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#### THE

#### ARCHITECTS'



# JOURNAL

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

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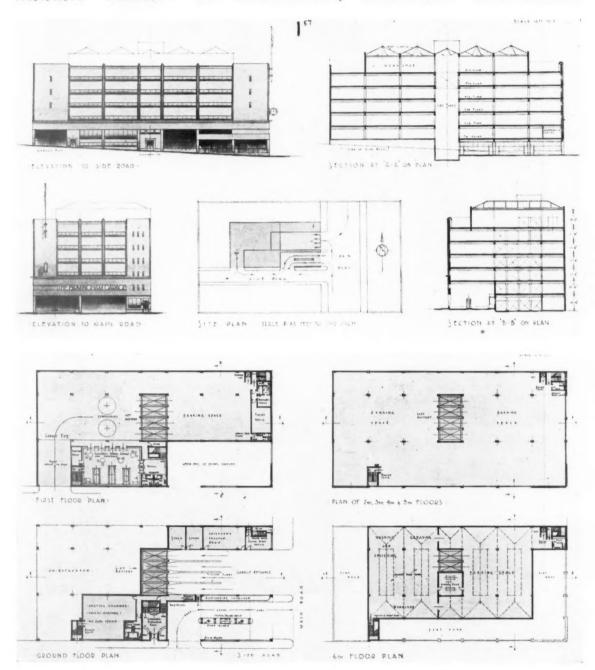
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The Editor will be glad to receive MS. articles and also illustrations of current architecture in this country and abtard with a view in publication. Though very cure will be saken, the Editor cannot hold himself responsible for material sent him.

### COMPETITION FOR A GARAGE

WINNING DESIGN: BY WISCHHUSEN, CORNFORTH AND PATON



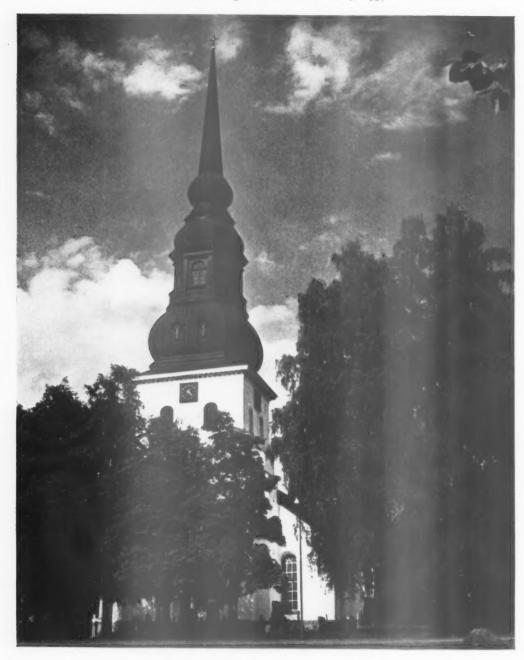
M ESSRS. W. T. Benslyn, S. N. Cooke and T. M. Ashford, the assessors of the competition for a multistorey garage to be built in the centre of a large city, promoted by the management of the Birmingham Building Trades Exhibition, have made their award as follows:

Design placed first (£60): Messrs. F. G. Wischhusen, L.R.I.B.A., R. C. Cornforth and A. G. Paton (of the office of Robert Sharp, F.R.I.B.A.), of 13 Lower Belgrave Street, London, S.W.1.

Design placed second (£30): Mr. E. Howard Sadler, A.R.I.B.A., of 57 Sutherland Avenue, Maida Vale, London, W.g.

Design placed third (£20): Mr. Richard Anderton, A.R.I.B.A., of 6 Kenilworth Gardens, Blackpool.

Above we illustrate the winning scheme; the design placed second is reproduced on page 533.



C H U R C H I N S W E D E N

A typical church in the Dalecarlia district of Sweden. The churches are built of local stone and finished in white stucco with the plinth left in random rubble. The spires are constructed of a wooden framework covered with copper. The photograph is by Mr. Norman Westwood.



# GOOD MORNING, BOYS

You are, of course, a genius; and after the three, five or seven years of training which you are now beginning, are certain to do extremely well in architecture. In a week or two, or at least after six months, you will have decided in what way you want to succeed and very probably what form of expression will make your name famous; and it will not matter in the least if your chosen style resembles that of someone well known at the moment—when you are getting into your stride at forty he will probably be dead. In six months' time, too, you will have found that political views are necessary for an able architect; but neither politics nor sociology will be at all difficult for you.

After your second term you will see clearly that, after the mere routine work of absorbing facts on quite a number of subjects is over, an enjoyable and prosperous career in architecture is almost entirely a

question of choosing your line.

You are a genius. And almost certainly your particular strong point is planning, design and the sensitive choice of materials. And you are right in thinking that exactitude in working drawings and specifications, and perfect office organization, can be looked after by others, providing your quiet authoritative hand is always ready to correct little wobbles. This will not take much time.

Your major occupation will therefore be getting work and designing. It is here that some care is needed, for a good choice of a line is very important. As architecture now is, such an architect as you soon will be would still prefer private practice on your own. An occasional competition (once the R.I.B.A. is reformed; for there will be no truckling to the Old Guard) will establish your name and give variety. Flat blocks or work for a go-ahead company can be got by ability and personality; and an odd director still under the Lutyens spell can soon be made to look very foolish indeed. And occasionally the development of a seaside estate in Cornwall for a man of real culture ought to be accepted. Such a job can never pay, but it can set an example.

There are other ways by which you can have an enjoyable career. But after two terms in architecture

these will seem the plainest.

They have been plain for a very long time. For a person of your talent they may even seem too plain; you may feel, just momentarily, that such easy ways to prominence might not give your powers their chance of full development.

The JOURNAL is sure that this momentary thought of yours should be encouraged; and even magnified

into a determination. It is sure of it for one or two reasons.

You have intelligence as well as powers of design, and taste as well. A number, perhaps the majority, of young architects with these qualities will in the normal way become architects, official or private. But you have them to a special degree, and these qualities, in conjunction, are needed amongst the general public and in the surroundings of the public to an extent which makes it a crime not to use them with the maximum effect.

In the architecture of ten years or fifteen years ahead—for you are not the person to scamp your training—the most important kinds of architecture will not come the way of the individualist. The highest form of architecture then will be that of the architect-town

planner.

You may have heard of town planning as an indescribable complex of restrictive legislation which becomes effective only at the most unhappy moments. This was not town planning's original intention, and in ten years' time, when town planners (who are still carrying on) possess powers commensurate with their problems, there will be a special need for you—for a young man who has trained for architecture with distinction and had the ability to study afterwards the problems of town planning. There are none larger and more important. This is one of the ways of being an architect in the grand manner of 1950.

Another way will be as an architect to a local authority. You may have to wait a little before you control a department; but with your talents it will be a very little, and committees, at present the chief cause of sterility in design, will have changed a lot by 1945. You may be fairly certain, in choosing your line, that the architect of the buildings of an entire municipality will have an influence in 1950 that rivals private

eminence.

And there are other ways, if a man of your ability takes time to look round. There is H.M. Office of Works—getting better every day. And thanks in part to the efforts of the R.I.B.A. (a backward institution which a distinguished person like you may feel compelled to join) more and more public bodies are learning that good design is one of their duties. London Transport, the Miners' Welfare Association, the Land Settlement Association, and the Central Electricity Board—aided by your genius the work of these might make good design as common as drinking water in the homes of Britain.

The JOURNAL hopes that with possibilities available you will avoid the temptations of too easy a success.



The Architects' fournal

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Telegrams

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NOTES

T O P I C S

LIFE IN 1937

HE miniature census which will begin on October 17 will have great architectural and town planning significance.

For some time the range of commodities on the retail price of which the cost of living index is largely based has had critics. On grounds of common sense it has been felt that more than twenty-five years must have brought about changes in the ways the public spends its money. And 30,000 families are going to be asked to face a formidable questionnaire of twelve pages.

People loathe being asked questions. This time one hopes that the census organizers will persuade the selected representatives to put their backs into it and to be as truthful as human nature can. Fares to and from work, rents and rates, the bicycles used, the consumption of vegetables, amusement expenditure and the extent of the never-never system of purchase—from the answers to questions we may be able to judge housing and slum clearance methods by their effects on people's lives; the only efficient test. The degree of need for a more constructive town planning, and for the health campaign which the Prime Minister started last week, are other things that will be learnt from the 30,000 painfully filled-up forms.

#### A MATTER OF PRICE

The Manchester Guardian has taken up a strong attitude over a question of housing in the Hulme area of Manchester. It concerns whether the City Council is justified in compelling the Housing Committee, against the latter's will, to proceed with a scheme for building flats on a portion of the Hulme clearance area at a price likely to work out at £900 a flat.

I do not, unfortunately, know Manchester well. It may be that this particular site, which is near the Town

Hall, is unsuitable for housing from every point of view, and is extremely suitable for other development; it is certain that the probable net cost per flat (£700) mentioned seems high, even as an estimated figure today. The real interest seems to lie in what alternatives are before the City Council and those whom they wish to re-house.

The Council can pay £7,621 per acre for a site surrounded according to an aerial photograph, by some factories and squalid streets of nineteenth-century housing—and thus place £200 site cost on to each flat they provide; or, no doubt, they could put the tenants out at Wythenshawe and let family budgets bear the cost of travel. The *Manchester Guardian* does not enter into these matters, it merely states that the price asked would be the highest ever paid for housing purposes in Manchester.

I have a great respect for the *Manchester Guardian*. I should have more if it had asked whether the landowners concerned were justified in asking such a price and how the city is to continue its housing programme if it has to pay £50,000 for each six acres it needs.

#### HEALTH

The Prime Minister's speech on the National Health Campaign to the "largest gathering of Local Authorities that has ever been known" was not without interest, and succeeded in dealing fairly fully with the more obvious things such as clinics (T.B., V.D. and ante-natal), playing-fields and milk at school, whilst tactfully avoiding all references to persons who are so nasty as to suspect "cannon fodder."

A healthy nation, however—and re-armament programme or not a healthy nation is an eminently desirable thing—depends on a good deal more than these rather negative health services, on something more even than those more positive schemes for "keeping fit" such as co-operative arm and leg wagging.

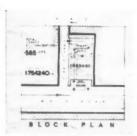
Ultimately it will depend on whether the biggerminded planners, both town and rural, are allowed to get to work. Health is diet and diet is agriculture. When and only when industrial and agricultural areas are properly related and interwoven will the pursuit of health become anything more than a rearguard action against illness.

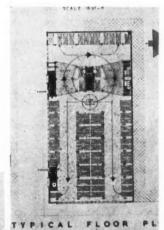
Immediately, it still seems to me that physical jerks and playing fields (much these are needed) will not do all that could be done in ten years. Better medical services, propaganda for better use of food, toddlers' lidos where children can play (and get free milk) under paid supervision, and adolescent and adult lidos for those who can't afford to get out to fresh air by themselves. These are my selections for a Health Campaign which will show results.

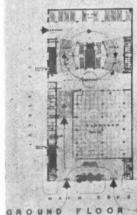
And I repeat that the family that most wants helping to health is that in which sixpence is a substantial expenditure.

When the National Advisory Committee gets going full blast my four points will no doubt be attended to. So far, a kindly press has interpreted in advance the Committee's activities as a kind of Oxford Fitness Movement with a very limited appeal.









Principal elevation, block plan, ground and typical floor plans of the design placed second, by Mr. E. Howard Sadler, in the competition for a multi-storey garage to be built in the centre of a large city. See page 529.

PLAN READING

Whatever one's politics may be, and I trust that I have never let mine show between the lines of this column, one has to admit that town planning schemes in the grand manner are easier to come by under a dictatorship. Sargon, Augustus, Trajan, Napoleon, and all those minor German royalties and English Whig landowners seem to have contributed to big scale planning, whether in the form of capital cities or mere parks, more than have the bureaucracies of free and independent peoples. Think, for instance, of the much better fate that might have befallen Wren's plan for London if the Stuarts had not had their wings clipped in the previous generation. Il faut souffrir . . .

The dictators so far as planning is concerned get it both ways—on the up grade they are revelling in outward display of their megalomania and on the down grade the "panes et circes" may take the form of stadia and thermæ. This, à propos of the fact that Herr Hitler is, I see, absorbed in architectural schemes both for the further development of the Nuremberg site and for the "beautifying" of Berlin. It will, I suspect, be a well-drilled and orderly beauty: romanticism was always taught its place unter den Linden.

One curious little fact emerges. Hitler is unable to read "plans and architectural elevations." This is a curious trait to find in the whilom architectural assistant, but it is one which he shares with the third, but not the first, Napoleon. So the fibrous plaster firms are busy erecting slices of façade, full-size, as being the best way of showing the Chancellor what the final result will look like. At Nuremberg a slice was erected in granite that colour and texture might also be judged.

#### AMENITIES AT BEXHILL

After petulance over the folly of an £80,000 pavilion in a comparatively small town the inhabitants of Bexhill have now come to the conclusion that it wasn't such a bad idea after all, for they propose to spend another £20,000 or so in removing that horrible old bandstand which still disfigures the view from the shore and add a swimming pool, a dance hall and a new bandstand on the east.

Shortly after the opening I heard two blimps in electric bathchairs muttering that it "wasn't as bad as they'd expected," but hardly anyone expected that a conservative population would accept modernism so soon, even if it does happen to be good.

#### FLAT LIFE-GUARANTEED TRUE!

The horrors latent in flat life such as the neighbour's loud speaker are well known, but a new and, I should imagine, quite unique instance has just come to my notice. I recently visited two distant relatives of the maiden aunt order, tenants of a modest "converted" flat, and found them in a perturbed state. The persons in the flat above were possessed, apparently, of what I can only call a "curiosity complex." Holes had been bored in the ceiling of the living-room whence sniggering sounds told of prying eyes above.

The ceiling was already well spotted with sticking plaster, but the nuisance persisted—as soon as one hole was covered up another appeared. The landlady, a friend of these unneighbourly creatures, persisted in pooh-poohing the whole thing. It was when a hole appeared over the bath that they decided something must be done. But what? The authorities appear to be powerless to intervene. The only thing I can think of is a syringe of ammonia.

#### YOUR BOY OR GIRL

Last week it was my joy and privilege to welcome new students, through the medium of this column, into our delightful profession. It was, therefore, with interest that I noticed an article in a paper which my housemaid had left lying about, called, I think, the *Daily Sketch*. The article was headed "A career for your Boy or Girl—Architecture."

I don't know who wrote the article, but the author had got hold of the right end of the stick. "To be a good architect a boy or girl must have a real interest in ancient and modern buildings." There is a lot in that. "The profession for women is still in the pioneer stage." Oh, come!

The article concludes with the announcement, "To-morrow: Aviation." Cynical, don't you think?

ASTRAGAL.

#### NEWS

#### POINTS FROM THIS ISSUE

" In the architecture of ten years or

fifteen years ahead the most important kinds of architecture will not come the way of the 531 Conditions of a competition for a glass house to be built at next year's Ideal Home Exhibition are now obtainable . . 534 "It is quite time you 'hedged' on 'modernism.' The ship is sinking, and you are already a year or two behind the times." 535 " Too much of our town planning, in legislation as in theory, is one-

APPOINTMENT

sided to the point of considering country merely as land without building value."

Mr. Herbert J. Rowse, F.R.I.B.A., has been appointed consultant architect for the £1,250,000 bridge to be built over the Clyde at Finnieston. Mr. Rowse was nominated by the president of the R.I.B.A. on the suggestion of the Ministry of Transport as a method of ending the deadlock created by objection by the Fine Art Commission to the proposed design of the bridge.

OFFICIAL OPENING

Yesterday, Mr. W. S. Morrison, M.P., Commissioner of Crown Lands, opened the sixth block of the working-class flats which are being erected by the Commissioners in the Cumberland Market area, east of Regent's Park, as part of a large redevelopment scheme rendered necessary by the obsolescence of old buildings previously existing. The sixth block, known as Camberley House, has been designed for 600 persons by Mr. S. D. Meadows, F.R.I.B.A.

EUSTON STATION

The rebuilding of Euston Station will necessitate the rehousing of some 500 people who live in streets adjacent to the station. These people are to be rehoused in five blocks of flats to be built in York Rise, Highgate Road. The foundation stone of the first block is to be laid today by Sir Josiah Stamp, and the estimated cost of the scheme is £86,000.

BIRMINGHAM CIVIC CENTRE

Mr. S. N. Cooke, F.R.I.B.A., speaking at the opening of the Building Trades Exhibition at Birmingham last week, said that the general public of Birmingham did not realise the magnitude of the Civic Centre scheme. The open space in front of the new buildings there would measure over 1,000 feet from east to west, parallel to Broad Street, and about 900 feet from north to south. It would be surrounded by civic buildings, and half of the first building, which would measure when complete about 700 feet, and would form the east side of the square, had been begun.

#### THE ARCHITECTS' DIARY

Thursday, October 7

ARCHITECTURAL ASSOCIATION, 36 Bedford Square, W.C.I., Exhibition of photographs taken by A.A. students on a motor tour in Central Europe. Until October 16. Europe, Until October 16.
NATIONAL COAL CONVENTION. At the Royal
Hall, Harrogate, Last day.

Friday, October 8 Institution of Structural Engineers, Western counties branch. At the Merchant Venturers' Technical College, Bristol. Chairman's address, 7.15 p.m.

Saturday, October 9

LONDON SOCIETY. Visit to St. Lawrence Church, Whitchurch, Middlesex, 2.45 p.m.

Monday, October 11
LONDON SOCIETY, Visit to Waterlow's Printing Works, Willesden, N.W., 3 p.m.

Tuesday, October 12

R.I.B.A., 66 Portland Place, W.1. Exhibition entitled "Modern Schools," to be opened by Professor John Hilton. The exhibition will remain open until October 19, 10 a.m. and 8 p.m., (Saturday, October 16, 10 a.m. and 6 p.m.). UNIVERSITY EXTENSION LECTURES. At 66, Portland Place, W.1. Third of the series: "Archbechure; Its place in Human Society." By Basil Ward, 6.30 p.m.

Wednesday, October 13

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SCOLESSIOLOGICAL SOCIETY. At 6 Queen Square, W.C.1. Byzantine Influence on Saxon Art." By Robert Francis. 8 pm.
INSTITUTION OF MECHANICAL EXGINEERS, Storey's Gate, S.W.I., General discussion on Lubrication and Lubrication.

Thursday, October 14

HISTATUTE OF HOUSING ADMINISTRATION.
At Carlisle, Fifth Annual Conference,
COUNCIL FOR THE PRESERVATION OF RURAL
ENGLAND. At Learnington, Tenth Annual
Conference, Until October 17.

"There is one danger we are faced with over this Civic Centre scheme," he continued. "It is with regard to adjoining buildings. When those adjoining buildings are rebuilt, who is to say what is going up on their sites? Who is going to control the type of architecture?

"I read a few days ago that a building company is buying the Mason College site in Edmund Street, and that, when it acquires the remaining buildings fronting Easy Row, although nothing has been settled, it is suggested that a block of shops and offices will be erected. Well, there you are on the edge of the Civic Centre site, facing the civic buildings you are now putting up behind the Hall of Memory. Shops would be unthinkable."

Mr. Cooke suggested that a large-scale

model should be made of the Civic Centre scheme. The layout of the roads, with their suggested widths, should be shown; the blocks of buildings indicated, with their proposed heights; the immediately surrounding buildings shown; and the civic buildings represented in more detail. That model could be housed in the Art Gallery, thus enabling the public to learn something of the scheme. There would be criticism, but he thought that would be welcomed. It would be better to meet criticism before the scheme was carried through than to do so after its completion.

There would be another advantage, even more important. It would enable the building owners of adjoining properties to know exactly what was proposed, so that when they submitted their plans for the proposed rebuilding scale models could be prepared and fitted into their places on the large model, whereby the scale and proportion of the building could be made to harmonize with the Civic Centre.

#### ARCHITECTS' PROTEST AT CARLISLE

Carlisle private architects resent a proposal to appoint the City Surveyor (Mr. Percy Dalton) as architect for new schools which the Education Committee is proposing to erect in the suburb of Currock (states The Yorkshire Post).

A letter on behalf of the local architects read at last week's meeting of the Education Committee pointed out that there were architects in the city well qualified to under-

take this work

Councillor Edgar Grierson, who opposed the appointment of the City Surveyor, said it had always been understood that that official, who enjoyed the decent remuneration of £23 a week, was always pressed with work. If the proposal was agreed to, it work. If the proposal was agreed to, it would mean further appointments in the surveyor's department.

Alderman Edmondson said the Surveyor would thus be drawing two salaries.

An amendment that the Organization Committee confers with the local architects on the matter was agreed to by a majority vote.

# GENERAL POSITION IN THE BUILDING INDUSTRY

"Activity in the building industry continues at a very high level, but seasonal factors now begin to exert their influence," states the current issue of *The Building Industries* Survey. "There is normally progressive fall in building activity until a low point is reached in January, the actual movement

depending largely on the weather.
"House-building as a whole is well maintained, but speculative activity begins to show a seasonal decline. Plans passed for dwelling-houses by 146 provincial urban authorities this year show a decline as

compared with a year ago.
"Industrial and commercial building is very active, and the continuing shortage of structural steel is in some cases proving a handicap. This may, however, have the effect of postponing development, with a consequent spread-over of activity.

#### CHANGES OF ADDRESS

Mr. E. C. Kaufmann has removed his offices from No. 4 Essex Court, E.C., to No. 4 Bloomsbury Square, London, W.C. Telephone No.: Temple Bar 5400. Mr. Alfred A. Ospalak, L.R.I.B.A., F.I.ARB.,

would be glad to receive catalogues at his new address, 25 Victoria Street, S.W.I. Telephone No.: Victoria 9262.

#### ON THE AIR

Monday, October 11. National Programme. 8 to 8.30 p.m.: "Design in Everyday Things—the House." By Anthony

#### COMPETITION NEWS

GLASS HOUSE AT IDEAL HOME EXHIBITION

Conditions of a competition for a glass house to be erected by Lenscrete, Ltd., at the Daily Mail Ideal Home Exhibition to be held at Olympia from April 5 to April 30, 1938, are now available; applications should be made to "Glass House," Daily Mail Ideal Home Exhibition, New Carmelite House, E.C.4, or to Mr. F. R. Yerbury, Director of the Building Centre, 158 New Bond Street, W.1.

The competition is being organized in conjunction with the British Glass Industry, and is being conducted on behalf of the Daily Mail by the Board of the Building Centre. The assessors are: Messrs. L. H. Bucknell, J. M. Easton, C. Grey Wornum and Maurice E. Webb, and the following premiums are offered: £100, £50, and £25. The last date for submission of designs is November 30. The competition is open to any qualified architect or architectural student of British nationality.

#### TOWN HALL, NEWCASTLE

Newcastle's special committee on municipal buildings is to recommend the City Council to hold an open competition for the new Town Hall to be built in St. Mary's Place, Newcastle.

#### SWIMMING BATH, GLOUCESTER

The Gloucester City Council has decided to hold a competition for a swimming bath, the estimated cost of which is £40,000. The following premiums are to be offered: £400, £250, and £150.

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

#### EXHIBITIONS OF DESIGNS

The designs of students of schools of architecture recognized for exemption from the R.I.B.A. Final Examination will be exhibited at the R.I.B.A., 66 Portland Place, London, W.I., from October 16 to 19 inclusive, between the hours of 10 a.m. and 8 p.m., Saturday 10 a.m. and 5 p.m. The R.I.B.A. Silver Medal for Recognized Schools of Architecture, and £5 in books, is awarded for the best set of drawings submitted.

The designs of students of schools of architecture recognised for exemption from the R.I.B.A. Intermediate Examination will be exhibited at the R.I.B.A. from October 26 to 29 inclusive, between the hours of 10 a.m. and 8 p.m. The R.I.B.A. Bronze Medal for Recognized Schools of Architecture, and £5 in books, is awarded for the best set of drawings submitted.

An exhibition of the drawings submitted in competition for the R.I.B.A. Prize (£5 in books) for Art Schools and Technical Institutions with facilities for the instruction of intending architects will be held with the Exhibition of Designs of Students of Schools of Architecture recognized for exemption from the R.I.B.A. Intermediate Examination.

#### GROWTH OF THE R.I.B.A.

The newly published Kalendar of the R.I.B.A. provides remarkable evidence of growth during the last 12 months.

The Fellows have increased in number from 1,767 to 1,772, the Associates from 3,618 to 3,908, the Licentiates are 2,333 as against 2,346, and the total number of architects and students of architecture in the ranks of the R.I.B.A. and its allied and associated societies throughout the Empire has increased from 19,428 to 20,353.

# E X H I B I T I O N S

IN a recent article on sculpture, Barbara Hepworth said, "Vision is not sight—it is the perception of the mind," and her own work, with its exact correlations, and subtle modifications of form, reflects this statement. Her approach to sculpture is architectural, and she visualizes her work in a definite surrounding space, and in relation to that space and its boundaries. In sculpture this is immensely important, and it is often forgotten. A carving is not a

DEAR EDITOR,

Some little while ago I had a note from Astragal to say that you and he and I were not so far apart as I might think.

Very well, here is an article; if he is right, print it. It is quite time you "hedged" on "modernism."

The ship is sinking, and you are already a year or two behind the times.

Sincerely yours,

Then

thing that can be brought home and planted down just anywhere, or, as many architects seem to think, applied to a building with all the appearance of an afterthought. If sculpture is to be used, architect and sculptor should co-operate in the creation of a building that is a whole, and the sculpture should act as a control—never as unconsidered ornament.

Barbara Hepworth's carvings at the Lefevre Galleries are the counterpart to modern architecture, and they need that background. They show great sensibility, and magnificent handling of materials. Her preoccupation with the exact, almost mathematical balance, through differentiation, of two similar shapes as a composition, produces some of her most interesting work. "Discs in Echelon" is perhaps the most successful of these.

Of the three exhibitions at the Leicester Galleries, Francis Butterfield's is by far the most hopeful. In his line and wash drawings, and simply suggested landscapes, form is implied with the greatest economy. Although his idiom is a personal one, and very assured, it is clearly the result of an observation that will prevent him from allowing it to become a formula.

Kisling should keep to landscape and street scenes. His people are intensely affected and sentimentalized. His different treatment of Dutch and Provençal scenes is interesting in comparison, and 76 and 79, both of Amsterdam, make one hope that he will always paint in what appears to be his spiritual home. For on such architectural subjects he has much to say, and he says it very well indeed. This is his first exhibition in this country.

Marie Howet, on the other hand, has a greater feeling for colour than for composition or structure. She severely avoids sunlight in her landscapes, and limits herself to very subdued tones. This, in "Autour de Laroche," for instance, can be very good indeed, and in its broad treatment this painting is far more satisfactory than those that suggest a Japanese influence.

There is also, at the same galleries, a good mixed collection which is not part of the exhibition. This includes some very fine Sickerts.

Sculpture by Barbara Hepworth. Lefevre Galleries, 1a King Street, St. James's. Drawings by Francis Butterfield, and Paintings by Marie Howet and Kisling. Leicester Galleries. Until October 16.

Here is the article.-Ed. A.J.

#### CHROMIUM TUBING IS AS DEAD AS MUTION

What is taste? What is truth? What is beauty? Only to the second have we any definite and satisfactory answer, and that only a scientific one.

The first may be said to be a faculty possessed only by persons who have the power to appreciate the latter, but that doesn't get us much further.

What rules taste? Generally the opinion of people who succeed for the moment in getting themselves considered "Worth while."

At one time certain classes have a preponderating effect on taste, at another, another. Sometimes it is a royal family, at another the less legitimate appurtenances of royalty, at another a small coterie, as the Horace Walpole connection in late Georgian times, at another a whole class such as the "respectable middle class in the nineteenth century."

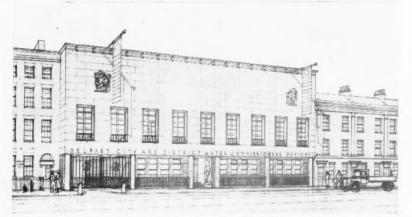
But particular periods seem especially good over long subsequent periods (often intermittent).

H. G.\* selects the Grecian of Pericles, the Italian Renaissance, English Elizabethan—good enough—but not (except the Greek) "peaks of unattainable level."

Egypt of Tutankamen, England of the fifteenth century, England of the middle Georgian times would have been pleasant to the eye, in housing, furnishing, dress, all the intimate things which concern the bulk of the people, if not in painting and sculpture, which have a less wide influence.

In the second paragraph he goes clean off the line: "round about the beginning of the present century taste was at a very low ebb"; this isn't, even comparatively, true. By all the

\* The article to which Mr. Falkner is referring is "Twentieth Century Taste," by Herbert Grimsditch, published on July 29.



A perspective, by Mr. P. E. D. Hirst, of the Queen Street façade of the new building for the Belfast City and District Water Commissioners. The architects are Messrs.

Silcock and Thearle, whose design was placed first in a recent competition.

canons of criticism before or since 1850 to 1900 was the low-water mark for architecture, painting, sculpture,

furnishing or dress.

The industrial revolution started in full earnest in 1830, and by 1880 had completely destroyed every kind of craft except a few utilitarian things like coopering and wheelwrights' work, architecture was almost completely stifled in commercialism, and the last and worst throes of Gothic revivalism; let any one who has any doubt look at *The Builder* or any other building paper of the period.

By 1900 things had definitely improved; as he says elsewhere, there was a strongish leaven in the first decade

of the twentieth century.

He is quite wrong in supposing that the Landseer popularity lasted until the War: I saw Landseers sold in 1914 for about the value of their frames. As he is that W. B. Leader painted in 1851; and especially in saying that domestic "architecture was at its nadir." Ask any continental or American architect what he thinks of English domestic architecture from 1900-1914, and he will tell you that we led the world, and that the seed of all reasonable continental domestic architecture was planted in England at that time, not only for today, but tomorrow.

Let any unbiassed person look through the Architectural Review domestic numbers, 1907-1914, and he will find good reasonable work being done not by exceptional persons like Lutyens and Lorimer, but quite ordinary practitioners (at that time) like Walter Cave, Guy Dawber, Hubert Worthington, Charles Lucas, A. Spooner, and a host of others, and if he wants to find pioneers, Edgar Wood, and numerous Scottish architects. In fact, in . . . everything sensible that the "modernist" has tried out, was first attempted.

In about 1905 there came a wave from the Continent, "L'art nouveau." It swept some of our younger brethren off their feet, see illustrations in The Studio, 1905-1914; it turned the Tottenham Court Road furniture makers' heads so that they made tables and chairs with limbs like human bones and all their hinges into onion blossoms; a collection of it was bought by the South Kensington Museum, as it was then known, it died as quickly as it came and as the 1930 "modernism" will die.

It had no effect on the real architecture of the country. The great bulk of building in 1900 was villainously bad; it has improved by the influence of "Victorian" architects working directly through post-war housing schemes, and by the substitution of materials popularized by them.

The position of the general building industry at the moment is nothing to boast about. In the south, tiles have driven out slates, white brick trimmings and terra cotta have disappeared, Elizabethan timberosity, combined with a wicked imitation of craftsmanship, has spread, "modernism" has affected about 1 per cent., and in "developing seaside beauty spots" about 30 per cent., so that a nice mixture of white and flat roof, timber and "ye olde bricke" and builders' "Georgian" improves the fairy scene.

But to return to the question of "Taste," a period of simplicity has set in; we have left the vertical bars out of our windows: unfortunately, a period of stark simplicity does not last, and an interior "swept and garnished" is likely to find itself inhabited by the legion devils of amateur and professional "decorators," and it won't be long before the inviting surfaces of some of our 1930-ish buildings become poster hoardings. Perhaps, if that will keep the wet out, it won't be a bad thing.

Of painting and sculpture it is unnecessary to speak; there has been no connection between painting and architecture since Georgian times. Whether the majority of critics would agree that the main stream flows through Gaugin and Van Gogh is a little doubtful in 1937, and though Epstein may receive a little sympathy through the martyrdom of his figures in the Strand, that sort of thing is fast losing its grip on even our younger students.

Of the crafts, furniture is certainly recovering, chromium tubing and stainless steel are as dead as mutton, and the work of Ambrose Heal and Gimson is again the inspiration. In textiles the geometrics of the Dorland Hall exhibition are equally dead. Textiles have always been a fluctuating taste, and Morris and tradition associated with real colour are likely to succeed. Curiously enough the fact that the whitewashed interior wall revived by Lutyens and Voysey provides an ideal background for rich and rare colouring and relief in textiles, does not seem to have inspired our weavers to anything but pastel and mud and ash shades.

As for the lesser crafts, glass-making, pottery, smiths' work, "the poor unfortunate crafts," they are in a bad way. "The towering figure of Morris' lifted them out of the Victorian slough, into the higher regions, almost of religion. The resurgent flood of commercialism, topped by the War and a wave of simplicity, and a worship of the machine (motors) has dropped them back to the "enlightened amateur"

status.

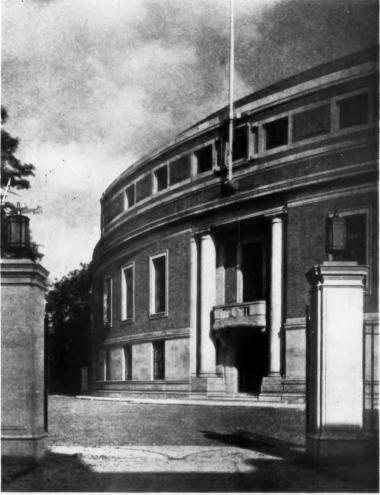
Rest assured that the things which should be preserved are designed by the people who make them; no one can sit down at a board to design a thing to be made by a machine and achieve beauty (except once in 1,000 times by accident), nor is there any system of education short of several generations in a workshop which will produce this miracle. At any period from 5000 B.C. to 1800 A.D. any article which attained beauty was designed by the craftsman who made it, or was associated in making it, from a cathedral to a button: a patron may have advised, or generally roughed out the plan, but it is the craftsman who is responsible, and only when he kept well within the limits of his craft did he become perfect, and as we realize more from day to day the more perfect for use the more perfect for beauty.

I was a few months ago looking over the items recovered in the clearing of Hampton Court Palace cellars, 1400-1600; perhaps it was that these things were so fragmentary that a little mind can appreciate their entire beauty; all are of course hand-made, with handprepared material, but they were the belongings of a luxurious, even profligate, court, yet in the matter of "Taste" there was not a fault in any of them.

HAROLD FALKNER

### STOKE NEWINGTON CIVIC CENTRE





GENERAL PROBLEM—The new buildings are in Church Street, Stoke Newington, London, N.16, and comprise municipal offices, an assembly hall, and the provision of additional accommodation to the library, which already existed on the east side of the site. It was desired that the assembly hall occupying the central portion of the new buildings should be planned so that it could be built at a later date; and that it should be approached from Church Street. The municipal offices, therefore, occupying the west portion, were designed as a separate building, which could have stood alone until joined up to the library extension by the assembly hall. The complete scheme, however, went forward at the same time.

CONSTRUCTION—Steel frame with brick walls, and Portland stone dressings; roof covered with Westmorland slates; steel windows with iron balconies.

PLAN—There are three entrances to the municipal buildings: 1, the main entrance in the centre of the curved front, for use during meetings of the council and during social occasions involving the use of the committee rooms; 2, the entrance to the east; and 3, the Lordship Terrace entrance on the north. From the north committee room access is obtained to a roof garden, completely sheltered on all sides. The public gallery of the council chamber is reached directly from the street or from the Lordship Terrace entrance hall. The assembly hall seats 616 persons on the ground floor and 146 in the balcony. On the north-east side of the assembly hall are a small hall and the previously existing public hall—a total of three halls, of varying sizes, which can be let together or separately. The library extension consists of a reference library, a room for the collection of books of local interest, store, etc. The old reference library is to become a children's library, and the old children's library, rooms for the staff.

The photographs show: above, the main entrance to the council chamber and municipal offices at the west end of the building, taken from Church Street; left, the entrance to the library at the east end, taken from the forecourt.

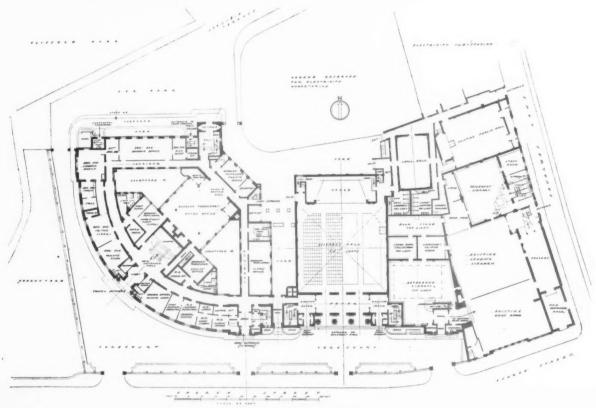
#### STOKE NEWINGTON CIVIC CENTRE:



INTERNAL FINISHES—Bronze doors open from the forecourt into the main hall of the municipal offices, and from here the main staircase, teak and carpeted and with wrought iron and silver bronze balustrade, leads up to the council chamber and suite. In the three committee rooms the woodwork is mahogany, with floors of teak; and in the council chamber the panelling is Australian walnut to a height of 15 ft. The seating in the council chamber is also in Australian walnut, with morocco leather upholstery. The council chamber has two stained glass windows containing the Coat of Arms of the borough. In the assembly hall the dance floor is Canadian maple on springs, so arranged that the springs can be fixed and the floor made rigid. The assembly hall has an oak dado, and a colour scheme is three shades of cream and mulberry and rose curtains, with an astringent motif of crème de menthe.

SERVICES—There is a public address equipment from a microphone on the stage in the assembly hall, to four amplifiers in the ceiling. Heating and ventilation of the council chamber is by plenum, the air being washed and warmed and supplied and extracted at floor level. The remainder of the buildings are heated by radiators in the ceiling, locally controlled.

The photograph is of the main entrance to the assembly hall, taken from the forecourt.

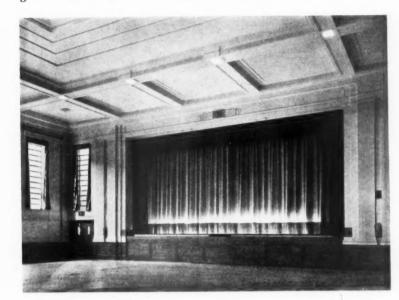


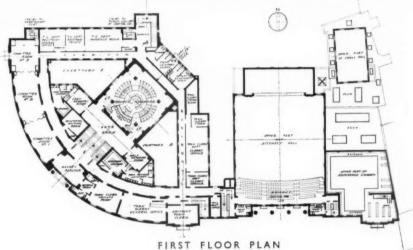
GROUND FLOOR PLAN

#### J. REGINALD TRUELOVE DESIGNED BY



The photographs show: above, the south corridor leading to the main staircase to the council chamber; right, the assembly hall, looking towards the stage.
For list of general and sub-contractors see page 560.







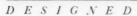
STOKE NEWINGTON CIVIC CENTRE





The photographs show: left, councillors' desks and seats in the council chamber; above, the three committee rooms, with the sliding partitions open, forming one room; below, left, the council chamber; right, the main staircase leading to the council chamber, taken from the first-floor landing.







J.

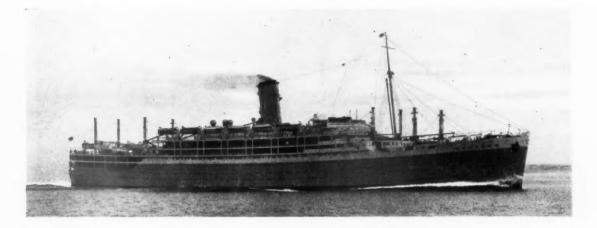


R E G I N A L D

TRUELOVE

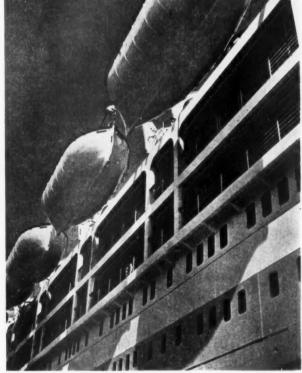
S . S .

ORCADES'



A R G H I T E C T F O R
T H E I N T E R I O R :
B R I A N O R O R K E



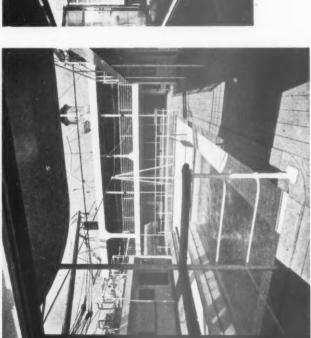




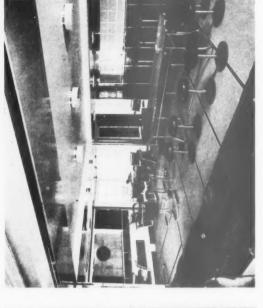
On October 9 s.s. "Orcades," the sister ship of the s.s. "Orion," will start from Southampton on her maiden voyage to Australia. Mr. Brian O'Rorke, who was responsible for the interior design of the "Orion," was also engaged by the Orient Line in a similar capacity for the "Orcades," photographs of which are reproduced on this and the four pages following. The length B.P. is 630 ft., the length overall is 665 ft., and the breadth overall is 84 ft. The water displacement is 28,400 tons.

The photographs show: Top, a general view; left, centre, the first-class games deck; left, one of the first-class promenade decks; above, a view looking up the promenade decks.

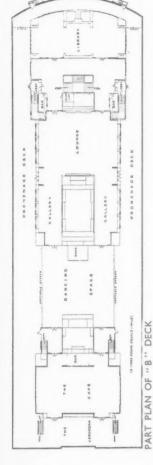
# O'RORKE BRIAN INTERIOR, THE FOR ARCHITECT "ORCADES"; s.s.





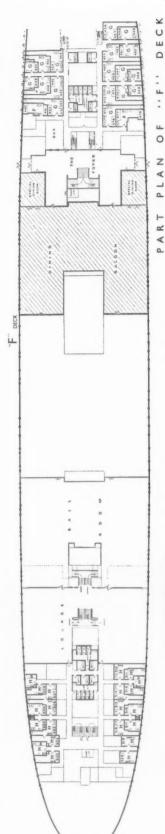




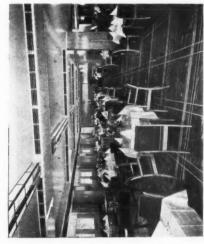




PLAN OF "C" DECK

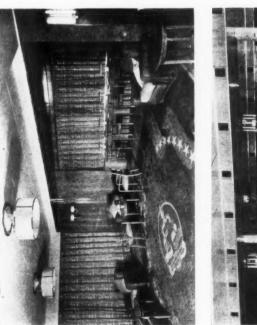










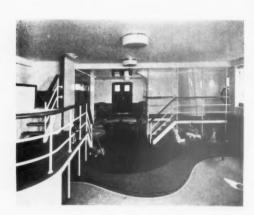




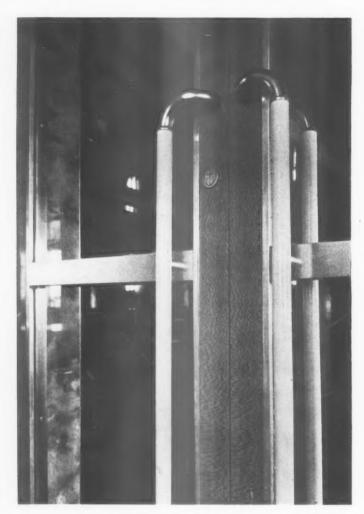
#### S.S. ORCADES: ARCHITECT FOR



The photographs show: Left, top, the tourists' lounge on deck F. This room is divided into two distinct halves, each forming a large room of its own. In between them are two stairways, a letter bureau and a coffee bar. Their carpets are of a dark green and blue tartan. Centre, the playroom, first-class, which is fitted up with a miniature ship, slides and platforms and has a floor designed to represent seas, beaches and islands. Bottom, the children's playroom, tourist. It has a floor laid out for various games of the hopscotch variety, a dado of washable material, and miniature seats and tables.









Right, top, a detail of door handles; bottom, part of the first-class café.



Accommodation is provided for 463 first-class passengers in 303 single- and two-berth cabins and for 605 tourist-class passengers in 270 cabins.

The photographs show: Top, the dancing space on deck B. Bottom, typical cabins; left, one of the first-class single-bed cabins showing the opening type windows introduced in the "Orion" and retained in the "Orcades." Right, one of the first-class double-bed cabins.





#### DESIGN FOR H T I

Following are some extracts from a paper read by Professor W. G. Holford at the recent conference of the Design and Industries Association.

VERY amateur of town-planning theory is assailed at the outset of his investigations by a number of startling paradoxes, like the clash of cymbals that proclaims the opening of an overture. Statisticians tell him that there is a wholesale immigration of country folk into the town, so that the populations of our larger cities increase yearly. At the same time, and in the same urban centres, everyone who can afford to do so is constantly planning to leave them—to visit the country, to week-end in the country, if possible to live in the country.

This initial paradox is not merely a debating point; it demonstrates the play of two opposing forces—economic necessity driving one section of the people into the towns, economic suffi-ciency allowing another section to escape from

them

It happens that in the course of frequent journeys between Liverpool and Newcastle, I sometimes overhear conversations between business men from those cities and from Man-chester, Leeds and Sheffield, on the subject of chester, Leeds and Sheffield, on the subject of the comparative advantages of living in these manufacturing towns. More than once I have heard a discussion on these lines: "Leeds is a wonderful city, wonderful! You can get out of it in no time"; followed by, "Aye! Manchester's not what it was."

It struck me as a curious commentary on our civilization that it should be taken for granted that a town's chief recommendation consisted in the easy with which one could get away.

that a town's chief recommendation consisted in the ease with which one could get away from it. This is almost the attitude of the Robber Barons; my fellow travellers might have been members of parliament for Old Sarum before the Reform Bill! They worked in the city because they had to, and apart from business and the state of the roads, that was as far as their interest in the city carried them. Yet this is a point of view that most of us are coming gradually to accept. In the England of the Middle Ages, such an attitude would have been unthinkable. It would have been considered eccentric in the times of the Georges. But we have not allowed our towns to become so uncivilized and so drab that our ancient genius for city life has died away, while our partly genuine and partly artificial love of the country has grown into a national stampede. Many people argue that this is as it should be. I cannot agree. The country is complementary

I cannot agree. The country is complementary to the town; it can never take its place.

The solution of this problem is obviously a two-sided one—the proper use of the country, and the rehabilitation of the towns; and it is of the utmost importance that they should proceed together. Too much of our town planning, in legislation as in theory, is one-sided to the point of considering country merely as land without building value. As far as the towns are concerned, however, we sideas the towns are concerned, however, we side-track this first paradox only to find half a dozen others. Perhaps I had better fire them off in a salvo, and have done with the paradox alto-

First, a traffic paradox. This has been pointed out by Le Corbusier and nearly every other town-planning prophet since the invention of the motor-car. In most existing towns the at the centre. But, in proportion, the roads are fewer in overall extent towards the centre and more frequent towards the outskirts. Even in a rectangular plan, such as New York's, the roads at the foot of the highest skyscrapers and the busiest offices are no wider than in quieter parts of the town. This means that if you are parts of the town. This means that if you are going to plan a business centre vertically (and that seems a good compact way of doing it) you must allow plenty of space around it and adequate communications to serve it. It also means parking spaces, and garages on a large scale, not just squeezed in by a miracle of building engineering but laid out and provided for as part of a town plan.

next is a paradox of housing densities. In all our larger towns poverty, overcrowding and insanitary conditions generally have combined to produce slums. Local authorities and public utility companies have set to work, and here and there, on comparatively small and unco-ordinated pieces of land within the builtup areas, re-housing schemes and new tenements have sprung into being—some of them possessing great architectural virtue. But to rebuild these dwellings to let at a rent which their inhabitants can pay, it is nearly always necessary to rehouse the same number of people on the site as before, if not an even greater number. Thus (the poverty remaining constant), the real overcrowding is not abated, and only the improved sanitary conveniences stand between the rehousing scheme and the creation of a future slum. Building higher will give more literal open space, but it is only when this is done on a really large scale that more open space is obtained relative to population. And scale is hardly ever large enoug

Following on this comes an industrial paradox, of a more particular character. Every student of town-planning history knows that in the past no town has ever flourished that was not founded for some sound economic reason— it might be m harbour, a river port, a station on a pilgrimage, a mart, or a centre of production or exchange. The hill-top, the castle, and the or exchange. refuge soon ceased to form the substance of a city, though they might be its nucleus. The Acropolis did not cause the growth of Athens; the agora did. And when the industrial revoluthe agora did. And when the industrial revolu-tion caused a new distribution and a vast increase of population in England, the houses sprang up around the mills and docks and factories. Then came a period when employ-ment declined and that disgusting and inhuman ment declined and that disgusting and inhuman phrase "surplus population" was invented. Now, in the very centres where industry once called aloud for workers, the workers are calling aloud for industry. This is a complete reversal of the old economic theory of towns. The Commissioner for the Special Areas suggests in his report the exclusion of industry from the Metropolitan region so as to induce it to go where its social value will be greater. The Government, by the establishment of trading where its social value will be greater. The Government, by the establishment of trading estates, is deliberately persuading industrialists to set up their works next door to the special areas. Even Welwyn, a garden city, does its areas. Even Welwyn, a garden city, does its best—and quite rightly so—to deny its purely dormitory status and advertise the attractions of its factory area. So that not only are new towns being founded or enlarged on the basis of some other principle than that of primary trade or exchange—as for example, recreation trade or exchange—as for example, recreation—but some of the older towns are undergoing a change of function. It is important for the town planner to realize that in both cases it is a social

planner to realize that in both cases it is a social impetus—a change of attitude among the public itself—which is behind the change.

I cannot help feeling that we are at the beginning of a new cycle in the growth and foundation of cities; and by that I mean something more fundamental, more cosmic, than an outward change of style. That is likely to come also, in fact it is visible already. But behind it is a change of attitude. The city no longer means the same thing to us as it did to a Roman soldier, a medieval trader, or an eighteenth-century landlord. We are making greater demands on our towns, and many of these demands are quite different from those these demands are quite different from those

that have existed in the past. You can trace the strange movement through-You can trace the strange movement throughout history of the great cities of the world from east to west, following the great trade routes. From India and Asia Minor they came to the Mediterranean, and those were the great days of Babylon and Tyre and Thebes, and later of Knosses and Phaistos in Crete. From the eastern Mediterranean they moved towards the centre, to Rome, Naples and Brindisi, to Byzantium, and to Amalfi, Pisa, Genoa and Venice. Then across to Marseilles and by Lyon to Paris and North Spain, by Vienna to the Rhine and Cologne. The pilgrimage routes and the crusades established markets which soon grew into towns. The woollen industry soon grew into towns. The woollen industry

and shipping and banking together opened up the North Sea and Baltic ports, Bremen, Hamburg, Amsterdam and London. Trade routes then moved farther west to the Atlantic and the New World, to the cotton and slave routes; and the merchants founded towns wherever they went. It was soon the turn of wherever they went. It was soon the turn of Bristol and Liverpool, and then of Boston, Philadelphia and New York. Even in America migration was towards the west; and the important cities belonging to this period are first those in the river zone—New Orleans, St. Louis, Pittsburgh; then those in the Great Lake zone—Chicago, Cleveland, Minneapolis; and finally those in the Pacific zone—San Francisco, Tacoma, Seattle and Vancouver; and latterly Tokyo. The last ocean has become a world trade route and the full circle of great towns is complete. The fusion is expressed with towns is complete. The fusion is expressed with bitter irony to-day by blood and flames in Shanghai and Nanking.

The migratory movement, east to west, is nearing an end, and a process of consolidation and appropriation—often by means of war—is in full swing. Discovery is still taking place in the air—witness the route to America via the North Pole. But the undercurrents are swirling into new channels, and towns will inevitably spring up and grow, for different reasons and under different motive forces than

obtained before.

Further than this I will not attempt to prophesy. I should like instead to gather up some of the threads of paradox I have left lying about and see what sort of pattern they are making in the town plans of to-day and to-morrow. I will briefly summarize the list of actions and reactions on which I have commented so far:—

1. The influx of country people into the town coupled with existing overcrowding and an increase in the number of families, is producing congestion; from which—
People of every class, but more especially those with means, are trying to escape.

The genuine urge for country scenery and pursuits as a change from town conditions, as rest and as recreation, the roads into the country being the pilgrimage routes of the twentieth century. This exodus is arrested

4. Improvements in locomotion and electric power, and social organization, e.g. rambling and cycling clubs, holiday camps, campaigns for physical fitness and recrea-

It is hindered by

The existing street plans of our towns, by the intensification of wayside attractions (at the same time as accelerated speeds on the roads), by the scarcity of roads at the centre, by the dozens of conflicting uses to which a road is put. In the towns them-

6. There is a social urge towards slum clearance, and the abatement of overcrowding, which is sometimes rendered less effective

7. Rehousing at high densities with the alternative of rehousing at a distance from the centre of the towns, entailing long and expensive journeys to work, and a lack of all but the domestic benefits of civilization on the outlying housing estates. A movement to counteract the invariable coincidence of unemployment and slums has led

1. The persuasive location of new industries in special areas and near existing large-scale dormitories. No national policy is in force, but Government inducements in the shape of Sara the Reconstruction Act, the Physical Training and Recreation Act, and the Trading Estates, are at least a confession that the problem exists. It is only necessary to add a horrible postscript,

namely-

namely—
The control of aerial sewage; or, in other words, municipal legislation, propaganda and subsidy towards smoke abatement, without which the very words "this fair city" are a misnomer, and we are ready to look at illustrations of some of the to look at illustrations of some of the answers to these nine points, not only in England but elsewhere

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# WORKING DETAILS: 597

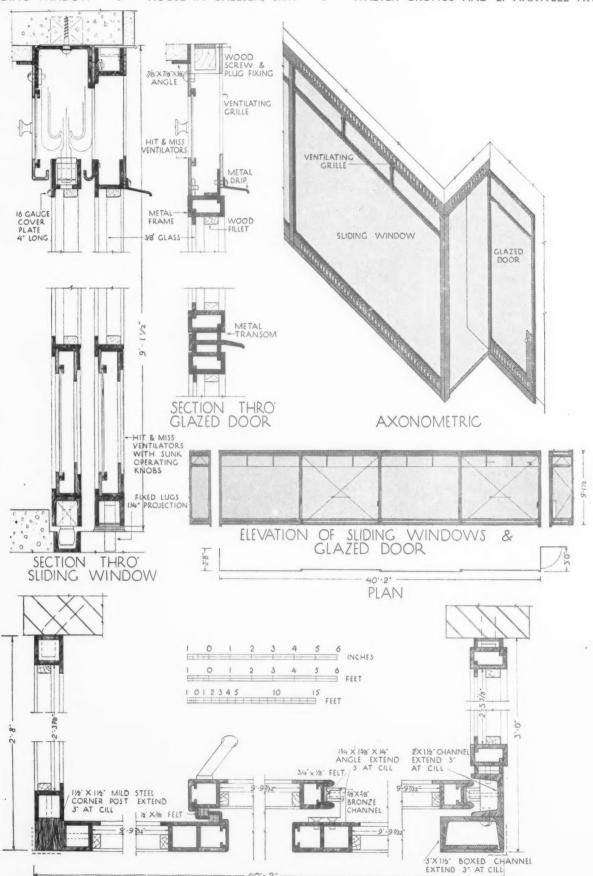
SLIDING WINDOW . HOUSE IN CHELSEA, S.W. . WALTER GROPIUS AND E. MAXWELL FRY



The sliding metal window runs the length of the dining- and living-rooms. Ventilating grilles run along the top and bottom of the window.

# WORKING DETAILS: 598

SLIDING WINDOW . HOUSE IN CHELSEA, S.W. . WALTER GROPIUS AND E. MAXWELL FRY



PLAN OF SLIDING WINDOW

The Architects' Journal Library of Planned Information



# INFORMATION SHEET

# SUPPLEMENT

#### SHEETS IN THIS ISSUE

**5 6 2** A.B.M. Rain-water Gutters and Fittings

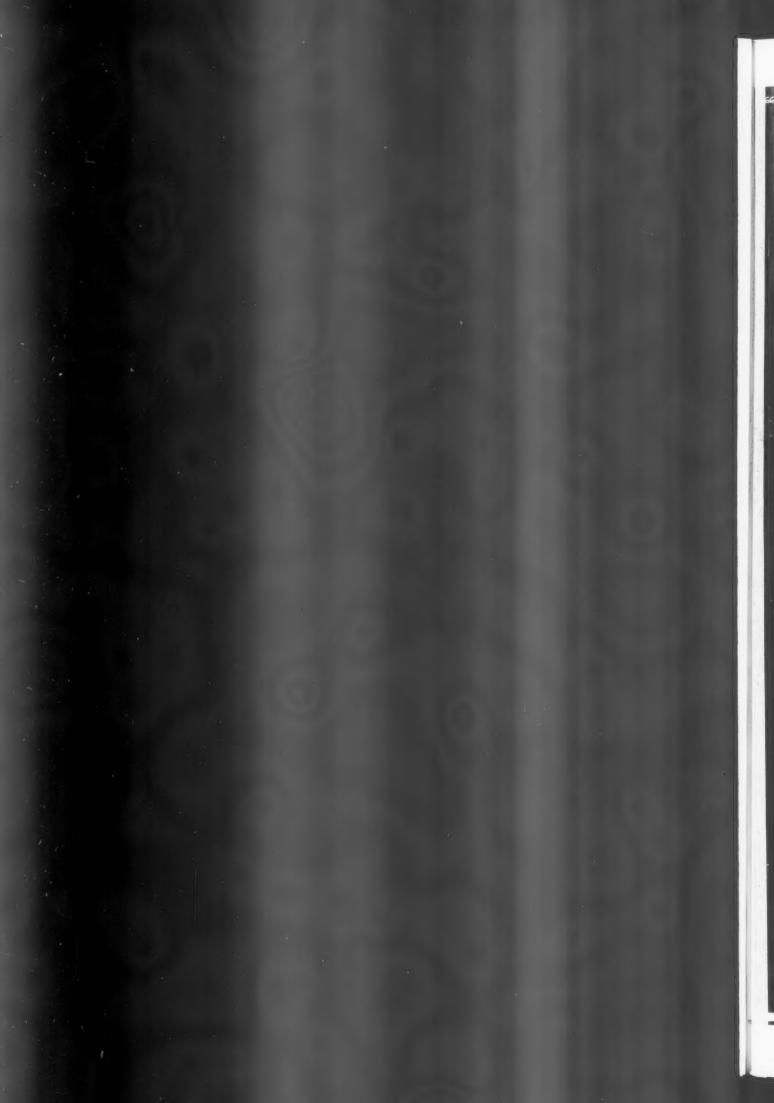
**5 6 3** Asbestos Cement Roofing



#### Sheets Issued since Index:

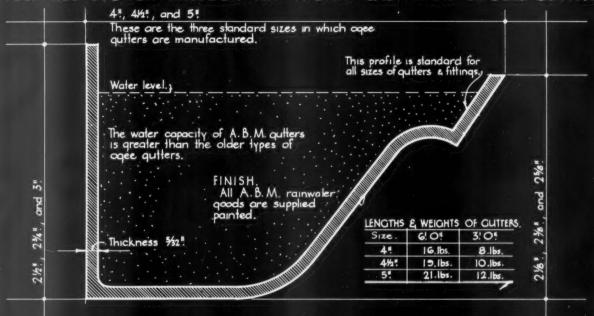
- 501 : Aluminium
- 502: Fixing Blocks
- 503 : Approximate Estimating-XII
- 504 : Aluminium
- 505: Aluminium
- 506 : Approximate Estimating-XIII
- 507 : Plumbing : Jointing of Copper Pipe
- 508: Roofing-Valley Flashings
- 509: The Equipment of Buildings
- 510 : Aluminium
- 511: Elementary Schools-II
- 512: School Lighting
- 513 : Approximate Estimating-XIV
- 514: Air Conditioning
- 515: Insulation of Buildings
- 516: Cycle Parks
- 517: Cycle Parks
- 518 : Plumbing Systems—II
- 519: Kitchen Equipment
- 520 : Roofing—Flashings 521 : Motor Cycle Parks
- 522: Reinforced Asbestos-Cement Roofing Tiles
- 523: Poison Gas Precautions
- 524: Kitchen Equipment
- 525: Metal Reinforced Asbestos Cement
- 526: Leadwork to Photographic Developing Tanks
- 527: Asbestos-Cement Corrugated Sheets
- 528 : Cycle Parks
- 529: Kitchen Equipment
- 530 : Asbestos-Cement Corrugated Sheets
- 531 : Plumbing
- 532 : Roofing—Flashings
- 533 : Asbestos-Cement Corrugated Sheets
- 534: Insulation of Buildings
- 535: The Equipment of Buildings
- 536 : Asbestos-Cement Ventilators
- 537 : Slate Window Cills, etc.
- 538 : Petroleum Storage
- 539: Linoleum
- 540 : Plumbing
- 541 : Linoleum
- 542 : Garage Equipment
- 543: The Equipment of Buildings
- 544 : Sheet Leadwork
- 545 : Elementary Schools-III
- 546: Elementary Schools-IV
- 547: U.S.A. Plumbing-III
- 548: Wallboards
- 549 : Elementary Schools-V
- 550 : Elementary Schools-VI
- 551: U.S.A. Plumbing-IV
- 552 : Sheet Leadwork
- 553: Kitchen Equipment
- 554: Burnt Clay Roofing Tiles
- 555 : A.B.M. Draining Boards
- 556: Kitchen Equipment
- 557: Asbestos Cement Roofing
- 558: A.B.M. Rainwater Pipes
- 559: Flashing
- 560 : Kitchen Equipment
- 561: Asbestos Cement Roofing





#### THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

#### FULL SIZE SECTION THROUGH AN A-B-M- CAST IRON 5! OGEE GUTTER.

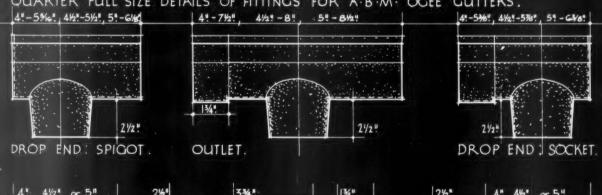


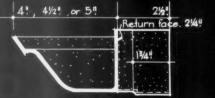
#### TABLE SHOWING SIZE OF GUTTER REQUIRED TO DRAIN A GIVEN FLAT SURFACE AREA (See book)

Area of flat surface to be drained. sq.fl.	Size of oqee quiller required.	Effective cross sectional area of gutter.	Size of drop.	Size of down pipe required.
250.	4".	4½. sq. ins.	21/21.	2½"
330.	41/2!	51/2. sq. ins.	2½!	2½!
450.	· 5!	7 sq. ins.	2½"	25.

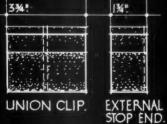
Data based on storm rainfall of 3! per hour, with generous safety margin and allowing for one outlet.

#### QUARTER FULL SIZE DETAILS OF FITTINGS FOR A-B-M- OGEE GUTTERS.





EXTERNAL ANGLE: Obtainable in either square or obtuse angles.



UNION CLIP



INTERNAL ANGLE : Either in square or obtuse angles.

Information from Associated Builders Merchants Ltd.

INFORMATION SHEET: GUTTERS Nº 1: OGEE CAST IRON GUTTERS AND FITTINGS: SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI-Ola A. Bayre

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# • 562 •

# A.B.M. RAIN-WATER GUTTERS AND FITTINGS

Product: A.B.M. Cast Iron Ogee Rain-water Gutters and Fittings

This Sheet deals with cast iron ogee gutters and fittings. The gutters are made in 6-ft. and 3-ft. lengths and three standard sizes, measured from back to front, namely 4 in.,  $4\frac{1}{2}$  in. and 5 in. and a complete range of fittings for each size is available.

#### Design of Gutters:

The design of A.B.M. gutters is based on the required water-carrying capacity of a gutter to drain a given roof area, and the size of gutter outlet to dispose of the water in the gutter sufficiently fast to prevent flooding. It should be understood that it is not the

sloping area of the roof that determines the gutter capacity, but the horizontal area covered by the roof slope. This is referred to in the table on the front of the Sheet as "flat surface area."

The deep straight-backed design of the A.B.M. gutters gives a water-carrying capacity which is generally greater than the old type gutters of the same nominal size, often allowing the use of one size smaller A.B.M. gutter than would be necessary with an older type of gutter.

type of gutter.

The table on the front of the Sheet shows the maximum recommended areas which can be drained by the ogee type gutters. For larger areas, the A.B.M. standard moulded gutters are recommended These will be dealt with in a later Information Sheet.

#### Gutter Fittings :

The fittings shown are available in all three standard sizes. The gutter outlets have been designed so that there is no restriction at the point of outlet, the internal diameter of the outlet being the same as the down pipe into which it discharges.

The angles are obtainable either right angled or obtuse angled, and for internal and external angles

The table below gives the prices for A.B.M. ogee gutter fittings:—

#### A.B.M. STANDARD LIST PRICES FOR O.G. GUTTER FITTINGS

					4" A.B.M. Std. List	4½" A.B.M. Std. List	5" A.B.M. Std. Lis
Angles—Square Exter	nal				1/6	1/9	2/- 2/- 2/- 2/- 2/-
,, Inter	nal				1/6	1/9	2/-
Obtuse Exte	rnal			***	1 /6 1 /6 1 /6	1/9	2/-
,, Inter	nal			***	1/6	1/9	2/-
Nozzle Pieces—Single	Sock	et			1/6	1/9	2/-
Drop Ends—Faucet				***	16	1/9	2 - 2 -
Spigot	***		* * *	***	1/6	1/9	2/-
Union Clips		***			1/6	1/9	2/-
Stop Ends-External	***	***		***	9d.	10½d.	1/-
Internal		* * *			9d.	10½d.	1/-

#### **Previous Sheets:**

The first three Sheets in this series dealing with A.B.M. Products are Nos. 540, 555 and 558.

#### Standardised Designs:

The Associated Builders' Merchants is a non-trading organisation devoted to the standardisation of the design of building materials and equipment.

Materials and equipment made by a number

of manufacturers are stamped with the following symbol indicating that they conform to the standard of design and quality laid down.

Information from: The Associated Builders' Merchants, Ltd.

Address : Peters Hill, Upper Thames Street, London, E.C.4

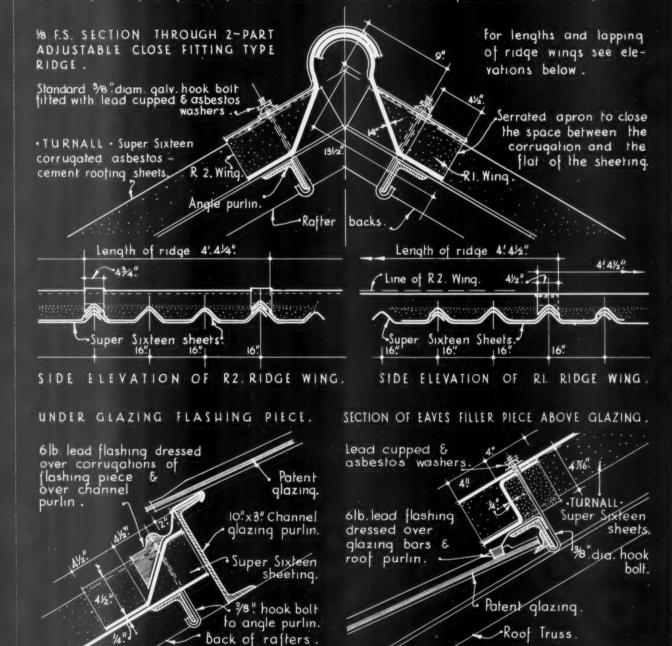




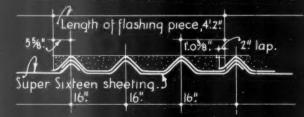
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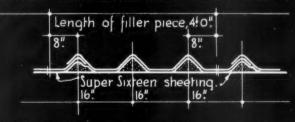
TURNALL . SUPER SIXTEEN . CORRUGATED ASBESTOS-CEMENT ROOFING ACCESSORIES: For description, laying & fixing of Super Sixteen sheets, see previous Information Sheet Nº1 of this series.



#### PARALLEL ELEVATION OF FLASHING PIECE.



PARALLEL ELEVATION OF EAVES FILLER PIECE .



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

INFORMATION SHEET: CORRUGATED ASBESTOS CEMENT SHEETING: Nº 2.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

## INFORMATION SHEET

· 563 ·

# ASBESTOS-CEMENT ROOFING

Product: "Turnall" Super Sixteen Corrugated Roofing Accessories

#### General:

This is the second of the two Information Sheets devoted to "Turnall" Super Sixteen corrugated Asbestos-cement roofing sheets, and illustrates the roofing accessories for use in conjunction with this product. The first of the series dealt with the "Turnall" Super Sixteen sheet itself, and its laying and fixing.

#### Material

The accessories shown are milled from a combination of British Standard Specification Portland cement and natural mineral rock, white asbestos fibre. The fibre imparts to the cement certain characteristics such as toughness and flexibility, which permit it to be used in the form of sheets which may be cut and sawn. In the process of manufacture the fibres are thoroughly coated with fine cement particles. The accessories are not moulded, but are built up in rolling mills in the form of layers or films of asbestos and cement regularly distributed and interlaced to constitute a kind of tough woven fabric.

#### Close-fitting ridge:

The close-fitting ridge capping is formed as shown overleaf, with a shaped and corrugated wing which, when in position, closes the space between the crown of the corrugations and the flat of the sheeting, and thereby provides a neat and weatherproof finish at the apex.

The capping is made in two wing types, the R I for fitting to one side and the R 2 for fitting to the other side of the roof slope, as shown. Laying is commenced at the lefthand end with the R I type and continued

right along the ridge before the R 2 type is fitted. It should be noted that the position of the top purlin depends on the pitch of the roof as well as on the depth of purlin, the correct position being such that the standard  $\frac{3}{3}$  in. diameter hook-bolt or drive-screw will pass through the ridge cap wing at a distance of 9 in. below the intersection. This dimension is to the back or edge of steel purlins, and to the centre of wooden purlins.

#### Eaves filler piece :

This accessory is made in lengths of 4 ft., having three complete corrugations at 16 in. pitch, and may be used to close the corrugations of the sheeting both at eaves and above roof glazing, as shown, the lengths being butt-jointed. For straight eaves the filler pieces are fitted under the "Turnall" Super Sixteen sheets and fixed with the standard accessories. In some cases, however, they may have to be stitched to the underside of the sheets with seam bolts as shown on the "single ridge board" section on Information Sheet No. 400, dealing with Turnall Trafford roof tiles.

#### Under glazing flashing pieces:

As indicated in the typical roof light details on Information Sheet No. 400, the space between the glass and the Asbestos-cement sheeting below the continuous glazing may be flashed with a lead apron, but by the use of the Asbestos-cement under glazing flashing piece, the depth of and the strain on the lead apron are greatly reduced. Fixing should be started from the left-hand end, ordinary hook-bolts being used as shown, or cast-iron clips when fixing to purlin flange is required, see built-up steel purlin arrangement detailed on Information Sheet No. 400.

Each length of "Turnall" "Super Sixteen

Each length of "Turnall" "Super Sixteen under glazing flashing piece covers three corrugations of the roofing, the lengths being lapped 2 in.

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

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

Telephone: Trafford Park 2181 (8 lines)

**London Office :** Asbestos House, Southwark Street, S.E.I

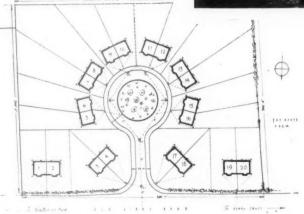
Telephone: Waterloo 4041

### HOUSING SCHEME, FRINTON-ON-SEA



D E S I G N E D B Y
G I L B E R T C .
R O B E R T S





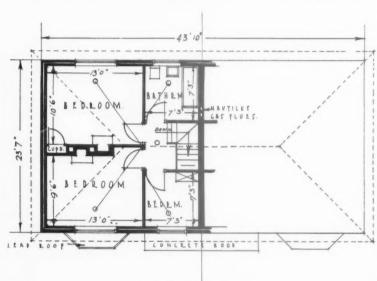
COUCUPACE CONTRACT

GENERAL PROBLEM—Houses, built by private enterprise to let at rents of 15s. per week inclusive, and designed to last at least 50 years without excessive repair bills. Each house has three bedrooms, bathroom, sitting room, living room and kitchen, and is intended for tenants with a total income per household not exceeding £2 10s. per week. It was a condition that there should be no ribbon development, and that the scheme should form a self-contained community with all services. Town Planning requirements were nine houses to the acre. This has been obtained by planning an internal road with a turning point and a large central plantation containing flowering shrubs. All fittings such as gas fires, water heaters, etc., had to be included in the cost, as also did roads, sewers and underground electric main. Normally the latter is overhead, but the owner insisted on the outlook being unobstructed by wires.

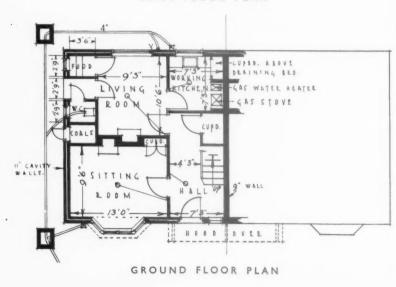
#### HOUSING SCHEME, FRINTON-ON-SEA



DESIGNED BY GILBERT C ROBERTS



FIRST FLOOR PLAN



SITE—Has a frontage of 389 ft. and a depth of 300 ft., and is practically flat. On the north are open country and backwaters for approximately six miles. The large circular lay-out gives each house a view in that direction. The wide road and the plantation are intended to be used as children's playgrounds.

CONSTRUCTION — 11-in. external cavity brick walls, with an outer skin of rusticated flettons; concrete hoods cast in situ over front doors; roofs, 4 ins. by 2 ins. rafters, boarded and felted and covered with concrete tiles. Ground floors, 6 ins. cement concrete treated with two coats of hot tar and with the boards fastened direct to battens let into the concrete; first floors; joists 7 ins. by 2 ins. with 1-in. grooved and tongued boarding.

fastened direct to battens let into the concrete; first floors; joists 7 ins. by 2 ins. with 1-in. grooved and tongued boarding.

ELEVATIONAL TREATMENT — Rusticated flettons, set in lime mortar with wide joints; string course and plinth set forward \( \frac{3}{2} \) in. from main wall face. Metal horizontal bar type windows in wood frames with double rebate; cills formed of two courses of tile creasing, lower course showing nibs.

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INTERNAL FINISHES—Special plaster and slabs are used for the walls and ceilings for sound absorption, the walls being distempered.

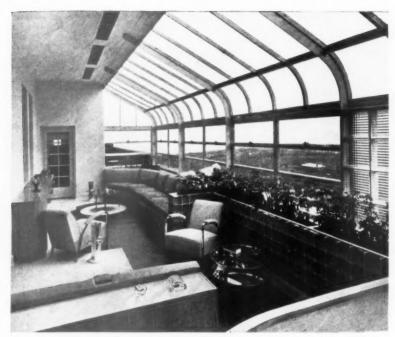
SERVICES—Hot water supply by gas water heater, thermostatically controlled; fitted panel gas fires in bedrooms with flues and fitted gas cooker, all vented by gas flues. There is a coal grate in each living room with open fire and small oven over, the coals being obtained from a small vertical sliding hatch beside the fireplace. All piping is 18-gauge copper.

COST—Two main contracts: For 20 houses, £9,020; for roads and sewers, £835; Total, £9,855.

Price per foot cube for houses a very slight fraction under 9d. per ft.

ROADS—6 ins. concrete on ashes with slabbed pavement and grass edge to curb, slabs made to radius. Sewers 9 ins. and 6 ins. to manholes and to public sewer. Plantation curbed and ground dug and levelled all in the cost stated.

For list of general and sub-contractors see page 561.



A penthouse solarium by Donald Deskey, a job submitted in the Pittsburg Glass Competition. [From the "Architectural Forum."]

# PERIODICALS AUGUST ANTHOLOGY

AMERICA American Architect

(Monthly, \$1.00. 572 Madison Avenue, New York)

AUGUST. Recent buildings by the U.S. Government, a varied assortment, mainly post offices, by several different supervising architects. The Royal Palm Club at Miami by Robert L. Weed, a good simple job in glass brick and concrete. A tennis and swimming club at Palm Springs by Spencer and Landon, traditional exterior with a simple but slightly affected interior, aimed, perhaps, at the film star membership. 12 pages of sundials, mostly contemporary and mostly quite good. 10 pages on swimming pools, four showing executed work, the rest general data on essential dimensions and equipment.

Architectural Forum

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

August. Results of the Pittsburg Glass Institute competition, which was awarded on executed work, not schemes (see illustration), 13 categories, the grand prize going to Abel Faidy of Chicago for the Hedrich-Blessing studio, about 60 pages of illustrations of the various jobs submitted from small houses via factories and theatres to bars and clocks. The Building Money section contains an analysis of wages paid in the American building industry.

Architectural Record

(Monthly, 50 cents. 115 West 40th Street, New York)

August. Week-end houses, a Pennsylvania

farmhouse by Oscar Stonorov, and a beach club in California by Donald McMurray. Mr. Kiesler continues his survey of photography. An interesting article by F. V. Wilson, a prefabricated house manufacturer, who considers architects necessary not only for design but for distribution. This Month's Building Types deals with factories, sites, fuel, flow analyses and

various examples of executed work and an eight-page bibliography.

Pencil Points

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

August. The results of the "Suntile" competition for a doctor's house, winners and 16 non-premiated designs, of which latter the assessors' report naively remarks: "We had a difficult task in selecting the 16 non-premiated designs for inclusion, since there were many others that seemed equally worthy. If your design was omitted, therefore, it is no reflection on the merit of your solution, which may have been really better than some of those chosen." The designs take up most of the issue, but there are some good working details and the usual data sheets.

#### FRANCE

L' Architecture

(Monthly, 8 frs. 51 Rue des Ecoles, Paris 5e)

August. Still the Paris Exhibition: this time a review by M. Waldemar George of the non-French pavilions, the British one being damned with faint praise, though the book display is thought to be good; generally a not very good article full of prejudices.

La Technique des Travaux

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

August. A stadium and exhibition hall at La Haye, by A. H. van Leeuwen, with a semi-Dudok entrance feature and a pair of halls each with a 45-metre span. Bits and pieces at the Parish Exhibition, a new bank building in Liège by G. Dedoyard, well described with plenty of illustrations, a rail-way station and elevated tracks at Syracuse, N.Y. The completion of M. Baes' article on calculations for arched structures fully restrained at both ends.

#### GERMANY

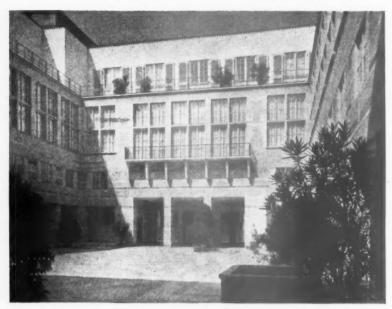
Baukunst und Städtebau

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

August. A barge-loading station in Berlin



A factory at Bremen by Rudolf Lodders. [From "Bauwelt."]



The central courtyard of the new Art Museum at Basle by Christ and Bonatz. [From "Baumeister."]

by Paul Baumgarten, described in Bauwelt by Faul Baumgarten, described in Baument for July 29; war memorial gardens, and n house for his own occupation by Walter Kratz, all from previous issues of Baumelt. Town planning notes and information sheets on asbestos cement ducting.

#### Baumeister

(Monthly, 3m. Georg Callwey, Munich) August. The new Art Museum at Basle, by Christ and Bonatz. 25 pages of photographs and plans and four further sheets of working drawings and elevations. Recent traditional housing and municipal building, an article by Otto Riedrich, illustrated by work by various architects.

#### Bauwelt

(Weekly, 90 pf. Ullstein Verlag, Berlin, S.W.68) August 5. Two traditional houses near Berlin by Günther Andretzki.

August 12. The Hansa-Lloyd-Goliath factory, by Rudolf Lodders (see illustration). August 19. An article by Friedrich Paulsen on the work of Christian Hansen.

August 26. Competition results, additions to the Reichsbank by Heinrich Wolff:

current prices.

Deutsche Bauzeitung

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

August 4. Openings in buildings, the technique of waterproofing hoods, cills and reveals of doors and windows, an article with 30 diagrams, by Helmut Hille.

August 11. A school competition, won by August 4.

Fritz Kröger

August 18. Helmut Hille's article continued

from the issue of August 4.

August 25. New materials and equipment at the Leipzig fair: swimming baths and bath houses, an article by Dr. Erbs. Buildings Supplement. Light and glass in country houses, an illustrated article by Max Müller, semi modern interiors in traditional exteriors; airport buildings, Bromma, the Schiphol, Croydon, Bordeaux; a week-end house, by Ludwig Kozma.

Innen Dekoration

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

August. A small house for a composer by Walter Loos; living rooms by Georg Bouta; some good cast-iron heating stoves from the Atelier Breuhaus and several pages on the furniture of Gordon Russell.

Moderne Bauformen

(Monthly, 3m. Julius Hoffmann, Paulinenstrasse 44, Stuttgart)

August. The planning and planting of gardens, a most excellent article continued

from two previous issues, this instalment dealing mainly with north-south plots; eight pages of week-end houses from a book about to be issued by Moderne Bauformen; a country house for a doctor on Lake Constance by Conrad Furrer; recent interiors by Richard Herre.

#### HOLLAND

Bouwkundig Weekblad Architectura

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

August 7. Stained glass windows, an article by D. Jansen; a medium-sized house at Hilversum, by P. Elling. August 14. The stained glass article

continued.

August 21 and 28. The Paris Exhibition, an illustrated article, by J. P. Mieras.

de 8 en opbouw

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

August 14. Notes on the work of the East European group of the C.I.A.M., illustrated with work by Farkas Molnar and Joseph Fischer; Simpson's shop in Piccadilly.

#### ITALY

Architettura

(Monthly, 18 lire. Via Palermo 10, Milan 1) A flat block on an extremely awkward site in Rome, by Mario Ridolfi; a fountain at Turin, by Ridolfi and Fagiolo; a flat block, by Angelo di Castro.

Rassegna di Architettura (Monthly, 15 lire, Via Podgora 9, Milan 105) July-August. The Italian Pavilion at the Paris Exhibition, with photographs and plans; m racecourse and grandstands at Merano, by P. Vietti-Violi; town-planning schemes and competitions.



Mast at the pont Alex-andre III., by Debat-Ponsan, Fildier, Sebilotte and Maistre. [From "La Technique des Travaux."]

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#### SWEDEN

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

No. 25. Cinemas, photographs of several recent jobs in Europe and elsewhere, and a full description of the Victoria and the Royal, two new Stockholm cinemas, by Ernst Grönwall and Björn Hedvall.

No. 26. The Building Industries' House in Stockholm, a large headquarters' building by Sven Markelius.

No. 27. The reinforcement of flat reinforced concrete slabs.

#### SWITZERLAND

Schweizerische Bauzeitung
(Weekly, 1 fr. Dianastrasse 5, Zurich)
August 7. Notes on the design of dams.
An article on the Paris Exhibition, by A.
Guyonnet; data on Michelin rail-cars.

August 14. A military number: five pages on bomb- and gas-proof shelters, six on the performance of different types of tank.

August 21. The work of the Swiss snow research station at Davos, 1934-37, article by Robert Haefeli.

August 28. Repairs to the Mohammed Ali mosque in Cairo, a long and interesting article, by Dr. C. Andreæ.

(Monthly, 3m. 50. Muhlebachstrasse 59, Zurich)

August. The Swiss Pavilion in Paris, a most thorough and admirable record with many photographs and all necessary.

#### LAW REPORT

RELIEF AGAINST FORFEITURE GRANTED National Real Estate and Finance Co., Ltd., v. Dalston Estates, Ltd.—Official Referee's Court. Before Mr. T. Eastham, K.C.

THE issue in this case was based on alleged breach of covenant to repair certain property, the National Real Estate and Finance Co., Ltd., claiming possession and damages in regard to their property at Cavour Street, Walworth.

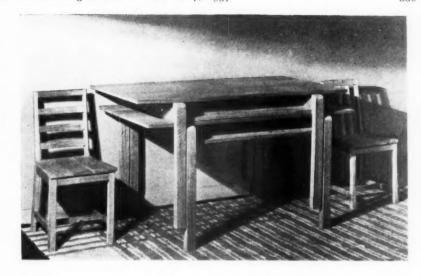
The plaintiffs were the holders of the head lease, which contained a covenant that the lessee would keep in good repair the buildings in question. Their case was that the defendants had been guilty of breaches of covenant. They accordingly served notices of breaches of covenant and schedules of dilapidations under section 146 of the Law of Property Act, 1925.

It was admitted that certain workshops at the rear of one of the houses were excluded from the operation of the covenant. Defendants denied liability, and sought relief against forfeiture.

The Official Referee, after hearing the evidence, said he came to the conclusion that this was a case in which he could give the defendants relief against forfeiture, but he should put them in terms. The defendants would have to carry out the necessary repairs within a period of three months. The plaintiffs would have the costs of the action. He also granted the defendants relief against damages.

#### Announcement

Mr. Harold Marsh, Incorporated and Registered Architect and Surveyor, of 14 King Street, King's Lynn (Telephone No. 2470), has opened a branch office at Westgate, Hunstanton (Telephone No. 308), and will be glad to receive catalogues at the latter address.



# T R A D E N O T E S

#### [EDITED BY PHILIP SCHOLBERG]

Business Efficiency

ROM the architect's point of view there was not really very much to be seen at the Business Efficiency show at Earl's Court. Plenty of filing cabinets, calculating machines, dictaphones and all the other whatnots alleged to be essential for every business, and therefore perhaps a useful show to see, if only as a guide to the kind of thing some clients may have if there's an office block to be done. One always hears that architects' offices have no sort of organization, yet none the less they manage to get jobs done occasionally, and I suspect that elaborate filing systems, although they are quite possibly essential for some types of business where people are doing the same thing all the time, are no manner of use to the architect, who hardly ever does the same thing twice. The organization of an elaborate office machine is easy enough, but it is easier still to get completely lost in that machinery, quite apart from the fact that the only man in the office who understands it is almost certain to be out. Everybody knows those library stack rooms where a book, once put in its wrong place on the shelves, is lost for ever.

Nor can I see any reason why all these filing cabinets should be painted such a uniformly uninteresting olive green, without even the option of a different finish, while the prices seem a lot higher than they should be, a large pressed steel plan chest, for example, can easily cost a good deal more than the saloon body of a 10-horse car, doors, windows, cushions, trimmings and all.

#### President Rolls First Ball

To be read after a glance at the photograph at the top of the next page, I offer the following social note exactly as it was sent to me. "J. F. Lincoln, President of the Lincoln Electric Co., Cleveland, Ohio,

U.S.A., and Director of Lincoln Electric Company, Ltd., Welwyn Garden City, Herts, in whose honour the \$200,000 arc welding foundation which bears his name was created, opens the 1937 38 bowling season for the Lincoln 24-team league composed of 150 of the company's employees. This year the league has three times as many teams as in 1935, when it was organ-Officers consist of Tony Gallitte. President; L. Herbst, Vice-President; D. Woodley, Treasurer; J. Kleinhenz and L. Stevens, Secretaries. Each of the 24 teams is named for one of the company' products, which consist of 'Shield Arc S.A.E.' arc welding machines of all types, electrodes and supplies for arc welding, together with 'Linc-Weld' electric motors. The league is entirely handicap, and the 1937-38 season will last for 34 weeks. It will be recalled that Mr. Lincoln made an extensive tour and delivered a series of lectures on arc welding in this country some few months ago."

#### Simple Furniture

The table in the photograph at the head of these notes has just been produced by Heal's, and sells at the quite reasonable price of £4 15s., not at all high, considering that it is in oak and measures 5 ft. by 2 ft. 6 in., and has a shelf at each side for oddments. As the photograph shows, it stacks easily in the Finmar manner, and should be useful in the better type of restaurant as well as the private house, for a width of 2 ft. 6 ins. is reasonably comfortable for anyone sitting at the ends, so that this table should be able to seat six, even though the legs will not be too good for the people at the side.

The two different chairs are also in unpolished oak, the ladder-back costing 25s. 6d. and the other 19s. 6d. Heal's, incidentally, have now got a whole lot of wooden table equipment like salad bowls



See note on previous page.

and toast racks and bread boards, nice to look at and not particularly expensive.—
(Heal and Son, Ltd., Tottenham Court Road, London, W.r.)

#### An Electrical Directory

Electrical Trading have just issued a large guide containing the names and addresses of some 1,200 manufacturers and wholesalers who market appliances and fittings for the domestic electrical trade. There is also a guide to about 1,000 brands and trade names and a further classified products section giving the names of makers of over 250 types of domestic appliances, accessories and associated equipment, this last section giving some cause for surprise, for there are no less than twenty-eight firms listed as manufacturing refrigerators—far too many for what should, by now, be a virtually standardized product.

Whether or not this directory is really comprehensive I do not know, but I have tried it out with two or three of the more obscure firms and they have duly appeared under their proper headings. Half-a-crown is quite enough to pay for 80 pages when about half of them are advertisements, but a handbook of this kind can be very urgently needed on occasion, and it is therefore probably worth getting if you are ever likely to want to know who makes the less usual things like Trouser Pressers or Lawn Mowers, Electric. — (Electrical Trading, 29, Bedford Street, London, W.C.2.)

#### Wiring Systems

Since before the war Callender's have been running their wiring system, which has been steadily developed so that now there is a standard fitting for every conceivable purpose. The system employs two distinct types of cable, the lead-sheathed and the tough rubber-sheathed, the lead type being available with or without an earth continuity conductor. All the usual junction boxes and continuity connectors are available, and standard boxes can be obtained suitable for use with Kalanoid waterproof plastic, which is thumbed into the junction boxes to make the connections waterproof. For damp situations, or as an alternative to lead alloy saddles for outdoor use, the firm sells Ferry metal clips and screws, which are made of a copper-nickel alloy unaffected by atmospheric conditions. It is not Callender's fault, but Ferry seems

about the worst trade name that could be imagined for an alloy of this kind, for it gives the natural impression that it is largely of iron (and therefore liable to corrosion), whereas it is, of course, no such thing.

Prices, as I noted a week or two ago in connection with the G.E.C. catalogue, are rising more than somewhat, 25 per cent. on all cables and 10 per cent. on all junction boxes and most other accessories.—(Gallender's Cable and Construction Co., Ltd., Hamilton House, Victoria Embankment, London, E.C.4.)

#### Manufacturers' Items

The production of the Eclair balanced door, first manufactured in this country over three years ago, is shortly to be taken over by a new company, Messrs. Eclair Doors, Ltd., with works at Shirley, Birmingham. Mr. C. E. T. Cridland, of Messrs. Hawkes and Snow, Ltd., is managing director of the new company, which will take over many important contracts. The Eclair balanced door has been approved and specified by government, municipal and other architects. The construction and operation of Eclair doors are such that they can be made up to 300 ft. wide, for use in aerodromes or similar buildings. A single span door, 150 ft. wide, manually operated, has recently been installed at Southampton.

On September 2t Mr. Ernest Brook (Managing Director) formally opened the new five-acre sports ground and the pavilion which the directors of Brooks Motors, Ltd., have presented to the firm's sports club. The club was founded three years ago by eight work-people and to-day it has a membership of 400.

#### THE BUILDINGS ILLUSTRATED

STOKE NEWINGTON MUNICIPAL BUILD-INGS (pages 537–540). Architect: J. Reginald Truelove, A.R.I.B.A. The general contractors were Foster and Dicksee and the sub-contractors and suppliers included: Dawnays, Ltd., steelwork; J. Jeffreys & Co., Ltd., heating and ventilation: Rashleigh, Phipps & Co., electric installation; Bath and Portland Stone Firms, Ltd., stone work; W. T. Lamb and Sons, bricks: Hollis Brothers & Co., Ltd., and G. J. Green and Son, wood block flooring; De Jong & Co., Ltd., and Starkie-Gardner & Co., Ltd., fibrous plastering; Morris-Singer

Co., Ltd., and Clarke, Hunt & Co., Ltd., ornamental ironwork and stained glass; Haywards, Ltd., lanterns and pavement lights; Roberts, Adlard & Co., Ltd., slating; Wm. Salter, Edwards & Co., Ltd., asphalt; Diespeker, Ltd., and Art Pavements and Decorations, Ltd., terrazzo: Minton Hollins, Ltd., tiling; John Stubbs & Co., Ltd., quartisite paving; May Acoustic Co., Ltd., quartisite paving; May Acoustic Co., Ltd., acoustic plastering; Davis, Bennett & Co., Ltd., sanitary fittings: Higginbotham, Ltd., plumbing; J. P. White and Sons, panelling in council chamber, etc.; Aldous and Campbell, Ltd., lifts: Crittall Manufacturing Co., Ltd., metal windows; Siegwart Fireproof Floor Co., Ltd., strong room doors; George Farmiloe and Sons, Ltd., glass domes; Gillett and Johnston, Ltd., strong room doors; George Farmiloe and Sons, Ltd., glass domes; Gillett and Johnston, Ltd., sprinkler installation; Educational Supply Association, Ltd., sliding partitions; Francis Morton, Junior, Ltd., spring floors; H. H. Martyn & Co., Ltd., bronze doors and fibrous plastering; G.P.O., internal telephone; James Gibbons, Ltd., bronze grilles and locks, etc.; Bratt Colbran, Ltd., fireplaces; Marbolith Flooring Co., Ltd., flooring; S. L. N. Electric, Ltd., and The General Electric Co., Ltd., electric fittings; Sydney Laughton, carpets and curtains: Sankey, Sheldon, Ltd., steel shelving; Libraco, Ltd., bookcases; Accordo Blinds, Ltd., blinds; Art Metal Construction Co., Ltd., and Roneo, Ltd., metal furniture; Waring and Gillow (1932), Ltd., Hampton and Sons, Maples, Ltd., and Shannon, Ltd., furniture; H. Lazarus and Sons, Ltd., and Pyrene Co., Ltd., Fine Recorder Co., Ltd., and Pyrene Co., Ltd., special fittings; King & Co., floors (patent).

S.S. "ORCADES" (pages 541–545). Architect for the Interior: Brian O'Rorke, A.R.I.B.A. General Contractors: H. H. Martyn & Co., Ltd., first-class library, lounge, café, tavern, dining saloon, foyer, nursery and staircases: Hampton and Sons, Ltd., first-class flats and special cabins, tourist-class café, lounge, dining saloon and nursery; Vickers-Armstrong, Ltd., shops in both classes, all standard cabins, purser's office and tourist staircase. The principal sub-contractors and suppliers included: William Mallinson and Sons, Ltd., Wright and Sons, Ltd., and W. W. Howard Brothers, Ltd., Veneers; Wm. McGeoch & Co., Ltd., and The General Electric Co., Ltd., light fittings and fire alarm equipment; Everett Edcumbe & Co., Ltd., clocks; Beresford and Hicks, B. Cohen and Sons, Ltd., Maple & Co., Ltd., Hampton and Sons, Ltd., Old Bleach Linen Co., Ltd., Edinburgh Weavers, Ltd., Donald Brothers, Ltd., furniture and furnishings; W. T. Elmore, Ltd., and Dryad Cane Furniture; wilton Royal Carpet Factory Co., Ltd., James Templeton & Co., and T. F. Firth and Sons, Ltd., carpets; London Sand Blast Decorative Glass Works, Ltd., decorative mirrors and glass; Comyn, Ching & Co., Ltd., and Dryad Metal Works, Ltd., hardware and door furniture; Connolly Brothers, Ltd., chairs in first-class dining saloon upholstered in "Vaumol": Henry Hope and Sons, Ltd., metal windows; Educational Supply Association, Esavian windows in swimming bath bar; LC.I. (Rexine), Ltd., colour scheme in café in tourist class carried out in "Rexine"; Doulton & Co., Ltd., breakfast and dinner service; Carrier Engineering Co., Ltd., air conditioning plant: Mechans, Ltd., J. Stone & Co., Ltd., and Dreadnought Fireproof Doors (1930), Ltd., doors; Pilkington Brothers, Ltd., glass; Thermotank, Ltd., heating and ventilation; R. McIvor and Son, Ltd., insulation; Korkoid Decorative Floors, Korkoid; Express Lift Co., Ltd., lifts; Shanks & Co., Ltd., and Greenwood and Hanson, sanitary outfit; Adams Hydraulics,

Ltd., sprink Ltd., fire-ex & Co Ltd., cables & Co equip

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Mr Jan Col Ltd., sewage plant; Mather and Platt, Ltd., sprinkler system; Paterson Engineering Co., Ltd., water-softening plant; Pyrene Co., Ltd., fire-extinguishing installation; W. T. Glover & Co., Ltd., W. T. Henley's Telegraph Co., Ltd., and British Insulated Cables, Ltd., cables; Harcourts, Ltd., and J. A. Crabtree & Co., Ltd., electric fittings; G.E.C., fire-alarm equipment. equipment

HOUSING SCHEME, FRINTON-ON.SEA, HOUSING SCHEME, FRINTON-ON-SEA, ESSEX (pages 555-556). Architect: Gilbert C. Roberts. The general contractors were W. Green and Sons, and the sub-contractors and suppliers included: Dawber, Townsley & Co., tiles; Crittall Manufacturing Co., casements; Ascot Gas Water Heaters, Ltd., gas fixtures, heaters and gas fires; E. L. Hunt, Ltd., capitary, fittings. sanitary fittings.

Baggeridge Colliery Co.; two houses, Jews Lane, Messrs. B. and L. Hyde; two houses, Benson Avenue, A. A. and L. A. Moore; five houses, Wolverhampton Road, Washbourne houses, Wolverhampton Road, Washbourne Bros.; alterations, Ward Road, Mr. J. Allsopp. MIDLAND COUNTIES

school at Brumby, Scunthorpe, at a cost of

tion is to erect by direct labour 64 flats in Thimblemill Road.

P. Adams; 14 houses, Little Chell Lane, for Mr. G. H. Wignall; 54 houses, Sandy Road, for Mr. G. L. D. Bates; 64 houses, Barber Road,

Mr G. L. D. Bates; 64 houses, Barber Road, for Mr. H. Hoskins, WOLVERHAMPTON. Houses, etc. Plans passed by the Wolverhampton Corporation: Eight houses, Blakeley Avenue, Cuthbert (Builders), Ltd.; 20 houses and four shops, Old Heath Road, Mr. M. A. Boswell; 24 houses, Winchester Road, Mrs. Kendrick; 14 houses, Southfield Grove, Mr. W. Vaughan. WOLVERHAMPTON. School. The Wolverhampton Education Committee recommends the erection of a junior and infant school at Warstones Road, at a cost of £46,000.

stones Road, at a cost of £46,000.

MIDLAND COUNTIES

BURSLEM. Houses. Plans passed at Burslem:
13 houses, Bankhall Road, for Mr. G. Talbot;
six houses, Leek Road, for Mr. T. Talbot.
DUDLEY. Flats. The Dudley Corporation
is to ered 84 flats in the Pitfield Row area.
DUDLEY. Houses, etc. Plans passed by the
Dudley Corporation: Factory, Church Street,
for Minories Sheet Metal Co., Ltd.; 62 houses,
Quarry Road, for Messrs. Roberts Bros.; 32
houses, Oakham estate, for Mr. C. P. Blewitt; 43
houses, Pensnett Road, for Messrs. Lloyd Bros.
MANSFIELD. Houses. Plans passed by the
Mansfield Corporation: 14 houses, Healther
Way, Mr. R. M. Walker; 14 houses, Norbury
Drive, Mr. J. P. Smith; 28 houses, The Knoll,
Radford and Jenkins.
Scunthorpe. School. The Lincoln (Lindsey)
Education Committee is to erect an elementary
school at Brumby, Scunthorpe, at a cost of

£28,570. SMETHWICK. Flats. The Smethwick Corpora-

Thimblemill Road.

STOKE-ON-TRENT. Houses, etc. Plans passed by the Stoke-on-Trent Corporation: 20 houses off Cemlyn Avenue, Fenton, for Mr. B. J. Brittle; 48 houses, Catchems Corner, Meir, for Mr. H. Beckett; nine houses, Highfield Avenue, for Messrs. Higginson and Cope; seven houses, Opal Road, Fenton, for Mr. W. C. Beech; six houses, Duke Street, Fenton, for Messrs. Salt and Trice; eight houses, Highfield Drive, Blurton, for Mr. F. Shenton.

TUNSTALL. Houses. Plans passed at Tunstall: 12 houses off Furlong Road, for Messrs. W. and P. Adams: 14 houses. Little Chell Lane, for

#### NORTHERN COUNTIES

TYNEMOUTH. Flats. The Tynemouth Corporation is to ered 36 flats on the site of the Queen Street clearance area.

TYNEMOUTH. Houses. The Tynemouth Corporation is to ered 214 houses on the Ridges Estate.

Estate.

TYNEMOUTH. Flats, etc. Plans passed by the Tynemouth Corporation: 10 houses in flats, Langley Road West, Balkwell Estate, Mr. W. Stockdale and Mr. Jake Burton.

MORECAMBE. Fire Station. The Morecambe Corporation has obtained sanction for a loan of the group for the services.

Gorporation has obtained sanction for a loan of £15,250 for the erection of a fire station.

MORECAMBE. Houses, etc. Plans passed by the Morecambe Corporation: 10 houses, Windsor Grove, Coates and Flaxington; flats, Hawksworth Grove, Mr. W. Barker; 10 houses, Regent Park Grove, Mr. M. Naylor.

WARRINGTON. Warehouse, etc. Plans passed by the Corporation: Warehouse, Crown Street, for Feroxide, Ltd.; alterations and additions, school, School Road, for Church of England managers; oil works extensions, Bewsey Street, for Warrington Oil Co.; alterations, Royal Court Hotel, Rylands Street, for Messrs. Greenall, Whitley & Co., Ltd.; four houses, Irwell Road, for Messrs. Walton and Woosey; two houses, Capesthorne Road, for Messrs. Tomlinson and Norbury; two houses, Cartwright Street, for Mr. E. Bold; 41 houses, off Chester Road, for Mr. W. Beswick.

#### THE WEEK'S BUILDING NEWS

#### LONDON & DISTRICT ((15 MILES RADIUS)

BATTERSEA. Cinema, etc. Plans passed by the Battersea B.C.: Flats, 33 Anerley Street, Mr. E. Priddis; cinema, between Falcon Road and Station Approach, Clapham Junction, Mr. A. Mather.

BERMONDSEY, Flats. The Bermondsey B.C. has approved revised plans for the erection of 33 flats.

BERMONDSEY. Flats, etc. The Bermondsey B.C. is to erect 83 flats, seven shops, and one restaurant on the Sards Rents area, at a cost of £62,206.

restatant in the Satus Reins area, at a Cost of £62,296.

BERMONDSEY. Flats, etc. The Bermondsey B.C. is to erect 69 flats and one shop on the site of St. Olave Buildings, at a cost of £46,500.

CROYDON. Flats, etc. Plans passed by the Croydon Corporation: 28 flats, Woodside Green, H. W. Darby; 410 houses, Lodge Farm Estate, Addington, First National Housing Trust, Ltd.; 13 houses, Waddington Way, A. Waddington and Son, Ltd.; 11 flats, Brighton Road, Hooker and Rogers; eight houses, Links View Road, T. Markwick & Co.; 54 houses, Ash Tree Way, W. West and Son, Ltd.; block of flats, Albert Road, Mr. R. J. Sargent; 12 houses, Waynflete Avenue, J. W. G. Cronk, Ltd.; seven houses, Ingram Road, and block of flats, Warwick Road, Wates, Ltd.

of flats, Warwick Road, Wates, Ltd.
ENFIELD. School. The Enfield Roman Catholic
Church Authorities are to provide a new Roman Catholic school for senior children on a site at the junction of the Great Cambridge Road

at the junction of the Great Cambridge Road and Southbury Road.

ENFIELD. Houses, etc. Plans passed by the Enfield U.D.C.: 26 houses, Crafton Road, Geo. Wimpey & Co.; 169 houses, Southbury Avenue, Pine Close, Hilbery Chaplin, Ltd.; 36 flats, Myddelton Avenue, Mr. G. W. Newman; 15 houses, Churchbury Close and Rowantree Road, Mr. F. Elmore Jones.

FINCHLEY, Mortuary. The Finchley Corporation has obtained sanction to borrow £3,270 for the erection of a mortuary in North Circular Road.

Road.

FINCHLEY. School extensions. The Finchley Education Committee has obtained sanction to borrow £10,967 for extensions at Summerside school.

side school,
FRIERN BARNET, Hospital, The Middlesex C.C.
is inquiring for a site for a new county hospital
at Friern Barnet,
FRIERN BARNET, Houses, Plans passed by the
Friern Barnet U.D.C.: 21 houses, Oakleigh
Park South Mr. H. Brook

Park South, Mr. H. Brook.

HACKNEY. Housing. The Hackney B.C. is to erect working-class dwellings upon the site of

erect working-class dwellings upon the site of a portion of the Hindle Street clearance area, at an estimated cost of £143,600.

LEWISHAM. Flats, etc. Plans passed by the Lewisham B.C.: Flats, opposite Lower Sydenham Station, W. Johnson & Co.; 93 houses, Hall Park Estate, A. J. Glock, Ltd.; block of flats, Addington Grove, Furnsales, Ltd., southgate. Cinema, etc. Messis. E. Owers, Ltd., have lodged with the Southgate Corporation preliminary layout plan of 35 shops or

Ltd., have lodged with the Southgate Corporation preliminary layout plan of 35 shops or
cinema, and 29 shops with site for flats, at the
corner of Bramley Road and Chase Road.
southgate. Flats, etc. Plans passed by the
Southgate Corporation: 48 flats, Chase Road,
Mr. E. W. Palmer; six houses, Sussex Way,
James & Co.; flats, Firs Lane, Townshend and
Collins, Ltd.; six houses, Minchenden Crescent,

Broadoak Building Co., Ltd.; 11 houses, Bramley Road, Cockfosters, Mr. C. E. Ward; 12 flats, Farm Road, Mr. J. R. Scarborough; 76 houses, Chaseville Park Road, New Ideal Homesteads, Ltd.; seven shops with seven flats over, Bowes Road, Mr. H. A. Nash; 13 shops over, bowes koad, Mr. H. A. Nash; 13 shops with 12 maisonnettes and two flats over, Chase Side, Marshall and Tweedy; 26 flats, adjoining L.N.E. Railway, Bowes Road, Mr. F. R. Gould; 60 flats, Park House and Woodbine Cottage, Winchmore Hill Road, Mr. J. Scarborough, Chapter and Car park Coekforteen borough; cinema and car park, Cockfosters Road, Mr. A. E. Brooks.

ROAG, Mr. A. E. Brooks.
STOKE NEWINGTON. Flats, etc. Plans passed
by the Stoke Newington B.C.: Block of flats,
54 Park Lane, Mr. G. Alan Fortescue; flats,
295 Green Lanes, Mr. R. C. Seifert; flats,
297-299 Seven Sisters Road, Messrs. Evans
and Lynde.

#### SOUTHERN COUNTIES

BEXHILL. Houses. Plans passed by the Bexhill Corporation: 23 houses, Bancroft Road, Mr. Larkin.

BRIGHTON. Clinic, etc. The Brighton Corpo

tion is to erect an ante-natal clinic and infant welfare centre in Whitehawk Road.

EPSOM. Baths. The Epsom and Ewell U.D.C. is to proceed with the provision of baths at a

cost of £64,834, the scheme now having been sanctioned by the Ministry of Health.

GUILDFORD. Chapel. The Guildford Corporation has approved plans by the borough surveyor for the erection of new buildings for the Baptist Chapel, Tuns Gate, at a cost of £.5,500. GUILDFORD.

Houses. Plans passed by the Guildford Corporation: 20 houses, Grange Estate, Grange Road, Mr. R. C. Whitemore.

GUILDFORD. Houses, etc. The Guildford Estate, Grange Road, Mr. R. C. Whitemore. GUILDFORD. Houses, etc. The Guildford Corporation is to erect 120 houses and 30 bungalows at Westborough, at a cost of £60,049. ISLE OF WIGHT. Houses. The Isle of Wight C.C. is to erect police houses, at a cost of £2,000. ISLE OF WIGHT. Nurses' Home. The Isle of Wight C.C. is to erect a new nurses' home at the mental hospital, Whitecroft, at a cost of

£12,250.
ISLE OF WIGHT. Schools. The Isle of Wight Education Committee is to provide new schools for Sandown-Shanklin, at a cost of £43,500; Ventnor at £21,300; Cowes and East Cowes at

£48,000; and Ryde at £48,000.

ISLEWORTH. School. The Middlesex Education Committee has obtained sanction to borrow

£54,621 for the erection of new premises for the Isleworth county boys' school.

READING. Approach to railway station. The Reading Corporation is to improve the approach road to the railway station at a cost of £19,850.

#### SOUTH-WESTERN COUNTIES

BRISTOL. Dock Extension. The Bristol Corporation has prepared a scheme for the extension of Royal Edward Dock, at a cost of £830,350.

#### EASTERN COUNTIES

CHELMSFORD. School. The Chelmsford Education Committee is to erect an elementary school for about 720 at Melbourne Park, and has appointed Mr. H. W. Allardyce as architect.

SEDGLEY. Houses. Plans passed by U.D.C.:
Two houses, The Straits, Earl of Dudley's

#### RATES OF WAGES

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

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A	ABERDARE S. Wales & M.	s. d. 1 7	s. d. 1 2½	Aa	EASTBOURNE S. Counties	1		s. d. 1 1½	A	Normanton	Yorkshire	s. 1	d. 7	1 2	1.
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As	Abingdon S. Counties Accrington N.W. Counties	1 51	1 12 1 22	A <sub>2</sub> B	Exeter S.W. Counties Exmouth S.W. Counties	*1	6 5	1 1½ 1 0¾	A A	Norwich	Mid. Counties E. Counties	1	7 64	1 2 1 2 1 2	1
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AB	Barnsley Yorkshire	1 7	1 21	A	Valley District Glasgow Scotland	1	7	1 24	A	Plymouth S	S.W. Counties Yorkshire	•1	7 7	1 2	1
A	Barrow N.W. Counties	1 7	1 21	A <sub>2</sub>	Gloucester S.W. Counties Goole Yorkshire	1	6	1 1½ 1 1½	$A_1$	Pontypridd 8	S. Wales & M.	1	64	1 2	
B	Basingstoke S.W. Counties	1 5	1 02	A <sub>2</sub> A <sub>3</sub>	Gosport S. Counties Grantham Mid. Counties	1	6 51	1 1 1	A	Preston	N.W. Counties	1	6	1 1	
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As	Berwick-on- N.E. Coast	1 6	1 11/2	AB	Grimsby Mid. Counties Guildford S. Counties	1	7 5	1 2	A	QUEENSFERRY :	N.W. Counties	1	1	1 2	-
A,	Tweed Bewdley Mid. Counties Bicester S. Counties	1 6 1 5	1 14	13		^	U		A <sub>2</sub>		S. Counties	1	61	1 2	
D	Birkenhead N.W. Counties Birmingham Mid. Counties	•1 8 1 7	1 02 1 3 1 2½	A	Halifax Yorkshire Hanley Mid. Counties	1	7	1 21 11	$A_{2}$	Retford 1	S. Counties Mid. Counties	1	51	1 1	1
A <sub>1</sub>	Bishop Auckland N.E. Coast	1 61	1 2	A	Harrogate Yorkshire Hartlepools N.E. Coast	1	7	1 21	A <sub>1</sub> A <sub>2</sub>		Yorkshire	1	61 51	1 2	ž.
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B	Blyth N.E. Coast Bognor S. Counties	1 7	1 02	As	Hatfield S. Counties	1	B 5	1 11	A <sub>1</sub>	Rugby !	N.W. Counties Mid. Counties	1	61 7	1 2	ż
A A	Boston N.W. Counties  Boston Mid. Counties	1 7	1 21 11	B A <sub>3</sub>	Hertford E. Counties	1	6	1 11	A <sub>2</sub>	Rugeley !	Mid. Counties N.W. Counties	1	6 7	1 12	
B <sub>2</sub>	Bovey Tracey S.W. Counties	1 6	1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A	Heysham N.W. Counties Howden N.E. Coast	i	7	1 2½ 1 2½ 1 2½		C					
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B	Bridgend S. Wales & M. Bridgwater S.W. Counties	1 7	1 04		ILKLEY Yorkshire		_		Ba A <sub>1</sub>	Scarborough Y	S.W. Counties Yorkshire	1	3 lg	0 113	
A <sub>1</sub>	Bridlington Yorkshire Brighouse Yorkshire	1 64	1 2 1 2 1	A	Immingham Mid. Counties		7	1 21	A	Sheffield I	Mid. Counties Yorkshire	1	7 7	1 2	
A	Bristol S. Counties Bristol S.W. Counties	1 6	1 1½ 1 2½	A <sub>2</sub> B <sub>2</sub>	Ipswich E. Counties Isle of Wight S. Counties	1	4	1 11	A A <sub>2</sub>	Shrewsbury 1	Yorkshire Mid. Counties	1	7	1 2	ż
A	Brixham S.W. Counties Bromsgrove Mid. Counties	1 5	1 04 1 24		[				A <sub>2</sub> A <sub>2</sub>	Slough S	Yorkshire S. Counties	1	6	1 1	1
B	Burnley Mid. Counties  Burnley N.W. Counties	1 5	1 0 4 1 2 4	A	JARROW N.E. Coast	1	7	1 21	A <sub>1</sub> A <sub>2</sub>	Southampton S	Mid. Counties S. Counties	1	6	1 2	
A	Burslem Mid. Counties Burton-on- Mid. Counties	1 7	1 21 1 21	A	Keighley Yorkshire	1	7	1 21	A <sub>1</sub>	Sea	E. Counties	1	61	1 2	
A	Bury N.W. Counties	1 7	1 21	A <sub>a</sub>	Keswick N.W. Counties	1		1 11	A		N.W. Counties N.E. Coast	1	7 7	1 2	
A	Buxton N.W. Counties	1 64	1 2	A <sub>1</sub> A <sub>2</sub>	Kettering Mid. Counties Kidderminster Mid. Counties	1	6	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A <sub>1</sub>	Stirling S	Mid. Counties Scotland	1	61 71	1 2	
A <sub>2</sub>	CAMBRIDGE E. Counties	1 64	1 2	B <sub>1</sub>	King's Lynn E. Counties	1	44	1 01	A	Stockport 1	N.W. Counties N.E. Coast	1	7 7	1 2	ž.
B <sub>3</sub>	Canterbury S. Counties Cardiff S. Wales & M.	$\frac{1}{1}  \frac{4\frac{1}{2}}{7}$	1 0½ 1 2½	A	LANCASTER N.W. Counties	1	7	1 24	A	Tees	fid. Counties	1	7	1 2	_
AB	Carlisle N.W. Counties Carmarthen S. Wales & M.	1 7 1 5	1 21 1 01	A <sub>1</sub>	Leamington Mid. Counties Leeds Yorkshire	1	64	1 2 1 2½	B	Stroud S	S.W. Counties V.E. Coast	1	5	1 0	ž
B A,	Carnarvon N.W. Counties Carnforth N.W. Counties	1 5	1 02	A	Leicester Mid. Counties	1	7	1 2½ 1 2½	A A	Swansea S	. Wales & M. .W. Counties	1	7 51	1 2	ŧ
A As	Castleford Yorkshire Chatham S. Counties	1 7	1 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AB	Leigh N.W. Counties Lewes S. Counties	1	5	1 21 1 02		-		•	~ 9		,
As As	Chelmsford E. Counties Cheltenham S.W. Counties	1 5 1 1 5 1	1 11 11	As	Lichfield Mid. Counties Lincoln Mid. Counties	1	6	1 1½ 1 2½	A <sub>1</sub>	Taunton S	W. Counties	1	61 5	1 2	
A	Chester N.W. Counties Chesterfield Mid. Counties	1 7	1 2½ 1 2½	A	Liverpool N.W. Counties Llandudno N.W. Counties	01	8½ 6	1 31 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A A	Teesside Dist N Teignmouth S	V.E. Counties	1	7	1 24	ž.
B	Chichester S. Counties Chorley N.W. Counties	1 5	1 04 1 21	A	Lianelly S. Wales & M. London (12-miles radius)	1	7 84	1 2 1 1 1 1 1 1	A A	Todmorden Y	orkshire W. Counties	1	7 64	1 24	
B,	Cirencester S. Counties Clitheroe N.W. Counties	1 41	1 01 1 21	A	Do. (12-15 miles radius) Long Eaton Mid. Counties	1	8	1 3 1 21	Ba Aa	Truro S	.W. Counties	1	4	1 0	
A	Clydebank Scotland Coalville Mid. Counties	1 7	1 2½ 1 2½	A A	Luton E. Counties	1	7 61	1 21	A	Wells	did. Counties	1	5½°	1 14	
A <sub>2</sub>	Colchester E. Counties Colne N.W. Counties	1 B 1 61	1 11 2	A	Lytham N.W. Counties	1	7	1 21	A	Tyne District N	N.E. Coast	1	7	1 28	
A <sub>8</sub>	Colwyn Bay N.W. Counties Consett N.E. Coast	1 6 1 64	1 1½ 1 2	$\mathbb{A}_1$	MACCLESFIELD N.W. Counties	1	61	1 2	Δ	WAKEFIELD Y	orkshire	1	7	1 91	
A,	Conway N.W. Counties Coventry Mid. Counties	1 6	1 11	A <sub>3</sub> A <sub>3</sub>	Maidstone S. Counties Malvern Mid. Counties	1	51	1 11	A	Waisali A	Iid. Counties	1 1	7 7	1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1	
A.	Crewe N.W. Counties Cumberland N.W. Counties	1 6 1 5 d	1 11 11 11	A	Manchester N.W. Counties Mansfield Mid. Counties	1	5 1 7 7 7	1 21	$A_1$	Warwick 1	lid. Counties	1	61	1 2	
	-	. 04	* 12	B <sub>1</sub>	Margate S. Counties Matlock Mid. Counties	1	41 51	1 01 1 1 1 1	A <sub>1</sub> A <sub>2</sub>	West Bromwich M	did. Counties did. Counties S.W. Counties	1	61 7 6	1 2	k
A	Darken N.E. Coast N.W. Counties	1 7	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	A <sub>1</sub> A	Merthyr S. Wales & M. Middlesbrough N.E. Coast	1	61	1 2 1 21	A <sub>2</sub>	Whitby Y	orkshire	1	6	1 14	b
B <sub>1</sub>	Deal S. Counties Denbigh N.W. Counties	1 4½ 1 5½	1 01 11	As Bs	Middlewich N.W. Counties Minehead S.W. Counties	1	6	1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AB		N.W. Counties N.W. Counties S. Counties	1	7 7 5	1 24 1 24 1 0	
A	Derby Mid. Counties Dewabury Yorkshire	1 7	1 2½ 1 2½ 1 2½	B <sub>2</sub>	Monmouth S. Wales & M. & S. and E.	1	4	1 0	$A_0$	Windsor S	S. Counties	1	6	1 1	
B	Didcot S. Counties Doncaster Yorkshire	1 5	1 01 1 21	A	Glamorganshire Morecambe N.W. Counties	1	7	1 24	A A <sub>2</sub>	Worcester 1	did. Counties did. Counties	1	6	1 1	b
B <sub>1</sub>	Dorchester S.W. Counties Driffield Yorkshire	1 41 1 51	1 01 11			1		4 42	As A1	Wrexham N	V.W. Counties	1	5 th	1 11 11 11 11 11 11 11 11 11 11 11 11 1	
As A	Droitwich Mid. Counties	1 6 1 7	1 11 11 1 21	As	Nantwich N.W. Counties Neath S. Wales & M.	1	6	1 11	$A_3$		3. Counties	1	51	1 14	i
Az	Dumfries Scotland	1 6	1 11 1 21 1 21	A	Nelson N.W. Counties	1	7 7 7	1 2½ 1 2½ 1 2½	E		E. Counties	1	5	1 01	1
A	Durham N.E. Coast	1 7	1 21	A	Newcastle N.E. Coast Newport S. Wales & M.	1	7	1 2½ 1 2½	A	TOOMY C	S.W. Counties Yorkshire	1	7	1 02	

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

trade in any given area will be sent on request. The rates of wages have been purised consequent uses the learners of the rates of wages.

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

# CURRENT PRICES

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

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

	SLATER AND TILER	SMITH AND FOUNDER-continued s. d.
WAGES	First quality Bangor or Portmadoc slates	Mild steel reinforcing rods, * cwt. 17 6
Bricklayer per hour 1 8 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	d/d F.O.R. London station:	,, ,, 1,,
Joiner	24" × 12" Duchesses per M. 28 17 6	" " " 13" 17 6
Mason (Banker)	20" × 10" Countesses ,, 19 5 0	Cast-iron rain-water pipes of ordi- s, d. s, d.
, (Fixer)	18" × 0" Ladies	nary thickness metal . F.R. 1 0 1 3
Painter	Westmorland green (random sizes) . per ton 8 10 0	Anti-splash shoes , 4 6 8 9
Glazier	Old Delabole slates d/d in full truck loads to Nine Elms Station:	Boots
Slater	20" × 10" medium grey . per 1,000 (actual) 21 11 6	with access door " — 6 3
Timberman	Best machine roofing tiles . " 4 5 0	Swan-necks up to 9" offsets ,, 3 9 6 0
General Labourer	Hips and valleys each 9	Plinth bends, 44" to 6"
Crane Driver	Nails, compo	ordinary thickness metal . F.R. 5 6 Stop ends each 6 6
Watchman per week 2 10 0	" copper " 1 6	Angles
MATERIALS EXCAVATOR AND CONCRETOR	CARPENTER AND JOINER	Obtuse angles , , 2 0 2 6 Outlets , 1 9 2 3
£ s. d.	Good carcassing timber F.C. 25, 7d2 10	PLUMBER Lead, milled sheets
Blue Lias Lime	Birch as r" F.S. 9 Deal, Joiner's	" drawn pipes " 1 6 9
Hydrated Lime	,, 2nds ,, ,, 4	" soil pipes " I 9 9 " scrap " 18 0
site, including Paper Bags)	African , , , I I	Solder, plumbers' lb. 1 1
(d/d site, including Paper Bags) 2 5 0	Oak, plain American , , , 2 5	Copper, sheet
White Portland Cement, in 1-ton lots Thames Ballast per Y.C. 6 6	"Figured " " " I 3 "plain Japanese " " I 2	L.C.C. soil and waste pipes: 3" 4" 6"
Trushed Ballast , 7 0	" Figured " " " I 5	Plain cast F.R. I O I 2 2 0
Washed Sand , 8 6	" English " " III	Galvanized ,, 2 0 2 6 4 6
2" Broken Brick	Pine, Yellow , , , I o	Holderbats each 3 10 4 0 4 9 Bends , 3 9 5 3 10 3
Pan Breeze	" British Columbian " " 4	Shoes , 2 10 4 4 9 6 Heads , 4 8 8 5 12 9
	Burma	PLASTERER £ s. d.
DRAINLAYER BEST STONEWARE DRAIN PIPES AND FITTINGS	Walnut, American , , , , , 2 3	Lime, chalk per ton 2 0 0
4" 6" s. d. s. d.	Whitewood, American	Plaster, coarse
Straight Pipes per F.R. 0 9 1 1 Bends each 1 9 2 6		Hydrated lime
Taper Bends , 3 6 5 3	" It" " I 5 0	Keene's cement 5 0 0
Rest Bends , , , 4 3 6 3 Single Junctions , , 3 6 5 3 Double , 4 9 6 6	Deal matchings, \$ , 110 0	Gothite plaster , 3 6 0 Pioneer plaster , 3 6 0
Double	, 1	Thistle plaster 3 6 0 Sand, washed Y.C. 11 6
Thannel bends each 2 9 4 0	Rough boarding, \$" , 16 o	Hair 6
Channel tapers ,, 2 9 4 0	" 11" · · · " 18 0	Laths, sawn bundle 2 4
Yard gullies	Plywood, per ft, sup.: Thickness   #"   #"   #"	Lath nails 3
IRON DRAINS:	Qualities A B BB A B BB A B BB	GLAZIER s. d. s. d.
Bends each 6 4 13 1	Birch 60 × 48 4 2 2 5 3 2 7 5 4 8 6 5	Sheet glass, 24 oz., squares n/e 2 ft. s. F.S. 28
Inspection bends , II 5 I4 4 Single junctions , II 2 22 IO	Cheap Alder .   - 2 14   - 34 2	Flemish, Arctic, Figures (white)* . ,,
	Oregon Pine - 21 - 2 24 - 4 34 - 5 44 -	Blazoned glasses
Double junctions , 17 2 30 9	Gaboon	Reeded: Cross Reeded
Double junctions , 17 2 30 9	Gaboon Mahogany 4 3½ - 5 4½ - 7 6½ - 8 7 - Figured Oak 6 5 - 75 5½ - 10 8 - 1/- 9 -	Reeded: Cross Reeded "II Cathedral glass, white, double-rolled, plain, hamniered, rimpled, waterwite "E
Double junctions	Gaboon Mahogany Mahogany Figured Oak. 6 5 - 7 5 5 - 10 8 - 1/- 9 - d.	Reeded: Cross Reeded "II Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite "Erown sheet glass (n/e 12" × 10") . " 2 0
Double junctions	Gaboon Mahogany 4 31 - 5 41 - 7 61 - 8 7 - 1/9 9 d. Scotch glue	Revded: Cross Reeded
Double junctions . , , 17 2 30 9 Lead Wool lb. 6 — Gaskin , 5 —  BRICKLAYER  Flettons per M. 2 12 0 Grooved do , , , 2 14 0	Gaboon Mahogany Figured Oak.   6	Reveded: Cross Reeded. "II Cathedral glass, white, double-rolled, plain, hamniered, rimpied, waterwite, Crown sheet glass (n/e 12" × 10") . "I o and 2 o Fraugh cast; rolled plate . "I o and 2 o Frugh cast; wired rolled . "I o and 2 o Frugh cast;
Double junctions	Gaboon	Reeded: Cross Reeded. Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite, Crown sheet glass (n/e tz' x 10'). Fisahed opals (white and coloured). Finugh cast; rolled plate. Winder cast; wired rolled. Georgian wired cast. Folished plate, n/e 1 ft, ft o to ti 13.
Double junctions	Gaboon Mahogany Figured Oak.   6\frac{1}{6}\frac{1}{5} -   7\frac{1}{6}\frac{1}{5} -   7\frac{1}{6}\frac{1}{6} -   8\frac{7}{7} -    Scotch glue	Reeded : Cross Reeded
Double junctions	Gaboon Mahogany Figured Oak.   6\frac{1}{6}\frac{1}{5} -   7\frac{1}{6}\frac{1}{6} -   8\frac{7}{7} -    Scotch glue	Reeded : Cross Reeded : Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite, Crown sheet glass (nie 12" × 10") 2 0 2
Double junctions	Gaboon	Reeded : Cross Reeded
Double junctions	Gaboon	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpied, waterwite   Crown sheet glass (n/e 12" x 10")   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o o to 1 o o o o o o o o o o o o o o o
Double junctions   17   2   30   9	Gaboon	Reeded : Cross Reeded : Cathedral glass, white, double-rolled, plain, hammered, rimpied, waterwite , Crown sheet glass (n/e t z' × 10')
Double junctions	Gaboon   Mahogany   4   3\frac{1}{4} -   7   6\frac{1}{4} -   8   7   7   7   7   8   7   7   7   7	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite   Crown sheet glass (n/e 12" x 10")   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o o to 1 o and 2 o Flashed opals (white and coloured)   I o o to 1 o and 2 o Flashed opals (white and coloured)   I o o to 1 o o and 2 o Flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o o flashed opals (white and coloured)   I o o to 1 o o o flashed opals (white and coloured)   I o o o flashed opals
Double junctions	Gaboon   Mahogany   4   3\frac{1}{4} -   5   4\frac{1}{2} -   7   6\frac{1}{4} -   8   7   7   6\frac{1}{4} -   9   -   1   7   6\frac{1}{4} -   9   -   1   7   6\frac{1}{4} -   1   9   -   1   7   9   -   1   1   1   1   1   1   1   1   1	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite   Crown sheet glass (n/e 12" x 10")   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o and 2 o Flashed opals (white and coloured)   I o o to 1 o and 2 o Flashed opals (white and coloured)   I o o to 1 o and 2 o Flashed opals (white and coloured)   I o o to 1 o o and 2 o Flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o to 1 o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o flashed opals (white and coloured)   I o o o o flashed opals (white and coloured)   I o o o o flashed opals (white and coloured)   I o o o o flashed opals (white and coloured)   I o o o o flashed opals (white and coloured)   I o o o o flashed opals (white and coloured)   I o o o o flashed opals (white and coloured)   I o o o o flashed opals (white and coloured)   I o o o o flashed opals (white and coloured)   I o o o o flashed opals (white and coloured)   I o o o
Double junctions	Gaboon   Mahogany   4   3\frac{1}{4} -   5   4\frac{1}{2} -   7   6\frac{1}{4} -   8   7   7   7   7   7   7   7   7   7	Reeded : Cross Reeded
Double junctions	Gaboon	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite, Crown sheet glass (nie 12" × 10"   10 and 2 of 1 rough cast; viriled plate   10 and 2 of 1 rough cast; viriled plate   10 and 2 of 1 rough cast; viriled plate   10 and 2 of 1 rough cast; viriled plate   10 and 2 of 1 rough cast; viriled plate   11 and 2 rough cast; viriled plate
Double junctions	Gaboon	Reeded : Cross Reeded : Cathedral glass, white, double-rolled, plain, hammered, rimpied, waterwite, Crown sheet glass (n/e tz* x to*)   2 0   2
Double junctions	Gaboon	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpied, waterwite,   Crown sheet glass (n/e t z' × 10')   1 o and 2 o   Fisshed opals (white and coloured)   1 o and 2 o   Fisshed opals (white and coloured)   1 o and 2 o   Fisshed opals (white and coloured)   1 o and 2 o   Fisshed opals (white and coloured)   1 o and 2 o   Fisshed opals (white and coloured)   1 o and 2 o   Fisshed opals (white and coloured)   1 o and 2 o   1 o
Double junctions	Gaboon   Mahogany   4   3\frac{1}{4} -   5   4\frac{1}{2} -   7   6\frac{1}{4} -   8   7   7   7   7   7   7   7   7   7	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite, Crown sheet glass (n/e 12" × 10")   1 0 and 2 0   1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Double junctions	Gaboon   Mahogany   4   3\frac{1}{4} -   5   4\frac{1}{2} -   7   6\frac{1}{4} -   8   7   7   6\frac{1}{4} -   9   7   7   7   9   7   7   7   9   7   7	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite,   Crown sheet glass (n/e 12" × 10")     2
Double junctions	Gaboon   Mahogany   4   3\frac{1}{4} -   5   4\frac{1}{2} -   7   6\frac{1}{4} -   8   7   7   6   7   9   4   6   5   7   7   5\frac{1}{4} -   10   8   7   7   9   4   6   6   5   7   7   5\frac{1}{4} -   10   8   7   7   9   4   6   6   6   6   6   6   6   6   6	Reeded : Cross Reeded
Double junctions	Gaboon	Reeded : Cross Reeded
Double junctions	Gaboon	Reeded : Cross Reeded
Double junctions	Gaboon	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite, Crown sheet glass (net 12" × 10")   2 0   2 0   7   1
Double junctions	Gaboon   Mahogany   4   3t -   5   4t -   7   6t -   8   7   7   7   7   7   7   7   7   7	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite, Crown sheet glass (nie 12" × 10")   2 0   2 0   Flashed opals (white and coloured)   1 0 and 2 0   1 ough cast; voiled plate   1 0 ough cast; wired rolled   1 0   1   1   1   1   1   1   1   1
Double junctions	South   Sout	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite, Crown sheet glass (nie 12" × 10"   2 0   2 0   1   2 0
Double junctions	Figured Oak	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite, Crown sheet glass (n/e tz² × 10°)   1 0 and 2 0   2 0   7 loshed opals (white and coloured)   1 0 and 2 0   2 0   7 loshed opals (white and coloured)   1 0 and 2 0   2 0   7 loshed opals (white and coloured)   1 0 and 2 0   2 loshed opals (white and coloured)   1 0 and 2 0   2 loshed opals (white and coloured)   1 0 and 2 0   2 loshed opals (white and coloured)   1 0 and 2 0   2 loshed opals (white and coloured)   1 0 and 2 0   1 0 and 2 loshed   1 0 and 2 los
Double junctions	South   Sout	Reeded : Cross Reeded   Cathedral glass, white, double-rolled, plain, hammered, rimpled, waterwite, Crown sheet glass (nie 12" × 10")   2 0   2 0   7   10   10   2 0   10   10   10   10   1

## CURRENT PRICES FOR MEASURED WORK

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

EXCAVATOR AND CONC	RE	TOR							5.	d.
Digging over surface n/e 12" de to reduce levels n/e 5'	ep a	nd car	t awa	ay .			,	Y.S. Y.C.	8	6
to form basement n/e	5'0	and	cart:	away				11	10	0
60 00	0'0	" deep	and	cart a	way			25	9.	6
If in stiff clay . "	5 0	" deep	and	cart a	way		add	11	1.0	6
If in underpinning							27		4	0
Planking and strutting to sides	of e	xcavai	tion		*			F.S.	1	0
to pier l	hes							26		5
extra, o	nly i	f left	in .							3
Hardcore, filled in and rammed	and a	tions	16 -1				*	Y.C.	1 6	0
Portland cement concrete in for	maa	edoni	(4-2-	-I) .				20	1 12	6
			unde	rpinnir	ng .			Y'S.	1 16	0
Finishing surface of concrete,	spac	e face					*	Y .5.		7
								4	4" (	50
DRAINLAYER								5.	d. s.	d.
Stoneware drains, laid complet priced separately)				concr	ete to	be	F.R.	7	6 2	3
Extra, only for bends .							Each	2	8 3	0
" junctions .	*				*		**	3	9 4	6
Gullies and gratings Cast iron drains, and laying and	ini	nting	*		*	*	F.R.	16	0 8	3
Extra, only for bends (cast iron	) .	Terriff.					Each	12	3 18	4
DDICTI AND										
BRICKLAYER Brickwork, Flettons in lime more	tar						. 1	er Ro	£ 5.	d.
in cement	. Lett							EL IVO	27 12	6
Stocks in cement								113	34 0	0
Blues in cement Extra only for circular on plan	*		*	1	*	*		22	50 8	0
backing to mason	nry				,			23	1 10	0
rising on old wal	s							13	2 0	0
Fair Face and pointing internal	v		*			*	*	F.S.	5 10	0
Extra over fletton brickwork for	r pic	ked st	ock f	acings	and p	ointi	ng .	A rock		8
20 20 20	rec	brick	facil	ngs and	d point	ting	*	2.0		II
29 29 29				ings racings				9.1 1.0	3	6
Tuck pointing " " .	610				*		. 0	33	3	71
Weather pointing in cement				*		*		30		3
Vertical dampcourse			*		*	*		213	I	10
version dampeouse :								29		
A COMPANY A TOTAL										
ASPHALTER  Horizontal dampcourse .								Y.S.	S. 4	d.
1" Vertical dampourse								25	7	9
" paving or flat " paving or flat " x 6" skirting			*					23	6	3
t paving or flat					*			F.R.	7	6
1" × 6" skirting								11		21
Rounded angle					4			m		21
Cesspools			*		*			Each	5	6
MASON									5.	d.
Portland stone, including all la	abou						ning	T.C		
down, complete  Bath stone and do., all as last	*					*		F.C.	17	6
Artificial stone and do								115 2.9	13	0
York stone templates, fixed com		е.			*		*	22	10	6
, thresholds .	•	1						13	13	6
,								1.		-
SLATER AND TILER Slating, Bangor or equal to	2	3" 1	ap,	and	fixing	wi	th ec	mpo	£ s.	d.
nails, 20" × 10"		3 .	ap,	· ·	. anilig	44.5		Sqr.	3 10	0
Do., 18" × 9"						4		19	3 7	0
Do., 24" × 12" Westmorland slating, laid with o	limi	nished	cour	292	×	×		11	3 17 6 p	0
Tiling, best hand-made sand-fac	ed,	laid to	a 4	gauge	e, naile	ed er	very	23	6 0	0
fourth course					*	*		11	3 0	0
Do., all as last, but of machine-ration 20" × 10" medium Old Delabole	slat	ing la	id to	a 2" 1	ap igre	ev)	*	31.	2 16	0
19 11 17 22		12		, ,	gre (gre	een)		22	4 15	0
CARPENTER AND JOINE	R								£ s.	d.
Flat boarded centering to concre	te f	oors, i	includ	ding al	strut	ting		Sqr.		6
Shuttering to sides and soffits of								F.S.		7
			*		*			21	I	7
Fir and fixing in wall plates line	ols,	etc.						F.C.	3	9
Fir framed in floors	*							18	4	6
trusses				*		1		22	6 7	6
" " partitions .							*		8	6
I" deal sawn boarding and fixing	to	Joists			*			Sqr.	I 14	6
1" " " " " " " " " " " " " " " " " " "	9	,	*	*			*	25	I 17 2 3	6
\$" × 2" fir battening for Counte	ss sl	ating						22	9	6
								F.R.		0
Do., for 4" gauge tiling .								C.N.		
Stout feather-edged tilting fillet	1							Y.S	2	41
Stout feather-edged tilting fillet Patent inodorous felt, 1 ply	1			:	:			Y.S.	2	3
Stout feather-edged tilting fillet Patent inodorous felt, I ply					:		:	Y.S.	2 2 3	3 9 3
Stout feather-edged tilting fillet Patent inodorous felt, I ply  """  """  """  """  """  """  """	· ioi	ete					:	Y.S. " F.R.	2 2 3	3 3 101
Stout feather-edged tilting fillet Patent inodorous felt, I ply  """  """  """  """  """  """  """	· ioi	ete						Y.S. " F.R. F.S.	2 2 3 1	3 9 3
Stout feather-edged tilling fillet Patent inodorous felt, 1 ply  """  Stout feather-edged tilling fillet Patent inodorous felt, 1 ply  ""  ""  Stout herringbone strutting to 9  " deal gutter boards and bearer  ""  deal wrought rounded roll"	joi	sts		:	lote :			Y.S. " F.R.	2 3 1 1	3 9 3
Stout feather-edged tilting fillet Patent inodorous felt, z ply  """ Stout herringbone strutting to 9 r" deal gutter boards and bearer desi wrought rounded roll" " deal grooved and tongued	joi	sts	laid	eompl			ling	Y.S. " F.R. F.S. F.R.	2 3 1 1	3 0 3 0 1 2 6 8
Stout feather-edged tilting fillet Patent inodorous felt, z ply  """ Stout herringbone strutting to 9 r" deal gutter boards and bearer desi wrought rounded roll" " deal grooved and tongued	joi	sts	laid	eompl			ling	Y.S. " F.R. F.S.	2 3 1 1 1 2	3 0 3 0 1 2 6 8
Stout feather-edged tilting fillet Patent inodorous felt, z ply  """ Stout herringbone strutting to 9 r" deal gutter boards and bearer desi wrought rounded roll" " deal grooved and tongued	joi	sts	laid	eompl			ling	Y.S. " F.R. F.S. F.R.	2 3 1 1 1 2 1 2 10	3 0 3 0 1 2 6 8
Stout feather-edged titling fillet Patent inodorous felt, z ply  "" 2" Stout herringbone strutting to 9 T deal gutter boards and bearer deal wrought rounded roll " T deal grooved and tongued	joi	sts	laid	eompl			ling	Y.S. F.R. F.S. F.R. Sqr.	2 3 1 1 1 2 1 2 10	3 0 3 0 2 6 8 0 0 0

CARPENTER AND JOIN	TER-	-contin	ued					F.S.	5	. d.
2" 1}" deal cased frames double			· ~	oak e	ille	11" nr	llev	**	3	III
stiles, 11" heads, 1" inside a	nd ou	itside	lining	S. #"	parti	ng be	ads,			_
and with brass faced axle pu	Heys,	etc., n	xed c	omple	te			9.9	3	10
Extra only for moulded horns  1\frac{1}{2}" deal four-panel square, bot	h side	s, door			^			Each F.S.	2	
zi but moulded both sid								22	2	
2 11 11 11 11 11								F.R.	3	0
4" × 3" deal, rebated and mou	ided i	rames						r.R.	1	4
deal bearers								F.S.	1	9
12" deal treads, 1" risers in s	tairca	ses, an	nd to	ngued	and	d groo	ved		2	6
11 deal moulded wall strings	· cong i	· ·	4					12	2	1
Ends of treads and risers house	d to s	tring		2		:	*	Each	1	
3" × 2" deal moulded handrail 1" × 1" deal balusters and hou	sing e	ach en	d d	*				F.R. Each	2	
1 × 1 deal baldsters and hou 1½" × 1½" ,, ,, 3" × 3" deal wrought framed n		**	*		*		*	F.R.	2	
Extra only for newel caps .							*	Each	6	0
Do., pendants		٠	*			٠	*	11		
SMITH AND FOUNDER									5	. d.
Rolled steel joists, cut to le					*			Per cwt.	18	6
Riveted plate or compound position	girder.	s, and	hois	ting	and	fixing	in	11	1 6	6
Do., stanchions with riveted ca Mild steel bar reinforcement, }*	ps and	bases	and	do.	con	nplete		9.9	I 2	-
Corrugated iron sheeting fixe	d to	wood	fran	ning,	inch	uding	all	F.S.	. 4	
bolts and nuts 20 g Wrot-iron caulked and cambere	d chir	nney b	oars.					Per cwt.	1 10	0
PLUMBER									€ 5.	d.
Milled lead and labour in flats								cwt.	1 18	0
Do. in flashings		:						**	2 7	6
Do. in soakers								F.R.	I 12	9
Open copper nailing		,						**		3
		1"	. 1	1	1		11"	2"		4-4
Lead service pipe and fixing with pipe		s. d.	S.	d.			s. d.		. S.	d.
hooks . F.R. Do. soil pipe and		I 2	I	4	I	81	2 7	3 6		-
fixing with cast lead tacks		_	_	_	_		_	-	7	3
Extra, only to bends . Each		-61	-	- 8	_		-	2 3	7	6
Do. to stop ends ,, Boiler screws and		OB		0		9	11	1 0		
unions		3 3	3_	9	5	0	8 0	 11 6		_
unions		6 9	9	6	11	0	~ ~	11_6		=
unions Lead traps . Screw down bib valves . Do. stop cocks .  4" cast-iron 1-rd. gutter and fix:	ing	_	-	6	11		~ ~	F.R.	1	
unions Lead traps Screw down bib valves Do. stop cocks 4" cast-iron 1-rd. gutter and fix Extra, only stop ends Do. angles	ing	6 9	9	6	11	0	~ ~	_	I	6
unions Lead traps Screw down bib valves. Do. stop cocks A' cast-iron i-rd. gutter and nx Extra, only stop ends Do. angles Do. outlets A' dia. cast-iron rain-water pipe	ing	6 9 7 11	9 9	6 6	11	0 6	~ ~	F.R. Each	1 1 1 2 1	0
unions Lead traps Screw down bib valves Do. stop cocks 4" cast-iron i-rd. gutter and fix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes	ing	6 9 7 11	9 9	6 6	11	0 6	~ ~	F.R. Each	2 I I	6
unions Lead traps Screw down bib valves. Do. stop cocks 4, cast-iron 1-rd. gutter and nx Extra, only stop ends Do. angles Do. outlets 4, dia. cast-iron rain-water pipe Extra, only for shoes. Do. for plain heads	and i	6 9 7 11	9 9	6 6	11	0 6	~ ~	F.R. Each	1 1 5	0 6 9 7 3 6
unions Lead traps Screw down bib valves. Do. stop cocks 4" cast-iron 4-rd, gutter and fix Extra, only stop ends Do. angles Do. outlets 4' dia. cast-iron rain-water pipe Extra, only for shoes Do. for plain heads  PLASTERER AND TILIN	and f	6 9 7 11	9 9	6 6	11	0 6	~ ~	F.R. Each	2 I I	6 9 7 3
unions Lead traps . Screw down bib valves . Do. stop cocks 4" cast-iron i-rd. gutter and fix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes . Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small ! Do. in n/w to beams, stanchion	and f	6 9 7 11	9 9	6 6	11	0 6	~ ~	F.R. Each	2 1 1 5 3.	0 6 9 7 3 6 d.
unions Lead traps . Screw down bib valves. Do. stop cocks 4" cast-iron i-rd. gutter and fix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes . Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small ! Do. in n/w to beams, stanchion Lathing with sawn laths to ceil "s creeding in Portland ceme	G mesh s, etc.	6 9 7 m	9 9 with	6 6	iii	0 66	8 0	F.R. Each "F.M. Each "Y.S.	2 1 1 5 5 9.	6 0 7 3 6 d. 0 9
unions Lead traps . Screw down bib valves . Do. stop cocks 4" cast-iron i-rd. gutter and fix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes . Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small ! Do. in n/w to beams, stanchion Lathing with sawn laths to ceil if screeding in Portland ceme floor, etc. Do. vertical	G mesh s, etc.	6 9 7 m	9 9 with	6 6	iii	0 66	8 0	F.R. Each "F.M. Each "Y.S.	2 1 1 5 3 8. 2 2 2 1	0 6 9 7 3 6 d. 0 9 3
unions Lead traps . Screw down bib valves . Do. stop cocks 4" cast-iron i-rd. gutter and fix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes . Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small i Do. in n/w to beams, stanchion Lathing with sawn laths to ceil if "screeding in Portland ceme- floor, etc. Do. vertical Rough under on walls Render, refloat and set in lime i	G mesh s, etc. ngs nt and	6 9 7 m	9 9 with	6 6	iii	0 66	8 0	F.R. Each "F.M. Each "Y.S. "	2 1 1 5 5 8. 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 9 7 3 6 d. 9 3
unions Lead traps Screw down bib valves. Do. stop cocks 4" cast-iron i-rd. gutter and fix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small Do. in n/w to beams, stanchiom Lathing with sawn laths to ceil i" screeding in Portland ceme floor, etc. Do. vertical Rough under on walls Render, refloat and set in lime Render, refloat and set in lime Render, refloat and set in lime Render and set in Sirapite	G mesh s, etc. ngs nt and ha	6 9 7 m	9 9 9 with e	6 6  ears ca	woo	o 6 6	8 0	F.R. Each "F.R. Each "Y.S. ""	2 1 1 5 5 8. 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 6 0 7 3 6 d. 0 9 3 5 7 2 9 1
unions Lead traps Screw down bib valves. Do. stop cocks 4" cast-iron 4-rd, gutter and fix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small Do. in n/w to beams, stanchion Lathing with sawn laths to ceili 4" screeding in Portland ceme floor, etc. Do. vertical Rough under on walls Render, refloat and set in lime a Render and set in Sirapite Render backing in cement and e Extra, only if on lathing	G mesh s, etc. ngs nt and ha	6 9 7 m	9 9 9 with e	6 6  ears ca	woo	o 6 6	8 0	F.R. Each "F.H. Each "Y.S. ""	2 1 1 1 5 5 8. 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	06 07 36 d. 09 3 57 29 11 94
unions Lead traps Screw down bib valves. Do. stop cocks  "cast-iron i-rd, gutter and fix Extra, only for shoes Do. angles Do. outlets d' dia. cast-iron rain-water pipe Extra, only for shoes Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small in Do. in n/w to beams, stanchion Lathing with sawn laths to ceili "screeding in Portland ceme- floor, etc. Do. vertical Rough under on walls Render, refloat and set in lime a Render and set in Sirapite Render backing in cement and e Extra, only if on lathing Keene's cement angle and arris Arris	G mesh s, etc. ngs nt and ha	6 9 7 m	9 9 9 with e	6 6  ears ca	woo	o 6 6	8 0	F.R. Each F.R. Each Y.S.	2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	06 07 36 d. 0 9 3 57 2 9 11 9 4 6 12
unions Lead traps Screw down bib valves. Do. stop cocks  "cast-iron i-rd, gutter and fix Extra, only for shoes Do. outlets d' dia. cast-iron rain-water pipe Extra, only for shoes Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small Do. in n/w to beams, stanchion Lathing with sawn laths to ceil "sreeding in Portland ceme- floor, etc. Do. wertical Rough under on walls Render, refloat and set in lime a Render and set in Sirapite Render backing in cement and Extra, only if on lathing Keene's cement angle and arris Arris Rounded angle, small Plain cormices in plaster, includi	G mesh s, etc. ngs nt and hasand, a	6 9 7 m	9 9 9	6 6 6	wood	ood blood bloom	8 0	F.R. Each  F.H. Each  Y.S.	2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	06 97 36 d. 0 93 57 29 1 9 46 13 1
unions Lead traps . Screw down bib valves . Do. stop cocks 4" cast-iron i-rd. gutter and fix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes . Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small ! Do. in n/w to beams, stanchion Lathing with sawn laths to ceil if "screeding in Portland ceme floor, etc. Do. vertical Rough under on walls Render, refloat and set in lime a Render refloat and set in lime a Render should in lime in the standard in the stand	G and f	6 9 7 m	9 9 9	6 6 6	wood cem	ood blood bloom	8 0	F.R. Each  P.H. Each  Y.S.  F.R.  Y.S.	2 1 1 5 5 9. 2 2 1 1 1 1 1 1 1 1 2 2	06 07 36 d. 0 9 3 57 29 1 9 46 1 3 3
unions Lead traps . Screw down bib valves . Do. stop cocks  4" cast-iron i-rd. gutter and inx Extra, only stop ends Do. angles Do. outlets  4" dia. cast-iron rain-water pipe Extra, only for shoes . Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small too, in n/w to beams, stanchlorn Lathing with sawn laths to ceili " screeding in Portland cemericory ending in Portland cemericory ending the service of the company of the company in the	G mesh , etc. and had had and had and had had had had had had had had had ha	6 9 7 m	9 9 9	6 6 6	wood cem	ood blood bloom	8 0	F.R. Each "F.H. Each "Y.S. "" "" "" "" "" "" "" "" "" "" "" "" ""	2 2 1 1 1 1 5 5 8. 2 2 2 1 1 1 1 1 1 2 2 4 1 7 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7	06 0 7 3 6 d. 0 9 3 5 7 2 9 1 9 4 6 1 3 1 6
unions Lead traps Screw down bib valves. Do. stop cocks  "cast-iron i-rd, gutter and fix Extra, only for shoes Do. outlets d' dia. cast-iron rain-water pipe Extra, only for shoes Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small Do. in n/w to beams, stanchion Lathing with sawn laths to ceil "sreeding in Portland ceme- floor, etc. Do. wertical Rough under on walls Render, refloat and set in lime a Render and set in Sirapite Render backing in cement and Extra, only if on lathing Keene's cement angle and arris Arris Rounded angle, small Plain cormices in plaster, includi	G mesh , etc. and had had and had and had had had had had had had had had ha	6 9 7 m	9 9 9	6 6 6	wood cem	ood blood bloom	8 0	F.R. Bach  "F.H. Each "Y.S. ""  F.R. " ""  Y.S. " ""  Y.S. "	2 2 1 1 1 1 5 5 8. 2 2 2 1 1 1 1 1 1 2 2 4 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	06 0 7 3 6 d. 0 9 3 5 7 2 9 1 9 4 6 1 3 1 6 6 6 6
unions Lead traps . Screw down bib valves . Do. stop cocks  4" cast-iron i-rd. gutter and inx Extra, only stop ends Do. angles Do. outlets  4" dia. cast-iron rain-water pipe Extra, only for shoes . Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small too, in n/w to beams, stanchlorn Lathing with sawn laths to ceili " screeding in Portland cemericory ending in Portland cemericory ending the service of the company of the company in the	G mesh , etc. and had had and had and had had had had had had had had had ha	6 9 7 m	9 9 9	6 6 6	wood cem	ood blood bloom	8 0	F.R. Each  P.E. Each  Y.S.  ""  ""  ""  F.R.  ""  F.R.	2 2 1 1 1 1 5 5 8. 2 2 2 1 1 1 1 1 1 2 2 4 1 7 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7	06 97 36 d. 93 57 29 19 46 23 16 66 66 8 d.
unions Lead traps . Screw down bib valves . Do. stop cocks 4" cast-iron i-rd. gutter and fix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes . Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small ! Do. in n/w to beams, stanchion Lathing with sawn laths to ceil if "screeding in Portland ceme floor, etc. Do. vertical Rough under on walls Render, refloat and set in lime i Render and set in Sirapite Render backing in cement and i Extra, only if on lathing Keene's cement angle and arris Arris Rounded angle, small Plain cornices in plaster, includi "granolithic pavings if 6 f of "white glazed wall tiling or x 3" Extra, only for small quadrant  GLAZIER 21 0z. sheet glass and glazing w	G mesh, etc., ngs nt and ha and ha and fi	6 6 9 7 m	9 9 9	6 6 6	wood cem	ood blood bloom	8 0	F.R. Each "F.R. Each " " " " " " " " " " " " " " " " " " "	2 1 1 1 5 5 9. 2 2 2 1 1 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 1 2 2 1	06 97 36 d. 9 9 3 5 7 2 9 1 9 4 6 1 3 1 6 6 6 6 8 d. 6
unions Lead traps Screw down bib valves. Do. stop cocks 4" cast-iron i-rd. gutter and fix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small in Do. in n/w to beams, stanchion Lathing with sawn laths to ceil if "screeding in Portland ceme floor, etc. Do. vertical Rough under on walls Render, refloat and set in lime is Render and set in Sirapite Render backing in cement and is Extra, only if on lathing Keene's cement angle and arris Arris Rounded angle, small Plain cornices in plaster, includi "granolithic pavings "5" 6" white glazed wall tiling o" x 3" Extra, only for small quadrant  GLAZIER 21 02. sheet glass and glazing w 26 oz. do. and do. Flemish, Arcite Figured (white)	G mesh , etc. ,	6 9 7 # fixing value of the fixing of the fi	9 9 9 1 1 or 1 or 1 or 1 or 1 or 1 or 1	6 6	wood screen	ood blood bloom	8 0	F.R. Each "F.R. Each " " " " " " " " " " " " " " " " " " "	2 2 2 2 1 1 1 1 1 1 2 2 3 4 4 7 1 2 2 5. I	060736 d.093 5729194613166668 d.621
unions Lead traps Screw down bib valves. Do. stop cocks 4" cast-iron i-rd. gutter and ix Extra, only stop ends Do. angles Do. outlets 4" dia. cast-iron rain-water pipe Extra, only for shoes Do. lin with the standard in the	G mesh , etc. ,	66 97 m	9 9 9 1 1 or 1 or 1 or 1 or 1 or 1 or 1	6 6 6	wood screen	ood blood bloom	8 0	F.R. Each F.B. Each F.B. Each F.B. Each F.R F.R F.R F.R F.S F.S	2 1 1 1 5 5 8. 2 2 1 1 1 1 1 1 1 2 2 3 4 4 1 7 1 2 2 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	06 0 7 3 6 d. 0 9 3 5 7 2 9 1 9 4 6 1 3 1 6 6 6 6 8 d. 6 7 1 2 7
unions Lead traps Screw down bib valves. Do. stop cocks  "cast-iron j-rd. gutter and "ix Extra, only stop ends Do. angles Do. outlets  "dia. cast-iron rain-water pipe Extra, only for shoes Do. for plain heads  PLASTERER AND TILIN Expanded metal lathing, small too, in n/w to beams, stanchlorn Lathing with sawn laths to ceili "screeding in Portland cemericory of the company of the	G mesh , etc. ,	6 9 7 # fixing value of the fixing of the fi	9 9 9 1 1 or 1 or 1 or 1 or 1 or 1 or 1	6 6	wood screen	ood blood bloom	8 0	F.R. Each	2 2 2 2 1 1 1 1 1 1 2 2 3 4 4 7 1 2 2 5. I	06 0 7 3 6 d. 0 9 3 5 7 2 9 1 9 4 6 1 3 1 6 6 6 6 8 d. 2 2
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