Mine host of "The Poulett Arms" serves good ale, so if you bappen to be down Ilminster way, take a look at the brickwork on the way in. The bricks are Phorpres' Rustics lime-washed except for the chimneys which are left their natural red-brown.

"The Poulett Arms" near Ilminster (for Messrs. Brutton, Mitchell Toms Ltd.). Architect: E. H. Clarke, F. I. A. A. Contractor: A. Taylor, Norton-sub-Hamdon.



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THE ARCHITECTS'



JOURNAL

THE ARCHITECTS' JOURNAL WITH WHICH IS INCORPORATED THE BUILDERS' JOURNAL AND THE ARCHITECTURAL ENGINEER, 16 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 % SPECIAL COMBINED RATE FOR SUBSCRIBERS TAKING BOTH THE ARCHITECTURAL REVIEW AND THE ARCHITECTS' JOURNAL: INLAND \pounds 2 6s.; ABROAD \pounds 2 10s. SUBSCRIPTIONS MAY BE BOOKED AT ALL NEWSAGENTS

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THURSDAY, MAY 12, 1938

Number 2260: Volume 87

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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.

ROYAL ACADEMY EXHIBITION





TOP, Camberley House: working-class flats for the Commissioners of Crown Lands (No. 1381). By Samuel D. Meadows (perspective: Cyril A. Farey). Bottom, L.C.C. Housing Scheme on the White City site (No. 1359). By Edwin P. Wheeler (perspective: J. M. Scott).



MAIN ENTRANCE, EMPIRE EXHIBITION, GLASGOW

This gaily coloured, light wooden structure is an appropriate introduction to the best designed Exhibition which has yet been held in Britain.

The series of articles on architects and territorial planning, which have been interrupted because of the Registration Bill and the Special Issue on "Silence" on May 19, will be resumed on May 26.



TOMORROW THE REGISTRATION BILL WILL BE DEFEATED

HE Registration Bill will come up for Report and Third Reading in the House of Commons tomorrow. The Bill is not free from all defects, but if it becomes an Act it will do two things: it will protect the title "architect" from misuse by unqualified persons; and it will make obligatory the passing of an examination of reasonable standard by all new entrants to the profession. For these provisions the Bill is supported by at least 14,000 of the 15,000 architects in the country, and because of their obvious benefit to the public it is probable that the Bill will pass Third Reading tomorrow by a substantial majority.

But one development of the past week is of some importance. A week ago the JOURNAL prophesied that since their own profession had proved unsympathetic the opposers of the Bill would probably confine their attention, this time, to M.P.s.

assumption proved correct.

An amendment has been tabled by Sir Robert Tasker which, briefly, aims to sweep away all existing recognized exams. and substitute a single national qualifying examination run by the Registration Council. And a week ago a booklet, stirringly entitled A Plea for Justice, was sent to M.P.s in support of this amendment.

In this booklet the small desperate opposition again assures M.P.s that it is not in fact opposing the Bill. It just wants to introduce a little, just a tiny little, alteration and everything will be perfect. alteration, this time, is the amendment referred to

By quoting a well-selected portion of a leading article which appeared in this JOURNAL over a year ago, the opposers-cleverly we must confess-make out that it has been converted with dramatic suddenness to their view and that, providing the trifling change stated in the amendment is made to the promoters' policy, universal agreement will be achieved at last.

The JOURNAL is flattered by the tribute to its judgment; but in case there exists an M.P. so warm-hearted. as to be carried away by A Plea for Justice and to feel convinced that this is a serious-and not a wreckingamendment, the JOURNAL must make it clear that it, unlike the I.A.A.S., did not discover the virtues of a single examination within a week of Third Reading.

The JOURNAL's view, with bluntness, is this. In its

belief the I.A.A.S. do not want either a single national qualifying examination or fourteen "recognized" qualifying examinations all of equally high standard. They want their own examination to be recognized at a lower standard than the others—a state of affairs which the vast majority of architects will not allow. In the JOURNAL's view the I.A.A.S.'s complaints that their examination has been unfairly refused recognition spring from this cause. On March 25, 1937, the JOURNAL, in the article quoted in A Plea for Justice, suggested, with a tinge of irony, that the Registration Council might set the same papers for all qualifying exams. and thus test the reality of the I.A.A.S.'s plea of unfairness. To that the I.A.A.S. paid little attention at the time.

Now, however-when the majority of architects have decided that a single national examination is in practice undesirable, but that a single standard for all qualifying examinations is highly desirable—the opposers of the Bill have remembered the JOURNAL's article, quoted the bits that sounded best, and tabled this amendment.

The JOURNAL hopes that M.P.s will be delighted to find that before Report and Third Reading begins the whole architectural profession is for the first time united in believing that a single standard of qualifying examination is the only fair solution. The only difference now remaining is that the promoters believe that the examinations of schools already existing should, when of a high enough standard, be recognized as qualifying for admission to the Register; while the opposers believe (since last week) that all existing exams. should be scrapped and an entirely new examination, created and controlled by the Registration Council, should be the sole avenue of entrance to the profession. As the opposers have complained unceasingly for ten years that the Registration Council is grossly biased against them, a proposal so touching in its selflessness deserves to be examined by M.P.s with the most painstaking attention.

Architects at this stage will not need the story of Registration to be told again. Tomorrow this vital matter for which they have worked for forty years is out of their hands and in that of their M.P.s.

If you have not already asked your M.P. to attend the debate and remain to vote, you have only until tonight's post to do so.



The Architects' Journal
Westminster, S.W.1
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Telegrams
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Parl

NOTES

T O P I C S

THE BILL

I may be a great virtue of a democracy that it comes to no large decision without attention being paid to the views of everyone whom the decision will affect. But a very colourable case can be made for this same carefulness being also a vice.

Directly general goodwill, tolerance and laissez faire is succeeded by a desire to achieve some definite progress—to do something—the virtue becomes a dreary, almost insuperable obstacle.

The Architects Registration Bill, which reaches Report and Third Reading tomorrow at 11 a.m., is a full-bodied example of this. Obligatory qualification by a reasonable examination and protection of title: no demands could well seem more modest than these. And for over a quarter of a century a majority of architects have wanted them.

Democracy, however, has decided that years and years and a huge sum of money must be spent on circumventing the resistance—on one or another ground—of π very small minority.

Today most architects are tired to distraction of the bickering and bad publicity which this professional wrangle has caused. But unless they want to throw away years of effort they have to go on—for twenty-four hours.

During the past week a new kind of counter-attack has been made on the Bill. It is described in the leading article in this issue and is no doubt the last of its kind. To make certain, all that is necessary is a letter to one's M.P. asking him to be in the House tomorrow at II a.m. and remain to vote.

Doing so will only take twenty minutes. After today it will be too late.

THE LINEAR TOWN

Mr. John Betjeman, in an article-interview by him in the North Wiltshire Herald, is continuing his support of the "linear town."

This solution for urban problems has now a considerable measure of support—utilising as it does the tendencies of modern transport, and some of the advantages of garden cities, the Hundred New Towns and the line of least resistance.

Mr. Betjeman restates the case. He suggests preventing dormitory-cum-industrial rings round existing cities by taking large trunk roads as base lines for development. On these would be placed at intervals complete towns of about 6,000 inhabitants, planned as reasonably self-contained units.

The idea's sole fault is that each town would need to be developed carefully and continuously either by a private company or a singularly unusual local authority. Its great merit is that it would remedy the greatest vices of present light industrial development.

ARCHITECTS' OFFER

Which reminds me that if anyone would like a factory, a firm of architects has one for sale, according to this letter in facsimile holograph:—

Fuller Hall & Foulsham, 212 High Holborn, London, W.C.1. 25/4/38

Dear Sir,—I make no apology for writing you in this personal manner for my letter draws attention to a problem that at one time or another confronts every Manufacturer—the necessity of securing new or additional accommodation.

I need not stress the advantages attached to manufacturing in a single storey modern building; the benefits of a clear floor, roof lighting, healthy surroundings and a factory planned to your own special requirements must be fully known to you. What I am anxious that you should know is, that such a building can either be rented or purchased within a mile or so of the West End. Plans have been prepared for a modern factory at Wandsworth, a copy of which I enclose herewith. Modifications could be made to incorporate any particular feature of your flow of work.

Whilst figures and terms have been ascertained for this building, I should prefer to advise you on these subjects in a rather more personal manner. For this purpose I should welcome an opportunity of calling on you if the subject is one that is of interest.

I am, dear Sir, Yours faithfully, (Sgnd.) C. Fuller Hall.

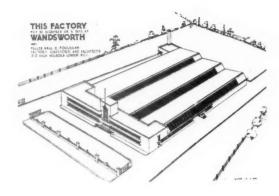
The plan and axonometric accompanying the letter are reproduced.

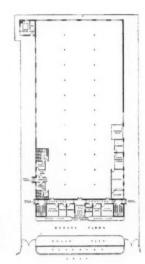
EVIDENCE SUBMITTED

Royal Commissions have acquired in the course of a century a strong double reputation. They are famous as a means of shelving reforms which are inconvenient to the Government of the day; and they are supposed to be ideal for making numerous private societies imagine they have the ear of the Cabinet. For these societies, though very small, are often active and influential.

It was therefore to be expected that the Royal Commission on the Location of Industry would hear evidence from the C.P.R.E., the Garden Cities and Town Planning Association and the Hundred New Towns Association. (The Yorkshire Evening Post even managed to get a headline from the evidence of the second society: "Big Cities Blamed for Divorce.")

What is very much more significant is that the Town Planning Institute have submitted a Memorandum explaining their views; and this evidence is supported by





Axonometric and ground floor plan of the factory mentioned in the letter on previous page.

the R.I.B.A. and the Institution of Municipal and County Engineers.

DESIGN IN INDUSTRY

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exby Two years ago when I read the first prospectus of the Reimann School I was very impressed with the idea that the staff and the brighter students should collaborate and do ordinary industrial jobs just like any other firm of designers. But ideas of this kind, admirable in themselves, so often fail in their execution, and I imagined a good many industrialists might be shy of an unorthodox organization such as this.

None the less the idea seems to be working, particularly at Glasgow, where Reimann Studios have done a complete travelling show for the B.B.C., a display window for the G.P.O., a stand for a firm of outfitters and the inside of the Empire Tea Pavilion. I saw the last and thought it very impressive.

NO EPSTEIN FLAVOUR, SAYS SCULPTOR

No Sunday opening and decent veils over three nudes in the Health Pavilion is making sure there shall be no wicked Continental licentiousness at Bellahouston. Not so Huddersfield, where two six-foot nudes are to grace the entrance to the new Public Library and Art Gallery—" a man representing literature and a woman representing painting, sculpture and architecture."

The proposal not to have them was defeated by only one vote—26 to 27—so that ART will probably be well placed in the Huddersfield Press for some time. Exactly what in the lady's figure and stance represents Painting and what Sculpture and Architecture is one potentially fruitful correspondence topic.

DISCLAIMER

I am enchanted by Sir Ian MacAlister's terse denial in a recent issue of the Liverpool Daily Post:—

SIR,—I was startled to read in your issue of April 28 a statement to the effect that, in my view, civilization does not exist outside this country and the United States.

I have never said or thought anything of the kind.

Yours, etc.

Now, of course, what we all want to know is what Sir Ian really does think.

CAMBRIDGE

I spent last week-end in Cambridge and noticed that Queens' is not the only building in danger of collapse.

All traffic has had to be diverted from passing a house in Trinity Street which was recently discovered to be tottering, and one side of Bridge Street is already in the hands of the housebreakers.

I visited the new extensions to Newnham which are now inhabited, though their official opening by Queen Mary is not until the summer. Miss Elizabeth Scott and her partners have made a very gay and elegant job of the inside, and if the outside is perhaps a little dull there are some unusual railings, claimed to be unclimbable (even by Whipplesnaith?), and a very saucy entrance door.

The completed scheme, as shown in a model, will provide a new hall to close the end of the court—

Here, at any rate, Cambridge has got a good imaginatively handled job.

The fact that this is unusual enough for comment shows that something is seriously wrong with the casual methods by which architects are chosen for university work.

For instance, I was told by a member of a building committee that when he submitted the name of Walter Gropius for a job, it was rejected because nobody had ever heard of him. The job went, in the usual way, to someone who had played golf with someone else.

A step towards solving such problems in a way rather more suitable for Cambridge would be to suggest the resignation from College building committees of all those who do not profess an active interest in building. Many of them are not so much ignorant as bored.

Additionally, it might not be difficult to form a permanent and *qualified* body to act in an advisory capacity on behalf of the University.

ASTRAGAL

Next week the JOURNAL will publish a SPECIAL ISSUE called "Silence." The issue will review present attempts to secure tolerable standards of quiet in urban areas, as well as present achievements in sound-suppression and insulation in building construction and equipment.

NEWS

POINTS FROM THIS ISSUE

Tomorrow at 1	II a.m.			765
" Local author	rities har	e been	asked	
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first Confe	erence (on Stru	ctural	
A.R.P., wh	ich will	be held	at the	
R.I.B.A. of	n Fune	13 to 15		770

THE DEVIL'S PUNCH BOWL

At the annual meeting of the Council for the Preservation of Rural England last week it was stated by Colonel W. P. Hume (of the Hindhead Committee of the National Trust) that 15 acres at the bottom of the Devil's Punch Bowl at Hindhead had been sold for development, but that the purchaser had expressed willingness to accept £2,000 for it. He said that his branch of the National Trust, the Haslemere and District Preservation Society, the Hamble-don District Council, and the West Surrey Society had met together and agreed to buy the land, and were now going to collect the necessary money.

FIVE-YEAR PLAN FOR IRAQ

A five-year plan for Iraq, consisting mainly of public works, to cost £8,250,000, has been approved by the Chamber of

Approximately one-third of the total sum will go to the Army, £1,500,000 is being set aside for roads, bridges, and telephones, and £400,000 has been allocated to the Habbaniyah escape project to divert the flood waters of the Euphrates, which

THE ARCHITECTS' DIARY

Thursday, May 12
GARDEN CITIES AND TOWN PLANNING ASSOCIATION. At the Housing Centre, 13 Suffolk Street.
S.W.1. Exhibition of books on planning. Until

S.W.1. Exhibition of books on planning. Until May 31.

COLLEGE OF ARTS AND CRAFTS, Rirminghum. At the Museum and Art Gallery. Exhibition of Students' Work. Until May 21.

SOCIETY OF ANTIQUARIES, Burlington House, W.1. "Recent Excavations at Criconium (Wrozeler)" By Kuhleen Kenyon. 8.30 p.m. ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS, 113 High Holborn, W.C.1—Metropolitan Branch. "The Position of the Assistant in Private Offices," By R. D. Manning and Colin T. Penn. 7 p.m.

INSTITCTION OF ELECTRICAL ENGINEERS, Surgy Place, W.C.2. Annual General Meeting. 6 p.m.

Wednesday, May 18 BRITISH GLASS CONVENTION. At Droitwich. Until May 18.

periodically cause great damage to the

CITY ARCHITECT, BRISTOL

Mr. John Nelson Meredith, F.R.I.B.A., City Architect of Norwich, has been chosen to fill the new post of full-time city architect of Bristol, at a salary of £1,000, rising to £1,300 by annual increments of £75. The post was advertised, and 98 applications were received.

Mr. Meredith, who is forty-five, is a native of South Wales, and has been at Norwich for six years, after working for Liverpool Corporation Housing Department.

SURVEY OF PROSPECTIVE WORKS INVOLVING CAPITAL **EXPENDITURE**

The Minister of Health, Sir Kingsley Wood, as he foreshadowed in his recent speech at Manchester, has now communicated with local authorities, asking them to undertake a survey of their probable capital expenditure during the next five years, and to submit to him and to the appropriate Government Departments m programme of the capital works which they would propose to carry out in that period. The Minister points out that it is only by such means that authorities can take a reasonably long view of their future requirements, and that under such a system a programme of capital works can be arranged in order of priority.

It is stated that this is of special importance under present conditions, not merely in order to secure the smooth progress of local authorities' operations, but as a matter of national economic policy, and that by ordered planning on a basis which will admit of adjustment should circumstances make it desirable, local authorities can make a valuable contribution to the stabilisation of the conditions in industry over a considerable period.

D.I.A.

The Design and Industries Association has arranged a visit to the R.M.S. Orcades, to take place on Thursday, June 23. Members of the R.I.B.A. and the A.A. can join the party if they wish. Applications for tickets should be sent to the Organising Secretary, Mr. M. L, Anderson, 6 Queen Square, W.C.1. Total cost: D.I.A. members and guests accompanying them, 10s. per head. Non-members of the D.I.A., 12s. 6d. per

COMPETITION FOR PROPOSED COMMUNITY CENTRE AND FIRE STATION

The Ilkeston Council invites architects of British nationality to submit designs for a community centre and fire station to be erected in the Borough.

Professor Lionel B. Budden, M.A., F.R.I.B.A., has been appointed assessor; and the following premiums are offered, £.200,

£100, £50.
The conditions and instructions to competitors, together with site plans, may be obtained on application to Mr. E. I. E. Williams, Town Clerk, Town Clerk's Office, Town Hall, Ilkeston. Deposit £1 1s. Designs must be submitted not later than 12 noon on Wednesday, September 14, 1938. Last day for questions June 14, 1938.

AN ARCHITECT'S WILL

Mr. Alexander Henry Kersey, F.R.I.B.A., of Kensington and Moorgate, architect and surveyor, left £24,248 (net personalty £.22,266)

THE LATE W. J. NEVETT

The death has occurred at Stafford of Mr. William James Nevett, until his retirement, in 1929, County Architect under Staffordshire County Council. He was seventy-five years of age.

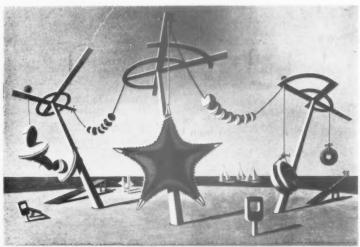
Before his appointment to the County Council in 1905, he was in the office of Mr. W. H. Cheadle, County Surveyor, who at that time was responsible for the architectural work in the county.

CORRECTION

The name of the author of the drawing of the Employment Exchange, Washwood Heath, Birmingham, published last week, was mis-spelt. The drawing was executed by Mr. O. P. Carver.

HOUSING PROGRESS

Slum Clearance and Decrowding: In their slum clearance work, Scottish local authorities, during the first quarter of this year, have removed 8,764 persons from 1,992 unfit houses. In the last two years 91,286 persons have been removed from 20,091 unfit houses, and in addition, 19,784 overcrowded families have been transferred to larger houses.



"The Beached Margin," by Edward Wadsworth. From the exhibition now being held at Tooth's Gallery. (See page 769).

Progress under the Housing (Rural Workers Ads: The number of dwellings reconstructed under the Housing (Rural Workers) Acts during the first quarter of this year was 713, compared with 785 in the previous quarter and 581 in the corresponding quarter last year. The number of dwellings under reconstruction at the end of March was 4.322, against 4.497 at the end of December and 3.377 at the end of March, 1937.

The applications for assistance under the

Acts made during the last quarter involved

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541 dwellings.
Since the Acts commenced to operate, 26,093 dwellings have been reconstructed and Scottish local authorities have paid £2,268,163 in grant, while payment of a further £443,411 has been promised.

PARLIAMENT IN

Housing

Mr. Kennedy, in the House of Commons, asked the Secretary of State for Scotland if he was aware that local authorities in Scotland were finding increasing difficulty in the matter of securing materials to enable them to carry out

were finding increasing difficulty in the matter of securing materials to enable them to carry out their working-class housing programmes; that difficulty was partly due to the diversion of materials required for luxury building; if he proposed to take any action to ensure that such materials were made available at reasonable prices to local authorities in regular and sufficient quantities; and if he was satisfied that the maximum available labour was now being employed in the building industry.

Mr. T. Cooper, Lord Advocate, said that his information was that the supply of building materials had considerably improved in recent months and that in general local authorities were not now finding any difficulty in obtaining supplies. If the rt. hon, member had any particular case in mind his rt, hon, friend would be glad to make inquiries if he would let him have particulars. In regard to the last part of the question, the supply of labour on local authorities' housing schemes had also increased during the past year and his rt, hon, friend was endeavouring, by encouraging the use of alternative methods of construction, to provide further employment for trades in which there was available labour.

SOCIETIES AND INSTITUTIONS

BUILDING INDUSTRIES NATIONAL COUNCIL

The sixth annual meeting of the Building Industries National Council was held recently at the R.I.B.A. The President, Mr. John M.

at the R.I.B.A. The President, Mr. John M. Theobald, P.P.S.I., presided. Mr. Theobald stated that the Ministry of Labour's figures of the estimated value of building plans approved had shown a consistent and appreciable decline, as had also the Board of Trade Index of Production for building and building materials. This decline in building activity, which was also reflected in the advances of building societies, had been followed by declines in new orders in the shipbuilding, motor car, wireless, furniture and iron and steel industries. as well as in Stock building, motor car, wireless, turniture and iron and steel industries, as well as in Stock Exchange values and bank clearings. This position also indicated a substantial decline in that portion of the trade of the industry emanating from private sources. There was, however, a considerable volume of work emanating from the rearmament programme of H.M. Government. In this connection it was to be regretted that the Government had not made greater use of the whole of the organized resources of the industry.

It was the more unfortunate that a wider measure of consultation has not been instituted



A perspective, by J. Ashworth, o, a block of flats now in course of construction at Wallasey. Architects, Silcock and Thearle.

concerning the problems that would arise when the rearmament programme was completed, problems in which all sections of the industry were interested. The desirability of co-operation with representatives of the whole industry in the light of the national advantages that would arise therefrom had been repeatedly urged upon the Government by the Council. Election of Officers.—The President, Mr., John M. Theobald, P.P.S.I., the senior Vice-President, Mr. H. J. C. Johnston, the Vice-Presidents, Mr. G. Hicks, M.P., Mr. G. H. Parker, Lt.-Col. C. W. D. Rowe, M.B.E., and Mr. Maurice E. Webb, D.S.O., M.C., F.R.I.B.A., were re-elected for the ensuing year. concerning the problems that would arise

Maurice E. Webb, D.S.O., M.C., F.R.I.B.A., were re-elected for the ensuing year.

The Honorary Treasurer, Mr. Oswald Healing, F.S.I., intimated his desire to retire from that position on the grounds of increasing calls upon his time from other directions of interest to the building industry. Mr. A. Strachan Bennion, F.S.I., was elected Honorary Treasurer. Mr. I. Ernest Jones, M.A., B.SC., was re-elected Honorary Secretary.

ARCHITECTS' BENEVOLENT SOCIETY

At the annual meeting of the Architects' Benevolent Society, it was stated that the Society would be overdrawn by £1,000 at the end of the year, unless more support were received.

received.

The President, Mr. H. S. Goodhart-Rendel, P.R.I.B.A., in moving the adoption of the Annual Report, said:

"My first words must convey some bad news. The Architects' Benevolent Society is drifting towards the rocks. The accounts for 1937 showed a deficit, and if things go on as they now are going the accounts for 1938 will show a larger one. Not a penny is wasted in the running of the Society; the deficit, therefore, must, if it be not met, result in the refusal and perhaps the discontinuance of grants. Your and my forgetfulness of the Society's especial need might let some man or woman sink whom need might let some man or woman sink whom we could easily have helped to safety.

"Now, from the Society's point of view British architects are divided into three classes: those that subscribe all they can to its funds, those that subscribe less than they might, and those that do not subscribe at all. Those in the first class have nothing to fear from their consciences, whether their runscriptions he in curious or in whether their subscriptions be in guineas or in

shillings.

"Among the second are many who will, I hope, increase the amount of their subscription gladly when they realize the urgency of the

Society's need. I expect that my own conduct has been typical in this class. I received an appeal some years ago, I looked through the list of subscribers to see what was the conventional subscription for men of what I believed to be my standing, and I started an annual habit of paying that sum without giving the matter a further thought. I admit that this course showed lack of imagination, since upon an architect, architects and their dependents have a particular claim. But I thought that there was no particular need, as, indeed, I went on thinking until I inquired into the Society's finance in preparation for this meeting.

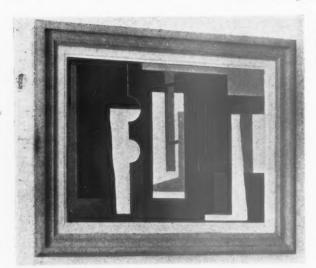
"There is a particular need which we must do our best to supply. I beg those whose subscription, whether by banker's order or otherwise, has become limited by routine to a

otherwise, has become limited by routine to a less sum than they can spare, I beg those to go into the matter without delay and put it right. "Applications increasing, deficit increasing—that is the distressing situation I have been compelled to call to your notice. I am confident that we are able to do something about it, and being able I am confident that we shall. But the need of doing it soon is vital, and I have therefore added no other matter to my speech this year that could weaken its force as a simple urgent appeal."

EXHIBITIONS

[By D. COSENS]

DWARD WADSWORTH'S work has always been notable for straightforward vision, clear definition, and taut construction. In his more recent work the direct representation of quayside and ships has given place to a formal design of maritime objects against a background of shore and sky. In almost all the pictures he is showing at Tooth's Gallery he has painted not only a scene or a composition but, through a particular arrangement of forms and associations he has succeeded in giving the pervading atmosphere of the sea more clearly than by a precise realism. In the associations compelled by these unexpected arrangements of the shapes of real things in the strong clear light of unreality his painting often becomes definitely surreal.



Painting by .7ohn Piper. From the exhibition now being held at the London Gallery.

And in his emphasis on the exact relation of the formal elements of his design his work is in the constructive, rather than the realist idiom. But Mr. Wadsworth attaches himself to no school, and while noting these qualities in passing it is far from our intention to attempt to fit his painting into any one category. A great deal of its interest lies in the fact that it has many of the merits of all three-direct realism, the geometric balance of deliberately opposed shapes, and the power of giving the observer an intense personal identification with the painted scene. Technically his work is outstandingly good, and when one re-members that tempera dries instantaneously his performance in that difficult medium is remarkable. His colour is always exact and luminous, and his compositions of simplified shapes can become exhilarating in move-ment even when they are in fact completely This is one of the two most interesting exhibitions in London at the moment.

The other is that of John Piper's paintings and collages at the London Gallery. His earlier abstract work was two-dimensional, but lately his preoccupation has been with the exploration of space in terms of flat surfaces, so that the recession of the various planes of his design is achieved by their exact relation to each other in colour or in shape. Not by perspective, for no solid forms are used. The third dimension is implied by a rhythmic linear composition. To this exacting type of painting the approach is essentially objective, and in the artist's search for an equation to a problem of equilibrium for whose complete solution there is no formula it is the intellect that selects, disposes, dictates, never the emotions. Yet this rigid construction never checks the vitality of his painting or limits it to an arid pattern.

At first sight his collages appear to be in direct contrast to his paintings, but the realism of their familiar scenes is deceptive -actually it is arrived at in exactly the same way as in the abstract design of the paintings only here odds and ends of paper and print of different tone and texture are cut out and applied. The realization of space in the quickly executed collage "Cardigan-shire Beach" for instance, is achieved by the same methods as the painting "Shuttered World." The work John Piper is showing is all of exceptional interest, and among the many excellent exhibitions at the London Gallery this is one of the most successful.

Both Edward Wadsworth and John Piper are engaged on a painting for the new collection of contemporary lithographs which will shortly be produced in the same series as lithographs for schools. These reproductions of work by contemporary painters greatly widen the range available to those who cannot afford originals.

Tempera Paintings by Edward Wadsworth. Tooth's Gallery, 155 New Bond Street.

Until May 14.
Paintings, Collages and Drawings by John
Piper. London Gallery, 28 Cork Street.

Until May 31.

R.I.B.A.

NEWS BULLETIN

London Architecture Bronze Medal.—The R.I.B.A. Bronze Medal for the best London building erected in 1937 has been awarded to Stockleigh Hall, a block of flats facing Regent's Park and for which Mr. Robert Atkinson, F.R.I.B.A., is the

Air Raid Precautions, -The Home Secretary is An Raid Precautions,—The Home Secretary is to open the first Conference on Structural A.R.P. which will be held at the R.I.B.A. on June 13 to 15. He will speak at the Inaugural Meeting on June 13 at 8 p.m. Full details will be announced shortly.

St. Andrew's Cathedral, Sydney.—The 30 sets of drawings submitted in the recent competition for the proposed new cathedral at Sydney will be on view at the R.I.B.A. from June 1 to 15 inclusive. The winning design was by Messrs. R. A. P. Pinckney and A. F. E. Gott.

Visit to B.R.S.—There will be a visit to the Building Research Station on Tuesday, May 24.

A fast train leaves Euston at 2.7 p.m. Members will except the outside Watford Junction Station

A fast train leaves Euston at 2.7 p.m. Members will assemble outside Watford Junction Station at 2.40 p.m. A special programme has been arranged to include recent work on sound transmission, a film on Continental rendering methods, demonstration of an apparatus for measuring the dryness of plaster and experi-ments on the penetration of driving rain. It is suggested that senior members who cannot themselves attend, should send an assistant. The Hon. Secretary of the Science Standing

The Hon. Secretary of the Science Standing Committee should be notified.

R.I.B.A. Dramatic Society.— The R.I.B.A. Dramatic Society will present "Bon Ton or High Life Above Stairs" by David Garrick, preceded by "The Waxen Man" by Mary Reynolds, on Thursday and Friday next, May 19 and 20, at 8.30 p.m. Tickets 5s. or 3s. 6d. from the R.I.B.A. or A.A. The Garrick play is a satirical drama which is so little known that the Society found difficulty in getting that the Society found difficulty in getting

copies of it.

Exhibitions.—"Health, Sport and Fitness" closes at Hull on May 21, and will reopen in

Bristol on June 1.
"Civic Centres" will open at the Museum and Art Gallery, Leicester, on May 17.

MAINTENANCE SCHOLARSHIPS

The R.I.B.A. offers for award in July, 1938, Houston Maintenance Scholarships to a total value of £ 100 in all. The value of the scholarships will depend on the financial circumstances of the parents or guardians of the candidates. Parents or guardians are required to furnish particulars, on the proper form, of their financial

The Houston Maintenance Scholarships are for the purpose of providing educational and maintenance allowances for the sons of architects or artists who may be, or at the time of their death were, in impecunious circumstances, whether such architects or artists are alive or

The scholarships will be tenable in the first instance for one year and renewable for two further periods of one year each upon reports of satisfactory progress. The scholarships are available for applicants residing in Great

Particulars and application forms may be obtained on application to the Secretary to the Board of Architectural Education of the R.I.B.A., 66 Portland Place, London, W.I. The closing date for the receipt of applications, duly completed, is June 20, 1938.

ARSHETECTURE THIS



From the "Glasgow Daily Record and Mail."

EMPIRE EXHIBITION, GLASGOW

On the following pages appears an illustrated commentary on the Glasgow Exhibition by Messrs. Bryan and Norman Westwood. Although not of very great size this Exhibition, under the direction of Mr. Thomas S. Tait and Associated Scottish Architects, has advanced very far beyond previous British achievements in exhibition design, and both layout and detail are of a very high standard. All photographs are by Messrs. Westwood.



Architect:
THOMAS S. TAIT (Sir John Burnet, Tait and Lorne).

LAUNCELOT ROSS, T. W. MARWICK, GORDON TAIT,

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Associate Architects:

JAMES TAYLOR THOMPSON,
ALISTER MACDONALD,
ESMÉ GORDON,
Miss MARGARET B. BRODIE.

The Glasgow Exhibition which has so suddenly emerged from obscurity is bound to be compared with last summer's Parisian display. The site does not provide any waterway to rival the Seine, neither is there the amusing virtuosity which came from the placing of a huge exhibition in the centre of a city. The dominant feature of the Glasgow site is Bellahouston Hill in the centre. With the exception of "Tait's Tower" and the Atlantic Restaurant the hill is left free of large buildings and the trees and grass act as a splendid foil to the buildings grouped closely along the frontages of the main avenues. Since one cannot see the whole layout at once, even from this hill, the exhibition apparently gains enormously in size. Although the hill is only of modest height from the top there is a striking view of distant mountains, and nearer at hand signs of the industrial activity along the Clyde. Its presence means that one can climb up out of the bustle of the busier parts of the exhibition and get a detached view of the buildings and gardens.

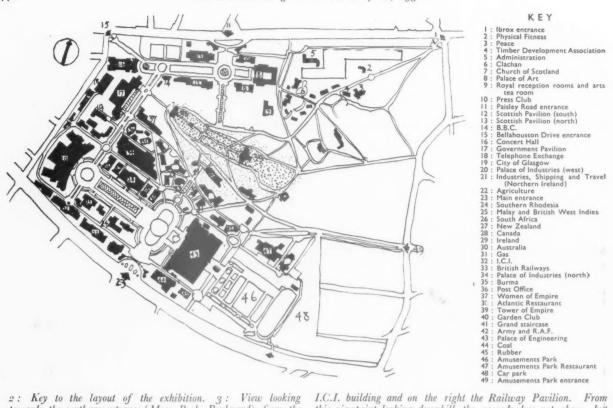
The asymmetrical treatment of the main approach from the south is a very clever piece of design. First there is the huge space outside the Palace of Engineering. On the gradually rising ground beyond are placed other pavilions with a cascade in the centre followed by the monumental flight of steps up the lower slopes to the Garden Club. This building consists of two parts joined by a colonnade and in both design and colour it is one of the

high spots of the exhibition. The colonnade actually terminates the axis but it is dominated by the tower. The tower performs the same function as the Eiffel Tower in being the focal point of a layout, but it differs fundamentally in being designed to dominate without being on any important axis.

A selection of the buildings appear on the following pages, but they can give little idea of the colouring which was for the most part particularly good. One of the most glaring exceptions was the G.P.O. building, which is a big lump of pillar-box red crowned with a crude gilded capping. In a less aggressive way the green and gold decoration on the United Kingdom building is as unfortunate.

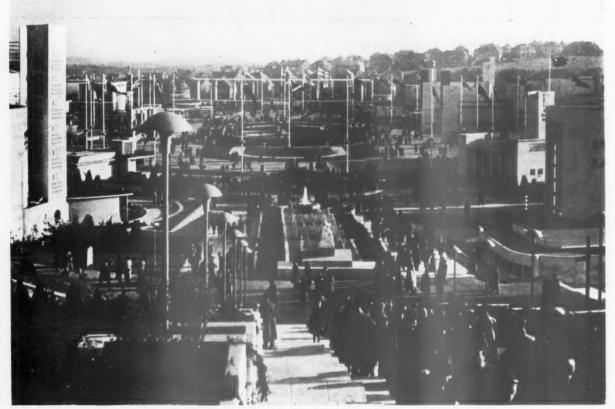
Several of the buildings appeared far more exciting while they were under construction than when they reached the finished state. It was too fatally easy to cover everything with asbestos sheeting, and the traditional farmhouse of South Africa shines when compared with the mass-cardboard looking structures of the other Dominions. The Palaces of Engineering and Industry and the other specialized buildings were designed with a lighter touch more in keeping with the temporary character of an exhibition than solid-looking Imperial buildings.

The planting in the avenues, the fountains and the light and subtle colouring all go to make it the best of its kind that has been produced in this country.



2: Key to the layout of the exhibition. 3: View looking towards the southern entrance (Moss Park Boulevard) from the portico of the Garden Club. In the background is the entrance—shown on p. 764—with the large seating arena and bandstand just inside. In the middle distance on the left is part of the

I.C.I. building and on the right the Railway Pavilion. From this viewpoint looking downhill the cascade does not show, but the illustration gives a good idea of the planting and details which have been excellently thought out—with the exception of the litter bins which are usually placed so that they do not stand upright.



3



4: A view looking along the Scottish Avenue towards the Concert Hall, which appears in the background. On the right is the main entrance from Paisley Road.



5: The Colonial Avenue.



6: Part of the Dominions Avenue, showing the South African and New Zealand pavilions.

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7: Looking along the Scottish Avenue towards the Palace of Art — a permanent building. The fountain in the foreground is by C. d'O. Pilkington. The site slopes across as well as in the length of this avenue and the garden layout has been designed accordingly. The two Scottish pavilions seemed to be too nearly the same to be satisfactory as a composition.

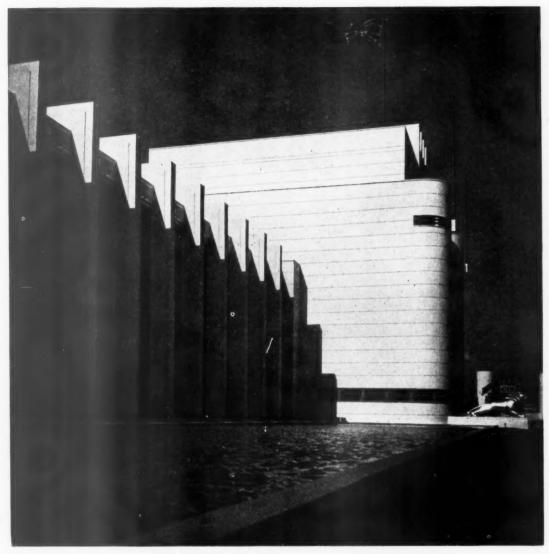


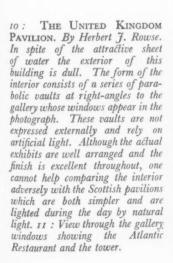
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8: One of the minor roads. The Post Office, designed by Jack Coia—not to be confused with the G.P.O. building—is better than any British Post Office we have been in.

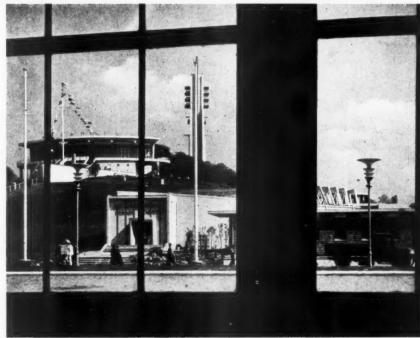
9: A view from the hill showing the amusement park in the distance.





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12: THE SCOTTISH PAVILION NORTH. Architects: T.S. Tait and Basil Spence. The exteriors of both Scottish pavilions are somewhat crude in design and colour, but the interiors are good and the actual displays interesting, particularly the diagrammatic maps.

13: The figure of St. Andrew by Archibald Dawson in the entrance of the Southern pavilion. Large figures of this kind are placed in both the Scottish pavilions and the United Kingdom pavilion and seemed out of place in a temporary exhibition.





14: The South African Pavilion.



15: The Australian Pavilion.





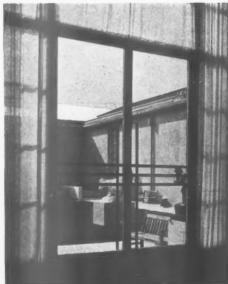


16 and 17: The Palace of Industry West and the Palace of Engineering. The horizontal mass of the former building makes a fine termination to the Dominions and Colonial Avenue. Both buildings are spoilt inside by the conglomeration of stands, which are for the most part poorly designed and in competition with each other.

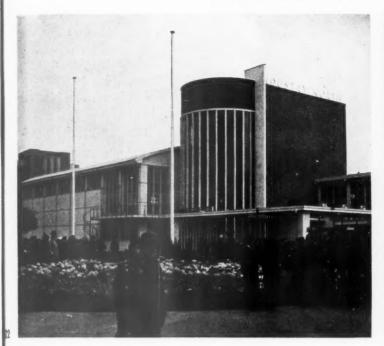


18: The Palace of Art. Supervising architect: Launcelot H. Ross. This is the only building which will be retained after the exhibition closes and is therefore of a much more permanent character. It consists of four galleries planned round an open courtyard which is used for the display of sculpture. The galleries have been kept lower than usual and have good lighting, making the display much more intimate than that of most public art galleries and gaining immensely thereby. 19: The Arts Tea Room which, with the Royal Suite, the Press Club and Palace of Art, terminate the Scottish Avenue. 20: View looking into the open courtyard from the East gallery. 21: General view of the Exhibition looking up towards the tower from the bandstand.







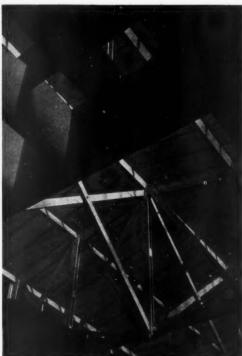




THE PALACE OF INDUSTRY NORTH.—Supervising Architect: Jack Coia, Part of this building is reminiscent of the Swiss Pavilion at Paris, but the interest gained by differences of level in that building is absent here. On entering one is not immediately thrust in among the mass of stands. There is a pleasant entrance hall with a semi-circular staircase going up to the restaurant above. The lighting of the interior is sadly reduced

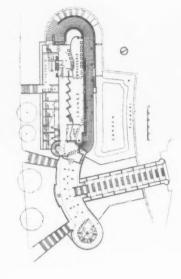
by the proximity of the G.P.O. building. What light remains is distinctly under the influence of the all-pervading red of this neighbour. 22: A general view from the S.W., showing the staircase window. 23: An external view of the staircase feature. 24: An interior view of the staircase. 25: Part of the roof in the main hall of the building, showing the light wooden trusses and the use of ceiling baffles to prevent glare from the roof light above.











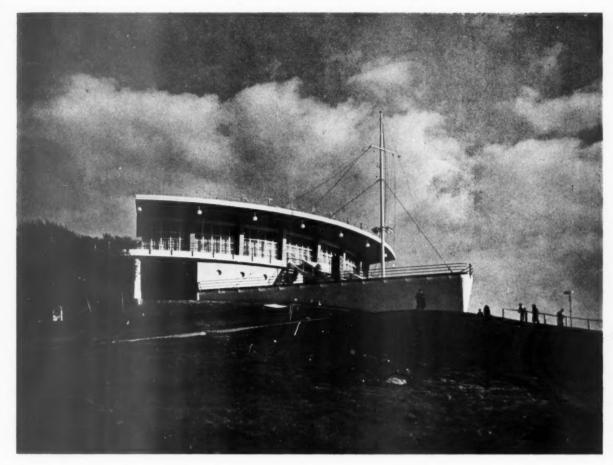




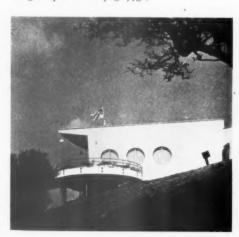




THE GARDEN CLUB. Architects: Thos. P. Marwick & Sons. This building is a private social club containing a lounge and cocktail bar, a restaurant and dance floor, and tea-terraces. It is one of the best pavilions in the exhibition. It is set on a steep slope and differences in level are a feature of the interior. Internal details such as the circular staircase and the lighting of the restaurant are strikingly original and the interior generally has a degree of polish and suavity which we did not see attained elsewhere in the exhibition. The terraces, with their flower boxes and coloured umbrellas, were with their flower boxes and coloured umbrellas, were particularly successful. 26: View looking through the colonnade. 27: Part of the south front with the I.C.I. pavilion in the foreground. 28: The upper terrace. (See also the night view shown on page 771.) 29: Plans and scction of the club.



THE ATLANTIC RESTAURANT. Although one would expect a restaurant formed in the shape of a ship would be bad architecturally, in this particular instance, owing to the special nature of the site, it seems to be justified. 30: Side view of the Atlantic Restaurant. 32: Looking up towards the Atlantic Restaurant from the Concert Hall. In the foreground is "The Times" pavilion, which has apparently been kept in cold storage since Wembley. (See also the view from the United Kingdom pavilion on page 775.)





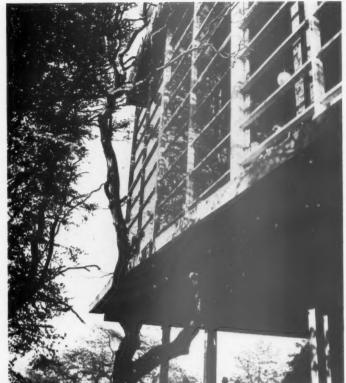
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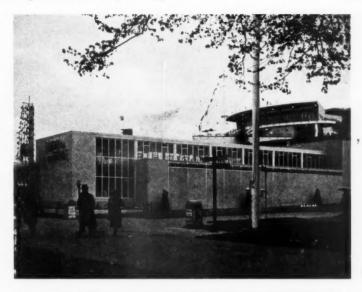






33: The Tree Top Restaurant near the base of the tower. 36: The tower. It is built up of special steel angles and covered with metal sheeting. It is a landmark for miles around and consequently one of the best advertisements for the exhibition, and the view from the top is magnificent. One very minor criticism that might be made is that the flags on the lower part of the tower are very mean. Long streamers would seem the only way of making flags appear adequate on such a structure. 37: The lower part of the tower and the Tree Top Restaurant. 34 and 35: Concert Hall Restaurant. Architects: T. S. Tait and J. Taylor Thomson. This restaurant, although entirely cut off, forms the front part of the concert hall building and is approached by lightly designed staircases at either side. It forms a large covered entrance to the Concert Hall proper.

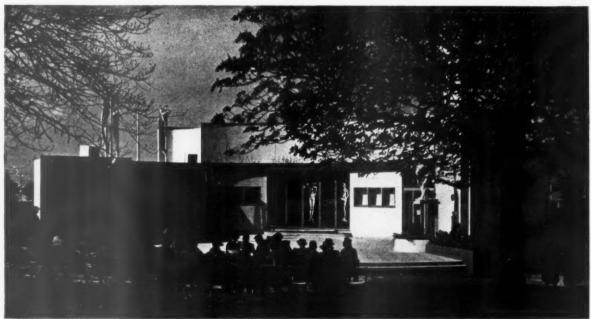




38: The main entrance to the Coal pavilion, designed by T. S. Tait. 39: Women of the Empire pavilion, designed by Miss Margaret Brodie. This pavilion is much more refined in detail and colour than most and is made interesting by taking advantage of the change in level of the site. As well as the usual exhibition halls there is a fan-shaped fashion theatre, the roof of which is suspended from radiating wooden lattice girders. These show outside and are painted turquoise blue. It was a great relief to see this frank treatment of structure after so many of the other pavilions in which construction has been entirely covered up. 40: The I.C.I. pavilion, designed by Basil Spence. This building is of a very high standard, but suffers from an overwhelming number of ideas. Inside there are some very charming mural panels and ceiling decoration by Donald Moodie and Robert Westwater. 41: The National Fitness pavilion, which incorporates an open air stage for country dancing.





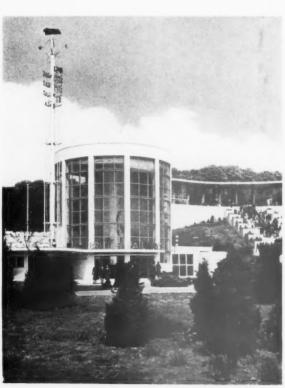


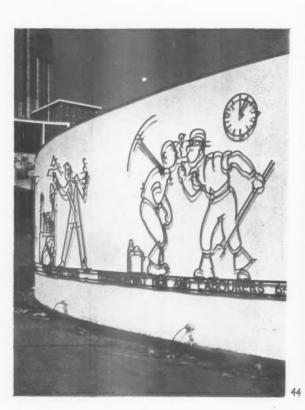


42: Part of the Catholic pavilion. Architects: Gillespie, Kidd and Coia. The pavilion includes a mission hall and church which takes the form of an open courtyard and covered altar. 43: The Railway pavilion. Architect: Joseph Emberton. 44: Wrought metal figures by Hassel on the rear wall of the Railway pavilion.

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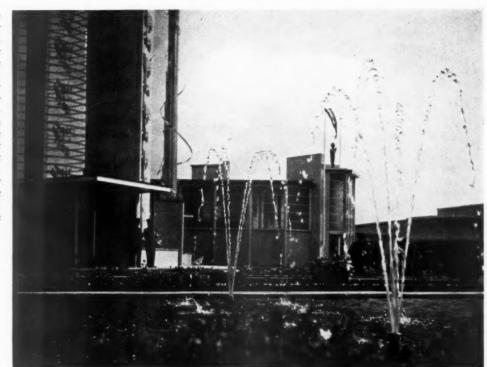




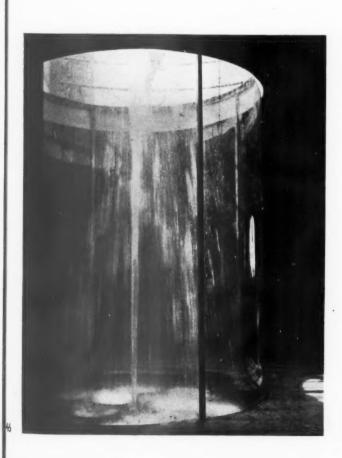
43

45: Small fountains outside the I.C.I. pavilion. 46: Interior fountain in the I.C.I. pavilion. Architect: Basil Spence. The major part of the charm of this fountain, which plays in a 7-ft. diameter glass tube, is the colour of its illuminated water and the sound it makes. The only daylight reaches the interior through the hole in the roof above this fountain. From the outside as well as the inside it appears as an original and amusing feature. 47: The fountain opposite the north entrance. 48: Part of the cascade below the Garden Club. The Distillers' pavilion is in the background.

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49: Interior of the Timber Development Association's pavilion. Architects: Jordan, Handisyde and Fairweather. Other illustrations and drawings of this finely designed pavilion appear elsewhere in this issue. 50: The Big Wheel in the Amusement Park. 51: The Lion outside the United Kingdom pavilion. 52: A copper Frog outside the I.C.I. pavilion, moulded by Walter Pritchard.



WORKING DETAILS: 653

T.D.A. PAVILION

EMPIRE EXHIBITION, GLASGOW

JORDAN, HANDISYDE AND FAIRWEATHER



This pavilion, for the Timber Development Association, exhibits the various uses of timber in building construction, both external and internal finishings being shown

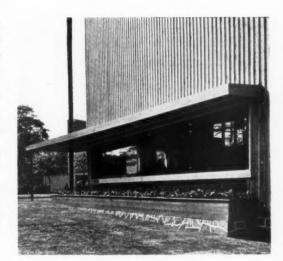
both external and internal finishings being shown.

The pavilion is rectangular on plan, the north face being splayed off, providing a covered entrance platform. There is a model village exhibit in a long display window on the west elevation, through which can be seen the interior of the pavilion. It was originally intended to have steps leading to a timber platform as shown in the detail drawing. The steps, however, have been omitted, and a flower-box has been placed under the display window. The chief lighting to the pavilion is provided by a large window which covers most of the wall space on the east elevation.

The construction is timber frame with the various types of boarded finishes shown externally. The building has a stone plinth of polygonal rubble.

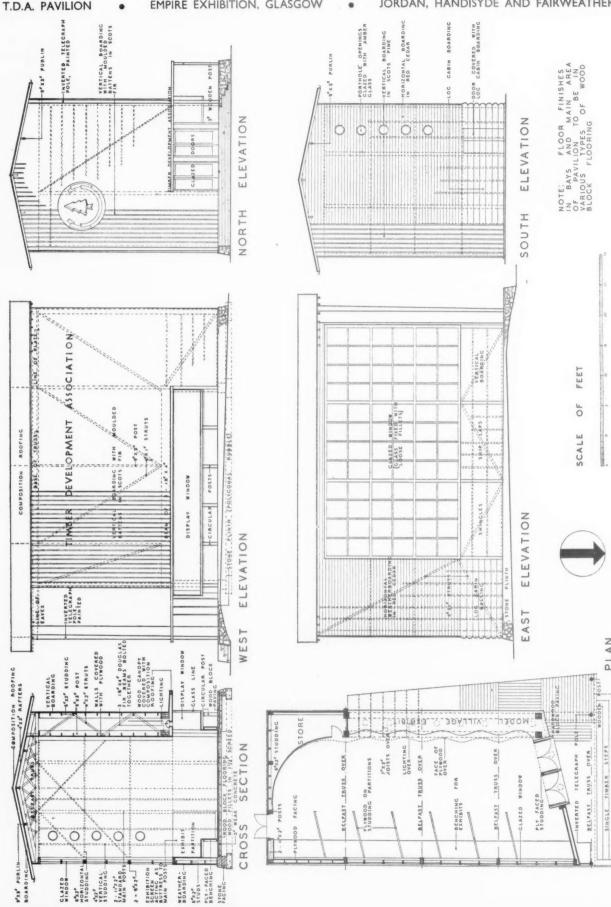
Inside the pavilion along the length of the large window wall run a series of partitions for exhibits with benching between. The whole of the walls are covered in various types of plywood, and over the model village exhibit there is a curved plywood-faced wall.

Details are shown overleaf.



IIII

WORKING DETAILS: 654 T.D.A. PAVILION • EMPIRE EXHIBITION, GLASGOW • JORDAN, HANDISYDE AND FAIRWEATHER



Details of the pavilion illustrated overleaf.

The Architects' Journal Library of Planned Information

INFORMATION SHEET

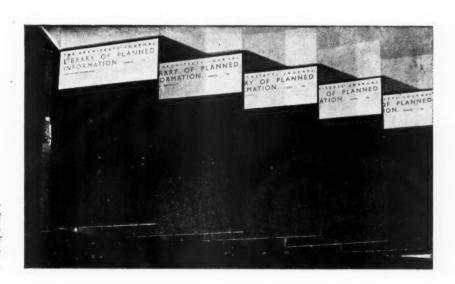
SUPPLEMENT



SHEETS IN THIS ISSUE

625 Kitchen Equipment

626 Weatherings—3



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

Sheets issued since Index:

601 : Sanitary Equipment

602 : Enamel Paints

603 : Hot Water Boilers-III

604 : Gas Cookers

605: Insulation and Protection of Buildings

606 : Heating Equipment

607: The Equipment of Buildings

6(8: Water Heating

609 : Fireplaces

610 : Weatherings-I

611: Fire Protection and Insulation

612 : Glass Masonry

613 : Roofing

614 : Central Heating

615 : Heating : Open Fires

616: External Renderings

617 : Kitchen Equipment

618: Roof and Pavement Lights

619: Glass Walls, Windows, Screens, and Partitions

620 : Weatherings-II

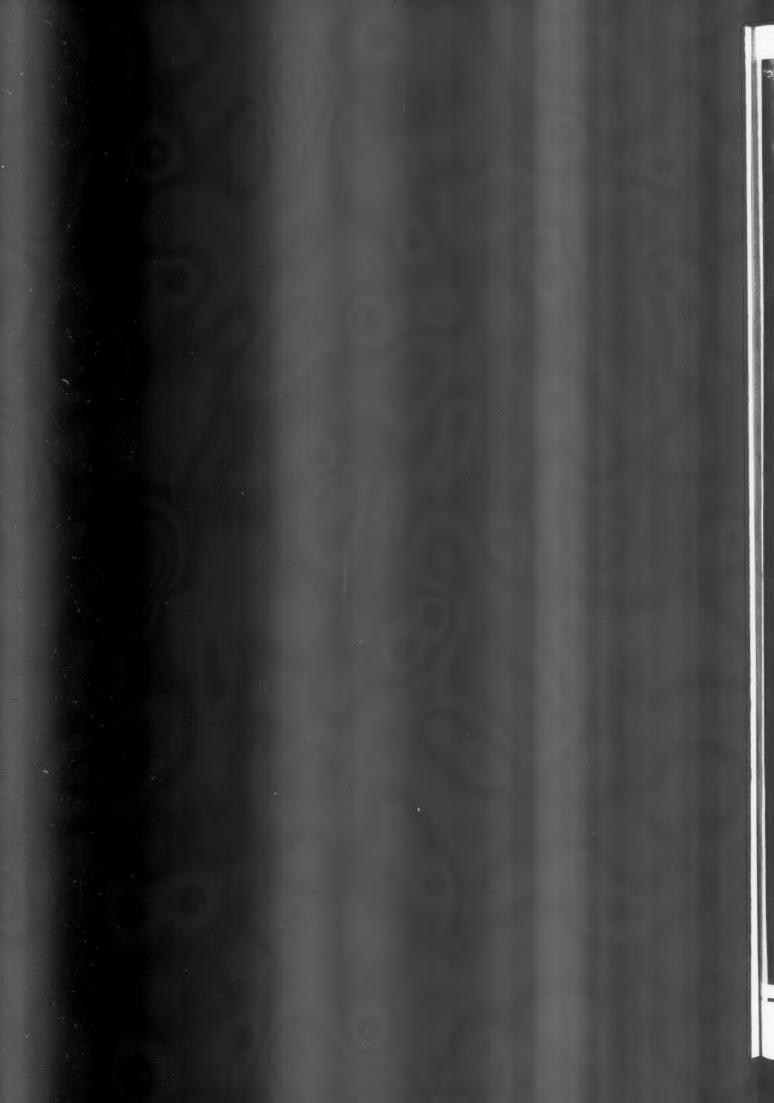
621 : Sanitary Equipment

622: The Insulation of Boiler Bases

623 : Brickwork

624 : Metal Trim



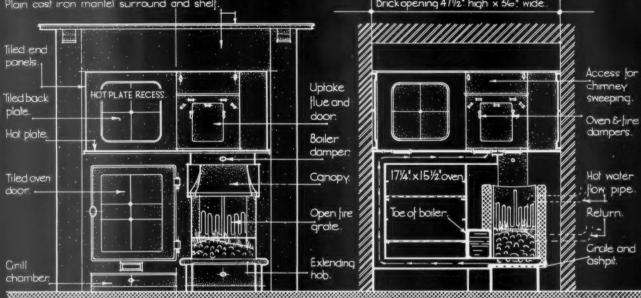


THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

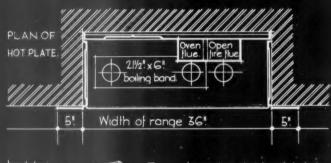
INSTALLATION & CONSTRUCTION OF THE . HOTANHOT. COMBINATION GRATE TYPE COOKING RANGE!

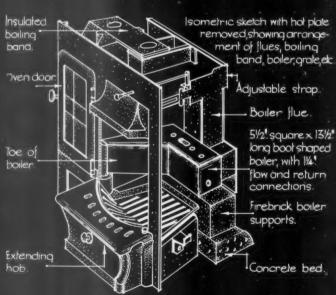
Plain cast iron mantel surround and shelf.

Brickopening 471/2! high x 36! wide.



FRONT ELEVATION AND LONGITUDINAL FRONT SECTION SHOWING ARRANGEMENT OF PARTS, FLUETRAVEL, ETC.





Depth of range and brickwork opening 14 .Plain cast iron mantel, primed or coloured vitreous enamelled. Infilling on top of cover plate 8/2" after castings are built in Cover plate. 424 Uptake flue. 211/2"x6" boiling band 34" x12" hat plate Height of range 42! Insulating material 271/4 conserving heat and protecting front of range plote Grill chamber under of hot 33/4" over oven.

All gases passing under the boiler on the oven side of the fireplace must pass round the oven and up over the top under the boiling plate.

VERTICAL CROSS SECTION THRO! OVEN & HOT PLATE

Information from Archibald Kenrick & Sons Ltd.

INFORMATION SHEET: COMBINED COOKING & DOMESTIC HOT WATER SUPPLY UNIT.

ARCHITECTS' JOURNAL THE INFORMATION LIBRARY OF PLANNED

INFORMATION SHEET · 625 ·

KITCHEN EOUIPMENT

Product: Combination Grate Type Cookers

General:

The Hotanhot pattern F combination kitchen range is built of cast iron throughout, and can be supplied with the oven right or left hand. The unit consists of an insulated rapid boiling plate (protected by patents), hot-plate, oven, grill chamber, open fire-grate and domestic hot water boiler. The fire-grate is provided with an extending hob and swing trivet and burns most types of solid fuel. A plate-rack or airing rack is also supplied to fit inside the hot-plate recess. The plain cast-iron mantel surround is designed for close-fitting over

Overall dimensions of the range proper are 42 ins. high by 36 ins. wide and 14 ins. front to back. The brickwork opening required is $47\frac{1}{2}$ ins. high by 36 ins. wide and 14 ins. deep. The space over the hot-plate is 143 ins. high.

Working Parts and Special Fittings:

(a) Fire-grate.—The back and oven side of the fire-grate are formed by the leg and toe end of the boiler, which thus forms a water jacket protection to the oven flue fire cheek. The opposite cheek and sides above the boiler level are of firebrick. The grate has a 12-in. wide front and an 8-in. back, and is 6 ins. deep from front to back. An extra safety firebar fitting can be supplied for the front of the grate to allow the fire to be banked up beyond the normal level.

(b) Boiler.—The boot-shaped boiler is supported on raised firebricks at the back and a cast-iron support at the front, and is $13\frac{1}{2}$ ins. wide by $5\frac{1}{2}$ ins. square, with a toe to heel depth of 10 ins., also by 51 ins. square. It is suitable for a 30-gallon hot water storage tank, and capable of supplying one hot bath in the first hour, and thereafter two hot baths per hour. The boiler is patented.
(c) Oven.—The oven is 17½ ins. high by 15½ ins.

wide and 133 ins. deep inside, with two sliding trays and four tray supports. One hour after the fire has been lighted the oven temperature is approximately 450° F., and after 1½ hours, 500° F. (d) Grill Chamber.—Placed directly beneath the

flue under the oven, measures 5 ins. high by 18 ins.

wide and 133 ins. from front to back.

(e) Hot-plate.—The range hot-plate is 34 ins. by 12 ins. with a polished and beaded front edge. A 21½ ins. by 6 ins. insulated boiling band is incorporated, under which the heat is so concentrated that a 3-pint saucepan will boil one hour after the fire is lighted, and thereafter 6 pints will boil in 15 minutes. The boiling band is patented.

(f) Flues.—Open fire, boiler and oven flues are seltcontained, and balanced with sufficient margin to give satisfactory working even with soft types of coal. Dampers are provided for each of the three flues, those for the oven and open fire being on the uptake flue above the hot-plate, and that for the boiler being on the range front immediately above the canopy.

The oven damper should be closed when lighting the fire, with the boiler damper opened a little and

the fire damper full way.

The open fire flue travels up under the canopy and directly into the flue uptake. It is there joined by the boiler flue, this having started at the base of the boiler, under which the hot gases are diverted between the firebrick supports, and led up the back in a separate cast-iron compartment. flue starts at the grate beneath the toe of the boiler, and travels right around the oven, beneath the boiling band, and thence directly into the flue uptake.

The open fire and the boiler dampers should be closed whilst cooking is in progress and only the oven damper kept open. Best cooking results are obtained by keeping a medium fire packed close and the oven damper partly closed.

Installation:

Instruction cards are issued for the correct fixing, working and cleaning of the ranges.

Fuel Consumption:

Tests have shown that with the oven kept at cooking heat for a full working day, the approximate fuel consumption is half a cwt. of coal. With the oven damper closed the consumption is approximately 16 lbs. for the same period. The approximate fuel consumption when cooking for a family of six people is 2 cwts. of small coal per week.

The range can be supplied stove blacked, ground and B.B. stove blacked, or vitreous enamelled in black, mottled blue, brown, green and grey

Tiles for the oven door and back and end panels of the hot-plate recess can be supplied in any

The mantel surround is supplied primed one coat of grey paint or in coloured vitreous enamel.

Prices and Distribution:

The price of the range varies between £10 14s. 3d. and £12 Is. according to finish and treatment of surround. It can be obtained through any builder's merchant.

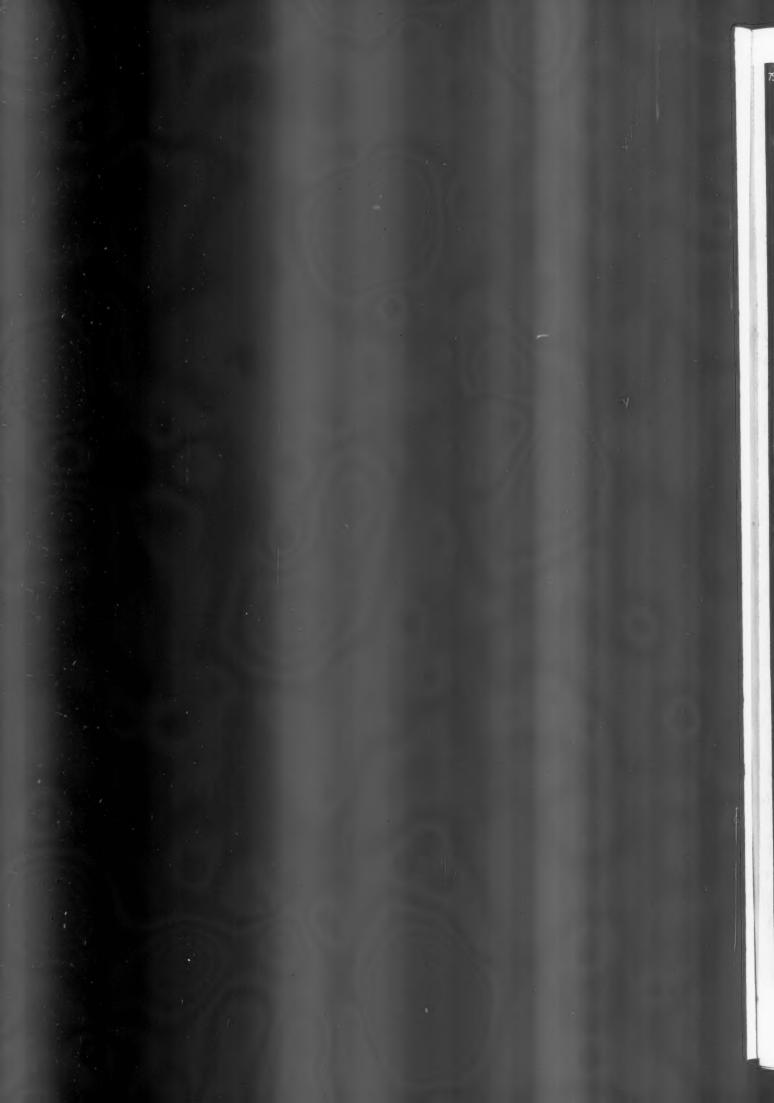
Manufacturer: Archibald Kenrick and Sons, Ltd.

Head Office: West Bromwich, Staffs West Bromwich, 0212 Telephone:

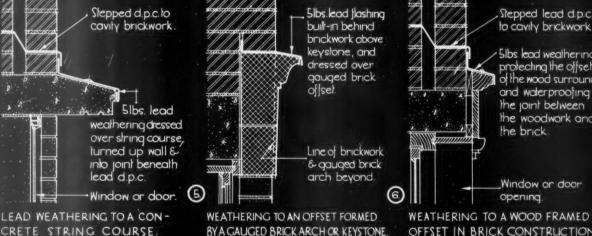
London Office: 65 Newman Street, London, W.I

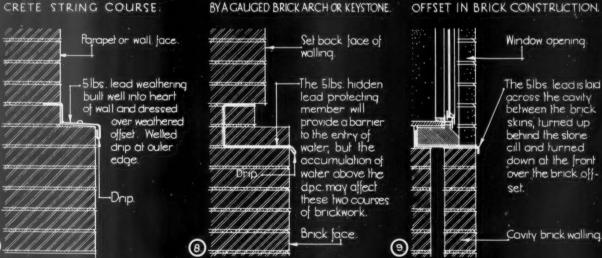
Museum 9216 Telephone:





THE ARCHITECTS' JOURNAL for May 12, 1938 FILING REFERENCE: ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION THE PROTECTION OF VARIOUS STRING COURSES AND OFFSETS WITH LEAD SHEET WEATHERINGS : face of parapet Vertically hung shingles, sheathing, etc. 5lbs.lead flashing Lead dampproof built into joint of course brickwork and dressed over brick Glbs.decorative 5lbs. lead weathering lead string locked to sheathing string course. course lurned and furned down into brickwork over watertable to -Drip. beneath D.P.C. orm Welled drip. Brickwork Rendered parapet wall. Brickwork. LEAD WEATHERING TO A TYPICAL DECORATIVE HEAVY LEAD STRING. WEATHERING TO A WOOD STRING ORNAMENTAL BRICK STRING COURSE. COURSE AND PARAPET D.P.C. COURSE IN TIMBER CONSTRUCTION. Stepped d.p.c.to 5lbs.lead flashing Stepped lead d.p.c. cavity brickwork built-in behind to cavily brickwork: brickwork above keystone, and 5lbs lead weathering dressed over protecting the offset gauged brick of the wood surround, offset. and waterproofing the joint between the woodwark and





LEAD WEATHERING TO A PLAIN BRICK OFFSET, FLAUNCHED.

(4)

SECRET BUILT-IN WEATHERING TO A RECESSED BRICK OFFSET.

WEATHERING TO A BRICK-ON-EDGE OFFSET BELOW A STONE CILL.

Information from Lead Industries Development Council.

STRING COURSES AND OFFSEIS: Nº 47. NFORMATION SHEET: LEAD WEATHERINGS TO

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

• 626 •

WEATHERINGS-3

Subject : Sheet Lead Weatherings to String Courses and Offsets

General:

This is the third of a group of Sheets devoted to weather protection of various architectural features of buildings, and deals particularly with string courses and offsets. Projecting string courses of even comparatively small width provide a lodgment for water, thus increasing the danger of damp penetration in the walls, and providing conditions which encourage the disintegration of the material of the string course itself and of that part of the wall immediately above. In most small projections such as string courses any disintegration which does occur is clearly visible, and becomes unsightly even before any serious structural damage has occurred.

Examples are given of various common types of offsets and string courses in brick, stone and timber construction, illustrating methods of protecting such points from water penetration by means of sheet lead.

Laying:

The outer edge of the lead covering should always be given adequate overhang to form an efficient drip, and may have a plain or welted finish. Where the appearance of the projecting metal is considered objectionable, however, it may be cut close, and the drip formed in the projecting member itself. Concealed weatherings (or flashings) may be used as shown in detail No. 8 but such weatherings neither protect the face of the

work above from splash, nor prevent local disintegration; they do, however, provide a barrier against water penetration if carried well up in the heart of the wall.

Jointing:

Joints between long lengths of weathering are usually formed by double flat welts, spaced at about 10 feet centre to centre. Expansion joints, as such, are not normally required for this type of lead work.

Fixing:

Lead weatherings for string courses of slight projection need no other fastening than that obtained by the building-in of the upper edges as the work proceeds. Should the weathering be turned up at the back and a cover flashing be provided, this should be secured by lead wedges in the usual way. Weatherings wider than four to six inches require fixing by means of cast lead dots, spaced at two to four feet intervals along the front edge, according to the width of the lead and the conditions of exposure.

Contacts

Where lead is to be bedded directly into fresh Portland cement, mortar or concrete, the surface of the metal should be protected by a coat of bitumen in order to prevent any risk of corrosion arising from the free alkali invariably present in Portland cement during and shortly after the period of setting. It is also desirable to bed the lead on

It is also desirable to bed the lead on building paper or bitumen felt in order to prevent damage arising from any irregularities in the surface of the structure below.

Previous Sheets:

The first two Sheets in this series dealing with weather protection of various architectural features of buildings are Nos. 610 and 620.

Issued by: The Lead Industries Development

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

Telephone: Mansion House 2855



An American exercise in reproduction-Palmer Square, Princeton, N.J., by Thomas Stapleton. [From the "Architectural Forum."]

PERIODICALS

APRIL ANTHOLOGY

AMERICA

Architectural Forum

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

PRII. The Esquire Cinema Chicago, designed by Pereira and Pereira for an owner who seems to have given them a fairly free hand: unorthodox but successful planning on a not too easy site. The Home Building Centre for the 1939 World's Fair-an ambitious scheme in which a number of architects have collaborated to produce a show of houses of all types and sizes from modern to traditional. Housing subsidies an examination of the four types so far used in the United States and the fifth which it must adopt next. Palmer Square, Princeton, by Thomas Stapleton—a job comparable to the restoration of Williamsburg, the difference being that the houses are new. Showrooms in New York for the Ford motor group, by Teague and Hadden, slick and clean.

Architectural Record

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

April. A café in Los Angeles re-modelled by Harbin F. Hunter; a theatre in Hawaii designed largely for use by patrons in cars -hence parking spaces on either side of the auditorium with exits opening directly into them: the second instalment of Mr. them; the second instalment of Warren Canney's article on the effect of air-conditioning on building design; eight pages of old grain silos in Vermont; the planning of service systems—heating, food, lighting, storage and cleaning-a long article giving plenty of useful information; small houses by various architects.

Pencil Points

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

April, A number devoted almost entirely to the town of New Orleans, where the A.I.A. is this summer holding its annual convention-plenty of good photographs and town-planning notes.

FRANCE

L'Architecture

(Monthly, 8 frs. 2 Rue de L'Ecole, Paris, ter) April. A Franciscan monastery by Hulot and Gélis; an aeroplane club at Buc by Beaudouin and Lods—simple and good, with excellent interiors; the Trocadéro aquarium by R. Lardat, and an office block the Cité Universitaire by Lucien Bechmann.

La Technique des Travaux

(Monthly, 10 frs. 54 Rue de Clichy, Paris 9e) April. A church in Belgium, by A. Vanden Nieuwenborg; a large covered stadium in Paris; covered fish market in the fishing harbour of Casablanca; a flat

block in Brussels, by Pierre Vierin; the Grand Coulde Dam, Washington, B.C.; foundations for wireless aerial masts.

GERMANY

Baukunst .und Städtebau

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

April. An aeroplane factory, by Karl Schramm; the conversion of a furniture factory into a flat block, by Heinz Bettenbuhl; a church and two private houses in Cassel, by Karl Schmiedt; three new houses by Rudolf Lodders; a war memorial at Frankfurt, by Hermann Senf.

Baumeister

(Monthly, 3m. Georg Callwey, Munich)

April. Recent work by Emil Freymuth —a small hospital job and several private houses; a doctor's house in Bavaria by Lois Knidlberger, first and second floors in wood; an open-air restaurant in the Neckar, near Tübingen, by R. Kessler; recent houses by Fritz Schopohl; workshop for Hansa-Lloyd-Goliath (manufacturers of heavy lorries) by Rudolf Lodders and Fritz Sünnemann-good photographs and plan. Eight pages of working and measured drawings of the jobs illustrated.

Bauwelt

(Weekly, 90 pf. Bauwelt Verlag, Charlotten-strasse 6, Berlin, S.W.68)

April 7. Blended light for interior lighting an article by H. Groher on the use of combination fittings for mercury and incandescent lamps; results of two competitions for Hitler-Youth hostels.

April 14. Recent Dutch buildings in the reclaimed land of the Zuyder Zee—an article by Dr. Münz; three buildings by Professor Gustav Wolf; an appreciation of Peter Behrens on the occasion of his seventieth birthday.

April 21. A large house for a doctor in Duisburg, by Rudolf Schwartz and Johannes Krahn—a large job definitely modern in feeling in spite of Nazi standards. April 28. The rebuilt Town Hall of

Stuhlweissenburg, by Professor Iwan Kotsis.



The new civil airport at Milan, by Luigi Giordani. [From "Architettura."]



An interesting type of buttressed Lamella hangar construction evolved by Pierluigi
Nervi. [From "Architettura."]

Water."

tion date.

Deutsche Bauzeitung

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

April 13. Competition for a church in Cuxhaven, won by Friedrich Ostermeyer; notes on recent reinforced concrete work.

April 20. Recent developments in folding and sliding windows—an article by Max Müller.

Buildings Supplement. Two German travel bureaux in Austria, by Josef Becvar and Viktor Ruczka; working-class housing schemes in Dortmund and Elbing; a gliding school by Hermann Höger; work by Eberhard Gildemeister; two youth hostels, and the Storström bridge between the islands of Falster and Zeeland in Denmark.

Innen Dekoration

(Monthly, 2m. 50. Alexander Koch, Neckar-strasse 121, Stuttgart)

April. The Berlin restaurant Frasquita, Fritz Gaulke-several pages of interior photographs of a somewhat florid job; a small house by C. Rudenauer; recent rooms by the atelier Walther May in the Zeppelinhaus, Cologne.

Moderne Bauformen

(Monthly, 3m. Julius Hoffmann, Paulinen-strasse 44, Stuttgart)

April. "Germany Building" — eighty

photographs from the recent architectural exhibition in the House of German Art in Munich.

HOLLAND

Bouwkundig Weekblad Architectura (Weekly, 15 florins per annum. Weteringshaus 102, Amsterdam)

April 2. A long review of the McGrath-

Frost Glass Book, by H. G. J. Schelling.
April 9. The sixth instalment of Dr.
Arnoldus Noach's article on the theory of architecture from Alberti to Le Corbusier.

April 16. A chemist's shop in Amsterdam with living accommodation above; the new tunnel exit at Arnhem station.

April 23. An article by J. P. Mireas on

Rassegna di Architettura (Monthly, 15 lire. Via Podgora 9, Milan 105) February. A long article by Giuseppe de Finetti on the work of Frank Lloyd Wright; competition for the replanning of a theatre in Turin; technical notes.

SWEDEN

Byggmästaren

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

No. 10. Result of the competition for additions to the Malmö library, won by Ernst Grönwall and Olle Zelterberg.
No. 11. Competition for a housing estate,

won by Kjell Odeen and Gunnar Vejke.
No. 12. Mural paintings in the Stockholm
Crematorium; a timber gymnasium, and

some photographs and an article on Ankara by Ivar Tengbom.

Form

(10 issues per annum, 10 kr. Nybrogatan 7, Stockholm)

No. 3. Danish toys and nursery furniture
–article by Ingegerd Henschen; housing in America.

SWITZERLAND

Schweizerische Bauzeitung

(Weekly, 1 fr. Dianastrasse 121, Zürich)

April 2. The sixtieth anniversary of the founding of the technical high school-a review of recent work.

April o. The San Gabriel dam, Cali-

April 9. fornia; a very elegant little steamer quay

at Lucerne, by Armin Meili.
April 16. Competition for a church school and lecture hall at Burgdorf, won by Hans Müller.

April 23. Further notes on the technical high school.

April 30. The ventilation of automobile tunnels; the Bellerive-Plage at Lausanne, by Marc Piccard-many illustrations and

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

April. Paintings by Ernst Morgenthaler; two houses by Moser Debrunner and Blankart. Moser and Kopp and

ITALY

Frank Lloyd Wright's house, "Falling

de 8 en opbouw

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

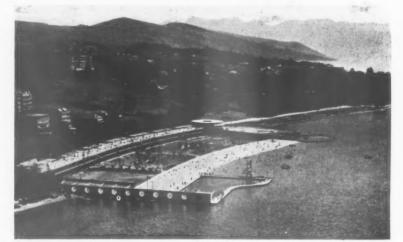
April 1. Number designed to suit publica-

April 9. Designs for several small houses,

a family hotel, a flat block and a competition

lay-out for the Vienna Fair.

Architettura (Monthly, 18 lire. Via Palermo 10, Milan 1) March. Milan civil airport, by Gianluigi Giordani (see illustration): a new type of hangar construction by Pierluigi Nervi, which can best be described as buttressed Lamella; three Balilla houses for Italian youth, by Cesare Valle; housing in America, the first instalment of an article by P. Carbonara.



The Bellerive-Plage at Lausanne, by Marc Piccard. [From "Schweizerische Bauzeitung."]

DOUBLE PEDESTAL
OUTLET
OUTLET
BUSHED OUTLET
CONDUIT RUN FROM
JUNCTION BOX
FLOOR TRAP

BONDING
SCREWS

BONDING
SCREWS

CONDUIT RUN FROM
BLANKING PLATE

TRADE NOTES

[BY PHILIP SCHOLBERG]

A New Gas Cooker

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In a preliminary note about the new devices and fittings shown at the Ideal Home Exhibition I referred to a new cooker by Radiation which was not only good to look at but also fairly cheap in comparison with some of the other modern designs on the market. There is a photograph of it at the foot of this column from which it can be seen that the design is sensible without being pointlessly moderne, while the enamelled cover plate folds down over the burners in the now usual way and gives an extra working table in the kitchen. The price is about £19, the exact figure

varying in different districts according to the gas company supplying the area. While this price is possibly more than most people want to pay for a cooker, it is not by any means as high as it might be. Three years or so ago when cookers designed in the simpler modern manner were first placed on the English market their price was anything up to about £30; since then they have come steadily down. All of which goes to show that good design is not such nonsense as many manufacturers seem to think, and that the general public will buy a good thing when it sees it.

This cooker has four high-speed hot-plate burners and a grill, all of which are self-lighting from a small by-pass flame (burning t cub. ft. of gas an hour) in the centre of the hot-plate. All the taps are grouped in a panel at the top of the cooker, and are self-locking, it being necessary to pull the knob outwards slightly before the gas can be turned on—a sensible arrangement which will prevent cooks of too ample habit from brushing past and turning on a burner without realizing what they have done. The oven tap is on the right and the Regulo thermostat control on the left; this is a useful improvement as the sides of the cooker are now perfectly clean, and it is therefore possible to build cupboards close up on both sides if you want to. The burners are of a special type which does not strike back; it is in practice possible to make them light back by holding a match to the injector, but the lighting back will only go on for so long as the match is there, and as soon as it is removed the burners once more go on in the ordinary The oven burner is not self-lighting, but is lighted from a point at the middle of the front of the oven so that there is no need to reach inside to the burner, which is at the back. The oven itself is 17 ins. high and 15½ ins. wide, the depth varying

from 13½ ins. at the top to 14½ ins. at the bottom, all internal corners being rounded for easy cleaning. The hot-plate is sensibly arranged with large drip trays which will hold up to half a pint of liquid, and the bars and cross pieces are easily removable for cleaning. The only finish so far available is grey mottled porcelain enamel, a pity, especially as other manufacturers manage to produce the better looking white, but the result, as I have said before, none the less looks quite good.—(Radiation, Ltd., 164-172 Queen Victoria Street, London, E.C.4.)

Simplified Wiring Layouts

The ordinary conduit or lead-covered system of current distribution works well enough provided it is possible to settle in advance just where each point is to go. In office buildings, however, the problem is more difficult, for they often consist of so much lettable floor space and the layout of the offices is not settled until the tenants move in. The ceiling may or may not be all over floor beams, but either way a grid of conduit looks untidy and is certain to make things awkward at the heads of the partitions. Some of the partition makers provide ducts in the skirtings for wiring, but even then it is almost impossible to arrange for desk lights or telephones in the middle of a large room and the result is generally festoons of cable either hanging from the ceiling or trailing all over the floor. There is, on these grounds, much to be said in favour of an underfloor duct system, and a new version of an old idea has recently been developed by Walsall Conduits, who have for years been making ordinary conduits and fittings of all kinds. This system consists of a network of steel ducts, single, double or triple, with inserts moulded in the floor, thus providing outlets from which current may be tapped for telephones, lights or small services, such as bells, fires or duplicating machines, or any of the numerous pieces of equipment which offices seem to need nowadays. The sketch on this page shows a typical layout of a four-way triple duct junctionbox with a telephone outlet on the left, below which are the standard bushed outlets for taking the ordinary plug. The ducts are supplied in standard lengths of 12 or 15 ft. with malleable iron screwed inserts at 36 in. centres as standard, though this spacing can be varied to order. The result is a continuous steel runway with outlets through which cables may be taken without disturbing the floor structure and without losing metallic continuity throughout the system. As can be seen in the sketch, the ducts can be run at two different levels and can therefore be crossed over each other in the thickness of the over each other in the thickness of the floor without any junction-boxes if necessary. Most of the junction-box cover plates are fitted in frames which can be adjusted to the level of the floor, the cover plate itself being generally given the same finish as the floor. The detail work of the whole system is good, and the different fittings have obviously been very carefully worked out so that you can do more or less anything you like with bends, phase separators, adaptors for a change over from duct to conduit or blanking plates for superfluous junction-box entries. It should, perhaps, be mentioned that the grid layout need not necessarily be rectangular, for in addition to the ordinary right-angle bends there are half and quarter bends, so



The new gas cooker described on this page.

that a proper system can be devised for the most irregularly shaped room.

This system is not cheap—nothing really good in the electrical world ever is-but for some types of job it is obviously very well worth while. The problem which it solves is not by any means a new one, but not every manufacturer would have taken so much trouble with the detail work. The system, by the way, is designed to conform to British Standard Specification No. 774. —(Walsall Conduits, Ltd., Excelsior Works, Dial Lane, West Bromwich.)

Concrete Houses

About a month ago reference was made in these notes to two publications by the Cement and Concrete Association and it was then suggested that architects needed drawings rather than pretty pictures. The latest booklet by this Association, however, is mostly drawings with a few progress photographs to show methods of construction, and is consequently of considerable Since this booklet was almost interest. certainly in the press at the time when the previous note was written it would be idle to pretend that the Cement and Concrete Association has been influenced by comments made here, but the fact remains that the title of the booklet, Concrete House Construction, describes it very fairly. subject is dealt with thoroughly, though not, of course, exhaustively, and the information is presented tersely without any needless propaganda. Cavity construction in concrete with the use of moving forms or other patent types of shuttering is adequately described, and some indication is given of the number of houses necessary before these patent systems become worth while; this naturally being about the most important point.

There is, however, one detail which might be cleared up. For the monolithic wall with the now general insulation of cork or wallboard on the inner face the drawings show "Concrete not less than 4 ins. thick," and it is stated elsewhere in the booklet that this is enough "if the work is well executed." This is perfectly true, but I seem to remember that the Cement Marketing Company, when they organized their small house competition three or four years ago, were of the opinion that it was unwise to go below 5 ins., not because 4 ins. wasn't strong enough to carry the load, but because the bare 2 ins. of cover may become almost nothing if the builder gets careless and the rods are not in the exact centre of the wall. Cement and Concrete Association is in an unenviable position for it cannot recommend 4 ins. categorically or somebody is sure to employ a builder whose only experience with concrete is a nice sloppy easily-worked mix for foundations, and then the reinforcement will probably start Borough the face of the wall. Borough surveyors, too, are liable to maintain that 5 ins. is a minimum. I suggest that the cement interests should . get together and try to decide what can and what cannot be safely done, though I doubt if it will be possible to produce any universally applicable ruling.

The booklet has a useful appendix giving details of materials and workmanship, mixes, foundation pressures and general constructional notes. - (The Cement Concrete Association, 52 Grosvenor Gardens. London, S.W.I.)

Gentlemen Only

You would think, wouldn't you, that the usual catalogue description of "chromium plate with screws to match" was quite good enough. But I have just been sent a leaflet by a manufacturer who has taken m hint from the haberdashery trade and who genteelly offers me screws "to tone."

Manufacturers' Items

Aluminium: Facils and Figures is the title of a booklet just issued by the British Aluminium Co., Ltd., Adelaide House, London, E.C.4, from whom copies are obtainable free of charge

Manufacturing Co., Ltd., supplied Nuway Mats to the majority of the principal official pavilions at the Empire Exhibition,

new Pier Pavilion at Felixstowe was opened to the public at the end of April, and is provided with an up-to-date stage which includes a curved plaster cyclorama back-ground. The lighting for the cyclorama is by means of Holophane three-colour equipment incorporating 941 type prismatic reflectors which have refracting prisms on the inside, as well as reflecting prisms on the outside of each

The cyclorama is lighted at the top by red, green and blue colour units arranged on four circuits with twice the intensity for blue. The bottom of the background is illuminated by portable groundrows also arranged for red, green and blue, the blue being half as strong again as the red and green circuits.

The acting area portion of the stage is illuminated by means of further Holophane equipment, including top lighting battens, footlights and portable wingflood trolley units, arranged for three-colour lighting. The front part of the stage is also illuminated by two spotlights concealed above the ceiling of the auditorium projecting their light through trap-doors in the ceiling in the front part of the stage. Each of these front-of-house spots employs a 200-watt projector lamp and one of these is complete with electrically operated colour screens, in turn controlled from the stage switchboard, so lighting may that changes in the colour made without the need of an operator in the

The second spotlight is one of the first of the The second spotlight is one of the first of the new Holophane "Frenca" projectors and demonstrates the efficiency of this new optical system. Adjustment of the lamp focus will expand the size of the spot from 3 ft. or 4 ft. in diameter to 30 ft., and the intensity is much higher than the ordinary plano-convex lear trunf groot. lens type of spot.

whole of the stage lighting is controlled from a Holophane dead-front type switchboard situated in the stage wings. The switchboard is of the four-colour type having four rows of dead-front dimmers arranged in tiers, one above the other, each with master operating hand wheel.

This is the fourth colour lighting installation which Holophane, Ltd., has carried out at Felixstowe in the last few years.

THE WEEK'S BUILDING NEWS

LONDON AND DISTRICTS

BARKING. Flats. Plans passed by the Barking Corporation: 120 flats, Longbridge Nurseries, Mr. J. P. Cassidy.

BETHNAL GREEN. Tenements. The L.C.C. is to

BETHNAL GREEN. Tenements. The L.C.C. is to crect 33 tenements in the Coventry Road area, Bethnal Green.

CAMBERWELL. Housing. The L.C.C. has appointed Mr. E. C. P. Monson as architect for the erection of 210 dwellings on the Lindon Grove estate, Camberwell, at an estimated cost

Grove estate, Camberwell, at an estimated cost of £128,549.

ENFIELD. Flats, etc. Plans passed by the Enfield U.D.C.: 24 flats, Adelaide Close, Mr. G. W. Newman; 18 houses and 64 flats, Camberley Gardens, Mr. H. C. Smith; eight flats, Beresford Gardens, Mr. E. W. Palmer; 18 houses, Linden Crescent, Mr. J. H. Mason; 20 flats, Osborne Road, Mr. James Neilson; 146 houses, The Ride, Durants Park Avenue, Moatside, Ellis & Co.; 215 houses, Gt. Cambridge Road, Bullsmoor Lane, Hilbery Chaplin, Ltd. Chaplin, Ltd.

Chaplin, Ltd.

FINSBURY. Housing. The L.C.C. has made arrangements with Messrs. Joseph to undertake the designs for 90 dwellings in Percival Street, Finsbury, at an estimated cost of £51,338.

GREENWICH. Tenements. The L.C.C. has arranged for Messrs. Howes and Jackman to undertake the designs for 86 tenements in Commercial Street, Greenwich, at an estimated cost of £52,000.

Commercial Street, Greather Cost of £53,000.

SOUTHOATE. Houses, etc. Plans passed by the Southgate Corporation: Seven shops with flats over, Green Lanes, Marshall and Tweedy; ten houses, Merrivale Avenue, F. W. Bristow and Son: 20 flats, rear of "Orchard," Trent and Son; 20 flats, rear of "Orchard," Trent Gardens, Mr. H. A. Nash; 30 houses, Chandos Avenue, etc., Davies Estates, Ltd.; nine houses, 38-54 Lakenheath, Mr. C. E. O. Ward; 18 flats, "Ivy Bank," Chase Road, Mr. W. A.

Tenements The L.C.C. has SOUTHWARK selected Messrs, Mitchell and Bridgewater as architects for the erection of 70 tenements in Redcross Street, Southwark, at an estimated

TOTTENHAM. Cinema, etc. Plans passed by the Tottenham Corporation: 12 flats, Lawrence Road, H. S. Couchman and Sons; cinema, High Road, Mr. A. Mather.

WANDSWORTH. Tenements. The Wandsworth

WANDSWORTH. Tenements. The Wandsworth B.C. is to erect blocks of tenements in Fairfield Street at a cost of £64,282.

PROVINCES

School Enlargements. The Bedford REDEORD Education Committee is to enlarge the Silver Jubilee Council Infants' School, at a cost of £4,000.

BICESTER. Houses. The Bicester U.D.C. is to erect 70 houses on the Highfield Estate, at a cost

BIRMINGHAM. Pavilions. The Birmingham corporation is to erect two pavilions at the BIRMINGHAM. Marston Green Homes, at a cost of £16,462.

BIRMINGHAM. School Extension. The Birmingham Education Committee is to enlarge the Baskerville Residential School, at a cost of

£.7,000. BIRMINGHAM. School Extensions. The Birming-ham Education Committee is to enlarge the Dulwich Road School, Perry Barr, at a cost of

£12,000.
BIRMINGHAM. Police Station. The Birmingham Corporation has approved plans by Messrs. Cooke and Twist, for the erection of a police station in Kingstanding Road, at a cost of

BOLTON. Houses, Plans passed by the Bolton Corporation: 14 houses, off Firwood Lane, Turner Bros.; 22 houses, Ainsworth Lane Road, Leverhulme Park Estate; ten houses, Edge Hill Road, Mr. J. Farnworth.

BRIERFIELD. School. The Lancashire Educa-

tion Committee is to erect an elementary school

at Brierfield, at a cost of £30,807.

CHELMSFORD. Houses. Plans passed by the Chelmsford Corporation: 32 houses, Fifth and Sixth Avenues, Mr. W. J. Wade; six houses, Sixth Avenue, Mr. A. J. Wells.

PRICES

On the following pages appear (a) Prices for Measured Work, Part II; (b) Prices for Approximate Estimates.



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ANSWERS TO QUESTIONS

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

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

- 1. Current Market Prices of Materials, Part I.
- 2. Current Market Prices of Materials, Part II.
- 3. Current Prices for Measured Work, Part I
- 4. A. Current Prices for Measured Work, Part II.

B.—Prices for Approximate Estimates.

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

CURRENT PRICES FOR MEASURED WORK—II

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

JOINER

Deal Flooring		
	1" quare 39/2 quare 42/10	$\frac{1\frac{1}{4}''}{48/-}$ $\frac{52}{1}$

Wood Block Flooring, laid herringbone, 100 yards and up

D.G. and T.G. kiln dried, 2 block border, laid in hot mastic composition on cement screed, including 2 feet run of straight cutting per yard super, and wax polishing at time of laying.

		1" nominal	1¼" nominal
Burma teak	per yard super	13/11	18/41
Canadian Maple	per yard super	11/6	13/8
25-30 per cent. quart Austrian			
Oak	per yard super	12/10	16/-
Plain American Oak (no			,
selection made for sap)	per yard super	11/8	_
Gurjun	per yard super	12/7	14/9
Pitch Pine (50% rift sawn)	per yard super	11/10	13/8
Ditto (100% ditto)	per yard super	13/11	15/6
British Columbian Pine	per yard super	10/-	11/6
Kara Sea Deal, 100 per cent.			
rift sawn	per yard super	9/9	10/6
Jarrah	per yard super	13/2	15/9
Additional straight cutting	5ld. per foot re	ın	

JOINER—(continued)

					1" n	om	inal	11 1	nom	ina
					£	S.	d.	3	S.	d.
Austrian	Wainso	ot Oak	 per	square	8	18	6	10	12	7
Plain Jar	oanese (Oak	 per	square	7	10	8	9	2	2
Plain An	nerican	Oak	 per	square	7	7	0	9	3	9
Pitch Pir	ne		 per	square	7	0	6	8	15	7
British C	olumbia	an Pine	 per	square	4	14	6	5	7	7
Canadian	Maple		 per	square	6	19	1	8	10	7
Mahobor	n Teak		 per	square	6	19	1	8	10	7
English (Dak		 per	square	10	4	9	12	15	11
Gurjun			 per	square	6	19	1	8	10	7
Jarrah			 per	square	6	13	10	8	6	5
			Wall	Linings						

watt cinings	
$\frac{5}{8}$ " Deal tongued and grooved V-jointed Matching in narrow widths per square $\frac{1}{8}$ " (6 mm.) Birch (A) Plywood and fixing to walls	33/4
per square	46/6
* Asbestos cement sheets butt jointed per foot super	-/32
2" Fibre board and fixing to walls per yard super Deal battens as ground plugged to brickwork	2/11
per foot super	-/11
13" × 3" wrot and chamfered fillets per foot run	-/11
$2'' \times \frac{1}{2}''$ wrot and moulded ditto per foot run	$-/1\frac{1}{2}$ $-/1\frac{1}{2}$

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

JOINER, IRONMONGER AND STEEL AND IRONWORKER

JOINER—(continued)	JOINER—(continued)
Skirtings Austrian	Shelving
1" chamfered or moulded 4" high, fixed to and including grounds and backings planted on	Slat shelving of 1" × 2" spaced \(\frac{3}{4}\)" apart per foot super \(-/9 \)
per foot run $-/3\frac{1}{2}$ $-/7\frac{3}{2}$ Add for plugging to brickwork per foot run $-/0\frac{1}{2}$ $-/0\frac{3}{2}$ Fitted ends on hardwood price as 4" of skirtings, mitres as 6". Fitted ends, etc., on deal skirting included in price per foot run.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Casements and Fanlights	per foot run $-/2\frac{1}{4}$ $-/5\frac{1}{4}$ Add if bearers plugged to brickwork per foot run $-/0\frac{1}{4}$ $-/0\frac{3}{4}$
Deal moulded sashes divided into squares with	Teak Draining Boards and Twice Oiling
glazing bars per foot super $1/4\frac{1}{2}$ $1/5\frac{1}{2}$ Add for hanging casements (butts measured separately) each $1/9$ $2/-$ Cased Frames and Sashes Deal cased sashed frame, including 2" double hung sashes,	1½" Moulmein cross-tongued fluted draining board fixed to slight falls per foot super $\frac{1}{2}$ " \times 2" rounded rim bedded in white lead and screwed to edge of draining board per foot run $\frac{1}{2}$ " \times 4" rounded skirting fillet ditto per foot run $-/9$
with 6" × 3" Oak cill and brass axle pulleys, sash line and weights, average 15 feet super per foot super 3/9	Staircases Deal Oak
Doors in Deal Matchboarded, ledged and braced door per foot super $1/ 1/2$ $1/4$	1½" treads and 1" risers per foot/super 2/- 5/- 2" strings, fixed per foot run 1/10 4/7 Housing treads and risers to strings each 3" × 2½" French polished moulded handrail per foot run — 2/6
Framed, ledged and braced door, filled in with matchboarding per foot super $1/5$ $1/9$ $1/10$ Ditto garage doors, per foot super $1/5$ $1/9$ $1/10$ $1/7$ $1/7$ 4-panel	$11'' \times 11''$ square balusters 2' 6" long each $-/10$ $2/-4'' \times 4$ " Newels with chamfered edges and fixing per foot run $1/4$ $3/4$
11 square framed, both sides per foot super 1/7	IRONMONGER
2" ditto per foot super 1/9 11" ditto bead butt panels one side, but square the other	Fixing only 4" Butt hinges to softwood per pair 1/-
1½" ditto bead butt panels one side, but square the other per foot super 1/9 2" ditto, ditto	4" ditto to hardwood per pair 1/4 16" T. hinges to softwood per pair 1/4 48" Collinges patent gate hinges to softwood per pair 7/6 Softwood Hardwood
Hardwood doors two-and-a-half times as much as deal. Deal glazing beads, mitred and bradded	6" Cabin hooks each $-/7\frac{1}{2}$ $-/10$ Hat and coat hooks each $-/3$ $-/4$
per foot run $-/1\frac{1}{2}$ Ditto and fixed with brass cups and screws	Cupboard knobs each -/3 -/4
per foot run -/8	Thumb latches each 1/6 2/- Letter plate and knocker, including perfora-
Window and Door Linings 1" 1\frac{1}{4}" 1\frac{1}{2}"	Barrel or tower bolts each -/10 1/1
Deal linings, 6" wide, tongued at angles and planted on including backings per foot run $-/6\frac{1}{4}$ $-/7$ $-/8$ Add for plugging to wall per foot run $-/0\frac{1}{2}$ $-/0\frac{1}{2}$ $-/0\frac{1}{2}$ Add for rebating per foot run $-/0\frac{1}{2}$ $-/0\frac{1}{2}$ $-/0\frac{1}{2}$ Add for $\frac{1}{2}$ " \times 2" Deal stop planted on	Flush bolts each $1/6$ $2/-$ Rim locks and furniture each $2/ 2/8$ Mortice ditto each $3/ 4/-$ Rebated ditto each $3/6$ $4/8$ Grip handles each $-/6$ $-/8$
per foot run -/1½ -/1½ -/1½ Deal window board 9" wide, with rounded nosing, tongued at back and on and including bearers plugged to brickwork per foot run -/10 -/11 1/1 2" Deal scotia mould per foot run -/1½ Oak linings 6" wide tongued at angles and	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
planted on including backings per foot run $1/2\frac{1}{2}$ $1/4\frac{1}{2}$ $1/7\frac{1}{2}$ Add for plugging to brickwork per foot run $-/1$ $-/1$ $-/1$ Add for rebating per foot run $-/1$ $-/1$ $-/1$ Add for $\frac{1}{2}$ × 2° Oak stop planted on	STEEL AND IRONWORKER (For Rainwater Goods—see " Plumber.")
Oak window board 9" wide, with rounded	Steelwork
nosing tongued at back and on and including bearers plugged to brickwork per foot run 1/10 2/1 4" Oak scotia mould per foot run -/3½	Basis for plain rolled steel joists . per ton £ s. d. 18 7 6
Window and Door Frames Austrian	£ s. d.
$4'' \times 3''$ door frames per foot run $1/2$ $2/0\frac{1}{2}$ $4'' \times 3''$ window frames per foot run $1/2$ $2/4\frac{1}{2}$ $4'' \times 3''$ transomes and mullions per foot run $1/3\frac{1}{2}$ $2/11\frac{1}{2}$ $2/11\frac{1}{2}$ $2/11\frac{1}{2}$ or cill, sunk weathered twice throated and grooved for water bar (measured separately) per foot run $2/3$	Joists cut and fitted per ton 22 11 6 Stanchions, ordinary sections with riveted caps and bases per ton 23 12 6 Stanchions, compound per ton 24 3 0 Girders, ditto per ton 23 12 6 Framed roof trusses, average span . per ton 23 7 0 The above prices are ex mills ordered well in advance of delivery.
6" \times 3" window ditto per foot run — 3/1 Add or deduct for variation in sectional area per square inch per foot run $-/0\frac{1}{2}$ $-/1\frac{1}{2}$ Add for each labour, for chamfer, bead or rebate,	Prices ex London stocks are considerably higher, and definite quotations should be obtained. Wrot Iron Work
etc per foot run $-/0\frac{1}{2}$ $-/1$ Add for each moulding per foot run $-/0\frac{3}{2}$ $-/1\frac{1}{2}$	Simple balusters and handrail fixed (excluding mortices, etc.)
Architraves	etc.)
Deal Oak 1"×3" chamfered or moulded architraves, includ-	Galvanized Corrugated Sheeting 20 B.G. 22 B.G. Sheeting in 3' corrugations and fixing on wood
Ing mitres on softwood, planted on per foot run $-/3$ $-/7\frac{1}{4}$ Mitred angles on oak price as $6''$ of architrave. Add for plugging to brickwork per foot run $-/0\frac{1}{2}$ $-/0\frac{3}{4}$ Add for narrow splayed grounds per foot run $-/1\frac{1}{2}$ $-/1\frac{1}{2}$	framing with screws and galvanized embossed curved washers including laps per square 56/- 49/- Ditto fixed to steel framing per square 63/4 56/8

CURRENT PRICES BY DAVIS AND BELFIELD, P.A.S.I. PLASTERER, EXTERNAL AND INTERNAL PLUMBER

DI	ACT	TO BOX III	RER
	43		CER

PLASTERER					
Lime and	Sira	pite Pla	astering	5	
2317110 34710	0110			,	In narrow
				Per	widths
				vard	per foot
				super	super
Expanded metal lathing $1'' \times \frac{3}{16}''$ sawn laths				1/8	-/3
1" 3" cown loths				-/9	-/11
1 × 16 sawn latins	-1-			1/8	-/31
Render and set in lime and h				2 -	$-/3\frac{3}{4}$
Render, float and set in lime			* * *	2 -	- 04
Plaster, float and set ditto on		-		o is t	14
separately)				$2/1\frac{1}{2}$	-/4
Render and set with Sirapite		* *		1/91/2	$-/3\frac{1}{2}$
Plaster, float and set ditto on	lathi	ng (mea	sured		
separately)				2 3	-/4
Skimming coat Sirapite				1/51	
3" thick plaster board fixed i		ing cov	vering		
				2/-	
,					*
	Kee	nes		**	In narrow
				Per	widths
				yard	per foot
				super	super
Cement plain face on and incl	uding	a back	ing of		
Portland cement and sand				26	-/5
					,
Mouldi	ngs a	nd Lab	ours		
				Lime	
				Sirap	ite Keenes
Plain cornices and mouldings	6" girl	h per	foot ru	n - 9	$\frac{1}{2}$ -/11
Labour arris, quirk or throat		. per	foot ru	n -/1	
Ditto rounded angle		. per	foot ru	n -2	-/2
Ditto staff bead		. per			-/71
Mitres price as 12" of mou	lding.	stoppe	d ends	as 6".	and rounded
angles as 18".		are I.I.			
0		. 10	. 3 /5	0)	
Portland Cer	ment	ana Sa	na (1:	3)	9.0
				1 "	
Screeds to floors for wood or	tiles	per ya	rd supe	r 1/2	
Screeds for tiling, etc., on wa	lls	per yar	rd supe	r 14	1/6
Renderings to walls-one coa	at floa	at finis	h		
		per va	rd supe	er 1/6	1/8
Plainface			rd supe		0 2/-
		-			
Coloured	Cem	ent Pla	unface		
Cullamix No. 2 or 3 cream, on	and i	neludir	ng wate	r repelle	ent
cement and sand backing			per	yard suj	per 3/10
Snowcrete mixture on and in-	eludir	g ditto	per	vard sur	per 3/10
Snowcrete and white silica	sand	on and	d inclu	ding di	tto
DISTRICTED BILL WILLE SHEET	Diess Ca	011 011	per	yard su	per 3/6
For raking out joints of br	rickwo	ork key	ved bri	cks or l	nacking face
of concrete, to form key for	plast	ering s	ee "R	ricklave	r."
or concrete, to form key for	piase	cinig,	, L	Lichthyc	
Wall Tiles,	Com	mercial	Quali	ty	
$6'' \times 6'' \times \frac{3}{8}''$ ivory or white			-	vard su	per 16/-
Extra for rounded edge tiles				r yard	
$6'' \times 6'' \times \frac{3}{8}''$ coloured enamel by				yard su	
Extra for rounded adar tiles	Rint	Siazeu	per	r word w	un -/73
Extra for rounded edge tiles				r yard r	
6" × 6" × 3" eggshell gloss ei	namel	iea		yard suj	
Extra for rounded edge tiles			pe	r yard r	un $-\frac{63}{4}$
EXTERNAL PLUM	1BE	R			
	T .				

		Lea	d				
		Flats	Fla	shings	, Ste	epped shings	cut to
Milled sheet le	ead and						
labour						11/81	34/4
Bedding edges in	white lead				per:	foot run	-/2
Lead wedgings to						foot run	$-/1\frac{1}{2}$
Ditto to stepped f	lashings				per :	foot run	
Dressing 6-lb. lead	d over glas	ss and g	lazing	g bars	per	foot run	-/31
Copper nailing					per	foot run	$-/1\frac{1}{2}$
Close ditto					per	foot run	-/2
Bossed ends to ro	lls					. each	$-77\frac{1}{2}$
Extra labour dres					to ra	inwater	
heads						. each	3/-
heads Ditto to cesspools						eacheach	
heads Ditto to cesspools	, including	g extra	solder				
Ditto to cesspools	, including Cast In	g extra	solder				
	, including Cast In	g extra	solder			. each	5 3
Ditto to cesspools Rainwater Pipes for	, including Cast In ixed to brid	g extra ron Rais ckwork.	solde nwate	r Good	ds .	each	5/3
Ditto to cesspools Rainwater Pipes for Round pipes	, including Cast In ixed to bridge	g extra ron Rais ckwork.	solder nwate . per	r Good	ds run	3″ 1/5½	5/3 4" 1/9
Ditto to cesspools Rainwater Pipes for Round pipes Extra for bends	, including Cast In ixed to brid	g extra ron Rai ckwork.	solder nwate . per	r Good	ds run ach	3" 1/5½ 2/2	5/3 4" 1/9 2/10
Ditto to cesspools Rainwater Pipes for Round pipes Extra for bends Ditto 6" offset	, including Cast In ixed to bridge	g extra ron Rais ckwork.	solder nwate . per	r Good	run ach ach	3" 1/5½ 2/2 2/4	4" 1/9 2/10 2/10
Ditto to cesspools Rainwater Pipes for Brown pipes Extra for bends Ditto 6" offset Ditto single brance	Cast In	g extra ron Rais ckwork.	solder	foot	run ach ach	3" 1/5½ 2/2 2/4 2/7	4" 1/9 2/10 2/10 3/1
Ditto to cesspools Rainwater Pipes for Round pipes Extra for bends Ditto 6" offset	Cast In	g extra ron Rais ckwork.	solder	r Good	run ach ach ach	3" 1/5½ 2/2 2/4 2/7 1/7	4" 1/9 2/10 2/10 3/1 2/2
Ditto to cesspools Rainwater Pipes for Round pipes Extra for bends Ditto 6" offset Ditto single branch Ditto shoes	, including Cast In ixed to brid ches	g extra	solder	r Good	run ach ach ach ach	3" $1/5\frac{1}{2}$ $2/2$ $2/4$ $2/7$ $1/7$ $3\frac{1}{2}$ " $\times 3\frac{1}{2}$ "	5/3 4" 1/9 2/10 2/10 3/1 2/2 4"×3"
Ditto to cesspools Rainwater Pipes for Round pipes Extra for bends Ditto 6' offset Ditto single branch Ditto shoes Square and rectar	, including Cast In ixed to brid ches ches ches ches	g extra ron Rai ckwork.	solder	foot	run ach ach ach ach	3" $1/5\frac{1}{2}/2$ $2/4$ $2/7$ $1/7$ $3\frac{1}{2}$ " \times $3\frac{1}{2}$ " $3/2$	4" 1/9 2/10 2/10 3/1 2/2 4"×3 2/10
Ditto to cesspools Rainwater Pipes for Round pipes Extra for bends Ditto 6" offset Ditto single branch Ditto shoes Square and rectar Extra for elbows	, including Cast In ixed to brid ches ngular pip	g extra ron Rain ckwork.	solder	foot	run ach ach ach ach ach	3" $1/5\frac{1}{2}$ $2/2$ $2/4$ $2/7$ $1/7$ $3\frac{1}{2}$ " \times $3\frac{1}{2}$ " $3/2$ $4/11$	4" 1/9 2/10 2/10 3/1 2/2 4"×3' 2/10 3/6
Ditto to cesspools Rainwater Pipes for Round pipes Extra for bends Ditto 6' offset Ditto single branch Ditto shoes Square and rectar	Cast In a control of the control of	g extra ron Rain ckwork.	solder	r footeeee	run ach ach ach ach ach	3" $1/5\frac{1}{2}$ $2/2$ $2/4$ $2/7$ $1/7$ $3\frac{1}{2}$ " \times $3\frac{1}{2}$ " $3/2$ $4/11$	4" 1/9 2/10 2/10 3/1 2/2 4"×3 2/10

EXTERNAL PLUMBER—(continued)

				4"	5"	6"
Half-round gutte	rs	 per foo	ot run	1/-	1/21	1/81
Extra for angles		 	each	1/9	2/-	2/3
Ditto nozzles		 	each	1/7	1/10	2/5
Ditto stop ends		 	each	1/-	1/3	1/44
O'Gee gutters		 per for	ot run	1/11	1/4	1/91
Extra for angles		 	each	1/91	2/3	2/4
Ditto nozzles		 	each	1/8	2/3	2/8
Ditto stop ends		 	each	1/14	1/44	1/71

INTERNAL PLUMBER

Service.	Lead Pipes				
		1"	3"	1"	11"
Pipes laid in trenches .	per foot run	-/103	1/21	1/83	2/44
Add if fixed on walls .			-/3	-/4	-/5
Ditto if in short lengths .	per foot run	-/1	-/1	-/11	-/2
		11"	2"	21"	3"
Pipes laid in trenches .	per foot run	3/-	4/-		
Add if fixed on walls .	per foot run	-/6	-/8	_	_
Ditto if in short lengths .	per foot run	-/3	-/4	-	-

Distributing.				
Cold water pipes fixed to walls	1"	3"	1"	11"
per foot run	-/103	1/23	1/81	2/3
Add if in short lengths per foot run	-/1	-/1	$-/1\frac{1}{4}$	-/2
Cold water pipes fixed to walls	11"	2"	21"	3"
per foot run	2/91	3/71	_	
Add if in short lengths per foot run	-/3	-/4	-	-
Flushing and Warning.				
Waste and overflow pipes fixed in short	1"	3"	1"	11"
lengths per foot run	-/83	-/11	1/2	1/5
Waste and overflow pipes fixed in short	11"	2"	21"	3"
lengths per foot run	1/10	2/51		

Soil and Vo	entilating.			
Pipes fixed, including lead tacks	per foot run	$\frac{3\frac{1}{2}''}{5/3}$	4" 5/10	$\frac{4\frac{1}{2}''}{6/8\frac{1}{2}}$
Bends each $\frac{1\frac{1}{2}''}{1/6}$ $\frac{2''}{2/-}$	$2\frac{1}{2}''$ $3''$ $2/9$ $3/9$	$\frac{3\frac{1}{2}''}{4/3}$	4"	$\frac{4\frac{1}{2}''}{5/6}$
Soldered joints to fittings $\frac{1}{2}''$ each $\frac{2}{1\frac{1}{2}}$	$\frac{3}{4}''$ $1''$ $2/4$ $2/7$	1½" 2/9	$\frac{1\frac{1}{2}''}{3/-}$	2" 3/5
Soldered branch joints (price as largest branch) each	$\frac{1}{2}''$ $\frac{3}{4}''$ $2/3\frac{1}{2}$ $2/6$	1" 2/9	1‡" 3/-	$\frac{1\frac{1}{2}''}{3/3}$
~				

Soldered branch joints (price as 2'' $2\frac{1}{2}''$ 3'' 4'' $4\frac{1}{2}''$ largest branch) . . each 3/8 4/- 4/6 5/- 6/6 Wrap small pipcs with hair felt. . . . per foot run -/6Drawn Lead Traps 11/2 11/2 2"

P. Traps			11/	deep seal	$1\frac{1}{2}$ "	deep	2"	deep seal
joints	 	each	7/1	7/71	8/3	8/91	9/8	10/21
S. ditto	 	each	7/6	$8/0\frac{7}{2}$	8/8	$9/2\tfrac{1}{2}$	10/4	10/101
		Brass	work	(Best Qu	uality)			

	1"	3"	1"	
Brass screwdown stop cocks including two soldered joints each	7/6	9/9	13 1	
Ditto, including two red lead joints for iron each	5/8	7/10	11/-	
Ditto, including one soldered and one red lead joint each	6/1	8 1	11/2	
High pressure Portsmouth pattern ball valve with flynut and union and one soldered joint				
each	8/5	11/7	17/2	
Ditto, including red lead joint for iron each	6/5	9/2	16/8	
		2"	4"	
Brass thimble and soldered and cement joints				
each		5/-	9 5	
Ditto, with solder and caulked lead joints each	1	6/-	11/2	

Fixing Only (Connections to Pipes	measured separately)
$24'' \times 18'' \times 6''$ sinks including taps,	
brackets cut and pinned to brickwork	each 6/-
24" × 18" lavatory basins ditto	
W.C. suite comprising pan and trap,	seat, W.W.P. and
brackets	
Baths, including taps, etc., and setting	in position each 10/6

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

INTERNAL PLUMBER, GLAZIER AND PAINTER

INTERNAL PLUMBER—(continued)	GLAZIER—(continued)
Screwed and Socketed Galvanized Steam Quality Steel Tubes and Fittings	Obscured ground sheet glass, net extra to above prices per foot super -/12
Pipes up to and including 1½" include short running lengths, sockets, connectors, elbows, bends, fire bends; Tees and Diminishing Pieces enumerated.	† figured rolled white glass and glazing to wood with beads (measured separately)
Distributing.	per foot super -/10
Pipes fixed to walls per foot run -/10 1/- 1/4 1/10 2/4 3/-	Ditto, normal tints, dittoper foot super 1/13 Add for glazing into metal frames (ordinary rebates) per foot super -/14
Ditto in short lengths, fittings, etc., measured separately per foot run -/10 1/- 1/4 1/10 2/4 3/-	Ditto, metal sashes with ferroput per foot super $-/2\frac{1}{4}$ Ditto, solid metal casements and screw beads per foot super Wash leather strip or similar material and bedding edge of
Extra for Firebends each -/4 -/6 -/9 1/3 1/6 2/-	glass per foot run -/31
Bends each 1/2 1/5 1/9 2/6 3/1 4/9 Round elbows each 1/5 1/8 2/- 2/4 2/10 4/4 Square ditto each 1/5 1/8 1/11 2/8 2/8 4/1 Tees each 1/6 1/10 2/1 2/9 3/1 4/8	Glazing only thick drawn sheet glass, polished plate or wire polished plate for all normal sizes. (For prices of glass see materials section and add profit, say 10 per cent.) per foot super 6½d. PAINTER
Crosses each 2/9 3/2 3/10 5/- 6/- 9/1 Diminishing pieces . each -/10 -/11 1/2 1/6 1/11 2/8	Painting, Whitening and Distempering (on new Plastered Walls)
Caps each -/7 -/8 -/10 1/- 1/5 1/9	Twice distempering white per yard super -/5
Plugs each -/6 -/6 -/8 -/11 1/4 1/8 Cast Iron Waste, Soil and Vent Pipes	Ditto, in common colours per yard super -/7 Add for stippling per yard super -/7 Preparing and painting three coats of paint Preparing and painting three coats of paint
2" 3" 4" 5" 6"	Preparing and Painting Two Coats of Oil Colour on Ironwork
L.C.C. pipes in 6' 0" lengths fixed to brick-	after fixing
work per foot run 1/10 2/- 2/5 4/5 5/4	General surfaces per yard super 1/1½
Extra for bends each 5/8 6/1 7/10 11/- 14/9 Ditto single branches each 6/5 8/2 11/- 17/6 23/6 Ditto swannecks 6' projection	Perforated landings and staircases both sides (one side measured)
each 6/1 8/9 11/1 16/1 22/-	Metal Window Frames per yard run $-/1\frac{3}{4}$
Extra for access door or any fitting each 6/9 6/9 7/3 8/6 8/6	Metal Window Frames per yard run -/21 Eaves gutters per yard run -/71
	2" Rainwater pipes per yard run -/3
Zincworker 13 G. 14 G. 15 G. 16 G.	4" ditto
Rolled sheet zinc on flats per foot super $-\frac{7}{2}$ $-\frac{8}{2}$ $-\frac{9}{2}$	Large ditto per dozen 1/9
Ditto in gutters, cover flashings, etc. per foot super $-/8\frac{1}{4}$ $-/8\frac{1}{2}$ $-/9\frac{1}{2}$ $-/10\frac{1}{4}$	Extra large ditto per dozen 3/-
Ditto in stepped flashings per foot super $-/0\frac{\pi}{2}$ $-/0\frac{\pi}{2}$ $-/11$ $1/ 1/0\frac{\pi}{2}$ Labour and risk dressing over glass	Edges of casements each -/3 Painting on New Woodwork
per foot run -/41 -/41 -/41 -/41	Knot, prime, Add or
Capped ends to rolls each $-/2\frac{1}{4}$ $-/2\frac{1}{4}$ $-/2\frac{1}{4}$ $-/2\frac{1}{4}$ $-/2\frac{1}{4}$ $-/2\frac{1}{4}$ Extra labour to cesspools each $2/7\frac{1}{2}$ $2/7\frac{1}{2}$ $3/2$ $3/2$	stop and deduct for paint three each coat coats more or less oil colour
Distributing.	General surfaces per yard super 2//6
Solid drawn connect take Good to	Fascias and soffites per yard super 2/6 -/7½ Fillets, skirtings, etc., not exceeding 3"
Solid drawn copper tube fixed to walls per foot run -9 $1/ 1/5\frac{1}{2}$ $1/10$ $2/3$ $3/3$	girth per yard run -/8 -/03
Add if in short lengths	Ditto, not exceeding 6" ,, ,, ,, -/5½ -/1½
per foot run $-/0\frac{3}{4}$ $-/0\frac{3}{4}$ $-/1$ $-/1\frac{1}{2}$ $-/2$ $-/2\frac{1}{4}$	Ditto, not exceeding $9''$,, ,, ,, $-/7$ $-/1\frac{2}{8}$ Ditto, not exceeding $12''$,, ,, ,, $-/9$ $-/2$
Fittings for copper tubes Compression type	Squares one side per dozen 3/6 -/9
Straight couplings each 1/10 2/2 3/- 3/9 5/1 7/3	Large ditto , , 4/6 1/- Extra large ditto , , , 6/- 1/4
Obtuse elbows ,, 2/8 3/2 4/5 5/6 8/10 12/7	Edges of casements each -/6 -/1½
Tees , $3/1$ $3/6\frac{1}{2}$ $5/4$ $7/4\frac{1}{2}$ $11/3$ $15/7$ Crosses , $4/1\frac{1}{2}$ $4/8$ $5/8\frac{1}{2}$ $8/ 13/2$ $18/-$	Sundries
Reducing coupling ,, — 2/2 3/- 3/9 5/1 7/3	Twice creosoting woodwork per yard super -/6 Twice limewhiting brickwork per yard super -/4
Bends , 2/5 2/10½ 3/1 5/- 8/3 11/11 Brass stopcocks , 5/6 7/10 11/- 19/3 26/6 43/6	Twice limewhiting brickwork per yard super -/4 Once
Capillary type	Sizing Staining Varnish
Straight coupling each 1/6 1/11 2/7 3/3 4/1 5/4½	General surfaces per yard super $-/2$ $-/4\frac{1}{2}$ $-/6$ Wax polishing per foot super $-/4\frac{1}{4}$
45° Elbow, 2/4 2/11½ 3/10½ 4/11 6/10 9/7 Tees, 2/7 3/- 4/3 5/10 7/10 11/-	Body in and French polish on hardwood surfaces
Tees ,, 2/7 3/- 4/3 5/10 7/10 11/- Crosses ,, 3/1 3/6 5/1½ 6/10 9/8 13/5	per foot super 1/- Writing
Reducing coupling ,, — 1/7 2/- 2/6 3/3 4/8	Plain letters or figures, two coats, 2" to 12" letters
Bends ,, 2/8 3/2 4/3 5/7 8/1 10/11 Pillar tap connections ,, 1/11 2/6	per dozen inches in height 1/10}
24 G. 23 G.	Ditto, shaded , , , , , , , 2/6 Plain gold, 2" to 12" letters , , , , , , 2/6
*Rolled sheet copper on flatsper foot super 1/6 1/8 *Ditto in gutters, cover flashings, etc. per foot super 1/7 1/9	Plain gold, 2" to 12" letters , , , , , , , , , , , , , , , , ,
Ditto in stepped flashings per foot super 2/1 2/4 2/4 2	Single Double
Labour and risk dressing over glass per foot run -/41 -/41	Gold Gold
Capped ends to rolls each $-/3\frac{1}{4}$ $-/3\frac{1}{4}$ Extra labour to cesspools each $3/8$ $3/8$	Preparing and gilding in best oil gold per foot super 5/3 8/4 Ditto in matt or burnished gold per foot super 7/4 11/6
CLAZIED	Ditto in matt or burnished gold per foot super 7/4 11/6 Paperhanging
GLAZIER Sheet Class (Ordinary Classica Orghita)	Pasting and hanging only.
Sheet Glass (Ordinary Glazing Quality) 18 oz. clear sheet and glazing to wood, sprigged and with	On On walls ceilings
back and front putties, to all normal sizes not exceeding	Preparing new plastered walls for papering
60" in length or 40" wide per foot super - 61	per piece (60 feet super) 1/4 1/51
24 oz. ditto	Plain lining paper , , , , , , , , , , , , , , , , ,
A A 7-2	

* Items marked thus have fallen since April 14.

APPROXIMATE ESTIMATES

N this and the three following pages the JOURNAL's section of Approximate Estimates is published for the fourth time.

There is nothing revolutionary about the idea—its usefulness lies in its efficiency as a time-saver in calculating the approximate price of work to which the cubing system cannot be applied.

In brief, an Approximate Estimate in considering a roof, converts the several units of pricing involved into a common unit of price per square yard, and then adjusts the price to cover sundry labours. By this means several stages of calculation are saved by the estimator in a hurry.

 The following composite prices are for work executed complete and should be used for the preparation of Approximate Estimates only,

FOUNDATIONS

Thickness of walls

9" 11" Hollow 13\frac{1}{2}"

Excavation in clay soil for foundations 2' 6" deep to walls, including stock brickwork in second stocks cement mortar 1: 3 up to 6" above ground and horizontal double slate damp-proof course with external facings p.c. 100/- and pointing ... per yard run 25/1 28/3 35/4
Ditto, in ordinary soil ditto per yard run 23/10 27/1 33/9

EXTERNAL WALLS

- External walls in Fletton brickwork in cement mortar

 1:3 including three coat lime plaster and twice
 distempering one side and facings p.c. 100/- in
 Flemish bond, joints raked out and pointed with
 a neat struck weathered joint, the otherper yard super 19/4 19/3 24/9
 Ditto, including Keenes cement plain-face and three
 coats oil colour one side and dittoper yard super 21/- 20/9 26/5
- Ditto, including internal fair face, flush jointed one side and ditto per yard super 17/7½ 17/4½ 23/0½
- For variation of 10/- per m. in p.c. of facings in

 Flemish bond (stretcher in cavity work) per yard super -/9 -/6\frac{3}{4} -/9

APPROXIMATE ESTIMATES—(continued)

AFFROAIMATE ESTIMATES (COULT	iueu,	,		
INTERNAL WALLS AND PARTITIONS				
	2"	3"	41"	9"
• Breeze partitions set in cement mortar or				
Fletton brick walls and including three				
coat lime plaster and twice distempering				
both sides per yard super	9/11	11/1	11/1	16/7
• Ditto, built fair and flush jointed both sides per yard super	_	_	$7/8\frac{1}{2}$	13/2
• Ditto, including Keenes cement plain-face				
and three coats oil colour both sidesper yard super	13/3	14/5	14/6	19/11
GROUND FLOORS				
• Solid ground floor construction including 9" excavation,	4" bed	of		
hardcore, 6" concrete 6: 1 surface bed, finished with 1½"	granolith	ic		
paving trowelled smooth		per y	ard super	9/10
• Ditto, finished with 3/4" cement and sand 1:3 screed and w	ood blo	ck		

hardcore, 6" concrete 6:1 s	urface bed, fir	nished with 1	½" granolith	ic ,	
paving trowelled smooth	***	***	***	per yard super	9/10
• Ditto, finished with \(\frac{3}{4}'' \) cement	and sand 1:	3 screed and	wood bloo	:k	
flooring or paving p.c. 10/-	yard	***	***	per yard super	18/2
\bullet Ditto, finished with 2" \times 2" s	awn floor fill	ets and floor	clips and	1"	
deal tongued and grooved fl	ooring, batten	widths	***	per yard super	$12/11\frac{1}{2}$
		- " / " "			

• Ditto, finished with floor fillets as before and 1" (nominal) oak tongued	
and grooved narrow widths strip flooring polished at time of laying per yard super	$25/2\frac{1}{2}$

• Sleeper wall ground floor c	onstruction,	including 15"	excavation,		
4" bed of hardcore, 6" cond	rete 6:1 sur	face bed, sleepe	er walls 12"		
high, built honeycomb, 4	" slate damp	-proof course	$4\frac{1}{2}$ " \times 3" fir		
plate, and $4'' \times 2''$ sleeper	joists and 1"	deal tongued a	and grooved		
flooring in batten widths	***	*** ***	***	per yard super	15/3

• Ditto, with 1" nominal oak tongued	and	grooved	narrow	widths	strip		
flooring polished at time of laying		* * *	***			per yard super	27/6

UPPER FLOORS	With 7"	9"	11"
• Wood construction including 2" fir joists on 4" × 3"	Joists	Joists	Joists
fir plates and herring-bone strutting with three			
coat lime plaster and twice distempering white			
to soffite and 1" deal tongued and grooved			
flooring in batten widths per yard supe	r 12/-	13/2	14/3
• Ditto, with 1" nominal oak tongued and grooved			
narrow widths strip flooring polished at time of			

	laying	• * •	***		***	***	* * *	per yar	a super	24/3	25/5	20/0
• 5	" thick c	oncrete	4:2:	1 reinf	orced v	vith fa	bric s	uitable	at 13'	0"		
	spans for	r carryi	ng 3/4 cw	t. per	ft. supe	r, with	two	coat lim	e plast	er		
	and twice	e distem	pering	white to	soffite	and 1	" Kara	Sea dea	l 100 p	er		
	cent rift	sawn h	lock flo	ring u	av noli	shed a	t time	of lavin	ď	ho	r ward super	25/7

● Ditto, with 1" nominal 25/30 per cen	it.	quartered	Austrian	oak	block		
flooring polished at time of laying	**				***	per yard super	28/8

APPROXIMATE ESTIMATES—(continued)

FLAT ROOFS		Using Using 7" 9"	Using
• Wood construction including 2" fir joists on 4" × 3" fir plates and herring-bone strutting with three coat lime plaster and twice distempering white to soffite and best natural rock asphalt roof finish	per yard super	Joists Joists 18/5 19/5	Joists
• 5" Thick concrete 4:2:1 reinforced with fabric (su span for carrying 40 lbs. per ft. super) with two cand twice distempering white ditto	nitable at 13' coat lime plast	0"	ber 22/7
PITCHED ROOFS			A.
 Bangor Countess 20" × 10" slating, laid to 3" lap fixed 	with zinc nai	le.	
including $2'' \times 1''$ battens, $\frac{3}{4}''$ roof boarding and			
(measured on slope)		per yard suf	per 13/1
 Westmorland Random green slates No. 1 best 24" to 1 tionate widths ditto 		or- per yard suj	ber 17/2
\bullet Machine-made tiles $10\frac{1}{2}''\times 6\frac{1}{2}''$ laid to a 4" gauge, four	th course naile	ed	
with galvanized nails ditto		per yard su	ber 11/6
• Hand-made sand faced tiles ditto ditto		per yard su	ber 12/3
\bullet Slate ridges, including cuttings and $1\frac{1}{2}''\times 9''$ deal ridge		per yard r	un 9/10½
• Half-round ridge tile ditto		per yard r	un 7/7
$ullet$ Slate hips, including cuttings, lead soakers, and $1\frac{1}{2}^{"}$	\times 11" deal h	ips per yard r	un $12/5\frac{1}{2}$
$ullet$ Hip tiles, including cuttings and $1^{1''}_{2} imes 11''$ deal hips		per run ya	rd 14/-
• Lead valley gutter to slated roof, including cuttings an	$d 1^{1}_{2}$ × 11 d	eal	
hips		per yard r	un 18/5
$ullet$ Purpose-made valley tiles, including cuttings and $1\frac{1}{2}$	× 11" deal hip	os per yard r	un 13/7
DOORS		Partitions or W	7a11a
		ratitions of vi	
 2" flush door p.c. 29/- 2' 6" × 6' 6", including deal frames or linings, ironmongery p.c. 15/- and simple architraves both sides, 	2" 3"	$4\frac{1}{2}''$ 9"	13½"
all painted each	ch 100/- 101/	5 96/3 100/1	01 106/101
WINDOWS			
Prices are for normal size, including suitable ironmongery, sheet glass and painting.	glazing with cl	ear	
• Standard metal casements with fixed lights		per foot suf	per 2/5
• Ditto, with average proportion of opening lights		per foot sup	er 3/10
• Standard metal casements in wood frames with fixed	lights	per foot sup	er 4/-
• Ditto, with average proportion of opening lights	***	per foot sut	per 4/11
• Standard industrial type sashes with fixed lights		per foot sup	er 2/2
• Ditto, with average proportion of opening lights		per foot sup	
• Solid deal frames and 2" casements		per foot sup	
• Deal cased frames and double hung sashes		per foot sup	
The state of the s		F Jose Sup	./202

APPROXIMATE ESTIMATES—(continued)

STAIRCASES

• Deal 9' 0" high, in	ncluding	half sp	oace lan	ding, n	ewels, l	alusters	and					
handrail	***	***	***	***	***	***		4.64	each	£23	10	0
• Austrian oak ditt	o				* * *	***		***	each	€44	5	0
• Precast concrete	ditto		***	***	***	***			each	€32	15	0

DRAINS

 Manhole, 2' 3" × 1' 6" × 2' 0" deep, including excavation, 6" (6:1) concrete bottom, one brick sides 3rd stocks in 	Ordinary Soil		Clay Soil	
cement mortar with brown glazed half-round straight main				
channel and one brown glazed branch channel, including).	
benching, sides rendered in cement and sand (1:3) and a 24" × 18" black single seal cast iron manhole cover and				
frame, weight 0 cwts. 3 qrs. 0 lbs each	£3 12	2 6	£3 1	5 6
• Manhole 2' 3" × 3' 9" × 4' 0" deep ditto including six				
branches each	£ 7 2	0	€7	6 6
			Ordin	nary
	Clay	Soil	So	il
British standard quality stoneware drain pipes laid on and including 6" thick concrete bed flaunched up both sides of pipe and excavating average 2' 6" deep per foot run	4" 2/5	6" 3/0½	4" 2/3	6" 2/10½
• Ditto, but excavating 4' 0" deep per foot run	4/11	4/9	3/71/2	4/3
• Cast iron drain pipes in 9' lengths and laying in trench including 6" concrete bed and excavating average 2' 6" deep per foot run	4/8	6 61	4/6	6/41
• Ditto, average 4' 0" deep ber foot run				

PATHS AND DRIVES

• 2" finished gravel paths, including 6	6" excav	ation and	4" bed of l	nard-		
core and edging boards		***			per yard super	5/3
• 7½" finished gravel drive, including	6" excav	vation, 6" l	ed of hard	lcore		
and edging boards	***				per yard super	6/9
• 2½" Tarmacadam drive including dit	to	***			per yard super	7/10

FENCES

• Cleft chestnut pale fence 4' 0" high	***				***	per	foot	run	-/10
• Deal weather boards, including post	ts, arris	rails	and	gravel	boards				
creosoted, 5' 0" high	***	***	***		***	per	foot	run	$2/9\tfrac{1}{2}$
• Ditto, in English oak throughout				***		per	foot	run	3/101

The four sections on PRICES published in the issues of April 21, 28, May 5 and this week, together complete the PRICES SUPPLEMENT. Next week the FIRST SECTION—PRICES OF MATERIALS, PART 1—will be repeated with items revised according to market quotations.