goole	Yorkshire S. Counties	1	6	1 15	A	Portsmouth Preston	S. Counties N.W. Counties	1	6	1 1½ 1 2½
B A ₁	Basingstoke S.W. Counties Bath S.W. Counties	1 5	1	02 12	A ₃ A ₁	Grantham	Mid. Counties S. Counties	1	54			0				,
A A	Batley Yorkshire Bedford E. Counties	1 7	1	24 11	A	Greenock	Scotland	•1	6½ 7	1 1½ 1 2 1 2½ 1 2½	A	UBENSFERRY	N.W. Counties	1	7	1 21
A	Berwick-on- N.E. Coast Tweed	1 6	1	11	B		Mid. Counties S. Counties	1	7 5	1 03	\mathbb{A}_2	READING	S. Counties	,	01	
A ₀	Bewdley Mid. Counties Bicester S. Counties	1 6 1 5	1	11		HALIFAX	Washahim				B A ₃	Reigate		1	5½	1 11
A	Birkenhead N.W. Counties Birmingham Mid. Counties	*1 8	1	3 21	A	Hanley	Yorkshire Mid. Counties	1	7 7	1 21 1 21	A_1	Rhondda Valley	S. Wales & M.	1	5 k	1 11 1 1 2
As	Bishop Auckland N.E. Coast Blackburn N.W. Counties	1 61	1	21	A	Hartlepools	Yorkshire N.E. Coast	1	7	1 21	A	Ripon Rochdale	Yorkshire N.W. Counties	1	5½ 7	1 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
A	Blackpool N.W. Counties Blyth N.E. Coast	1 7	1	24 24 24	B	Hastings	E. Counties S. Counties	1	5	1 03	B A ₁	Rochester Ruabon	S. Counties N.W. Counties	1	5 6½	1 01
B	Begnor S. Counties	1 5	1	02	As B	Hatfield Hereford	S. Counties S.W. Counties	1	6	1 11 1 1 1 1 1 1 1 1 1 1	A	Rugby Rugeley	Mid. Counties Mid. Counties	1	7	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Aa	Boston Mid. Counties	1 51	1	2½ 1½	Aa	Hertford	E. Counties N.W. Counties	1	6	1 1½ 1 2½	A	Runcorn	N.W. Counties	1	7	1 21
B ₀	Bournemouth S. Counties Bovey Tracey S.W. Counties	1 6	1	0	A	Howden	N.E. Coast Yorkshire	î	7 7	1 21	\mathbb{A}_1	ST ALBANS	E. Counties	1	C1	1 0
A	Bradford Yorkshire Brentwood E. Counties	1 7 1 6½	1	2 1 2	A		Yorkshire	1	7	1 21	A B _a	St. Helens	N.W. Counties S.W. Counties	1	64 7	1 2 1 2 1
B	Bridgend S. Wales & M. Bridgwater S.W. Counties	1 7	1	21 02	A	ILKLEY	Yorkshire	1	7	1 21	A	Scarborough Scunthorpe	Yorkshire Mid. Counties	1	3½ 6½	0 112
A	Bridlington Yorkshire Brighouse Yorkshire	1 61 7	1	2 21	A	Immingham	Mid. Counties E. Counties	1	7	1 21 11	A	Sheffield	Yorkshire	1	7	1 21 1 21
A	Brighton S. Counties Bristol S.W. Counties	1 6	1	1 1 2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B	Isle of Wight	S. Counties	1	4	1 0	AA	Shipley Shrewsbury	Yorkshire Mid. Counties	1	6	1 21 11
B	Brixham S.W. Counties Bromsgrove Mid. Counties	1 5	1	01		JARROW	N.E. Coast			1 01	A ₂	Skipton Slough	Yorkshire S. Counties	1	6	1 11 11 11
B	Bromyard Mid. Counties Burnley N.W. Counties	1 5	1	03	A	JARROW	N.E. Coast	1	7	1 21	A ₁ A ₂	Solihull Southampton	Mid. Counties S. Counties	1	64	1 2 11
A	Burslem Mid. Counties Burton-on- Mid. Counties	1 7	î	24	A	KEIGHLEY	Yorkshire	1	7	1 21	A_1	Southend-on- Sea	E. Counties	1	61	1 2
A	Trent	1 7	1		A ₈ A ₃	Keswick	N.W. Counties N.W. Counties	1	5½ 5½	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	A	Southport S. Shields	N.W. Counties N.E. Coast	1	7	1 2½ 1 2½
A	Buxton N.W. Counties	1 61		21/2	A ₁ A ₂	Kidderminster	Mid. Counties Mid. Counties	1	6½ 6	1 11	A ₁	Stafford Stirling	Mid. Counties Scotland	Î	6± 7±	1 2
	CAMBRIDGE E. Counties	Y 01			B_1	King's Lynn	E. Counties	1	41	1 01	A	Stockport Stockton-on-	N.W. Counties N.E. Coast	1	7	1 21
A ₁ B ₁	Canterbury S. Counties	1 6½ 1 4½	1	2 ()1/2	A	LANCASTER	N.W. Counties	1	7	1 21	A	Tees Stoke-on-Trent	Mid. Counties	1	7	
A	Cardiff S. Wales & M. Carlisle N.W. Counties	1 7	1	21 21	A ₁	Leamington	Mid. Counties Yorkshire	1	6½ 7	1 2 1 2½	B	Stroud Sunderland	S.W. Counties N.E. Coast	1	5	1 21 1 01
В	Carmarthen S. Wales & M. Carnarvon N.W. Counties	1 5	1	02 02	A	Leek	Mid. Counties Mid. Counties	1	7	1 21	A A	Swansea	S. Wales & M. S.W. Counties	1	7	1 21
A	Carnforth N.W. Counties Castleford Yorkshire	1 7	1	2½ 2½	AB	Leigh	N.W. Counties S. Counties	î	7 5	1 21	43	Swindon	S.W. Counties	1	51	1 11
A ₂	Chatham S. Counties Chelmsford E. Counties	1 5½ 1 5½	1	11	A _s	Lichfield	Mid. Counties Mid. Counties	1	6	1 02	\mathbb{A}_1	TAMWORTH	N.W. Counties	1	64	1 2
A.	Cheltenham S.W. Counties Chester N.W. Counties	1 5½ 1 7	1	11 21		Liverpool	N.W. Counties N.W. Counties	•1	81	1 21 1 31	A	Teeside Dist	S.W. Counties N.E. Counties	1	7	1 01
B	Chesterfield Mid. Counties Chichester S. Counties	1 7 1 5	1	21	A		S. Wales & M.	1	6 7	1 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A ₂	Teignmouth Todmorden	Yorkshire	1	6	1 1½ 1 2½
B,	Chorley N.W. Counties Cirencester S. Counties	1 7 1 4½	1	21 01	À	Do. (12-15 miles	radius) Mid. Counties	1	81	1 3 1 3	A ₁ B ₂	Truro	S.W. Counties S.W. Counties	1	64	1 2 1 0
A	Clitheroe N.W. Counties Clydebank Scotland	1 7	1	21 21 21	A	Loughborough	Mid. Counties	1	7	1 2½ 1 2½	As	Tunbridge Wells	S. Counties	1	51	1 11
A A	Coalville Mid. Counties Colchester E. Counties	1 7	1	21	A ₁	Luton Lytham	E. Counties N.W. Counties	1	6½ 7	1 2 1 2\frac{1}{2}	A	Tunstall Tyne District	Mid. Counties N.B. Coast	1	7	1 2½ 1 2½
A ₁	Colne N.W. Counties Colwyn Bay N.W. Counties	1 6½ 1 6	1	2 11		Macclesfield	N W C		0.1			YAT		-		
A_1	Consett N.E. Coast	1 61	1	2	A ₁ A ₃	Maidstone	S. Counties	1	61 51	1 2 11	A	Wakefield Walsall	Yorkshire Mid. Counties	1	7	1 21
A	Coventry Mid. Counties	1 6	1	1# 2#	A	Manchester	Mid. Counties N.W. Counties	1	5½ 7	1 11 11 1 1 1 1 1	A	Warrington	N.W. Counties	1	7	1 2½ 1 2½ 1 2
A,	Crewe N.W. Counties Cumberland N.W. Counties	1 6 1 5½	1	11	A B ₁	Mansfield Margate	Mid. Counties S. Counties	1	7 44	1 21 1 01	A ₁	Warwick Wellingborough	Mid. Counties Mid. Counties	1	61	1 2
	DARLINGTON N.E. Coast				A ₃ A ₁	Matlock Merthyr	Mid. Counties S. Wales & M.	1	5± 6±	1 11 2	A A ₂	West Bromwich Weston-sMare	Mid. Counties W. Counties	1	7	1 2½ 1 1½ 1 1½
A B ₁	Darwen N.W. Counties	1 7	1	24	A As	Middlesbrough Middlewich	N.E. Coast N.W. Counties	1	6	1 21 11	A	Whitby Widnes	Yorkshire N.W. Counties N.W. Counties	1	6	1 21
Δ.	Denbigh N.W. Counties	1 41 1 51	1	11	B ₃	Minehead Monmouth & S. and E. Glamorganshire	S. Wales & M.	1	4	1 0	B	Wigan Winchester	S. Counties	1	7 5	1 2½ 1 0½ 1 1½
A	Dewsbury Mid. Counties Dewsbury Yorkshire	1 7	1	24							A ₂	Windsor Wolverhampton	S. Counties Mid. Counties	1	6	1 21
B	Didcot S. Counties Doncaster Yorkshire	1 8	1	01 21	A	Morecambe	N.W. Countles	1	7	1 21	A ₂ A ₃	Worcester Worksop	Mid. Counties Yorkshire	1	6 51	1 11
B ₁	Driffield Yorkshire	1 4± 1 5±	1	01 11	A_3	Nantwich	N.W. Counties	1	6	1 11	A_1 A_2	Wrexham	N.W. Counties S. Counties	1	61 51	1 1½ 1 2 1 1½
A	Droitwich Mid. Counties Dudley Mid. Counties	1 6	1	1 kg	A	Nelson	S. Wales & M. N.W. Counties	1	7			3.7				
A	Dumfries Scotland Dundee Scotland	1 8	1	11 21	A	Newcastle Newport	N.E. Coast S. Wales & M.	1	7 7	1 2½ 1 2½ 1 2½ 1 2½ 1 2½	B	Y ARMOUTH Yeovil	E. Counties S.W. Counties	1	5	1 02
A	Durham N.E. Coast	1 7	1	21			Yorkshire		7	1 21	A	York		1	7	1 21

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

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

CURRENT PRICES

The wages are the standard Union rates of wages payable in London at the time of publication. The prices given below are for materials of good quality and include delivery to site in Central London area, unless otherwise stated. For delivery outside this area, adjust-

 $\frac{21}{4}$

ment should be made for the cost of transport. Though every care has been taken in its compilation, it is impossible to guarantee the accuracy of the list, and readers are advised to have the figures confirmed by trade inquiry. The whole of the information given is copyright.

WAGES	SLATER AND TILER	SMITH AND FOUNDER—continued s. d Mild steel reinforcing rods, §" cwt. 9 6
Bricklayer per hour I 5½	First quality Bangor or Portmadoc slates d/d F.O.R. London station:	" 9 6
Carpenter	24" × 12" Duchesses per M. 28 17 6	,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,
Machinist	22" × 12" Marchionesses , 24 10 0 20" × 10" Countesses , 19 5 0	Cast-iron rain-water pipes of s. d. s. d.
(Fixer)	18" × 10" Viscountesses , 15 10 m 18" × 9" Ladies , 13 17 6	ordinary thickness metal . F.R. 8 10 Shoes each 2 0 3 0
Painter	Westmorland green (random sizes) . per ton 8 10 0 Old Delabole slates d/d in full truck loads to	Anti-splash shoes , 4 6 8 0
Glazier	Nine Elms Station: 20" × 10" medium grey per 1,000 (actual) 21 11 6	Boots
Scaffolder	,, ,, green ,, ,, 24 7 4	,, with access door ,, — 6 3 Heads , , 4 9 5 0
Navvy	Best hand-made do 4 17 5	Swan-necks up to 9" offsets . ,, 3 9 6 0 Plinth bends, 4\frac{1}{2}" to 6" ,, 3 9 5 3
Lorryman , I 6½	Hips and valleys each 9 , hand-made	Half-round rain-water gutters of ordinary thickness metal . F.R. 5
Watchman per week 2 10 B	Nails, compo lb. 1 4 copper , 1 6	Stop ends each 6 6 Angles , 1 7 1 11
MATERIALS	CARPENTER AND JOINER	Obtuse angles , 2 0 2 6 Outlets , 1 9 2 3
EXCAVATOR AND CONCRETOR	Good carcassing timber F.C. 2 2	PLUMBER
Grey Stone Lime per ton 2 2 0 Blue Lias Lime , 1 18 6	Birch as I" F.S. 9 Deal, Joiner's	Lead, milled sheets cwt. 38 3 , drawn pipes
Hydrated Lime	Mahogany, Honduras , , , , 1 3	,, soil pipe ,, 40 9 ,, scrap ,, 25 9
site, including Paper Bags) , I 19 B Rapid Hardening Cement, in 4-ton lots	Marican	Solder, plumbers' lb. 9 , fine do , 1 0
(d/d site, including Paper Bags) . , 2 5 0 White Portland Cement, in 1-ton lots , 8 15 0	Oak, plain American ,, ,, I o	Copper, sheet ,, III
Thames Ballast per Y.C. 6 6 6 7 0	" plain Japanese " " I 2	L.C.C. soil and waste pipes: 3" 4" 6" Plain cast F.R. 1 0 1 2 2 6
Building Sand , 7 6 Washed Sand , 8 6	" Austrian wainscot " " 1 6	Coated
2" Broken Brick 8 o	Pine, Yellow , ,, I o	Holderbats each 3 10 4 0 4 9
#" , , , , , , , , , , , , , , , , , , ,	, Oregon , , , 4 , British Columbian , , , , 4	Shoes , 2 10 4 4 9 6
	Teak, Moulmein , , , , , , , , , , , , , , ,	
DRAINLAYER BEST STONEWARE DRAIN PIPES AND FITTINGS	Walnut, American , , , , 2 3 , , French , , , , , 2 3	PLASTERER Lime, chalk per ton 2 0 0
4" 6" s. d. s. d.	Whitewood, American , , , , , , , , , , , , , , , ,	Plaster, coarse , 2 15 0 , fine
Straight Pipes per F.R. o 9 1 1 Bends each 1 9 2 6	,,	,, nne
Taper Bends , , 3 6 5 3 Rest Bends , , 4 3 6 3	" 11" · · · " 1 5 0	Keene's cement , 5 0 0 Gothite plaster , 3 6 0
Single Junctions	Deal matchings, 4"	Pioneer plaster
Straight channels per F.R. 1 6 2 6	P	Sand, washed Y.C. 11 6
Channel junctions 4 6 6 6	, 1" , , 18 0	Laths, sawn bundle 2 4
Yard gullies	Plywood, per ft. sup.	Lath nails · · · · · · b 3
IRON DRAINS: Iron drain pipe per F.R. 1 6 2 6	Thickness Qualities A B BB A B BB A B BB BB BB BB BB BB BB B	GLAZIER s. d. s. d.
Bends each 5 0 10 6	Birch 60 × 48 4 2 2 5 3 2 7 5 4 8 6 5	Sheet glass, 24 oz., squares n/e 2 ft. s. F.S. 21
Single junctions , 8 9 18 0	Cheap Alder 2 1 - 3 2 Oregon Pine 2 - 3 2 - 4 3 - 5 4 -	Flemish, Arctic, Figures (white) , , 78 Blazoned glasses , , , 2 6
Double junctions	Gaboon Mahogany 4 31 - 5 41 - 7 61 - 8 7 - Figured Oak . 61 5 - 71 51 - 10 8 - 17 9 -	Reeded: Cross Reeded ,, 11 Cathedral glass, white, double-rolled,
Gaskin , , 5	u,	plain, hammered, rimpled, waterwite ., 6 Crown sheet glass (n/e 12" × 10") . ,, 2 0
BRICKLAYER £ s. d.	Scotch glue	Flashed opals (white and coloured) . ,, I o and 2 o
Flettons	SMITH AND FOUNDER	"wired cast; wired rolled ,, 10
Phorpres bricks , 2 15 0	Tubes and Fittings (The following are the standard list prices from which	a" Polished plate, n/e i ft , tio to ii i
Stocks, 1st quality	should be deducted the various percentages as set forth below.)	" " 4 " 12 3 " 12 6
Blue Bricks, Pressed , 8 14 0 , Wirecuts , 7 12 6	Tubes 2'-14' long per tt. run 4 5½ 9½ 1/1 1/10	20
,, Brindles ,, 7 0 0 ,, Bullnose ,, 9 0 0	Pieces, 12"-23" long each 10 1/1 1/11 2/8 4/9 ,, 3"-11½" long , 7 9 1/3 1/8 3/-	7, 45
Red Sand-faced Facings , 6 18 6 Red Rubbers for Arches , 12 0 0	Long screws, 12"-23\frac{1}{2}" long,, 11 1/3 2/2 2/10 5/3 11 1/3 2/2 2/10 5/3 8 10 1/5 1/11 3/6	,, ,, ,, 2 ft, I 3
Multicoloured Facings , 7 10 0 Luton Facings , 7 10 0	Bends	,, plate, n/e 1 ft ,, 1 6
Phorpres White Facings	Socket unions	,, ,, 5 ft ,, 4 o
Midhurst White Facings , , 5 o o Glazed Bricks, Ivory, White or Salt	Tees , 1/- 1/3 1/10 2/6 5/1 Crosses , 2/2 2/0 4/1 5/6 10/6	7 ft
glazed, 1st quality: Stretchers	Plain sockets and nipples ,, 3 4 6 8 1/3 Diminished sockets , 4 6 9 1/- 2/-	", ", over 15 ft
neducis	Flanges	Putty, linseed oil lb. 3
Double Stretchers	Flanges , , , , , , , , , , , , , , , , ,	", ", over 15 ft , 7 6 "Calorex" sheet 21 0x., and 32 0x , 2 6 and 3 6 " rough cast # and # "
Glazed Second Quality, Less , I o o	", with brass plugs ", — 4/- 7/6 10/- 21/-	
	Discounts Tubes. Per cent. Per cent.	White lead in 1 cwt, casks cwt. 3 4 9
20 11 11 11 11 11 11 11 11 11 11 11 11 11	Gas 683 Galvanized gas . 611	Linseed oil gall. 3 o Boiled oil
3, 11, 11, 11, 11, 2, 1 4, 11, 11, 11, 11, 12, 12, 6	Water	Patent knotting
MASON	FITTINGS.	Distemper washable cwt. 2 6 0 ordinary 2 0 0
The following d/d F.O.R. at Nine Elms: Portland stone, Whitbed F.C. 4 4	Gas 611 Galvanized gas	Whitening
Bath stone	steam 53\$, steam . 40\$ s. d.	Flat varnish gail. 13 o
Sawn templates	Rolled steel joists cut to lengtl, cwt. 14 6 Mild steel reinforcing rods, #" . ,, 10 6	Outside varnish , , 16 o White enamel , , 15 o
, Paving, 2 F.S. 1 8	, 10 3 , 10 0	Ready mixed paint

CURRENT PRICES FOR MEASURED WORK

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

EXCAVATOR AND CONCRETOR Digging over surface n/e 12" deep and cart away	Y.S. s. d.	CARPENTER AND JOINER—continued s. d. 1½" deal moulded sashes of average size F.S. 1 of
to form basement n/e 5′ o″ and cart away to form basement n/e 5′ o″ and cart away	Y.C. 8 6	1½" deal moulded sashes of average size F.S. 1 9½ 2" 1½" deal cased frames double hung, of 6" × 3" oak sills, 1½" pulley
. 10 0 deep and cart away	" g o	stiles, 14" heads, 1" inside and outside linings, 4" parting beads, and with brass faced axle pulleys, etc., fixed complete
If in stiff clay add If in underpinning	10 0	
	F.S. 1 0	Extra only for moulded horns
rianking and strutting to kines of excavation to pier holes to trenches extra, only if left in	, 5	2" , , , , , , , , , , , , , 2 8
,, to trenches	n 5	
Hardcore, filled in and rainfilled	Y.C. 10 0	2 " X 3" deal, rebated and moulded frames F.R. I o
, (4-2-1)	,, 1 12 6	4½" x 3½" 1½" deal tongued and moulded window board, on and including deal bearers . F.S. 1 9
Finishing surface of concrete, space face	Y.S. 1 16 e	12" deal treads, 1" risers in staircases, and tongued and grooved
	4" 6"	together on and including strong fir carriages
DRAINLAYER	4" 6" s. d. s. d.	I g" ,, outer strings
Stoneware drains, laid complete (digging and concrete to be priced separately) . F.R.	. 1 6 2 3	3" × 2" deal moulded handrail F.K. 1 3
	h 2 8 3 9	I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
junctions Gullies and gratings Cast iron drains, and laving and jointing F.R	16 6 18 0	3" × 3" deal wrought framed newels F.R. 1 3 Extra only for newel caps Each 6 o
Cast iron drains, and laying and jointing F.R. Extra, only for bends		Do., pendants
		SMITH AND FOUNDER & s. d.
BRICKLAYER	£ s. d.	Rolled steel joists, cut to length, and hoisting and fixing in
Brickwork, Flettons in lime mortar	Per Rod 26 10 8	position
Stocks in cement	m 34 0 0	position
,, Dides in cement	,, 50 0 0	Mild steel bar reinforcement, 1 and up, bent and fixed complete . ,,
,, backing to masonry	,, I IO 0	Corrugated iron sheeting fixed to wood framing, including all bolts and nuts 20 g F.S. 11
Extra only for circular on plan backing to masonry rising on old walls moderpinning Fair Face and pointing internally	5 10 6 F.S. 12	Wrot-iron caulked and cambered chimney bars Per cwt. 1 10 0
Extra over fletton brickwork for picked stock facings and pointing .	8	PLUMBER £ s. d.
red brick facings and pointing blue brick facings and pointing blue brick facings and pointing red brick facings and pointing blue brick facings and pointing red brick facing re	,, II	Milled lead and labour in flats
	3 6	Do, in covering to turrets
Weather pointing in cement	7 3	Do. in soakers
Slate dampcourse	,, IO	Open copper nailing
Turning adaptions of the territory		* * I I I 2 4
ASPHALTER	s. d.	Lead service pipe and s. d.
Horizontal dampcourse	Y.S. 4 9	hooks F.R. I 0 I 2 I 6 2 4 3 2 — Do. soil pipe and
g paving or flat	11 0 3	fixing with cast lead tacks — 6 6
x" x 6" skirting	F.R. I O	Extra, only to bends . Each 2 0 6 9
Angle fillet	H 2½	Do, to stop ends . , 6½ 8 9 11 1 0 — Boiler screws and
Cesspools	Each 5 6	unions
		Lead traps
MASON	£ s. d.	Screw down bib valves , 6 9 9 6 11 0 — — — Do. stop cocks . , 7 0 9 6 12 6 — — — — — — — — — — — — — — — — — —
Portland stone, including all labour, hoisting, fixing and cleaning down, complete	F.C. 17 9	Extra, only stop ends Each 1 o
bath stone and do., an as last	н 13 б	Do. angles
York stone templates, fixed complete	,, 10 6	4" dia. cast-iron rain-water pipe and fixing with ears cast on . F.R. I 2 Extra, only for shoes Each I 3
,, thresholds	13 6 1 0 6	Do, for plain heads 5 6
		PLASTERER AND TILING s. d.
SLATER AND TILER	£ s. d.	Expanded metal lathing, small mesh Y.S. 2 o Do. in n/w to beams, stanchions, etc
Slating, Bangor or equal to a 3" lap, and fixing with compo		
Dails, 20° × 10°	. 3 7 0	1 screeding in Portland cement and sand or tiling, wood block floor, etc.
Do., 24" × 12" Westmorland slating, laid with diminished courses	3 17 B	Do. Vertical
Tiling, best hand-made sand-faced, laid to m a" gauge, nailed every	3 0 0	Render, float and set in lime and hair
fourth course. Do., all as last, but of machine-made tiles	3 0 0 2 16 0	Render, backing in cement and sand, and set in Keene's cement 2 9
20" × 10" medium Old Delabole slating, laid to a 3" lap (grey)	11 2 10 0	Extra, only if on lathing
		Arris
CARPENTER AND JOINER	£ s. d.	Plain cornices in plaster, including dubbing out, per I" girth ,,
Flat boarded centering to concrete floors, including all strutting .	Sqr. 2 2 6	
Shuttering to sides and soffits of beams ,, to stanchions , to staircases		6" × 6" white glazed wall tiling and fixing on prepared screed . ,, 17 6
, to staircases Fir and fixing in wall plates, lintols, etc	1 6	9" × 3" Extra, only for small quadrant angle"
Fir framed in floors	,, 4 6	GLAZIER s. d.
, , roofs		21 oz. sheet glass and glazing with putty F.S. 6
at deal come boarding and fining to injute	,, 8 6 Sqr. 1 14 6	26 oz. do. and do
I" ,, ,, ,, ,, ,, , , , , , , , , , , ,	1 17 6	Cathedral glass and do
* × 2" fir battening for Countess slating	,, 9 6	Extra, only if in beds
Stout feather-edged tilting fillet	12 0	
Patent inodorous felt, r ply	Y.S. 2 3	PAINTER S. d.
" " 3", Stout herringbone strutting to 9" joists	3 3	Do. and distemper walls
	F.R. 104 F.S. 1 2	Do. with washable distemper
11 " " " " " " " " " " " " " " " " " "	F.R. 1 6	
1" deal grooved and tongued flooring, laid complete, including		Do on steelwork
cleaning off	Sqr. 2 1 0	Do, and brush grain and twice varnish Stain and twice varnish woodwork I II
1 do. 1 deal moulded skirting fixed on, and including grounds plugged	2 17 0	Stain and wax polish woodwork
to wall	F.S 1 6	Stripping off old paper Piece 2 o
1}" do	, ,, I g	Hanging ordinary paper from 2 9