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Contractors: Ernest Collis, Kidmore End, near Reading.

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THE

ARCHITECTS'



JOURNAL

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

THURSDAY, April 13, 1939

NUMBER 2308: VOLUME 89

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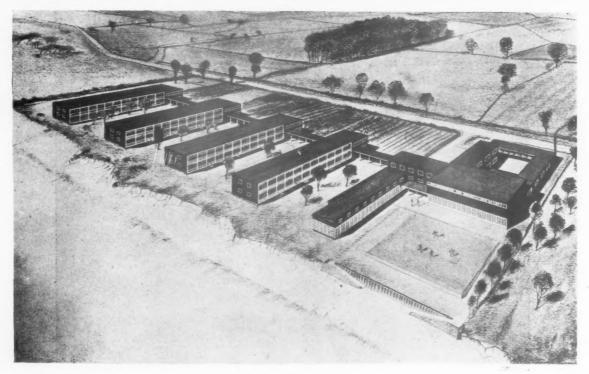
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THE END OF THE DEAR OLD GAIETY



Mr. George Edwardes' Gaiety Theatre, at the junction of the Strand and Aldwych, designed by Norman Shaw, opened in October, 1903, with a musical comedy called "The Orchid" and a cast including Gertie Millar, George Grossmith, junior, and Connie Ediss. It is now to be pulled down. As a condition of renewal of licence, the L.C.C. insisted on structural alterations which were too costly for the theatre's present revenue. A block of offices is to be built on the site.





CAMPS EXHIBITION

Two of the schemes on view at the Camps Exhibition now being held at the Housing Centre. Top, Holiday Centre, Hillborough, Herne Bay. By Max Lock and Judith Ledeboer. Bottom: Holiday Camp for 300 children. By Mitchell and Bridgwater. The Exhibition is reviewed on page 601.



THE REGISTER

AT the end of last September architects found themselves sharing an unpleasant situation with a great many of their countrymen. They were wondering what they would do if war broke out.

For architects this question had a significance greater than for others. They knew that in a modern war their knowledge would be at a premium. At home or overseas skill in building materials, surveying and structure would obviously be needed in bulk. In fact, once a war of movement (always expected but never for long realized) had changed in a month or so into fort *versus* fort, it looked as though victory would go to those who could build most and repair quickest. It was knowing this, and the anticipation of weeks of confusion which must elapse before architects were sorted into jobs where they were needed, that were most desolating for architects.

When the immediate crisis was over architects, for once, did not forget its lessons. During the next two months the R.I.B.A. prepared to set up a National Register of Architects, by means of which the allocation of architects for various duties in wartime could be

made in advance.

On January 2 and 3 this year 13,000 odd registered architects received duplicate index cards issued by the R.I.B.A. in collaboration with the Ministry of Labour. In this matter at least the profession acted promptly and showed itself aware of its responsibilities.

By the beginning of April, over 9,000 cards had been returned—a figure approaching three-quarters

of the total of registered architects.

Architects are inclined to take very short views, and this result is therefore encouraging. But filling in the index cards is a matter of half an hour's work; and that nearly 4,000 architects have not yet bothered to do so seriously hinders the objects of the whole Register.

The JOURNAL hopes that the tardy 4,000 will consider this very seriously on settling down again after Easter. If all registered architects are on the roll the profession can speak with an authority which it does not now possess. Nor is this all. If the Architects' Emergency Panel now tries to speed up the allocation of architects between various duties—which is the whole purpose of the Register—it lays itself open to the rejoinder that 4,000 architects have not yet put themselves in readiness for allocation. At a time when further aggression—diplomatic or by force of arms—may quite possibly occur during the next month or so, we hope every outstanding architect will return his cards at once.

When he has done so the profession can consider how each architect can be given a very good idea of what vacancies will exist for his services on the outbreak of war.

At the moment, apart from a complete Register, the difficulty seems to be that architects are only one section of the Central Register of "persons with scientific, technical, professional and higher administrative qualifications."

The Ministry of Labour, in collaboration with the various professional societies, is no doubt engaged on sifting this mass of varied ability and calculating the appropriate vacancies which will be available in wartime.

This work is bound to take a long time. But from the point of view of the architect it is questionable whether the process needs to be carried through to the end before he is told anything at all of the duties for which he will be needed.

It is obvious that there are two results which could be attained by the architects' Register. First, an actual individual job could be allocated to each individual architect—a process which is bound to take several more months. Secondly (in a much shorter time) various fields of employment could be indicated as being likely to be those which will be offered to architects of certain ages and certain qualifications.

It is this second result which is infinitely the more important at the present moment and there seems no reason why it should not be achieved quickly.

If architects of certain ages are told they will probably be needed—as many will—for the Royal Engineers they can take steps to enlist and even to obtain some training. If others can be told they will be needed, for the first few months at any rate, for A.R.P. services in cities, they can do the same. But if no advice at all is given the coming of another emergency will find architects little better prepared than they were last September.

It would seem quite possible for the Architects' Emergency Panel to keep the profession informed of probable wartime vacancies for architectural services without making the difficult job of the Ministry of Labour any more difficult. Interim bulletins—at first general, but gradually more precise—would enable the Panel to familiarize the profession with its wartime responsibilities and avoid the dangers of an entire lack of information until the complete plan of the Ministry of Labour is ready for publication.



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NOTES &

VIGILANCE COMMITTEE: LATEST

1, R.I.B.A. President Goodhart-Rendel demanded a vigilance committee to vet designs for important buildings. 2, Astragal said committee consisting of whom? Architects ineligible; live-wire laymen, such as Georgian Group? 3, Georgian Group chairman Lord Derwent said difficult to vet modern buildings until some sort of standard established. He would accept for standard: B.B.C., Imperial Airways, Scarborough Hospital, Radio City, Battersea Power Station, Underground Building, R.A.F. aerodremes. 4, Astragal, puzzled, said: would this standard satisfy other eminent laymen. Decided to find out. Invited readers to nominate for vigilance committee laymen in whom they would have confidence. 5, readers sent in names of 61 men, 2 women. 6, A.J. Editor, at Astragal's request, asked above 63 for six recent buildings they approved of.

First of all, any enquiry of this sort invariably rehaut monde. Resrespondence

ANSWERING my appeal for a list of six up-to-standard recent buildings (see terms of reference reproduced above) seems to have become a favourite Easter Holiday occupation. For I have been overwhelmed with replies.

It is too early to summarise them yet, but the same characteristics appear in recent lists as in the earlier ones: 1, a tendency automatically to include Radio City, New York (I suppose partly because Lord Derwent did, and partly because it is nothing if not modern in the sense of being up to date); though it seems to have little to do with the problem of what is most suitable as a standard for this country. That, however, is my fault and the Editor's; it should have been made clear that only English buildings applied. 2, The continued and gratifying popularity of Peter Jones. 3, The simultaneous popularity of Mr. Holden's more massive work, the Underground building and London University, which are often included in the same lists as work by, say, Tecton, though they

could hardly be more different in expression—I do not disapprove of this; it is admirable that the selection should show real catholicity as distinct from partisanship. 4, The remarkably cold treatment by the haut-monde of the Royal Academy. Sir Giles Scott's Battersea Power Station and Sir Edwin Lutyens' Campion Hall are the only works by Academicians (I think) that have yet been mentioned. 5, No one has mentioned the R.I.B.A. building.

Here are some more lists:

Mr. John Betjeman:

Peter Jones Store. Ladbroke Grove Flats. Penguin Pool, Regent's Park. St. Philip's Church, Cosham, Portsmouth (by J. N. Comper).

Here he stops as he says he can't think of *six* decent modern buildings, but he adds as an afterthought David Pleydell-Bouverie's work on the foreshore at Folkestone.

Professor J. D. Bernal:

Highpoint, Highgate. Leeds Housing Estate. I.C.I. Laboratories, Manchester. Osterley Underground Station. Battersea Power Station. The Comet Inn, Hatfield.

Mr. Joseph Peter Thorp (writing from Portmeirion):

Underground Building. Battersea Power Station. Peckham Health Centre. Campion Hall, Oxford (by Sir Edwin Lutyens). "Yaffle Hill" (by Edward Maufe). London University.

Dr. Vevers, of the Zoo (who only gives five, as he tries to give a building in each of six types and cannot think of one of any merit under the heading of Civic Buildings):

Finsbury Health Centre (public services). Bexhill Pavilion or Penguin Pool (entertainment). Chermayeff's Sussex House (country domestic). Highpoint Flats, 1 and 2 (town domestic). Peter Jones (business).

Mr. Jack Beddington (of Shell-Mex):

Radio City, New York. Peter Jones. Frank Lloyd Wright's "House in the Wood." Recent Suburban Houses in Johannesburg. Avenue Close, Regent's Park. Royal Bank of Canada, Lothbury.

As a reminder to readers I have asked for some of the buildings chosen to be reproduced in this issue.

BUILDING SOCIETIES: THE GOVERNMENT BILL

The Government has now issued its reply to Miss Wilkinson's Bill in the shape of the Building Societies (No. 2) Bill.

Like Miss Wilkinson, the Government has decided that existing mortgages which are dependent on collateral security must be legalised: but, in future, societies are to be limited to certain classes of such security, and guarantees given by builders in the form of collateral security (or "builders' pools") will have to comply with certain requirements in order to qualify as one of authorized types of collateral security.

The Bill contains none of the warranties of good building, which are the main feature of Miss Wilkinson's Bill, but it does provide that a building society shall be deemed to warrant that the purchase price of the house to which the advance is applied is reasonable, unless the society should expressly negation such warranty. (The possibility of contracting out of the obligation should disappear from the Bill, as it will otherwise, no doubt, become common form to do so).

This provision is vague and will be difficult to enforce, but its importance lies in the fact that the Government now admit what the societies have always denied, namely, that the responsibility for making sure that the article he is



Chosen by Mr. Jack Beddington and several others—Radio City, New York.



Also chosen by Mr. Jack Beddington-Frank Lloyd Wright's "Falling Waters."



Chosen by Mr. Joseph Thorp—Campion Hall, Oxford, by Sir Edwin Lutyens.



Chosen by Mr. Jack Beddington-Suburban Houses at Johannesburg.



Also chosen by Mr. Jack Beddington—Avenue Close, Regent's Park, by Stanley Hall and Easton and Robertson.

Other buildings chosen by readers' nominees for a layman's vigilance committee are illustrated on page 601.

purchasing is worth the money he pays for it, rests, not with the purchaser, but the building society.

THE DEAR OLD GAIETY

Many titled women, we are told, were among those who sighed to hear that the Gaiety Theatre is to follow the Lyceum into oblivion. This unusual interest on the part of the haut-monde in the fate of a building is explained by the fact that these ladies were ex-Gaiety girls, survivors of that madcap galaxy for whom nightly waited outside the stage door the line of discreet broughams and rakish hansoms, each containing a young gentleman of fashion, title or wealth. Those were the days.

It was on October 26, 1903, that 1,300 lucky people settled down in the rose pink, green and gold interior to see the *Orchid*, while the less lucky criticized Norman Shaw's exterior (see p. 595).

Now the Gaiety, unable to face alterations insisted on by the L.C.C. before a renewal of its licence, is to make way for an office block—one more office block. Heigh-ho...

SCHOLARSHIP CORNER

'The design represents Architecture, typified by the figure of a young man, opposed to the forces of Nature in

the form of a white stallion. The central group is surrounded by architectural motifs, including a wall to which is attached a poster bearing the Latin words familiar to every schoolboy: "Balbus murum ae disicavit"—"Balbus best of all."

Thus the Public Relations Officer of the International Building Club. Education to-day embraces a pretty wide variety of subjects, but "every schoolboy" should be congratulated on as free a piece of translation as we are likely to get in these days. International the Building Club maybe, polyglot no.

INFORMAL EXCITEMENT

The next Informal Meeting at the R.I.B.A. (Wednesday, May 3, at 6.30 p.m.) is going to be something special.

In every detail, except reality, it will be an Appeal against the refusal of a local Council to allow a passably modern house to be built in its area. A strong team of inspectors, local councillors, counsel and general public has been booked, and a unique store of irrelevancies are ready for the cross-examinations. Two architects have already broken down after glancing through the exhibits.

ASTRAGAL

NEWS

POINTS FROM THIS ISSUE

The North Eastern Trading Estate have won a "bet" by completing the building of a factory in one calendar month

" Would the attainment of proportional representation by departmental chiefs on the Council of the Institute induce them to behave any better?" ...

Winning design in the Coseley Council School Competition ...

THE LEEDS SCHOOL OF ARCHITECTURE

The first premiums in the two prizes offered by the Northern Architectural Students' Associa-tion in connection with its recent Congress tion in connection with its recent Congress at Hull have been awarded to students of the Leeds School of Architecture, Leeds College of Art. Mr. C. N. Hardman was awarded the first prize for a design for a Youth Hostel offered by the Timber Development Association, and Messrs. Horrocks and Wilson were jointly awarded the first prize for a design for a Fun Fair Building offered by Messrs. G. and T. Earle. The second prize in connection with the latter competition was awarded to Mr. C. Latter competition was awarded to Mr. C. Featherstone, who is also a student of the Leeds School of Architecture.

The Northern Architectural Students' Association

tion comprises the student members of the Edinburgh, Glasgow, Newcastle, Liverpool, Manchester, Sheffield, Hull, and Leeds Schools of Architecture, and the competitions were open to members from all these Schools.

TRADING ESTATE ARE THE WINNERS

Working under severe weather conditions, North Eastern Trading Estate have won a "bet" by completing the building of a factory in precisely one calendar month, or six weeks

ahead of the programme.

On March 3, Mr. M. Sigmund instructed N.E.T.E. to build a 23,000 sq. ft. factory for him. He explained that, as it was wanted for big air raid precautions contracts, it was

THE ARCHITECTS' DIARY

Thursday, April 13

HOUSING CENTRE, 13 Suffolk Street, S.W.1.
Camps Exhibition. Until May 6, 10 a.m. to
5 p.m. Saturdays: 10 a.m. to 12 noon.
BULLININ CENTRE, 158 New Bond Street, W.1.
Exhibition of Architecture in Drama by Professor
Ernest Stern. Until April 22.
INSTITUTION OF STRUCTURAL ENGINEERS,
11 Upper Belgrace Street, S.W.1. "Reinforced
Brickwork." By C. W. Hamann and L. W.
Burridae. 6,30 p.m.

Brickwork, By C. W. Hamann and L. W. Burridge. 6.30 p.m.
IDEAL HOME EXHIBITION. At Earls Court.
Until May 6.

Friday, April 14

600

610

628

POLYECUNIO SCHOOL OF ARCHITECTURE.
Surceyors' and Auctioneers' Section. Fifteenth
Annual Dinner of Post and Present Students. At
the Florence Restaurant, W.1.
INSTITUTION OF STRUCTURAL ENGINEERS.
Milland Counties Branch. At the James Watt
Memorial Institute, Birmingham. "Reinforced
Brick Masonry." By F. G. Thomas. 7 p.m.
Western Counties Branch. At the Merchant
Venturers Technical College, Bristol. "The New
Bascule Bridge." By J. B. Bennett. 7.15 p.m.

Tuesday, April 18

HOUSING CENTRE, 13 Suffolk Street, S.W.1. Luncheon, "Essentials in Design of Holiday and Ecacuation Centres." By Dr. Thomas Adams.
FACULTY OF ARCHITECTS AND SURVEYORS. City of London Branch. Annual General Meeting. At "The White Hart Hotel," 39 High Holborn, W.C.1. 7 p.m.

Wednesday, April 19

HOUSING CENTRE, 13 Suffolk Street, S.W.1. Reception to Local Authorities. "Camps." By Sir Ronald Davison. 6 p.m.

absolutely essential that he should be able to install his machinery on or before May 15.

Despite the very short time allowed, Mr.

Methven, the manager of the Estate, accepted the challenge on the basis that Mr. Sigmund would pay extra rent up to £60 a year, at the rate of 6 per cent, on the overtime paid for work.

N.E.T.E. then set out to create what is believed to be a world record in factory con-

ARCHITECTS AND NATIONAL SERVICE The R.I.B.A. Emergency Panel announces that it has been informed by the Ministry of Labour that the Provisional Schedule of Reserved Occupations has been amended to reserve architects as from the age of 25 years instead of reserving them without any age limit.

Members of the profession up to the age of 25 are therefore free to offer themselves for any form of National Service.

500,000 ACRES PRESERVED

Half a million acres of the most beautiful country in England are protected by three





Winners of the Godalming Civic Centre Competition: left, Mr. Bryan Westwood; right, Mr. Edmund Ward. The final premiated design was published in last week's issue.

planning schemes which have just been approved by the Minister of Health. The Lake District (South) Scheme covers such

Ine Lake District (South) Scheme covers such famous places as Patterdale, Langdale, Grasmere, Troutbeck, Arnside and Kirkby Lonsdale. A second scheme covers the whole of Wensleydale, considered by many to be the finest of all the Yorkshire dales. A third includes the whole of the coast of the North Riding of Vorkshire except. Scarborough, where the Yorkshire except Scarborough, where the Borough Council are preparing their own scheme, and the areas included in the South Tees Scheme, which is in an advanced stage of preparation. Robin Hood's Bay, Whitby and Runswick Bay fall within this scheme, together with the Vorkshire Moera distributed. with the Yorkshire Moors adjoining.

BUILDING INDUSTRIES NATIONAL COUNCIL

The position of the building industry shows North of England and Scotland being compensated by a decline in the South of England. The preliminary figures, for 140 urban authorities cavital Levels of the setimental value of

ties outside London, of the estimated value of buildings for which plans were approved in February, show an increase for Great Britain of £528,000 or 7.1 per cent., compared with the corresponding total a year ago. This is the first £528,000 or 7.1 per cent., compared with the corresponding total a year ago. This is the first increase on the year since August, 1938, but is due entirely to a rise of £914,000 in Scotland to more than double the figure of a year ago. The total for England thus continues to show a declining tendency, the fall compared with February, 1938, occurring mainly in Outer London and the South-East.

The rise in the total for Great Britain is due mainly to housing, which increased by £660,000.

mainly to housing, which increased by £660,000 or 14.9 per cent., compared with a year ago. The increase in Scotland, however, amounted to £1,107,000, so that the increase in the total marks a considerable fall in England.

$\begin{array}{ccc} THE & R.I.B.A. & INTERMEDIATE \\ & EXAMINATION \end{array}$

The following are the dates on which the forthcoming R.I.B.A. Intermediate Examination will be held: May 19, 20, 22, 23 and 25, 1939 (Last day for applications: April 19, 1939).

IDEAL HOME EXHIBITION

The Daily Mail Ideal Home Exhibition was opened on Tuesday last at Earls Court, S.W. It will remain open until May 6. This is the first time the Exhibition has been held at Earls Court.

NEWS IN BRIEF

- Mr. C. Holliday, M.ARCH., F.R.I.B.A.,
 M.T.P.I., of 22 Suffolk Street, Pall Mall, S.W.I.,
 left England for Ceylon on March 31, and expects to return in November.
- Mr. Edward Armstrong, F.R.I.B.A., has emoved his office to 19 Manchester Square,

COMPETITION RESULT

Coseley Council School: The Award.
Mr. A. C. Bunch, F.R.I.B.A., the assessor of the competition for a public elementary school at Lanesfield for Coseley U.D.C. (limited to architects within the territory of the Birmingham and Five Counties A.A.) has made his award as follows:

Design placed first (£100): Messrs. Nicol, Nicol and Thomas, A.R.I.B.A., 111 New Street, Birmingham.

Design placed second (£30): Mr. J. Blackburn, A.R.I.B.A., 30 The Crescent, Old Hill, Staffs,

Design placed third (£20): Mr. J. A. Suggitt, A.R.I.B.A., 771 Shirlea Road, Hall Green, Birmingham.

Birmingham.

Commended: Mr. Rolf Hellberg, A.R.I.B.A.;

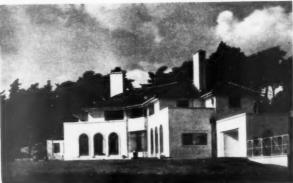
Messrs. Hickton, Madeley and Scott, A.R.I.B.A.;

and Messrs. Beard, Bennett and Cooper,

F., L. and A.R.I.B.A.

The winning design is reproduced on pages





The laymen nominated by JOURNAL readers for membership of a Laymen's 3 Vigilance Committee (see Astragal this week) have been sending in their selections of the six best recent buildings. On this page are:

- 1. Chosen by Mr. John Betjeman—St. Philip's, Cosham, by J. N. Comper.
- 2. Chosen by Mr. Jack Beddington Royal Bank of Canada, Lothbury, E.C., by Stanley Hall and Easton & Robertson.
- 3. Chosen by Mr. Joseph Thorp "Yaffle Hill," Dorset, by Edward Maufe.
- 4. Chosen "as an afterthought" by Mr. John Betjeman Folkestone Swimming Pool, by D. Pleydell-Bouverie.
- 5. Chosen by Professor J. D. Bernal
 —Osterley Underground Station, by
 S. A. Heaps (Consulting Architects: Adams, Holden and Pearson).





CAMPS

EXHIBITION AT THE HOUSING CENTRE

(Until May 6)

THIS singularly opportune exhibition has been organized in record time and has managed to be extremely representative: there are good photographs of existing camps, both in this country and abroad, and there are many drawings and models of proposed camp buildings which should stimulate interest in this comparatively new branch of architecture and social service.

The demand for holiday camps for children and for adults has been stressed in the Press and elsewhere for the last two or three years. Holidays with pay and the campaign for physical fitness successively suggested a camp programme. Now a new and urgent need for camps has arisen out of the scarcity of billeting in certain areas. Fifty camps each to accommodate 350 children are to be built by the Government, seven in Scotland and the remainder in England. These are to be experimental, and it is concluded that many more will follow.

Architects and town planners have welcomed the idea of assisted camp projects; but they have asked (as so often in other cases) that they should be carefully sited and designed. Now that the case for camps has been proved the question of their location and planning becomes of first importance. The exhibition at the Housing Centre is particularly interesting in this respect because it demonstrates a wide variety of suggestions made by both individual architects and associations.

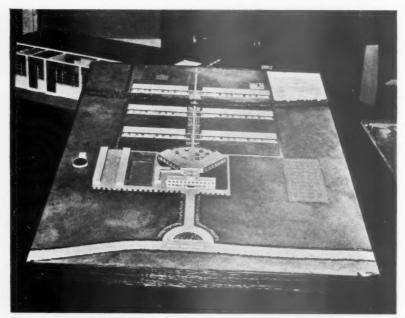
The majority of the proposals, however, date from the period when the case for camps was being made, and as a result they tend to overstress particular aspects—such as special camps for holidays with or without pay and non-profit making school and nutrition camps for children. A new set of circumstances arises out of the Government's recent decision to build camps for evacuation purposes—a proposal requiring a reconsideration and greater co-ordination of all camping activities. There is one scheme on exhibition of an approach to this new problem by the statement of basic principles, an exact accommodation schedule, and a detailed consideration of cost and construction.

All of the schemes submitted agree upon the principle of single-storey buildings, simplicity and economy of structure and repetition of units. As the camp problem inevitably produces an unusual type of building for the English countryside, in order to avoid landscape conflicts most of the camps are shown to be surrounded by thick foliage—one might say at the same time safe from the enemy and the C.P.R.E.

The one study of basic requirements in the exhibition announces the advent of a new group of architects and planners— C.P.C.

Their exhibit is worth close examination.





From the Camps Exhibition at the Housing Centre: top, screen showing typical English Holiday Camps; bottom, model of camp at Rogerson Hall, Lowestoft, managed by the Workers' Travel Association.

Camp location is approached by a national survey of population concentrations and strategic industries which define the danger zones in this country. A study of the relationship between danger zones and the area of agriculturally productive land, which must be preserved in the national interest, defines areas suitable for camping. Camping areas are by no means unlimited. Reserved camp zones are advocated wherein the smaller country towns already scheduled as centres of administration, food distribution, and medical services in an emergency, become the centres of camp grouping. Location within these reserved zones finally resolves itself into the choice of suitable sites within specific distances from these small towns, so that the essential facilities that camps need in the way of distribution, administration, water, light, and medical services can be economically provided.

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An effort has been made to define the basic space requirements of the various elements composing camps. There are at present too many arbitrary approaches to camp accommodation. Here is an attempt to arrive at indisputable elements. The analysis of these factors and their relationships in the design of camps is pioneering in yet another field of architectural activity. Then follow a series of attractive diagrammatic layouts of various camp types which embody practical consideration of the relationship between component elements.

The group has surveyed the field of building construction applicable to camps by a series of diagrams dealing with traditional and contemporary constructional methods applicable to foundations, walls and roofs. Each building technique dealt with indicates the relative amounts of skilled and unskilled labour needed in construction, an approximation of costs, and constructional time. Though the considerations of labour, cost, and time must necessarily be generalities applicable to each method of construction, they nevertheless give an extremely clear picture of the relative advantage of constructional methods.

The C.P.C.'s contribution to the exhibition marks a definite step in the planning and architectural approach to camp construction based upon a realistic appreciation of the factors to be contended with if camp development is to be something other than a haphazard and confused exploitation of yet another field for responsible architectural activity.

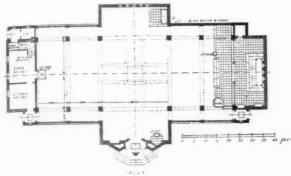
BUILDING SOCIETIES: GOVERNMENT BILL

The Government has now issued its reply to Miss Wilkinson's Bill in the shape of the Building Societies (No. 2) Bill, which is described as one "to declare and amend the law as to the making of advances by building societies, as to the security taken for advances made by such societies, as to the payment of commissions in connection with the business of such societies, and as to the liability of persons concerned in their administration." The Government, like Miss Wilkinson, has decided that there must be no doubt as to the legality of existing mortgages which are dependent upon collateral security; but, in future, building societies are to be limited to certain classes only of such security, and the guarantees given by builders in the shape of what are now known as the "builders' pools" will have to comply with the detailed requirements of the Bill in order to

(continued on page 604)

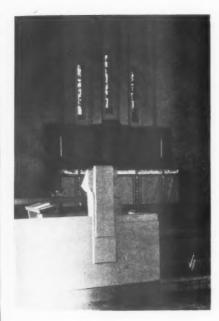
Clive Bell's First Choice

Contemporary Buildings among



GROUND FLOOR PLAN







In his letter replying to the JOURNAL's request for his list of the six best buildings in Britain (see Astragal) Mr. Clive Bell wrote (see also last week's A.J.):

"I do not think I have seen any building put up in London since the war that I would call first-rate. But then there are many that I have not seen. I suspect the happiest achievements of contemporary architecture are churches, and of these the best that I know is Bishop Andrew's at Morden, by Geddes Hyslop."

PROBLEM—Church to seat 400 on the St. Helier Estate.

PLAN—The symmetrical plan was suggested by the site, the tower of the church being on the axis of Wellhouse Road. Need for economy played a large part in the design; the complete building costing £6,500 and the furnishings £250.

CONSTRUCTION AND FINISHES—Columns, trusses and tower are of reinforced concrete. Walls, dark brown-red facing bricks. Concrete was rubbed down to expose Thames ballast aggregate. Roof is of pantiles. Internal: walls plastered with rough stipple finish. Ceiling and gallery front are of acoustic wallboard. Floor is of teak blocks; Chancel is paved with reconstructed Purbeck stone with Irish marble round altar. Doors are oak and light fittings of Larana wood with red and gold bands. Reredos is of various marbles.

Above, view from the south and the interior; left, the altar.

qualify as one of the authorised forms of collateral security, or " as described in the Bill. "additional security," as it is

described in the Bill.

The Bill contains none of the warranties of good building, which are the main feature of Miss Wilkinson's Bill, but it does provide that a building society shall be deemed to warrant that the purchase price of the house to which the advance is applied is reasonable, unless the society should expressly negative such warranty. (The possibility of contracting out of the obligation should disappear from the Bill, as it will otherwise, no doubt, become common form to do so.)

obligation should disappear from the Bill, as it will otherwise, no doubt, become common form to do so.)

This provision is vague, and will be difficult to enforce, but its importance lies in the fact that the Government now admit what the societies have always denied, namely, that the responsibility for making sure that the article he is purchasing is worth the money he pays for it rests not with the purchaser, but the building society. As the Law Journal says, the warranty of reasonable price is really to the same effect (in principle, but not in practice) as those contained in Miss Wilkinson's Bill. In these circumstances it is obviously desirable that, having once admitted the principle of the societies' liability, the Government should ensure that the warranties are of some practical value, and such as will do something to cure the evils which are now common.

The further provisions of the Government Bill are directed towards preventing the "knockdown" sales to builders, of which some societies are guilty, restricting the payment of commissions on the introduction of business to a building society (this may be unpopular with many people besides solicitors) and ensuring that directors of societies take adequate steps to see that valuations are made by competent persons, which is by no means always the case at present. Apart from the form of the warranty given to the house-purchaser, the Bill is no doubt fairly satisfactory so far as it goes, and certainly an advance on the existing law. But it does not go far enough, and many of the remedies which Miss Wilkinson's Bill proposed to give to the mortgagor should find their way into the Government Bill. Two final points: the mortgagor should have the right to see the report of the society's surveyor on the strength of which the advance is made, and the question of extending the score of the Bill to any company. the mortgagor should have the right to see the report of the society's surveyor on the strength of which the advance is made, and the question of extending the scope of the Bill to any company carrying on the business of a building society (although not technically a society incorporated under the Building Societies Acts) should be considered,

METROPOLITANP

BY G. MACKENZIE TRENCH:



SITE—Irregular, with a narrow frontage to Judd Street, and a long frontage to Compton Place, which has restricted access from Tavistock Street. Above, the main entrance from Compton Place; below, the Judd Street front.





SITE PLAN

N POLICE SECTION HOUSE, W.C.1



Looking down on to the main entrance from Compton Place.

treet, ricted

elow,



The recessed doorway to the main entrance from Compton Place has a reinforced concrete canopy. The stone balustrade to the entrance steps has bronze handrailing supported on turned and moulded balusters. The fanlight above the doorway has a decorative bronze grille.

M



Part of the Compton Place front. Portland stone is used for the copings and strings. Brick and stone facings are tied back to the frame by dovetailed anchor slots and keys. Reconstructed stone is used for strings, copings and dressings on all elevations except this.

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floors of stairca frontag roofs on scr Winde

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steel to cabine glass of Follow Kitcher 25 per glazer

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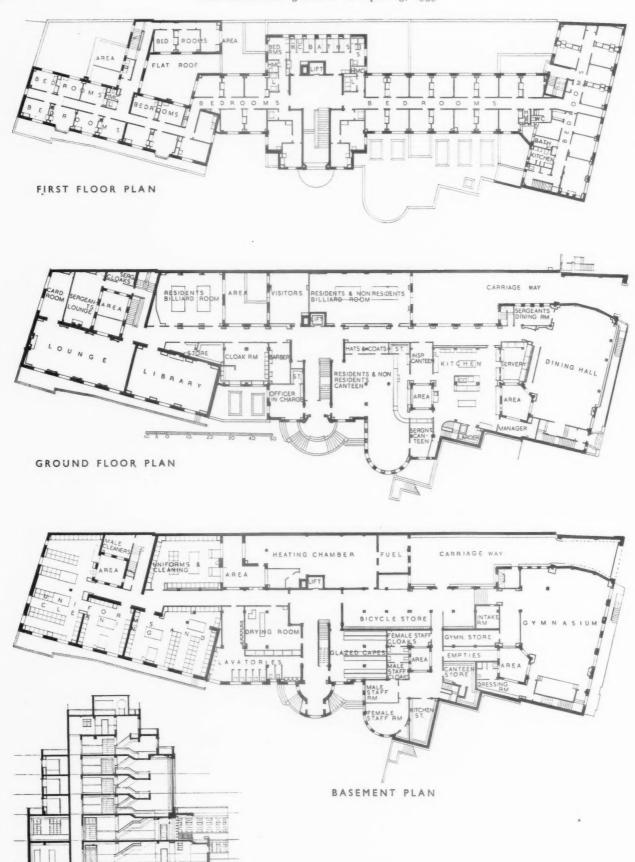
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therm etc., i fan ir

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MA



METROPOLITAN POLICE SECTION HOUSE, W.C. . BY G.

SECTION

PLAN-The plan consists of a central block with connecting wings joining the Judd Street portion on the east and a part of the old reconstructed section house on the west. In consideration of the adjoining owners' rights and to obtain the maximum amount of light and air, the central block and wings are set back from the boundaries at first-floor level. The high level of the ground floor was fixed by the existing floor level of the old section house, and the desire to provide well-lighted rooms on the lower ground floor. The main entrance in Compton Place was so placed as to afford a certain degree of privacy and to secure entry in the centre of the building to provide easy circulation. The carriageway from Judd Street provides a trades entrance with direct access to the heating chamber, kitchen, stores and staff rooms.

CONSTRUCTION AND EXTERIOR FINISHES-Steel-framed with reinforced concrete floors, roofs and staircases. The steel frame is encased in concrete and is sound-insulated. Stanchions carrying heavy loads have grillage bases and those next to adjoining property are supported on steel cantilever foundations. External walls are 9-in. brick panels with Buckinghamshire brick facings and Fletton brick backings. All external walls have an inner lining of hollow concrete blocks separated from the brickwork by a 13-in. cavity. Internal partitions generally are hollow concrete blocks. The inner lining and the partitions are supported on the concrete floors and are not tied to the external brickwork or frame. Walls to staircases and lift well are in Flettons. Roof to the Judd Street frontage is of timber construction, with sand-faced tiles. Other roofs are flat, covered with patent built-up roofing laid to falls on screed and with a wearing surface marked in square tiles. Windows are steel casements in deal frames with oak cills.

INTERNAL FINISHES-Dining-room: Floor, Gurjun wood strip; skirting and dado rail, teak; walls, plaster, finished stone-coloured distemper; picture rail, deal, painted; frieze, plaster, finished cream distemper; ceiling beams and cornices in fine plaster; ceiling, calime with scrim to heating panels, finished ivory distemper; windows, pressed steel frame and steel casements sherardized and painted cream; window boards, black glazed tiles; pelmet boards, painted cream; curtains, blue; cafeteria service, counter-stainless steel top with black vitreous enamelled front; showcases, display cabinets, teak, wax polished; lighting fittings, champagne-coloured glass bowl with plate over and bronze gallery and stem.

Following are the finishings for the principal rooms:—
Kitchen: Floor, vitreous oatmeal-coloured tiles in 3-in. squares,
25 per cent. of which are carborundum non-slip finish; walls,
glazed block and tiling full height, oatmeal colour. Natural and mechanical ventilation by extract fan connected to concealed ducts, which terminate in grilles flush with the ceiling and in the canopy

over the cookers. Canteen: Floor, jarrah block; skirting and dado rail, teak; dado, green rubber; other finishings as dining-room; window boards, teak; pelmet boards, painted cream; curtains, green. Library: Floor, Gurjun wood strip; walls, panelled in Australian

straight-grained walnut.

Doors throughout are flush with the exception of external doors and glazed corridor doors, which are framed teak, wax polished. Ironmongery is bronze finish.

SERVICES—The engineering equipment throughout the building was designed under the direction of the Police Engineer. The heating system is by hot water at a low temperature circulating through embedded steel panel coils in the ceilings-all entirely concealed. The hot water supply to the kitchen, baths and lavatories is by an indirect system with calorifiers and large storage cylinders in duplicate. Three boilers are installed in the boiler-house, each fired by an automatic stoker, feeding small anthracite nuts. Circulating pumps in duplicate are provided for all services. A control panel is installed on which are mounted thermometers, draught gauges, C.O.2 indicators, pressure gauges, etc., to ensure the efficient running of the systems. The centrifugal fan in the kitchen changes the air twenty times per hour, if necessary. Top, interior view of staircase window over the main entrance from

Compton Place; bottom, the library.
The general contractors were Messrs. Haymills (Contractors), Ltd.; for list of sub-contractors see page 627.





MACKENZIE TRENCH: ASSISTANTS, D. T. EDWARDS AND A. L. LUKE

LETTERS

"ONCE BITTEN" "A LIGHTING ENGINEER" "GENE RHYNER" HAROLD WYATT

Building Societies

SIR,—The "legal position" by a solicitor I have read with interest, so probably have many more of your regular readers, but is "bad material and workmanship" the only pitfall which has done much to put the brake on speculative building, thereby swelling the number of the unemployed today in the building trade?

May I be permitted through the columns of the Architects' Journal to cite another important point for which the building society accept no

responsibility?

A thrifty individual looks around and decides on a house which practical opinion confirms is being built of good materials by best workmanship. price is £820 freehold—no road charges, and no legal charges. The building society being satisfied that the pur-chaser is in a position to meet his obligations agrees to advance £,760 because there is the collateral security.

The purchaser satisfies himself that everything is in order, but is concerned about the road charges because the builders are a limited company, and wonders how these charges will be paid if the company goes into bankruptcy before the road is made up. The purchaser may decide that the safest step to take is to obtain a personal guarantee from the principal

director of the company.

The purchaser occupies his house and pays regularly to the building society. After a period of 4-5 years the Council presents to the purchaser a demand for road charges to be paid. If the house is on a corner site these charges may amount to a figure between £100 and £150. The purchaser may find the building company went into bankruptcy a year or more before this time. The principal director of this company may have mortgaged all he possesses, including personal estate, and on approaching the director's solicitors, the purchaser finds they are unable to make an offer on his behalf. If the purchaser should decide to take the matter to court he will probably throw away "good money for bad." The building society will accept no responsibility although they advanced £760 against a security which ultimately turns out to be £700 or perhaps less. The purchaser has to pay and very dearly, if he obtains a second mortgage. I hope the new legislation will do something to protect the interests of

both parties so that the demand for

sound houses on sound terms will be met in the very near future.

"ONCE BITTEN "

Finchley, N.3

Lighting Standards

SIR,-I am interested in lighting standards of any kind, chiefly because about a year ago I had in my usual business to choose or reject quite a large number of concrete standards, made by the firm which produced those shown in the pictures Nos. 1 and 2.

As it is quite probable they will consider it beneath their dignity to reply, as a firm, to your anonymous contributor in a recent issue of THE ARCHITECTS' JOURNAL, I, with your permission, also remaining anonymous, may perhaps express an opinion.

Being an engineer, I soon understood that the designs were according to engineering principles, and the effect to be obtained was balance in appearance as well as in actuality, i.e. as far as possible, hence the down tail of the

bracket shown.

I had the opportunity of seeing and discussing a large number of the designs, which range from simple and severe curves to effective openwork, effective in reliability and appearance, and since noticing the writer M.M.'s letter I have considered from my own point of view the varying differences, the good and bad of both the concrete and the steel lamp-post of all descriptions. I need not go back to some of the cast-iron atrocities that are still in existence, although some of them were considered good design in their time. Times and designs change, and if

elaborateness is not to be thought of, then what has your writer to say of the many slender steel shafts that are fearfully ornamented with scrolls and other forms of light ironwork that are merely an encumbrance to the standard, creating wind stress and offering no

backing or support?

The designers have in both cases to consider the cost as well as the selling possibilities, which means repetition, so while the steel standard has evolved itself upon the productions of a drawnsteel tube to be doubtfully ornamented by appendages, the concrete standard maker has to have his design to suit the possibility of a set mould wherein he can place his steel with the certainty of its being equally covered with concrete. He may have a hundred designs, but that most frequently chosen will determine his production of moulds, and he will eventually be tied to the design which demand makes cheaper by repetition.

Let your correspondent "M.M." or his sponsor, Mr. Ellis, be constructive and send to your pages a design they consider suitable. It will, I feel sure, if not already existing and is reasonably possible to make, pay "M.M." better than procuring indifferent pictures to make comparisons that suggest more than artistic sensibilities.

" A LIGHTING ENGINEER" S.E.15.

Sir,-I have been rather interested in the correspondence regarding lighting standards, particularly the letter by "M.M." with regard to this design. He suggested that the design of these standards did not come under the province of architectural criticism, which is rather ironical.

I think I am quite safe in stating that the design of the steel poles which he prefers emanated from my drawingboard, as did many others both in this

country and overseas.

My claims to architectural knowledge are based upon nine years' experience (including articled pupilage) in purely architectural practice. In view of this, my connection with the design of lighting standards may appear rather odd, but is due to the fact that an enterprising firm of manufacturers decided that engineering principles allied to architectural design would produce pleasing as well as utilitarian results.

Might I add that the intermediate letters dealing with stresses, strains and moments in my opinion appear to be rather superfluous in view of the fact that these poles were "calculated" by some of the most able and experienced engineers in the country, who specialize

in this type of work.

"GENE RHYNER"

Earls Court, S.W.5.

Official Architects and Elections

SIR,—I reply to your correspondent "Amazed," whose letter appears in THE ARCHITECTS' JOURNAL, for March 9. Do departmental chiefs do any better on the whole for their staffs than private practitioners even though they do not have to pay them out of their own pockets? I question it.

Would the attainment of proportional representation by departmental chiefs on the Council of the Institute induce them to behave any better? I question

But putting aside such doubts, is it not obvious that assistants as a whole would be willing and even eager to vote for departmental chiefs who first took the trouble to show themselves to be worth voting for? Many years have passed since such a rapprochement could have been made, but we are still only offered the same old ridiculous story: "Vote for me, for I am an important Fellow!"

What is wanted to be known today is the way in which "importance" has been achieved. Is it the outcome of fair and impartial dealing with those of "less importance," or merely the result of years of selfishly pursued ambitions?

HAROLD WYATT

Welwyn Garden City.

WORKING DETAILS: 741

CAFÉ SHOPFRONT . MARKET STREET, MANCHESTER . MISHA BLACK AND WALTER LANDAUER



The design of this shopfront is, to some extent, the standard design for a chain of similar cafés in various parts of the country. It is carried out in teak, with bronze trim. The main lettering above the projecting cornice is in steel, with blue neon lighting. The projecting canopy is also in teak, with glazed panels of obscured glass lit from above. There is a mahogany-framed glass screen just inside the entrance doors, which separates the entrance vestibule from the main restaurant. Details are shown overleaf.

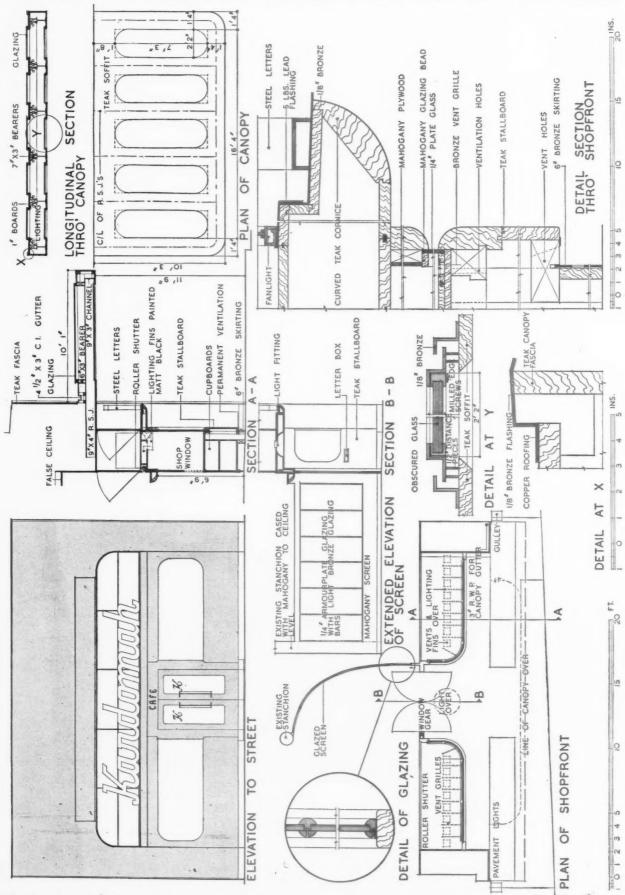


WORKING

DETAILS

7 4 2

CAFÉ SHOPFRONT . MARKET STREET, MANCHESTER . MISHA BLACK AND WALTER LANDAUER



De ails of the cafe shopfront illustrated overleaf. 612

The Architects' Journal Library of Planned Information

SUPPLEMENT



SHEETS IN THIS ISSUE

721 Wall Facing Materials and Wallboards

722 Roofing



All the Information Sheets published in The Architecis' Journal Library of Planned Information since the inception of the series to the end of 1938 have been reprinted and are available in the four volumes illustrated here. Price 21s. each.

Sheets issued since index:

701 : Tile Hanging

702 (420 revised) : Fixing Insulating Board

703 : Sheet Metals

704 : Plan Elements

705 : Metal Work

706: Plan Elements

707 : Furniture Layout

708 : Plan Elements

709 : Flue Construction

710 : Natural Lighting

711: Glass and Glazing

712 (109 revised) : Quarry Tiles

713: Glass and Glazing

714: Metalwork

715 (106 revised): Hot Water Radiators (Pressed Steel)

716: Furniture Layout

717: Metalwork

718: Flooring Materials

719: Plumbing

720 : Water Heating



892

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

DIAGRAMS SHOWING METHOD OF FRAMING AND INSULATING ASBESTOS - CEMENT WALLS:
Openings such as doors and windows should be trimmed in the usual manner and trussed where necessary.

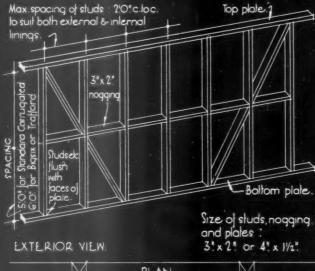
ASBESTOS CEMENT MATERIALS FOR EXTERIOR COVERINGS.

1. Flat sheets (5 different surface finishes) width 4:0", and up to 8:0" long.

2:Everile: Slandard Corrugaled sheets, width 25°, length up to 10:0. 3:Everile: Bigsix Corrugated sheets, width 3:5½°, length up to 10:0. 4:Turnall: Trafford tiles, width 3:8°, length up to 10:0.

ASBESTOS-CEMENT MATERIALS FOR INTERIOR LININGS

- 1. Poilite. Hat sheets, Turnall Decarated sheets in various finishes.
 Widths and lengths as for exterior use. (See back.)
- 2 ·Turnall· asbestos (fire-resisting) wallboard width 4.0, length 8.0, 10.0, or 12.0.



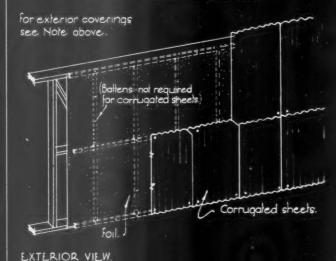
PLAN.

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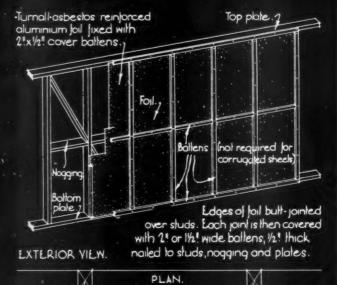
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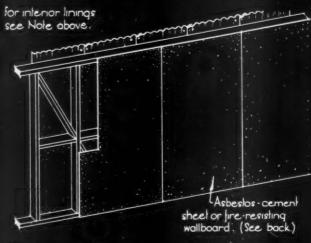
SKETCH SHOWING TYPICAL ARRANGEMENT OF SPACING OF WALL MEMBERS, & MAXIMUM SPANS FOR EXTERNAL AND INTERNAL COVERINGS.



SKETCH SHOWING TYPICAL APPLICATION OF ASBESTOS - CEMENT EXTERNAL WALL COVERING OVER THE FRAMED AND INSULATED WALL.



B) SKETCH SHOWING METHOD OF APPLYING ALUMINIUM FOIL INSULATION TO THE EXTERNAL FACE OF THE FRAMING.



INTERIOR VIEW OF LINING.



(D) INTERNAL VIEW OF WALL SHOWING THE TYPICAL APPLICATION OF ASBESTOS-CEMENT SHEETING OR ASBESTOS WALLBOARD TO THE INTERIOR.

Information from Turner's Asbestos Cement Co. branch of Turner & Newall Ltd.

INFORMATION SHEET: LIGHT FRAME CONSTRUCTION FOR ASBESTOS-CEMENT MATERIALS: WALLS. SIR JOHN BURNLY TAIT AND LORNE ARCHITECTS ONE MONTAGUL PLACE BLOFORD SQUARL LONDON NOIS ACCURAGE A FAMILY OF THE PROPERTY OF

ARCHITECTS' JOURNAL THE LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET • 721 •

WALL FACING MATERIALS AND WALLBOARDS

Subject: Wall Construction for Asbestos-cement Materials

General:

The structural framing required for the fixing and support of the outer lining of an external wall differs according to the type of lining used; i.e. flat sheet, corrugated sheet, etc.; but if the framing is designed to suit not only the outer lining, but also the insulation and inner lining, then it is found that the simple standard framing shown on this Sheet is the most economical and most satisfactory in every case.

This framing consists of a top plate, bottom plate and studs (usually 3 in. \times 2 in. or 4 in. \times $\frac{1}{2}$ in.) at 2 ft. centre to centre, with a central row of nogging if the frame is not more than 10 ft. in height overall.

10 ft. in height overall.

Exterior Linings:

The Asbestos-cement materials most suitable for external

The Asbestos-cement materials most suitable for external wall linings are:—I: Flat Sheets.

(a) Poilite Asbestos-cement Flat Building sheets in the following sizes and thicknesses:

8' × 4' × \frac{52}{52} = \frac{3}{16}" = \frac{1}{4}" = \frac{5}{16}" \text{ or } \frac{3}{8}" \text{ and } \frac{1}{2}" \text{ of } \frac{3}{4}" = \frac{5}{16}" \text{ or } \frac{3}{8}" \text{ and } \frac{1}{2}" \text{ of } \frac{4}{3}" \text{ in } \text

Natural grey colour. (b) Poilite Embossed Asbestos-cement sheets, in the following sizes and thicknesses: $8 \text{ ft.} \times 4 \text{ ft.} \times \frac{1}{4} \text{ in.}$; in five patterns,

(c) Turnall Rough-cast Asbestos-cement sheets, in one size only,

(c) Turnal none size only, 8 ft. × 4 ft. × ½ in., and in buff colour only.

(d) Poilite Pebble-dashed Asbestos-cement sheets, in one size only, 8 ft. × 4 ft. Colours: warm brown pebble-dashed, or Derbyshire spar (white).

(e) Turnall Granitone Asbestos-cement sheets, in one size only, 8 ft. × 4 ft. × ½ in. In eight separate colours.

Everite Standard Asbestos-cement corrugated sheets. Standard sizes :

Lengths, 3 ft., in 6 in. increments up to 10 ft. $\times \frac{1}{4}$ in. thick. Width, 2 ft. 6 in. Net covering width when laid, 2 ft. $1\frac{1}{2}$ in. Depth of corrugations, 1 in. overall.

Colours: Natural grey, red, russet brown, maroon and green. See also Sheet No. 527.

3 : Everite Bigsix Asbestos-cement corrugated sheets. Standard sizes :

Lengths: 3 ft., in 6 in. increments up to 10 ft. $\times \frac{1}{2}$ in. thick. Width: 3 ft. $5\frac{1}{2}$ in. Net covering width when laid 3 ft. $3\frac{1}{2}$ in. Depth of corrugations, $2\frac{1}{8}$ in. overall. Colours: Natural grey, red, russet brown, maroon and green. See also Sheets Nos. 530, 533.

4: Turnall Asbestos-cement Trafford tiles. Standard sizes:—Lengths: 4 ft., in 6 in. increments up to 10 ft. × ½ in. thick. Width: 3 ft. 8 in. Net covering width when laid 3 ft. 4 in. Depth of corrugations, 2 in. overall.

Colours: Natural grey, red, russet brown, maroon and green. See also Sheets Nos. 394, 397, 400, 426, 427, 430.

Interior Linings:

Asbestos materials most suitable for interior linings are :—

1: Flat sheets. Poilite Asbestos-cement flat building sheets, as listed above.

2: Turnall asbestos wallboard.
In lengths, 12 ft., 10 ft., 8 ft., and 5 ft. × 4 ft. wide × ½" thick. Natural buff colour (ready for surface finish by painting, etc.) See also Sheet No. 573.

3: Glazed, decorated and marbled sheets, etc.

3: Glazed, decorated and marbled sheets, etc.

A wide range of varieties of asbestos-cement sheets supplied finished with a decorated surface, ready for fixing, including:

(a) Turnall stipple-glaze sheets in many stippled colours and plain white. Sizes 8 ft. × 4 ft. and 4 ft. × 4 ft.

(b) Turnall marbled-glaze sheets—similar but with marbled patterns. Sizes 8 ft. × 4 ft. and 4 ft. × 4 ft.

(c) Turnall granitone sheets in 8 mottled colours, in size 8 ft. × 4 ft. only.

(d) Turnall decorated sheets, super quality, with a plain glazed surface in pastel colours. Sizes 8 ft. × 4 ft. and 6 ft. × 4 ft.

(e) Turnall glazed panels: plain colours, wood reproductions and fancy patterns, maximum size 6 ft. imes 3 ft. (f) Turnall oak-grained asbestos panels and sheets.

Insulation

The insulating medium used in the construction shown on this Sheet is Turnall asbestos reinforced aluminium foil which is produced on a core of either asbestos paper or asbestos felt.

Foil with the asbestos paper centre weighs 62 lbs. per roll 24 in. wide by 100 yards in length, which equals 0.93 lbs. per sq. yd. Foil with an asbestos felt centre weighs 115 lbs. per roll which equals 1.72 lbs. per sq. yd. See also Sheets Nos. 403 and 406.

Insulation of Roofs and Walls:

Insulation of roofs and walls is usually measured by air-to-air Transmittance U (the number of B.Th.U. which pass per hour per sq. ft. per I deg. F. difference in air-temperature on

Heat resistance (air-to-air) is the inverse of air-to-air transmittance, and is the number of hours for I B.Th.U. to pass per sq. ft. per I deg. difference in air-temperature on both sides. There is a difference in air temperature on both sides and surface temperature on the face of a wall, due to the heat resistance, or to the time taken by heat to pass from a surface to the air in contact with it.

to the air in contact with it.

The heat resistance, on an external surface, is taken at ·15 hours, and on an internal, at ·6 hours, being the time taken for I B.Th.U. to pass per sq. ft. from the surface to the air in either case. The former allows for a wind at 15 miles per hour, the latter for still air. Obviously in still air the heat will transfer more slowly. The heat transmittance of an II-in. cavity wall is calculated thus:

Heat Resistance, R, in hours, per B.Th.U. per sq. ft. per l° diff. in temperature.

diff. in temperature.

			Surface to Surface	Air to Air
Outer surface	***		-	-15
43-in. brick			.9	.9
2-in, air space	(about)		-8	-8
41-in. brick			.9	.9
Inner surface	***	***	_	.6
			2.6	3.35

The heat conductance (surface) is $\frac{1}{2 \cdot 6} \cdot 39$ and transmittance (air) $\frac{1}{3.35}$ ·29. In the tropics a thin wall or roof is better

about ·75 hours The heat resistance of the non-emissive surface is about ·65 hours The total resistance of aluminium foil, provided

both faces are exposed to air, is about 1.4 hours The heat resistance of an air space varies, under different conditions and widths, from about $1\cdot 1$ hours to perhaps $\cdot 7$ hours; for $\frac{1}{2}$ in air space it may be taken at $1\cdot 1$ to $\cdot 9$ hours. The following gives the details of resistance and transmittance of the composite wall panel shown on this Sheet.

Heat resistance, R, in hours, per B.Th.U. per sq. ft. per 1° diff. in temperature.

		Surface to Surface	Air to Air
Outer surface resistance		_	0.15
Asbestos wallboard 1 in.		0.13	0.13
Air space		1.05	1.05
Aluminium foil reflecti)	
of one surface		0.75	1.4
Non-emissivity of or	ther	7	1.4
surface		0.65	
Air space		1.05	1.05
Asbestos-cement flat shee	t l in.	0.05	0.05
Surface resistance	***	_	0.60
Total heat resistance		3.68	4.43

Thermal Transmission and Maintenance Cost: In all light framed and covered construction thermal insulation is essential if comfort conditions are to be maintained in the rooms without excessive heating costs. If the external walls provide only a low insulating value, then not only is the annual cost of fuel unnecessarily high but the whole of the heating equipment must be correspondingly increased above normal. The capitalized cost of fuel saved is usually much greater than the original cost of insulation. Accurate figures showing the relative values can be calculated for any given case if the type of building and type of construction to be used is known.

Turners Asbestos Cement Co. branch of Turner & Newall, Ltd. issued by:

Address (Central Office): Trafford Park, Manchester, 17 Telephone: Trafford Park 2181 London Office: Asbestos House, Southwark Street, S.E.1

Waterloo 4041

Telephone:



Information from Turners Asbestos Cement Co. branch of Turner & Newall Lld.

INFORMATION SHEET: LIGHT FRAME CONSTRUCTION FOR ASBESTOS-CEMENT MATERIALS: ROOFS SIR JOHN BURNET TAIT AND LORNE ARCHITECTS ONE MONTAGUE PLACE BEDFORD SQUARE LONDON WCI + Grea. a. A.

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

INFORMATION SHEET

• 722 •

ROOFING

Subject: Roof Construction for Asbestoscement Materials

General

The roof construction required for any given roof varies not only with the type of asbestoscement roofing material used, but also with the span of the roof and the arrangement of internal partitions which may be used for strutting and support of ceiling joists. For the type of small building with small roof span which is being considered in this series of Sheets, the form of construction shown is probably the most economical for all forms of asbestos-cement roofing materials.

Construction :

The construction consists of a series of rafters at 2 ft. centre to centre tied in at the feet by ceiling joists at corresponding centres; the joists being hung at the centre from the ridge if necessary. Alternatively, if the plan of the building is suitable it may be more economical to run the ceiling joists parallel to the ridge supporting them on the internal partitions. Additional ties must then be provided to tie in the feet of the rafters.

Roofing Materials:

The asbestos-cement roofing materials available are :—

- I: Turnall Asbestos-cement Trafford Tiles. 3 ft. to 10 ft. \times 3 ft. 8 in. For further particulars see Information Sheets Nos. 394-397, 400, 426, 427, 430, 721.
- 2: Everite Standard Asbestos-cement Corrugated Sheets. 3 ft. to 10 ft. \times 2 ft. 6 in. For further particulars see Sheets Nos. 527, 721.
- 3: Everite Bigsix Asbestos-cement Corrugated Sheets. 3 ft. to 10 ft. \times 3 ft. $5\frac{1}{2}$ in. For further particulars see Information Sheets Nos. 530-533, 721.
- 4: Turnall Asbestos-cement Combined Sheets (giving a double roof thickness). Standard size: 5 ft. or 6 ft. \times 4 ft. \times $\frac{1}{4}$ in. thick. Net covering width when fixed, 1 ft. 10 in. Depth of corrugation 2 in. overall. For further particulars see Information Sheet No. 557.
- 5: Turnall Super Sixteen Asbestos-cement Sheets. 5 ft. \times 4 ft. $5\frac{1}{2}$ in. For further particulars see Sheets Nos. 561 and 563.

Colours: All five materials listed above are obtainable in natural grey, red, russet-brown, maroon and green.

- 6: Poilite Asbestos-cement Pantiles. $15\frac{3}{4}$ in. \times $13\frac{1}{4}$ in. and $15\frac{3}{4}$ in. \times $9\frac{7}{16}$ in. Standard lap, 4 in. In russet-brown and green.
- 7: Poilite Newtone Asbestos-cement Slates—Rectangular. Duchess, 24 in. \times 12 in.; Countess, 20 in. \times 10 in.; Ladies, $15\frac{3}{4}$ in. \times $7\frac{3}{8}$ in.

Diagonal (Diamond and Honeycomb pattern). $15\frac{3}{4}$ in. \times $15\frac{3}{4}$ in.

Colours: Green, russet-brown, green-brown, brown stone, blue, red and grey.

Ceiling Linings:

The asbestos materials suitable for ceiling linings are similar to those given on Sheet No. 721 for inner wall linings. All such linings must be backed by framing at not more than 2 ft. widths centre to centre and behind all joints.

Insulation:

The insulation of roofs or ceilings is as important as the insulation of walls, and is provided in the construction shown on this Sheet by laying Turnall Asbestos reinforced aluminium foil loosely over the ceiling joists and stretching strong building paper or felt above it so that a closed air space is formed above the foil and the foil is protected from dust accumulation. For details of aluminium foil see Sheets 403, 406 and 721.

The insulation value (heat resistance) of this construction can be stated as follows:—

Air to air heat resistance in hours per B.Th.U. per sq. ft. per I deg. F. difference in temperature.

Outer surface re	sistance		-	-	.15
Asbestos-cement	t roofing	-	-	-	- 05
Roof air space		-	-	-	.8
Building paper			-		.0
Air space -			-	-	1.05
Reflectivity of al	uminium	sur	face	-	.75
Non-emissivity				-	-65
Air space -		-		-	1 - 05
Asbestos buildin	g board	-			.13
Surface resistance		*	-	-	.65
					F 20

Transmittance ... $\frac{1}{5 \cdot 28} = 0 \cdot 19$.

The corresponding transmittance for brickwork is given in the Report of the Building Research Board, 1937, as follows:

9 in. brick transmittance is 0.44 11 in. cavity wall - - 0.31

Issued by: Turners Asbestos Cement Co. branch of Turner and Newall, Ltd.

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Poplar Hall, Maitland, Ontario. Early 19th century. Windows are on the outside face of walls with deep panelled reveals inside. Roof is slightly pitched: the porch is probably a later addition. From "The Early Buildings of Ontario."

BOOKS

DETAILS

[By R. GARDNER-MEDWIN]

The Early Buildings of Ontario. By Eric R. Arthur. University of Toronto Press. Working Details I: Domestic. Edited by Mildred W. White. The Architectural Press. Price 5s.

PROFESSOR ARTHUR is one of the greatest authorities on early Canadian architecture, but as architect of some contemporary industrial buildings and as editor of the rejuvenated Canadian Institute Journal, he has also shown himself to be one of Canada's most progressive architects. His pleasantly unpretentious book covers the pioneer period in the province of Ontario, from the beginnings of the settlement down to about 1840.

To the average Englishman, apt to look upon Canada as a "backwoods" country even today, the scholarship and easy grace of some of the buildings illustrated will be illuminating. In the neighbouring province of Quebec, buildings of this period are distinctly French in character, but in Ontario, which was settled mostly by Britishers, practically none of the French influence is found. Inspiration came directly from England and Scotland, but also from the "colonial" architecture of the New England and Southern States.

Though a large number of early Ontario buildings were built in wood, there are also several fine examples in brick and stone. Many of them are somewhat ungainly when compared with the exquisite refinements in proportion and detail found in so many of the New England churches, meeting halls and houses. But there are a few which certainly equal, if they do not surpass, examples of the American colonial and early Federation periods.

It is not generally known that Canada

has at least a small number of important contributions to make to architecture, and for that reason alone this book is a valuable as well as an extremely interesting collection.

In addition to the photographs there are some well-drawn details of domestic work.

After looking at the details in Professor Arthur's book, one cannot help noticing how many of the collection of modern domestic Working Details, with a few notable exceptions, lack the sureness and grace of those colonial examples. In spite of the bleak and limited circumstances in which they were built, many of those American and Canadian houses excel even in those qualities of precision and lightness which are supposed to be the special attributes of this age of technical refinements. Perhaps it is because our resources are now almost unlimited, and because we lack any steady conviction, that even the best of our houses reflect a restless striving rather than the assuring calm which most of us secretly desire in our domestic environment.

Working Details: Domestic presents the best that we degenerates have been able to do in the last ten years—details representing another kind of pioneer movement in a world which, seen side by side with these sure-footed pioneer days in Canada not much more than a hundred years ago, suffers at one and the same time the diseases of effete over-civilization and neo-barbarism.

However, Working Details is obviously useful and even valuable as a thoughtfully compiled record of recent domestic achievements. All the drawings have been published at one time or another in this JOURNAL, so there is no need for me to testify to their excellent draughtsmanship. Miss Mildred White, who has made a very good job of compiling and cataloguing the details in an easily accessible form, is also responsible for most of the drawings.

In these days, when there are so many

new materials and so many ways of putting them together, it is very important that we should share our experiments, and, when we think we've hit on something good, publish it in the technical press so that others may profit by it—though in many cases it would be good to know how certain inventive details, so convincing in the beautiful drawings, have stood up to wear and tear.

It can be said, in spite of my earlier general criticism, that nearly all the drawings and photographs in this book show an imaginative application of materials to design, an unusual precision of thought in detailing. They should do much to raise the standard of that almost imperceptible percentage of domestic architecture which is the work of architects.

PLANNED INFORMATION

Architects' Journal Library of Planned Information, Vol. 5. Edited by Sir John Burnet Tait and Lorne. Architectural Press. Price 21s.

If there are any readers who do not already know the "Information Books" published by the Architectural Press, I should not like to mislead them by suggesting that they should be read in bed. And yet they have much in common with the good bedside book, in that they should not be read continuously, but rather dipped into casually for profit and delight.

If used in this wav in spare moments, it should be possible for the architect to keep more up to date in materials and construction, planning, and the host of other subjects covered by these books. This does not, of course, detract in any way from their primary value as reference books.

The fifth volume of the Information Books has now appeared, comprising Sheets Nos. 589-692, which have been published weekly in the JOURNAL during 1938. The index, rightly, covers the Sheets in all previous volumes.

The only improvement that I can suggest is that the index should also be published as a separate sheet, so that several copies may be pinned on the walls of the drawing office for easy reference of a number of draughtsmen.

N. T.

CHESHIRE

Building in Cheshire. Report by C.P.R.E.

THIS is the latest of the publications produced by branches of the C.P.R.E. "It aims," in the words of Professor Abercrombie, "at a constructive policy of development—good plain architecture, interesting site planning, and proper distribution of groups in landscapes."

There are chapters on planning, design, and building materials, and the illustrations have been well selected.



Wells Cathedral; from the banqueting hall of the Bishop's Palace.

From "West Country,"

There is perhaps too much emphasis on details of design, which can only be a matter of opinion, rather than on the question of site control, about which there can be no dispute. But the authors succeed in being persuasive without being superior, and instructive without being dictatorial, and if this book is as widely circulated as it ought to be, it should certainly help to promote a wider public interest in the planning of the countryside.

WEST COUNTRY

West Country. By C. Henry Warren. B. T. Batsford, Ltd. Price 8s. 6d. net.

THIS, the latest addition to the series "The Face of Britain," is textually well up to the standard of the previous volumes, but the layout, new to me, of the plates is disturbing. An illustration, 1½ in. by 1¾ in., of grazing sheep can hardly help a survey of Somerset, Devon and Cornwall. Mr. Warren has the advantage of being a "foreigner" and writes with insight

and a nice sense of architectural values, but it is disconcerting to find no word at all of the Abbeys of Downside and Buckfast, two of the outstanding architectural achievements of later years. A sense of continuity is essential to books of this kind.

G. C.

BOOKS RECEIVED

Sols et Fondations. By Armand Meyer. Paris: Armand Colin. Price 17.50 fr. Influence Lines: Their Practical Use in Bridge Calculation. By David S. Stewart, B.SC., PH.D. With a Foreword by Sir Thomas Hudson Beare. Constable. Price 12s. 6d.

20 Aastat Ehitamist Eestis. Obtainable from F. Wassermann, Tallin, Estonia. Price 9s.

Estonian appears to be one of the few European languages in which the word "architecture" is unrecognizable. This publication reviews twenty years of Estonian architecture in so-so photogravure and two colour plates. About one in ten of the buildings looks tolerable, and five in the whole book are good.

LAW REPORTS

APPEAL UNDER THE HOUSING ACTS, 1925 to 1936

Ripon (Highfield) Housing Confirmation Order, 1938.—White and Collins appellants.—King's Bench Division. Before Mr. Justice Charles.

THIS was an appeal by Juliana White and Bessie Bargrave Collins against an order made by the Ripon Council under the Housing Acts for compulsory purchase of land at Highfield, Ripon, for the purpose of an housing estate.

For the appellants, Mr. W. E. P. Dove said under the order the area of land to be acquired was about twenty acres. His clients took the view that the land was essential to their estate as part of the park and that to take away 20 acres would very much interfere with the amenities of the house, as it formed part of the park. His case was that the order ought not to have been made by the Council, and that there was no evidence upon which the Minister of Health could have said that the land was not land within section 75 of the Housing Act, and that under the circumstances the order should not have been confirmed.

Mr. Valentine Holmes, for the Minister of Health, said the question was whether there was evidence upon which the Minister could find as a fact that this land was not a park. In this case he ventured to say that the Minister was right as the land was more or less fields, which adjoined the house on the estate. The question was one of some importance, because often such appeals meant great delay in the development of a housing estate. His submission was that the Minister was right in his decision and that the appeal should be dismissed.

His lordship said this matter had been the subject of a local inquiry by an inspector of the Ministry and upon his report the Minister confirmed the order. He had no doubt that the question raised as to the land being park land had been fully considered. Under these circumstances he was of opinion that the court could not quash the order. He dismissed the appeal, with costs.

REPAIRING COVENANT IN A LEASE: CONSTRUCTION OF OPTION CLAUSE

Scantlebury v. Cassin.—Official Referee's Court. Before His Honour T. Eastham, K.C.

THIS matter came before his honour on a preliminary point, which raised the question whether in the construction of a proviso contained in a lease for a residential flat, by which the lessee was granted an option to pay a lump sum in lieu of performing covenants to repair and decorate, and in the events which had happened, the tenant was entitled to exercise the option in full discharge of his liabilities under the

The plaintiff, Mr. G. F. Scantlebury, as assignee of the lessors of a flat at Edwardes Terrace, Kensington, sued the tenant, Mr. Patrick Cassin, to recover damages for the breach of m covenant to repair contained in the lease.

His honour, in giving judgment, said the question he was asked to try as a preliminary point was whether on the true construction of the lease and a consideration of the correspondence and the events which had happened, the defendant was entitled, after the issue of the writ, claiming damages against him for breach of covenant, to



Tourists' Hotel in Estonia. Architect, A. Nurnberg. From "20 Aastat Ehitamist Eestis" reviewed on the previous page.

exercise an option to pay £50 in full discharge of all his liabilities under the lease. The question was an important one and there appeared to be no decided case which determined the matter.

The lease was for seven years from December 25, 1931, and expired in December, 1938. It was for a flat with a sitting-room, four bedrooms, bathroom and kitchenette. By clause 2 the tenant had to keep the premises in good, substantial and tenantable repair and to yield them up in the same condition.

The important clause was clause 3, under which the tenant covenanted to do certain specific decorations, and the proviso

was:—
"Provided always that the tenant may at the end of the tenancy, whenever the same may happen, if he so desire, pay to the lessors the sum of £50 in lieu of effecting the repairs and decorations, for which he would otherwise be liable. Such sum to include all the lessee's liability therefor, except in the case of breakages."

When the lease expired, continued his honour, the lessee had not effected the repairs and decorations, which he had covenanted to do. On January 5, 1939, the lessors' solicitors asked the lessee if he wished to pay the £50. To that letter the defendant did not reply. On January 10 another letter was sent defendant, again there was no reply. Early in February the lessee telephoned the lessors' solicitors enquiring if he could take his surveyors to the premises to give him an estimate, but the term having expired that request was refused. The lessors' solicitors then asked if defendant were going to pay the £50, and he replied that if the repairs and decorations only came £30 he would be saving £20. Defendant did not pay the £50, and plaintiff issued the writ claiming damages for breach of covenant.

The defendant contended that if the damage to the reversion was more than £50 he was only liable for that amount, while if it was less he was only liable for the smaller sum. The lessor submitted

that the lessee had failed to exercise his option and that he had now no right to do so, but that he was liable to pay whatever damage the lessor had suffered by reason of the breach of covenant, and that such damages were not limited to £50.

In this case it was open to the defendant to elect whether he would exercise the option or not. If he did not exercise the option, the lessor was left to his right to claim damages for non-repair. The option could only be exercised by the payment of the stated sum. If the repairs were not done and the option was not exercised within a reasonable time after the expiration of the lease, or if the lessee refused to exercise the option, the lessor could enforce his usual rights and claim and recover from the defendant damages for breach of covenant. That was the only remedy open to the lessor. As the lessee had not exercised his option, and as, on the facts, his conduct amounted to a refusal to exercise it, the lessor could claim, under section 18 of the Landlord and Tenant Act, 1927, for the injury to the reversion, and the damages might be more or less than £50, the amount specified in the proviso. In other words, the lessee's liability was not limited to £50.

Therefore in the present case on the facts his honour held that the defendant never exercised his option, and that, after being asked whether he wished to do so, he failed to exercise it. By such failure the lessor was entitled to regard the lessee's conduct as a refusal. He held that the lessee was not at the date of the writ or at any subsequent time, entitled to exercise the option, and that the plaintiff was entitled to pursue his claim for damages for breach of covenant and that such claim was not limited to £50.

FLAT PASSAGES: LIGHTS: CONSTRUCTION

Hyams v. Freehold Co-operative Investment Trust, Ltd. King's Bench Division. Before Mr. Justice Asquith.

NTERESTING points on the construction of a schedule to a covenant for the lighting of flats arose out of the action by Mr. C. Hyams, the tenant of a £246 a year flat he had taken from the Freehold Co-operative Investment Trust, Ltd., at Beverley Gate, West Hill, Wandsworth, when he sued them for an injunction. Mr. Leonard appeared for the plaintiff

and Mr. Gerald Upjohn for the defendants. Mr. Leonard said the action by the plaintiff was for an injunction to restrain the defendants from extinguishing the lights on the staircase and passages of the flats before midnight. The lease contained a covenant by which the defendants covenanted to light the staircase and passages, and the rule in the schedule stated that the light on the staircase would be lighted at dusk each evening and put out when the front door closed at 11 p.m. Plaintiff's complaint was that the lights were put out at 10 p.m., when the porter went off duty.

Counsel argued that this could not be suitable lighting as set out in the schedule. It was true that there was a push button lighting after 10 p.m., which was operated by the tenant, but counsel contended that this was foreign to the terms of the covenant the defendants had entered into. There was an implied obligation by defendants to give suitable lighting and this they had failed to do.

Mr. Upjohn argued that the defendants had complied with their covenant and that the rules and regulations were not binding on the defendants, being for the guidance of the tenants.

His lordship, in giving judgment, said the plaintiff's complaint was for inconvenience, but he also set up a much broader ground that what might be suitable for a £50 a year flat, could not be said to be suitable lighting for a £246 a year flat. Under these circumstances he accepted the plaintiff's submission that suitable lighting in the covenant meant suitable lighting regarding the type of property plaintiff inhabited, and not mere'y with regard to suitable lighting to prevent one meeting with an accident.

Here it was clear that the defendants had covenanted to provide suitable lighting. In similar blocks of flats in the neighbourhood the lighting continued till 11 p.m., and in his view no lighting in the plaintiff's block could be called suitable if it ceased before that hour.

He therefore found that defendants had not complied with the covenant and he granted plaintiff an injunction that the lights be not extinguished till II p.m. His lordship did not consider the action a trivial one and in giving judgment for plaintiff his lordship awarded him two-thirds of the taxed costs.

SOCIETIES AND INSTITUTIONS

Extracts from a paper delivered to the architectural students of Liverpool University by Mr. John Gloag on

ARCHITECTURE AS A VEHICLE FOR PROPAGANDA

THE most bitter opposition may be expected if the modern movement is presented as a revolutionary movement. The young architect of today, who is tempted to study deeply social and economic matters, is doing contemporary architecture a bad service unless he is first a master of building technique. You dare not neglect to perfect your competence as building technicians in order to pursue congenial and perhaps less arduous branches of study.

and perhaps less arduous branches of study. Speaking as I am to an architecturally-educated audience, that may seem like a piece of impertinent advice; it isn't meant to be. Nor am I suggesting that social and economic studies are unimportant; familiarity with contemporary conditions of life is essential, unless we are going to be pansy hermits. But an architect must be a specialist first, and his job is to know how to plan and how to build—and with his expert knowledge he can call the tune anywhere in England today, and even more readily tomorrow, but only if he is a master of building technique.

expert knowledge he can call the tune anywhere in England today, and even more readily tomorrow, but only if he is a master of building technique.

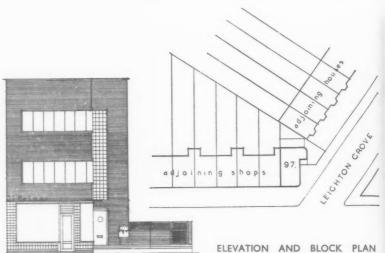
One of the most essential things for an architect in these days of non-stop propaganda is to keep an open mind. I don't mean the sort of mind that is so open that nothing will stay in it; but the sort of mind that refuses to accept limitations, that rejects ready-made faiths, and does its own criticizing and thinking. I suggest, with all respect, that the linking of any branch or movement of architecture with any particular type of political faith leads to a hardening of the mental arteries. We want leaders in architecture—not fanatics.

I am frankly afraid of architecture being used in this country as an instrument of political propaganda. Please don't think I am just a nervous ass who sees a Communist crouching on every cantilever, or lurking under every flat roof. Nor, for that matter, do I see the hand of Colonel Blimp in every building of the bigger, but not better, Georgian school. I am afraid of architecture getting under the control of political propaganda; for then it will cease to grow, and it will be ignored—and architects will be ignored—by the people of England even more pointedly than it is now.

Propaganda has helped architecture. At the end of the nineteen-thirties some people may forget the debt they owe to Sir John Squire and the Architecture Club, which he founded. It won for architecture the attention and frequently the respect of the press.

SHOP, LEIGHTON ROAD, KE

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PROBLEM—Shop, with living accommodation over, for the sale of groceries and greengroceries.

CONSTRUCTION AND EXTERNAL FINISHES—Foundations: Mass concrete, reinforced over council's sewer. Structure: Solid brickwork 14 in. and 9 in. thick in concrete bricks. Partitions: 2 in. and 3 in. breeze blocks. Roofs: Main roof—built-up bitumen roofing with tarmacadam surfacing. Terrace—built-up roofing with concrete tile surfacing. Buff facing bricks with slight variation of colour. Blue tile surround to shop front. Metal windows and railings painted blue. Woodwork to shop front painted marigold, lettering to same painted to match.



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KENTISH TOWN,

D D R



INTERNAL FINISHES—Doors: flush doors throughout, painted; woodwork: special fittings to shop, built-in cupboards to bedrooms, and fittings to kitchens; metalwork: metal railings I in. dia. tube with square mesh infilling; copper tubular handles; distemper to walls and ceilings.

COST-£1,947.

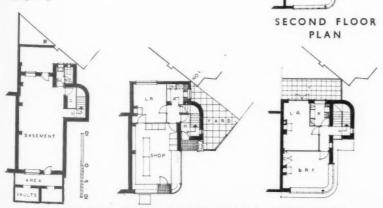
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> The general contractors were Messrs. Charles Sayers and Son (Mitcham), Ltd.; for list of sub-contractors see page 627.



BASEMENT, GROUND AND FIRST FLOOR PLANS

In the early twenties it did good and In the early twenties it did good and strenuous work. It revived among an influential section of the public a consciousness of architecture. The architectural profession is cashing-in on that now. Buildings are treated as "news" today. They were very rarely "news" fifteen or twenty years are and then only if they or twenty years ago, and then only if they were extremely old and about to collapse.

Propaganda of an educational kind could Propaganda of an educational kind could help architecture even more today. The travelling exhibitions organized by the R.I.B.A., when they are designed to interest the general public, and are not just pleasant collections of photographs to please architects, are most effective examples of planned propaganda.

of planned propaganda.

Certainly propaganda can help architec-ture; but when domestic or civic architecture is made to help political propaganda, such perversion of its function must inevitably stultify or warp its development. Nazi Germany provides us with a contemporary example of the results. The official architecture of the Western Empire of Rome (or as I prefer to call it, the Roman United States of Europe) was a classical instance of architecture acting as propaganda for Roman law, order, discipline and bureaucratic control. Both contemporary German and classic Roman are examples of muscle-bound architecture — the Germans have flung away the gifts of the modern movement; when they use modern technique they conceal it; the Romans ignored the promise of the arch. They used it as a structural convenience only. Architecture gives everybody away. It will give us away to our remote descendants, if any of it is left after the next war; though I think that the next war is a long way off if we only have the courage to make democracy the fine thing it has always promised to be, and to recognize that here in England with all our muddles and needless waste and futile cruelties we have a splendid civiliza-

Working-Class Houses: Rise in Costs

The increase in the cost of building working-class houses in Scotland has three main causes \$\(^{\alpha}\) (a) the general overloading of the building industry; (b) the improvement in the standard of the houses provided by local authorities; and (c) the lack of efficient organization in connection with building schemes and proposals. This is the main finding of the Committee of Enquiry appointed by Mr. Colville, Secretary of State for Scotland, on August 30, 1938. The Report, published by H.M. Stationery Office (price 9d.) has just been presented to Parlia-ment.

ment.

ment.
The Committee, having found that the rise in building costs first became apparent during 1935, chose the years 1934–1938 as the proper period for their investigations.
This Report shows that the rise in costs is not mainly attributable to a ramp in prices, but is the cumulative result of many factors. The benefits of the inflated prices have been widely distributed—speculators. manufacturers.

benefits of the inflated prices have been widely distributed—speculators, manufacturers, contractors, and operatives each having their share. An analysis of the increase of £190 in the average cost of houses of all types and sizes in Scotland after the first quarter of 1935 shows that one-half of the total increase is due to the increase in building prices and the other half to the improvement in the standard of the houses provided.

Of the first half, 16 per cent, is stated to be due to the increase in the cost of materials; 17 per cent, to the increase in the cost of labour (including premiums, reduced output, and 6 per cent, for increases in the standard rates of wages); and 17 per cent, for contractors' extra profit, oncosts and cover for possible increases.

OFFICE BUILDING,

FINSBURY

SQUARE,

E.C

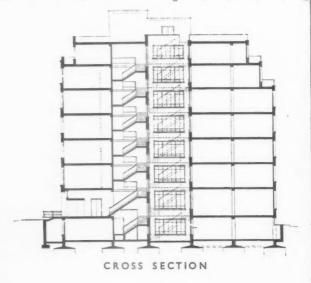
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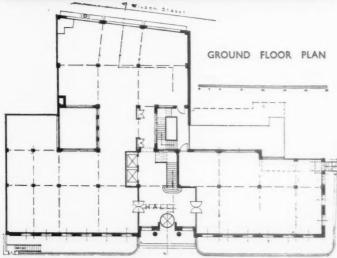
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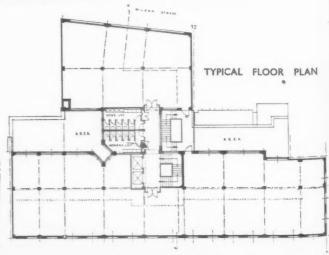




GENERAL—The building was designed as offices for letting, and it was so planned to give the most convenient arrangement for sub-division as may be required by tenants, with the maximum amount of light.

Left, the front to Wilson Street.





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CONSTRUCTION AND EXTERNAL FINISHES—Steel-framed building. The façades to Finsbury Square and Sun Street are faced with Portland stone. Internal courts, brick facings; back elevation, faience and bricks; internal walls, V-block partitions; floors, solid reinforced concrete. Metal casements are fitted and the grilles and balustrades are of wrought iron.

sion as

AN

INTERNAL FINISHES—Staircase finishings are of glazed faience with terrazzo tiles and ebonite strips. Floors for offices are screeded ready for linoleum or other material to tenants' requirements.

SERVICES—Central heating; two lifts; postal letter chutes on all floors.

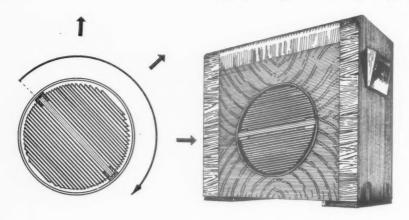
Above, the main entrance; right, the entrance hall and the main front.

The general contractors were Messrs. Trollope and Colls, Ltd.; for list of sub-contractors see page 627.





OFFICE BUILDING, FINSBURY SQUARE, E.C. • BY MESSRS. JOSEPH



the handling of reinforcing rods, form work, and typical specification clauses. A short explanation is given of the reasons underlying each specification clause and the whole handbook, though it cannot obviously in sixty pages pretend to be exhaustive, is none the less a very convenient summary of current practice and should be very useful, not only to students in need of a short introductory course, but to architects who may have copied out typical concrete specifications without bothering to understand the reasons for them. I have from time to time reproached the Association for issuing collections of rather meaningless pretty pictures; this is much more the sort of thing the architect wants.—(The Cement and Concrete Association, 52 Grosvenor Gardens, London, S.W.I.)

TRADE NOTES

[By PHILIP SCHOLBERG]

Portable Air-Conditioner

HE sketch at the head of these notes shows a small portable air-conditioning unit which is known as the It consists of a 2-kw. heating Zephaire. unit with a motor-driven fan, a filter composed of glass silk fibres with a viscous coating, and a humidifier. There are coating, and a humidifier. There are already one or two units of this kind on the market, but the best known of them incorporate a refrigerating unit for use in summer, and the price consequently comes out rather high. The price of this small unit is £15 15s., and the louvres in the grille at the front are set at an angle so that by turning the grille bodily the air stream can be deflected in any direction. Temperature is automatically controlled by a thermostat and the fan motor is of the induction type and will not cause any interference with wireless sets. Inside the heater is a fusible link which disconnects the heating elements if the fan motor should accidentally stop. In the leaflet before me it is stated that "for deodorizing, In the leaflet special perfumes, etc., can be added to the water in the humidifier." This seems to me a possibly sound idea which may prove peculiarly revolting in practice as I cannot easily imagine a smell which would not be preferable to "perfumes, etc."—(Air Conditioning and Engineering, Ltd., 123D Victoria Street, London, S.W.I.)

Fire Extinguishers

A booklet on Industrial Safety from the National Fire Protection Company deals with Essex methyl-bromide fire extinguishers and contains some quite useful notes comparing methyl-bromide as an extinguishing medium with other substances, such as carbon-tetra-chloride, emulsifying water systems, foam, and carbon-dioxide. This firm makes the Essex independent extinguishers for dotting about individually at essential points, but the same units can be used with remote control or with fusible spraying heads which become virtually an independent sprinkler system. Hand trucks containing batteries of extinguishers are made for use in works, and the firm also makes a smoke-detection device which works through the diminution of light received by a photo-electric cell, any smoke automatically ringing an alarm. The same principle is applied to a remote control system in which a small diameter

pipe is laid from the space to be protected to the control position, a suction fan providing continuous air samples to be tested for the presence of smoke. Something very much on these lines has been in use for some years on board ships for continuously sampling the air in different holds, but so far as I know, this latter testing is done purely by eye as the air passes through a glass tube, whereas the photo-electric cell method makes the system automatic and it is not necessary to arrange periodical inspections.—(The National Fire Protection Co., Ltd., Petersham Road, Richmond, Surrey.)

Concrete Practice

The Cement and Concrete Association has just issued No. 4 of its series of concrete handbooks. This one deals with concrete practice and starts with the selection and preliminary testing of materials, continuing with mixing, transport, placing, construction joints and finishing, with further information on shrinkage and expansion,

Hospital Equipment

Now that the new block of the Hospital for Sick Children in Great Ormond Street has been completed, Dent and Hellyer, who supplied all the sanitary fittings and carried out the entire plumbing installation, have issued a booklet illustrating some of the specialized equipment which they have supplied. The photograph on this page shows the surgeons' wash-up in one of the operating theatres, and the glass screens are a departure from normal practice. Dent and Hellyer tell me that they have done this before at a hospital near Salisbury, but this is the first London job. The screens are made of armour plate-glass supported by brackets, and the general arrangement seems an improvement over the design which has up till now been the current practice. The surgeon normally washes in the stream of water descending from the nozzle and the basin is only used to catch drips and serve as a drain. It is not improbable that a certain amount of splashing goes beyond the basin and these glass screens are therefore probably an improvement, since they form a large space in which it would be very easy to wash with the certainty that no splashes or drips could possibly escape. The table in the middle of the photograph (not a Dent and Hellyer



The surgeons' wash-up in one of the operating theatres in the new block of the Hospital for Sick Children, Great Ormond Street, W.C.

production) is used for rubber gloves and any other necessary equipment.— Dent and Hellyer, Ltd., 35 Red Lion Square, London, W.C.I.)

Earth Leakage Circuit Breakers

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In urban areas it is comparatively easy to obtain a satisfactorily low resistance earth for electrical equipment, but in the country where a house or farm may not be on a main water supply, the problem becomes very difficult. A large copper plate buried in damp ground will give good results for a time, but during the summer the ground is always liable to dry out and there may be a considerable increase in the resistance of the earth circuit. Assuming that all the metalwork of conduits and water pipes is connected to earth, a very dangerous state of affairs can arise if there are any small leakages in any of the electrical equipment. In the old days when isolated houses generated their own low voltage D.C. supply, leakages did not matter to any great extent, apart from the fact that they wasted current. With the spread of the grid at 230 volts A.C., electric shocks, instead of being a slightly unpleasant surprise, have become definitely dangerous, for it is generally accepted that alternating current becomes dangerous to human life at a potential as low as 42 volts, and to farm stock, particularly horses and cattle, at about half this value.

Leakage currents should be able to pass easily to earth and should thus blow fuses and isolate the appliance. If the leakage current cannot pass easily to earth, the leak continues and the whole of any metallic system connected to earth becomes alive, and anybody standing, for example, on a damp concrete floor in a garage and turning on a water tap may easily receive a fatal shock. The remedy for this is to instal a system for cutting off the whole of the main current supply if the leakage current reaches a dangerous voltage. Siemens make various trips of this kind which are calibrated to operate at 22 volts. Two models are made, to protect a supply load of 30 or 60 amperes, and the usual free handle principle is used so that the main switch cannot be closed against the leakage current. Prices are 18s. 3d. and £2 5s. 9d. with insulated covers and a small key for testing the earth circuit. The same basic equipment is also made up for the control of electric cookers.—(Siemens Electric Lamps and Supplies, Ltd., 38-39 Upper Thames Street, London, E.C.4.

The Economy of Welding

Ever since electric welding became a commercially possible process in this country, one of the chief claims made for it is that it would show a considerable saving in cost. For building work this claim is perfectly reasonable and there is the additional fact that welding often allows structures which would be difficult if not impossible with more usual methods. Cost figures for a welded structure, for instance, may be taken as accurate, since they are based on executed work, but any figures for savings can only be arrived at by estimating what the cost of a non-welded structure would have been, and however accurately and faithfully these estimates are made, they always leave room for doubt and a little inspired criticism by the protagonists of rival systems. It is therefore interesting to see figures given by Mr. A. Nicholls, of the Royal Corps of Naval Constructors, in a paper read before the Institution of Naval

Architects last week. In the 1936 naval programme two mine-sweepers, the Seagull and the Leda, were built in Devonport Dockyard, and it was decided, in order to obtain a full and reliable comparison, that the Seagull should be all-welded and the Leda built according to standard practice, mainly with riveted joints. The Seagull was completed in 76 weeks as against 84 for the Leda, and the weight saved was 33.7 tons, nearly 10 per cent. of the weight of the hull structure. It should in fairness be pointed out that the Seagull and the Leda are sister ships and were designed to be built by normal constructional methods, and it is therefore probable that if the Seagull had originally been designed as a would have been shown.

THE BUILDINGS ILLUSTRATED

METROPOLITAN POLICE SECTION HOUSE, COMPTON PLACE, W.C.1 (pages 604-609). Architect: G. Mackenzie Trench. Assistant Architects: D. T. Edwards and A. L. Luke. Quantity Surveyors: Gardiner and Theobald. Engineer: C. N. MacDermott. General contractors, Haymills (Contractors), Ltd., who were also responsible for the plaster and joinery. Sub-contractors and suppliers included: W. F. Moore, demolition; F. and H. F. Higgs, Ltd., excavation: Excel Asphalte Co., Ltd., asphalt; Twisteel Reinforcement, Ltd., reinforced concrete: A. H. Herbert & Co., Ltd., facing bricks: Sevenoaks Brick Works, Ltd., sand lime bricks: Bath and Portland Stone Firms, Ltd., stone: Patent Victoria Stone Co., Ltd., artificial stone: Redpath, Brown & Co., Ltd., structural steel: Trussed Concrete Steel Co., Ltd., suspended ceilings; A. H. Herbert & Co., Ltd., tiles: Frazzi, Ltd., special roofings; Moler Products, Ltd., and Attoc Blocks, Ltd., partitions; Eaton Parr and Gibson, Ltd., special glazing to staircase windows: Lenscrete, Ltd., patent glazing (roof lights); Stevens and Adams, wood block flooring; Avon India Rubber Co., Ltd., Camden Tile and Mosaic Co., Ltd., and Twyford Art Paving Co., Ltd., patent flooring; Rosser and Russell, Rosser and

SHOP AND FLAT, KENTISH TOWN (pages 622-623). Architect: E. D. Mills, General contractors, Chas. Sayers and Son (Mitcham), Ltd., who were also responsible for the demolition. Sub-contractors and suppliers included: Dunbrik, Ltd., bricks; James Couper & Co., Ltd., metal windows; Lenscrete, Ltd., glass brick window and pavement light; Joseph

Sandell & Co., Ltd., doors; Brown and Tawse, Ltd., roofing; H. and C. Davis & Co., Ltd., sanitary fittings: Edward Marshall & Co., fireplaces; Adams, Lane and Neave, Ltd., shop-blinds; Allen and Greaves, Ltd., metal railings; Yannedis & Co., ironmongery; L. E. Davis and Merchant Adventurers of London, Ltd., electric lighting and fittings; Cellulin Flooring Co., flooring; Walpamur Co., Ltd., paints and distemper; Nash and Hull, Ltd., metal letters; South Metropolitan Gas Co., gas fittings.

OFFICE BUILDING, FINSBURY SQUARE, E.C.2 (pages 624-625). Architects: Messrs. Joseph. General contractors, Trollope and Colls, Ltd., who were also responsible for the plumbing, foundations, concrete, electric wiring, etc. Sub-contractors and suppliers included: Goodman Price, Ltd., demolition and excavation: Lawfords Asphalte Co., Ltd., asphalt: Ryarsh Brick Co., Ltd., bricks: Flettons, Ltd., bricks: Wandsworth Stone Masonry Co., Ltd., stone: Emerson and Norris, Ltd., artificial stone: Shaws Glazed Brick Co., Ltd., white-brick, terra-cotta exterior and interior faience work: Redpath Brown & Co., Ltd., structural steel: Frazzi, Ltd., special roofings: Nicholls and Clarke, Ltd., glass: Young, Austen and Young, Ltd., central heating: Gas Light and Coke Co., Ltd., gasfitting: Dent and Hellyer, Ltd., sanitary fittings: Carter & Co., Ltd., casements and window furniture: Caston & Co., Ltd., doors to lift openings: F, A. Norris & Co., Ltd., doors to lift openings: F, A. Norris & Co., Ltd., iron staircases; S. Elliott and Sons (Reading), Ltd., revolving doors: Plastering, Ltd., plaster: J. Starkie Gardner, Ltd., metal-work: Hammond Bros. and Champness, Ltd., lifts: F, C. Flack, Ltd., Vi-block partitions; Bull Motors, super silent motors.

Manufacturers' Items

Mr. J. H. Harpin, A.M.I.E.E., of "Thurston," Hoole, near Preston, has been appointed technical representative for William Sanders & Co. (Wednesbury), Ltd., in the Counties of Westmorland, Lancashire, Cheshire, Flintshire, Denbighshire, Merionethshire, Caernarvonshire, Flintshire, and the town of Oswestry, in succession to Messrs. W. T. Rawcliffe and Son.

Thos. W. Ward, Ltd.. Sheffield, have taken a controlling influence in Thomas Smith and Sons (Rodley), Ltd., Rodley, crane and excavator manufacturers, and the following have been added to the Board: Messrs, Joseph Ward, J.P. (chairman), Frank R. Stagg, M.I.STRUCT, E., James Bussey, M.I.STRUCT, E., and C. A. Lee.

Messrs, A. H. Herbert & Co., Ltd., of Imperia House, Kingsway, W.C.2, announce that they have been appointed sole agents for London and Home Counties by Form-a-Key, Ltd., manufacturers of a new process for obtaining an undercut key to concrete finishes.

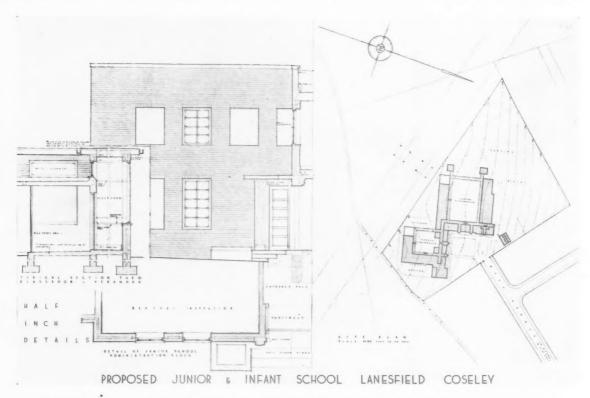
Particulars as to price and application for concrete walls and ceilings where renderings of cement, asphalt or plaster are required may be obtained from the firm.

Vauxhall Motors sales during March have set up a new high record in the history of the company. Well over 7,000 Vauxhall cars and Bedford trucks have been delivered during the month. So far this season Vauxhall sales in this country are 27 per cent. higher than for the corresponding period last year. There has also been a steady increase in export business; shipments during March were considerably higher than those of last year.

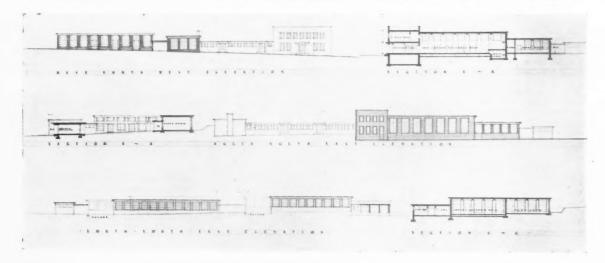
A.R.P. was discussed by Sir Malcolm P. Stewart, chairman and one of the managing directors of the Associated Portland Cement

COMPETITION FOR COUNCIL SCHOOL, COSELEY

WINNING DESIGN: BY NICOL, NICOL AND THOMAS



Main entrance detail and lay out plan. Below, elevation and sections. The floor plans are reproduced on page 629.



Manufacturers, Ltd., at the annual meeting held on March 30. He said: "It has been represented to me that I should urge the claims of concrete in connection with A.R.P. work. I must decline to do so since it has been publicly stated that the whole question of the provision of deep and other forms of shelter is receiving close consideration. The experts are at work and the Cement and Concrete Association has offered its services. Certain aspects of the problems involved are not simple and a decision must be awaited with patience.

must be awaited with patience.

"We do not seek the adoption of any particular scheme merely because it would create a demand for Portland cement. What we desire in the national interest is that the most effective methods should be adopted and the materials

best suited specified. Unless obviously justified by circumstances beyond our control there will be no advance of present prices. Indeed, should favourable circumstances arise, and this means the cessation of the decrease of deliveries means the cessation of the decrease of deliveries as compared with last year and its replacement by a definite upward movement, then thus favoured we should unhesitatingly advocate a reduction of prices. At the moment it is but reasonable that we should wait for the situation to clarify sufficiently to see whether the diminution of volume of demand persists or whether it ceases and is followed by an increase of demand sufficient to provide for an expansion of production. This is the vital factor to be determined before a reduction of prices can be reasonably deemed to be warranted."

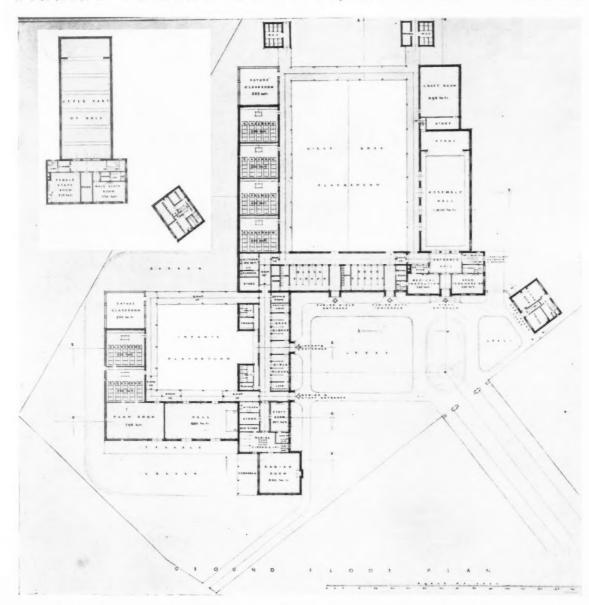
Manchester Building Exhibition

Over one hundred of the leading firms in the building trade are to be represented at the Sixteenth Manchester Building Trades Exhibition, which is to be held at the City Hall, Manchester, from Tuesday, April 18, until Saturday, April 28 Saturday, April 29. Up-to-date methods of building, decorating and

Up-to-date methods of building, decorating and sanitation; displays of timber and wood-working supplies; and machinery in motion will be of first importance to members of the building trades. The non-technical exhibits will occupy a good deal of the available stand space and will be of special interest to the layman. Features on view will include modern furnished flats; an Air Raid Precautions Section;

COMPETITION FOR COUNCIL SCHOOL, COSELEY

WINNING DESIGN: BY NICOL, NICOL A N D



Mr. A. C. Bunch, the assessor, in his report said:
"The new school is to accommodate: (1) infants and babies—140 children; and (2) juniors, boys and girls—250 children. The conditions require the school to be arranged as one unit and in two sections as indicated above, the plan to be convenient for future extensions to accommodate a total of 190 children in the infants' and babies' department, and 300 children in the junior department.
"In Design No. 28, placed first (Messrs. Nicol, Nicol and Thomas), the school is to be on the higher ground at the east end of the site, and the longer axis of the buildings follows the contour of the land, which arrangement avoids a considerable amount of excavation and filling. The variations of the floor levels, necessitated by the fall of the

The variations of the floor levels, necessitated by the fall of the ground, are overcome by the insertion of "ramps" in certain of the corridor floors. There are no steps inside the building except the stairs to the staff rooms on the first floor. The school is planned as one unit divided into two separate sections, as required by the conditions, the whole being compactly planned.

"The building, which is designed with well-arranged masses, will

have architectural character obtained without embellishment and ornament by simple lines and well-proportioned solids and voids. Its appearance when built of materials chosen for good texture and colour

should be pleasing and satisfactory." Following are extracts from the winners' report:

"CONSTRUCTION—Classrooms have external walls of 1 ft. 2 in. by 1 ft. 6 in. brick piers between windows with 11-in. cavity brick panels under windows. A continuous reinforced concrete lintol would transmit roof loads to the piers.

transmit roof loads to the piers.

"Halls have external walls of 1 ft. 2 in. by 3 ft. 4½ in. brick piers between windows with 11-in. brick panels under windows and a continuous reinforced concrete lintol as for classrooms. Flat roofs as in classrooms, all carried on R.S. Js. at 10-ft. centres.

"Administration has external walls of 1 ft. 2 in. brickwork up to ground-floor joists level, with 11-in. brick cavity walls above. Flat roof a before but with one brick bornete.

roof as before, but with 9-in. brick parapet.

"All external brickwork would be executed in an approved wirecut facing brick. Fascia and soffits of eaves and external doors of painted deal. Metal casement windows in painted deal surround and oak cills. Flat roofs of asphalt.

"COST—The estimated cost of the completed scheme is £20,826.52, including all fees, giving a cost per place of £46.75 for the infants and £43.99 per place for the juniors."

Above, ground and first floor plans.

a modern nursery school erected in association with the Manchester University School of Architecture; the R.I.B.A. Exhibition

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of Modern Schools, supplemented by drawings and photographs submitted by members of the Manchester Society and other bodies.

The technical side of the exhibition includes competitions for plumbers, in which the actual work by the competitors will be done in the hall. Copies of the loose supplement containing the labour rates for the principal towns and districts throughout the country can be obtained from the JOURNAL, price 2d. to cover postage.

PRICES

N the following pages appears Prices of Materials
—Part I, with the prices, last published on
March 16, brought up to date.

Immediately below, Messrs. Davis and Belfield mention the principal changes which have occurred in the last month. Similar notes will be published on this page each month.



ANSWERS TO QUESTIONS

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

NOTES ON PRICE CHANGES

Prices generally remain at about the same level. Such changes as have occurred are marked as indicated below.

O. A. DAVIS, F.S.I.

- . Items marked thus have risen in price since last quotation on March 16.
- * Items marked thus have fallen in price since last quotation on March 16.

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

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

B.—Prices for Approximate Estimates.

The previous complete Supplement is contained in the issues of the JOURNAL for March 16, March 23, March 30 and April 6.

Prices vary according to quality and the quantity ordered.

Those given below are average market prices and include delivery in the London area, except where otherwise stated, but do not include overhead charges and profit.

PART 1

CURRENT MARKET PRICES OF MATERIALS-I

BYDAVIS AND BELFIELD

CONCRETOR Cements	
All delivered in paper bags (20 to the	ton) free and non-returnable.
	In 80-ton freights
	F.A.S. Safe Wharf
	4 Tons in River Thames,
D .1 1	and over London Area.
Portland per to	on 42/- 39/6
	on 48/- 45/6
Water repellent per to	
Atlas White (1 barrel 376 lbs.)	per barrel 44/-
	1 ton
	upwards
Colorcrete rapid hardening, Nos. 1 and	d 2 per ton 69/-
Colorcrete non rapid hardening	ner ton 139/- to 309/-
Snowcrete	
bhowerete	1-10 11-15 16-20 1 ton and
	cwts. cwts. upwards
Ciment Fonds delisered C-4-1	
Ciment Fondu, delivered Central	
London area per cwt.	
Aggregate and Sands	
2" Unscreened ballast	per yard cube 5/9
1" (Down) Washed, crushed and gr	aded
shingle	per yard cube 6/-
4" (Down) Ditto	per vard cube 7/3
a (Down) Ditto 2" Broken brick	per yard cube 10/6
2" Broken brick	per yard cube 11/9
Washed non breeze	per yard cube 5/3
Colso brooms 1" to dust	per yard cube 12/6
Washed pan breeze	per yard cube 12/0
White Silver Sand for white cement (one ten lets) per ten 25/
(For Sands for Dricklering and Dk	one ton lots) per ton 25/-
(For Sands for Bricklaying and Pla	
Pavings	
Brick hardcore	per yard cube 2/9
Concrete ditto	per yard cube 3/9
Clean furnace clinker and boiler ashes	per yard cube 3/3
Coarse gravel for paths	per vard cube 6/9
Fine ditto	per yard cube 9/6
Clean granite chippings	per ton 18/6
Red quarry tiles, $6'' \times 6'' \times 7''$	per yard super 6/-
Clean grante chippings Red quarry tiles, $6'' \times 6'' \times \frac{7}{k}''$ Ditto $6'' \times 6'' \times \frac{5}{k}''$	per yard super 5/-
Buff ditto, $6'' \times 6'' \times 7''$	per yard super 6/6
Ditto $6'' \times 6'' \times \frac{5}{8}''$	
Hard red paving bricks	per 1,000 150/-
Reinforcem	
Basis price for mild steel rods, { diam	
from London stocks	per ton £13 0 0
	p
Extras for :-	•
Extras for :—	per ton 10/-
Extras for :— ⁹ / ₁₆ " and ½" diameter	per ton 10/-
Extras for :— ⁹ / ₁₆ " and ½" diameter	per ton 10/- per ton 15/-
Extras for :— \$\int_{0}^{\text{f''}}\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	per ton 10/- per ton 15/- per ton 20/-
Extras for :— \$\frac{1}{6}''' \text{ adiameter } \\ \$\frac{1}{6}'''' \text{ diameter } \\ \$\frac{1}{6}''''' \text{ diameter } \\ \$\frac{1}{6}''''''''''''''''''''''''''''''''''	per ton 10/ per ton 15/ per ton 20/ per ton 30/-
Extras for :— 0	per ton 10/ per ton 15/ per ton 20/ per ton 30/ per ton 40/-
Extras for :— ** f" and ½" diameter ** diameter	per ton 10/- per ton 15/- per ton 20/- per ton 30/- per ton 40/- per ton 60/-
Extras for :— 0	per ton 10/- per ton 15/- per ton 20/- per ton 30/- per ton 40/-

CONCRETOR—(continued)

Sundries

	10 00110111	Print.	
Retarding	liquid, in 5-gallon drums		Ex Warehouse,
	(for exposing aggregate) per gallon	20/-	Southwark Bridge. > Drums chargeable
Ditto.	(for obtaining a bond) per gallon	12/6	and credited, if returned.
	ber Burron)

BRICKLAYER

			Commo	m Bri	cks			
Rough stocks						per 1,000	67/6	
Third stocks						per 1,000	52/6	
Mild stocks						per 1,000	69/6	
Sand limes						per 1,000	50/-	
* Phorpres pr	ressed	Fletto	ns			per 1,000	46/3	
* Phorpres ke	yed F	letton	s			per 1,000	48/3	
Blue Stafford	shire v	wirecu	ts			per 1,000	160/-	
Lingfield engi	ineerin	g wire	ecuts			per 1,000	95/-	
Breeze fixing	bricks					per 1,000	57/6	
Firebricks, be	est Sto	urbrio	ige 21"			per 1,000	155/-	
Firebricks, be	est Ste	ourbri	dge 3"			per 1,000	190/-	
* At King's	Cross	. For	deliver	y in W	.C. dist	rict add 4/3	per 1,000	

Facing and Engineering Bricks

	_	_				
Sand Limes, No. 1 .					per 1,000	85/-
Sand Limes, No. 2 .					per 1,000	70/-
* Phorpres rustic Flett	ons .				per 1,000	66/3
Midhurst Whites .					per 1,000	75/-
Hard stocks, firsts .					per 1,000	93/-
Hard stocks, seconds.					per 1,000	86/-
Sand-faced, hand-mad	e reds			per	1,000 from	115/-
Sand-faced, machine-n	nade re	ds		per	1,000 from	110/-
Red rubbers (93-in.) .					per 1,000	300/-
Hunziker (white) .					per 1,000	67/6
Hunziker (creams, light	t greys	etc.)	per 1,0	000 1	rom 85/- to	100/-
Dunbricks (concrete),	multi 1	eds, e	x work	S	per 1,000	72/-
Dunbricks (concrete),	multi	lave	nder,	ex		
works					per 1,000	75/-
Southwater engineerin	g No.	1 (firs	t quali	ity		
red pressed) .					per 1,000	145/-
Southwater engineering	g No. 2	(secon	nd qua	lity		-0-1
red pressed) .					per 1,000	125/-
Blue pressed					per 1,000	180/-
4 A 4 TZ C	D J . 1		- 337 6	Atabat	-4 - 44 4 10 -	- 1 000

* At King's Cross. For delivery in W.C. district add 4/3 per 1,000. Discount if accompanied by order for pressed 2/- per 1,000.

CURRENT PRICES

BY DAVIS AND BELFIELD

BRICKLAYER AND DRAINLAYER

BRICKLAYER—(continued)

White, Salt and Coloured Glazed Bricks (9" \times 4\frac{1}{2}" \times 2\frac{7}{8}")

The following prices are subject to $2\frac{1}{2}$ per cent. trade discount and $2\frac{1}{2}$ per cent. cash discount, and include delivery to any railway station (minimum 4-ton loads). Add 10/- per 1,000 for delivery in London area.

Prices per 1,000	White, Ivory and Salt Glazed						Buff, Cream and Bronze			Other Colours			All Colours		
	1	Best	t	Seconds		Best		Best		t	Seconds				
	2	s.	d.	2	s.	d.	2	s.	d.	2	s.	d.	£	s.	d.
Stretcher, glazed															
one side	24	0	0	22	0	0	26	0	0	29	10	0	23	0	0
Header, glazed one end	23	10	0	21	10	0	25	10	0	29	0	0	22	10	0
Double stretcher, glazed two sides	32	10	0	30	10	0	34	10	0	38	0	0	31	10	0
Double header, glazed two ends	29	10	0	27	10	0	31	10	0	35	0	0	28	10	0
Quoin, glazed one side and one end	30	10	0	28	10	0	32	10	0	36	0	0	29	10	(

Limes and Sand

	1-ton lots	6-ton lots
Lime, greystone	per ton * 42/-	37/6
Lime, chalk	per ton * 42/-	37/6
Lime, blue Lias (including paper bags)	per ton 47/6	42/6
Lime, hydrated (including paper bags)	per ton 47/-	42/6
Washed pit sand	per yard cube	7/6

(For cements, see "Concretor.")

Hire of jute sacks charged at 1/6 and credited at 1/6. If left, charged at 1/9.

Sundries

Wall ties, self coloured				per cwt.	19/-
Wall ties, galvanized				per cwt.	24/6
Hoop iron, black				per cwt.	25/-
D.P.C. slates, size 18" × 9	"			per 1,000	150/-
D.P.C. slates, size 14" × 9	"			per 1,000	117/6
D.P.C. slates, size 14" × 4	1"			per 1,000	59/-
*Ledkore D.P.C. Grade A			per	foot super	5d.
*Ledkore D.P.C. Grade B		*	per	foot super	6id.
*Ledkore D.P.C. Grade C			per	foot super	8d.

* Trade discount 5 per cent. and cash discount 5 per cent. Prices include delivery on minimum of $\mathfrak L4$ orders.

	9"×3"	9"×6"	9"×9"	12"×9"	14"×9"
Earthenware airbricks: red, blue, vitrified and					

bun	terra	cotta	each	-/8	1/4	2/4	4/-	6/8
				9"×3"	9"×6"	9"×9"	$12''\times6''$	12"×9"
			School					
		1	per doz.	3/-	5/6	11/-	11/-	20/-

Galvanized ditto per doz. Black hit and miss cast iron ventilators	5/6	11/-	22/-	22/-	40/-
per doz	19/-	15/-	. 21/-	21/-	36/-

Galvanized ditto per doz.	24/-	30/-	42/-	42/-	7	2/-	
	1' 0"	1' 6"	2'0"	2' 6"	3' 6"	5' (0

Buff terra cotta chimney	1 0	1 0	2 0	2 0	0 0	2 0
pots each Fireclay per ton	2/6	3/-	4/4	5/9	13/4	22 6
Fireclay per ton	45/-					

Wall reinforcement supplied in standard rolls containing 25 yards lin. 2" wide black japanned per roll 2/1 Greater widths pro rata $2\frac{1}{2}$ " wide galvanized ... per roll 3/2 price carriage paid on $2\frac{1}{2}$ " wide black japanned per roll $2/7\frac{1}{2}$ orders of £5. Discounts $2\frac{1}{2}$ " wide galvanized ...per roll $3/10\frac{1}{2}$ for quantities.

Partitions

		2"	21"	3"	4"
Breeze	 per yard super	1/31	1/54	1/8	2/3
Clay tiles	 per yard super	2/3	2/6	2/9	3/1
Pumice	 per yard super	2/8	3/-	3/6	4/-
Plaster	 per yard super	2/3	2/9	3/3	4/-

BRICKLAYER—(continued)

Shepwood Partition Bricks size $9'' \times 2^+_8''$ and $2^+_2''$ on bed. Terms, as for Glazed Bricks

Prices per 1,000 except where stated per brick		Wh	ar	Iv d	-		C	rear and ron:	m)the olou			All	rs
	1	Best	t	Se	con	ds		Best	t		Best	t	Se	con	ds
Double stretcher,											s.		£	S.	d.
glazed two sides Single stretcher, glazed one side											10			0	0
	1	Eacl	1	1	Eacl	h	1	Eacl	h]	Eacl	h	I	Eacl	n
Round end glazed two sides and one end		-/10	01/2		-/10)		1/0	1 2		1/0	raine.		-/10) <u>1</u>

		Gas Fl	ue Blocks		
				Single Flues	Double Flues
Straight blocks			each	1/1	1/11
Building in set			per set of 3	2/8	4/10
Cover blocks			each	1/5	3/-
Raking blocks 45°			each	2/9	3/11
Raking blocks 60°			each	1/11	2/10
Offset blocks			each	3/4	4/19
Closer blocks			each	1/1	1/11
Closer flashing blocks			each	1/-	1/8
Straight flashing blocks	5		each	1/-	1/8
Terminal and cap			per set	6/9	11/6
Middle terminal and ca	B		per set	6/3	10/9
End terminal and cap			per set	6/6	11/3
Corbel block			each	4/10	3/2
Gathering block			each	-/	9/8

DRAINLAYER

Agricultural Pipes

Pipes in 12" lengths . . per 1,000 67/6 92/6 120/- 210/- (Delivered in full loads Central London Area.)

Salt Glazed Stoneware Pipes and Fittings

			4"	6"	9"
Pipes (2' lengths)		each	1/8	2/6	4/6
		each	2/6	3/9	6/9
Single Junction, 2' long		each	3/4	5/-	9/-
Yard Gulley, without grating		each	6/3	6/101	11/3
Ordinary round or square G	Frating,				
painted		each	$-/7\frac{1}{2}$	1/3	2/6
Ordinary round or square G	Frating,				
galvanized		each	1/01	2/1	4/44
Extra for Inlets, horizontal		each	1/6	1/6	1/6
Extra for Inlets, vertical		each	2/3	2/3	2/3
Intercepting Trap with S	tanford				
Stopper		each	17/6	22/6	37 6
Grease and mud interceptor w	vith buc	ket for	remov	ring)	
silt and grease for 6", 9" a				iron > each	20/-
grating, painted					
Ditto, with iron grating galvan	nized	* *		each	21/101

The above prices to be varied by the following percentages for the different qualities given. All subject to $2\frac{1}{2}$ per cent. cash discount.

	British Standard	British Standard Tested
Orders for 2 tons and over	Less 20%	Plus 5%
Orders under 2 tons, 100 pieces upwards	Less 21%	Plus 221%
Orders under 2 tons, less than 100 pieces	Plus 71%	Plus 321%

	Best	Seconds
Orders for 2 tons and over	Less 271%	Subject to 15%
Orders under 2 tons, 100 pieces upwards	Less 10%	off the price of
Orders under 2 tons, less than 100 pieces	Nett	best quality

* Items marked thus have fallen since March 16.

CURRENT PRICES BY DAVIS AND BELFIELD

DRAINLAYER AND MASON

DRAINLAYER—(continued)	DRAINLAYER—(continued)
Cast Iron Drain Pipes and Fittings	Channels in Brown Glazed Ware
Socket and Spigot Pipes:— Weight Size 9 fts. 6 fts. 4 fts. 3 fts.	4" 6" 9"
(per 9 ft.) each each	Half round straight channels 24" long each 1/3 1/101 3/41
1.1.8 4" per yard 6/2 6/11 11/- 8/4	Half round straight channels $30''$ long each $ 4/2\frac{5}{4}$ Ditto, short lengths each $1/3$ $1/10\frac{1}{4}$
1.1.20 4" per yard 6/5 7/1 11/3 8/7	Half round ordinary channel bends each $1/3$ $1/10\frac{1}{2}$ — each $1/10\frac{1}{2}$ $2/9\frac{1}{2}$ $5/0\frac{1}{2}$
$egin{array}{cccccccccccccccccccccccccccccccccccc$	Ditto, short each 1/10 2/9 —
Socket and Spigot Pipes :—	Ditto, long each 3/9 5/7½ 10/1½
Weight Size 2 fts. 18 ins. 12 ins. 9 ins.	Three-quarter round branch bends each $5/ 7/6$ $ 6'' \times 4''$ $9'' \times 6''$
(per 9 ft.) 1.1.8 4" each 6/11 6/2 5/5 4/11	Half round taper channels 24" long each 3/9 6/9
1.1.8 4" each 6/11 6/2 5/5 4/11 1.1.20 4" each 7/	Half round taper channel bends each 4/81 8/51
2.0.6 6" each 10 11	The above prices are subject to the same discounts as those given for "Best" quality salt glazed stoneware pipes.
4.0. 2 9" each — — — — —	
Tonnage Allowances:— Orders up to 2 tons nett.	Manhole Covers
Orders 2 to 4 tons less 2½%	• 24" × 18" single seal for foot traffic. (Weight
Orders 4 tons or over less 5%	0.3.0 in lots of 24) each 14/6 25/9
4" 6" 9"	• 24" × 18" single seal for light car traffic.
Bends each $6/1\frac{1}{2}$ $12/7$ $39/10$ Single junctions each $10/9$ $22/ 69/6$	(Weight 2 cwt. in lots of 24) each $38/9$ $65/3$ \bullet 24" \times 18" Wood Block pattern. For road
Intercepting traps each 36/9 47/2 134/6	traffic. (Weight 3 cwts.) each Coated 63/-
Gulleys ordinary trapped each 14/8 — —	Fine Cast Galw
Extra for inlet 4" each 4/ Grease Gulley trap each 115/2	• Cast step irons, 13½" long, 6" wide, 9" in wall,
Grease Gulley trap each 115/2 — — H.M.O.W. large socket gulley	approximate weight $5\frac{1}{2}$ lbs. each per dozen 14.9 $25/6$
trap with 9" gulley top and heavy	Galvanized fresh air inlets with cast brass
grating and one back inlet each 23/3 42/	fronts (L.C.C. pattern) each 5/6 20/3
Cast Iron Inspection Chambers The larger figures below refer to	
the main pipes and the smaller	MASON
figures to the branches	Yorkstone
$4'' \times 4''$ $6'' \times 4''$ $6'' \times 6''$ $9'' \times 6''$ $9'' \times 9''$ Straight chambers with	Building quality Robin Hood and Woodkirk Blue Stone.
one branch one side, each 36/9 47/2 52/8 110/3 124/11	Blocks scrappled, random sizes per foot cube 4/6 Add for blocks to dimension sizes per foot cube 6d. (each
Straight chambers with	Add for blocks to dimension sizes per foot cube 6d. (each dimension)
two branches one side, each 55/1½ 65/6 77/2 150/8 194/4	Templates with sawn beds, edges rough (up to 4 ft. super
Straight chambers with three branches in all each 64/11 75/4 89/5 162 11 —	and not over 2' 6" long) per foot cube 5/-
Straight chambers with	Templates with sawn beds, sawn one edge per foot cube 6/-
four branches in all each 74/9 85/2 101/8 175/2 -	Templates with sawn beds, sawn two edges per foot cube Prices f.o.r. Yorkshire, railway rate to London Station
Straight chambers with three branches one side each 69/10 87/- 99/3 — —	per ton. (Minimum 6-ton loads.) 18/3
three branches one side each 69/10 87/- 99/3 — — Straight chambers with	Ancaster Stone
four branches in all each 79/7½ 96/9 111/6 — —	
Straight chambers with	Freestone, random blocks per foot cube 3/6 Brown weather bed stone selected for
five branches in all each 89/5 106/7 123/9 — — Straight chambers with	polishing all brown blocks per foot cube 8/-
six branches in all each 99/3 116/4 136/	Brown and blue weather bed stone
Straight chambers with	selected for polishing per foot cube 7/- Prices f.o.r. Ancaster, railway rate to London Station approxi-
four branches one side each 91/10½ 109/- 131/4 Straight chambers with	mately 11 d. per foot cube (minimum 6-ton loads).
five branches in all each 101/8 118/10 143/4 —	White Manafald Stone
Straight chambers with	White Mansfield Stone Random blocks (yellow bed) for dressings per foot cube 4-
six branches in all each 111/6 128/7½ 155/7 —	Random blocks (yehow bed) for dressings per foot cube
Straight chambers with seven branches in all each 121/3 138/5 167/10 — —	pavings and copings per foot cube 3/6
Straight chambers with	Prices f.o.r. Mansfield, railway rate to London station,
eight branches in all each 131/9 148/8 180/1 — —	6 ton lots per foot cube 1/2
The branches to the above are at 135° 4" 6"	Bath Stone
Extra for branches between 135° and 180° each 7/4 7/4	Random blocks, delivered railway trucks, Paddington or
Extra for branches between 90° and 135°	South Lambeth per foot cube 2/10‡
other than standard angles each $6/1\frac{1}{2}$ $6/1\frac{1}{2}$ $4'' \times 4''$ $6'' \times 4''$ $6'' \times 6''$	Portland Stone
Curved chambers, no branch 90°-112½°	Whitbed, in random blocks of 20 feet cube average,
each 26/4 — 37/4	delivered railway trucks Nine Elms, South Lambeth
Curved chambers, no branch 135° each 26/4 — 37/4 Curved chambers, one branch 135° each 33/1 47/9 53/11	or Paddington per foot cube 4/5 Basebed—add to the abov per foot cube -/3
Curved chambers, one branch 135° each 33/1 47/9 53/11 Curved chambers, two branches 135° each 39/10 64/4 74/9	For every foot over 20 ft. cube average—add per foot cube -/1
Channels in White Glazed Ware (Unselected Quality)	For every foot over 30 ft. cube average—add per foot cube -/01
4" 6" 9"	?" Thick Plain Marble Wall Linings
Half round straight channels, 6" long each 2/4 3/2 5/3 Half round straight channels, 12" long each 3/3 4/5 6/11	Roman Travertine per foot super 5/-
Half round straight channels, 12 long each 4/- 5/3 8/5	Golden Travertine per foot super 6/3
Half round straight channels, 24" long each 4/8 6/4 10/6	Roman stone per foot super 4/6
Half round straight channels, 30" long each 5/10 7/11 13/2	Hopton-wood stone per foot super 5/- Second statuary per foot super 4/6
Half round straight channels, 36" long each 7/- 9/6 15/9 Half round ordinary or long channel bends each 8/5 12/11 21/-	Second statuary per foot super 4/6 Sicilian
Half round ordinary or short channel bends each 6/- 8/5 -	
Three-quarter round ordinary branch bends	Artificial Stone
each 8/1 11/8 —	$6'' \times 3''$ Copings and sills per foot run 1/6 $6'' \times 6''$ Copings and sills per foot run 2/4
Three-quarter round ordinary branch bends, midgets each 7/3 — —	$9'' \times 3''$ Copings and sills per foot run $2/-$
6"×4" 9"×6"	9" × 6" Copings and sills per foot run 3/4
Half round taper channels 24" long each 7/10 11/3 Half round taper channel bends each 10/3 17/9	$12'' \times 3''$ Copings and sills per foot run $2/4$ $12'' \times 6''$ Copings and sills per foot run $3/9$
Half round taper channel bends each 10/3 17/9 These prices are subject to 20% discount.	Cornices according to detail, per foot cube (from) 6/9

• Items marked thus have risen since March 16.

CURRENT PRICES

BY DAVIS AND BELFIELD

MASON, SLATER, TILER AND ROOFER, AND CARPENTER

	one to match Natural Stone	Westmorland Green Slates	ued)
	s, ashlar, etc., average size per foot cube 11/-	Bests, 24" to 1 Proportionate	
Window sills, $9'' \times 3''$ section ,, $7'' \times 3''$ section	per foot run 2/-	Price of per ton	over in sq. yds.
Slate Slabs,	cut to size and Planed 1" 1\frac{1}{2}" 1\frac{1}{2}"	Random sizes. No. 1 Buttermere fine light green 240/-	per ton
Not exceeding 4' 6" long or 2	' 3" wide	No. 2 ,, light green (coarse grained) 215/-	27-28
,, 6' 6" long or 3"	per foot super 3/1 3/4 3/11 ' 3" wide per foot super 3/9 4/1 4/10	No. 5 , olive green (coarse grained) 197/-	25-27
Exceeding 6' 6" long or 3' 3"	wide	No. 5 Medium green 197/-	25-26 27-28
	per foot super 4/1 4/6 5/2 per foot super -/5 -/5 -/6 per foot run -/4 -/4 -/5	No. 7 Elterwater fine light green	26-28
Combined Slate Cills and	Window Boards for Metal Windows	No. 16 ,, light green (coarse grained) Broughton Moor, light sea green, olive	25-27
Straight Cills Window Wall thickness Width 9" 11"		green, silver grey green, and mixed shades	27
1'8" 4/- 4/8	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Prices include for delivery to any station, minimum 6 loads.	ton true
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Asbestos-cement 6" corrugated	
		sheets, grey per yard supe	r 2/11
SLATER, TILER AN Best	ND ROOFER Bangor Slates	Standard 3" corrugated sheets, grey per yard super Slates :—	$r = 2/7\frac{1}{2}$
24" × 12"	£ s. d per 1,000 actual 33 10 0	$15\frac{3}{4}$ " \times $7\frac{7}{8}$ " grey per 1,000	
22" × 12"	per 1,000 actual 27 19 0	$15\frac{3}{4}$ " \times $15\frac{3}{4}$ " diagonal, grey per 1,000 15 $\frac{3}{4}$ " \times $15\frac{3}{4}$ " diagonal, russet or brindled per 1,000	
0.00	per 1,000 actual 25 4 9 per 1,000 actual 24 14 6	Pantiles. Large russet brown per 1,000	219 8
0#	per 1,000 actual 21 15 5	Prices are for minimum two-ton loads, and are subj	
0// 30//	per 1,000 actual 20 19 3 per 1,000 actual 17 7 6	trade discount.	
8" × 9"	per 1,000 actual 15 11 9	Cedar Wood Tiles	
	per 1,000 actual 17 14 9 per 1,000 actual 15 11 9	Canadian cedar wood shingles per square 32/-	(norma
6" × 9"	per 1,000 actual 13 19 6	quantity).	En-l-
	per 1,000 actual 12 1 11	Prices include for delivery to nearest railway station in but vary with quantity.	n Englan
Prices include for delivery	to site in lots of 1,000 and upwards.		
	abole Slates (f.o.r.)	CARPENTER Carcassing Timber	
Standard sizes. Prices and com	puted weights per 1,200.	Prices are for Standards in one	
		delivery; when less than a Per	
	20" × 12" 16" × 10"		Per foot muhe
Grey medium gradings	per 1,200 597/- 366/-	standard is required, or special standard	
	per 1,200 $597/ 366/-$ cwts. $46\frac{1}{2}$ 30	standard is required, or special standard lengths, add £1 per standard. £ s. d. 4" × 11" Scantling 24 5 0	2/11½
	per 1,200 $597/ 366/-$ cwts. $46\frac{1}{2}$ 30	standard is required, or special lengths, add £1 per standard. £ s. d. 4" × 11" Scantling	foot cube
Grey medium gradings Unselected greens (V.M.S.) Random sizes.	per 1,200 597/- 366/- cwts. 46½ 30 per 1,200 672/- 413/-	standard is required, or special lengths, add £1 per standard. £ s. d. 4" × 11" Scantling	2/11½ 2/10½ 2/10½ 2/9½ 2/10¼
Unselected greens (V.M.S.)	per 1,200 597/- 366/- cwts. 46½ 30 per 1,200 672/- 413/- cwts. 55½ 36 covering capacities in squares per ton.	standard is required, or special lengths, add £1 per standard. £ s. d. 4" × 11" Scantling	2/11½ 2/10¾ 2/9½ 2/10½ 2/10½ 2/8¾
Unselected greens (V.M.S.) Random sizes.	per 1,200 597/- 366/- cwts. 46½ 30 per 1,200 672/- 413/- cwts. 55½ 36	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2/11½ 2/10¾ 2/9½ 2/10¼ 2/8¾ 2/9½ 2/6
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2/11½ 2/10¾ 2/9½ 2/10¾ 2/8½ 2/8½ 2/8½ 2/9½ 2/6
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed	per 1,200 597/- 366/- cwts. 46½ 30 per 1,200 672/- 413/- cwts. 55½ 36 covering capacities in squares per ton. No. 1 Grading 24"/22" to 12"/10" per ton (3" lap) 2.37 squares	standard is required, or special lengths, add £1 per standard. £ s. d. 4" × 11" Scantling	2/11½ 2/10¾ 2/9½ 2/10¾ 2/10¾ 2/8¾ 2/9½ 2/6 2/6 2/6 2/5½
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens	per 1,200 597/- 366/- cwts. 46½ 30 per 1,200 672/- 413/- cwts. 55½ 36 covering capacities in squares per ton. No. 1 Grading 24"/22" to 12"/10" per ton per ton (3" lap) per ton (4" lap) 2.37 squares per ton (4" lap) 2.19 squares	standard is required, or special lengths, add £1 per standard. £ s. d. 4" × 11" Scantling . 24 5 0 4" × 9" . 23 15 0 3" × 11" . 23 10 0 2" × 11" . 23 10 0 3" × 9" . 22 10 0 • 2" × 9" . 23 0 0 3" × 8" . 20 10 0 • 2" × 8" . 20 10 0 3" × 7" . 20 0 0 2" × 7" . 20 0 0 4" × 6" . 24 0 0	2/11½ 2/10½ 2/9½ 2/10½ 2/8½ 2/9½ 2/6 2/6 2/5½ 2/11
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens	per 1,200 597 - 366 - cwts. 46½ 30 per 1,200 672 - 413 - cwts. 55½ 36 graph of the second of the seco	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2/11½ 2/10½ 2/9½ 2/10½ 2/8½ 2/9½ 2/6 2/6 2/5½ 2/11 2/7½ 2/5½
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.:	per 1,200 597/— 366/— cwts. 46½ 30 per 1,200 672/— 413/— cwts. 55½ 36 covering capacities in squares per ton. No. 1 Grading 24"/22" to 12"/10" per ton (3" lap) 2.37 squares per ton (4" lap) 2.37 squares No. 2 Grading 24"/22" to 12"/10" 139/— I.S.) per ton 139/—	standard is required, or special lengths, add £1 per standard. £ s. d. 4" × 11" Scantling . 24 5 0 4" × 9" . 23 15 0 3" × 11" . 23 0 0 2" × 11" . 23 10 0 3" × 9" . 22 10 0 • 2" × 9" . 22 10 0 • 2" × 8" . 20 10 0 3" × 7" . 20 10 0 2" × 7" . 20 0 0 2" × 7" . 24 0 0 3" × 6" . 24 0 0 3" × 6" . 21 0 9 • 2" × 6" . 20 0 0 • 3" × 5" . 20 5 0	2/11½ 2/10½ 2/9½ 2/10½ 2/9½ 2/10½ 2/8½ 2/6 2/6 2/6 2/5½ 2/11 2/7½ 2/5½ 2/5½
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.:	per 1,200 597 - 366 - cwts. 46½ 30 per 1,200 672 - 413 - soft 55½ 36 per 1,200 672 - 138 - cwts. 55½ 36 per ton No. 1 Grading 24"/22" to 12"/10" 128 -	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2/11½ 2/10½ 2/9½ 2/10½ 2/8½ 2/9½ 2/6 2/6 2/5½ 2/11 2/7½ 2/5½
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.:	per 1,200 597 - 366 - cwts. 46½ 30 per 1,200 672 - 413 - 55½ 36 covering capacities in squares per ton. No. 1 Grading 24" 22" to 12" 10"	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2/11 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/6 ½ 2/6 2/6 2/5 ½ 2/6 ½ 2/5 ½ 2/6 ½ 2/5 ½ 2/6 ½ 2/5 ½ 2/6 ½ 2/5 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/6 ½ 2/8
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.:	per 1,200 597/- 366/- cwts. 46½ 30 per 1,200 672/- 413/- cwts. 55½ 36 covering capacities in squares per ton. No. 1 Grading 24"/22" to 12"/10" per ton per ton (3" lap) per ton (4" lap) 2.2" squares No. 2 Grading 24"/22" to 12"/10" I.S.) per ton per ton (3" lap) per ton (3" lap) per ton (4" lap) 2.25 squares per ton (4" lap) 2.08 squares No. 2 Grading	standard is required, or special lengths, add £1 per standard. £ s. d. 4" × 11" Scantling . 24 5 0 4" × 9"	2/11 ½ ½ ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 2/10 2/10 2/10 2/10 2/10 2/10 2/10
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M.Covering cap.:	per 1,200 597/— 366/— cwts. 46½ 30 per 1,200 672/— 413/— 55½ 36 covering capacities in squares per ton. No. 1 Grading 24"/22" to 12"/10" 128/— 128/— 2.37 squares per ton (4" lap) 2.19 squares No. 2 Grading 24"/22" to 12"/10" 139/— 2.25 squares per ton (4" lap) 2.08 squares No. 2 Grading 24"/22" to 12"/10" 149/— 149/—	standard is required, or special lengths, add £1 per standard. £ s. d. 4" × 11" Scantling . 24 5 0 4" × 9" . 23 15 0 3" × 11" . 23 0 0 2" × 11" . 23 10 0 3" × 9" . 22 10 0 • 2" × 9" . 22 10 0 • 2" × 8" . 20 10 0 3" × 8" . 20 10 0 3" × 7" . 20 0 0 2" × 7" . 20 0 0 4" × 6" . 24 0 0 3" × 6" . 21 0 9 • 2" × 6" . 20 0 0 • 3" × 5" . 20 5 0 3" × 4" . 19 10 0 2" × 4" . 18 10 0 2" × 4" . 18 10 0	2/11 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/11 ½ 2/10 ½ 2/11 ½ 2/10 Z 2/
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M. Covering cap.:	per 1,200	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2/11 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/10 ½ 2/11 ½ 2/10 ½ 2/11 ½ 2/10 Z 2/
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M. Covering cap.:	per 1,200	standard is required, or special lengths, add £1 per standard. 4" × 11" Scantling	Coot cube 2/11 ½ 2/10
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M. Covering cap.: Weathering greens (V.M.S.) Covering cap.:	per 1,200	standard is required, or special lengths, add £1 per standard.	foot cube 2/11 ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½ ½
Unselected greens (V.M.S.) Itandom sizes. Trices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M. Covering cap.: Weathering greens (V.M.S.) Covering cap.:	per 1,200	standard is required, or special lengths, add £1 per standard.	Coot cube 2/11 ½ 2/10 ½ 2/90
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Veathering grey greens (V.M. Covering cap.: Rustic reds (25%) and v. (V.M.S.)	per 1,200 cwts. 46½ 30 per 1,200 672/— 413/— cwts. 55½ 36 covering capacities in squares per ton, No. 1 Grading 24"/22" to 12"/10" per ton (3" lap) per ton (4" lap) 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/— 129/— 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/— 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/— 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/— 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/— 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/— 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/— 2.25 squares	standard is required, or special lengths, add £1 per standard.	Coot cube 2/11 ½ 2/10 ½ 2/90
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M. Covering cap.: Weathering greens (V.M.S.) Covering cap.:	per 1,200	standard is required, or special lengths, add £1 per standard.	foot cube 2/11 \(\frac{1}{2}\) \(\frac{1}\) \(\frac{1}{2}\) \(\frac{1}{2}\) \(\frac{1}{2}\) \(\frac{1}{2}\) \(\frac{1}{2}\) \
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M. Covering cap.: Rustic reds (25%) and v (V.M.S.) Covering cap.: Rustic reds (25%) and v (Y.M.S.) Covering cap.:	per 1,200	standard is required, or special lengths, add £1 per standard.	2/11 ½ ½ 2/10 2/10 2/10 2/10 2/10 2/10 2/10 2/10
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M. Covering cap.: Rustic reds (25%) and v (V.M.S.) Covering cap.: Railway-rate to Nine Elm	per 1,200	standard is required, or special lengths, add £1 per standard.	2/11 ½ ½ 2/10 2/10 2/10 2/10 2/10 2/10 2/10 2/10
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M. Covering cap.: Rustic reds (25%) and v (V.M.S.) Covering cap.: Railway-rate to Nine Elm	per 1,200 cwts. 46½ 30 per 1,200 672 - 413 / 55½ 36 covering capacities in squares per ton. No. 1 Grading 24"/22" to 12"/10" 128/- 2.37 squares 2.19 squares No. 2 Grading 24"/22" to 12"/10" 139/- 2.25 squares No. 2 Grading 24"/22" to 12"/10" 1.S.) per ton per ton (3" lap) per ton (4" lap) 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/- 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/- 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/- 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/- 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/- 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/- 2.25 squares No. 2 Grading 24"/22" to 12"/10" 149/- 2.25 squares No. 2 Grading 24"/22" to 12"/10" 174/- 2.25 squares 174/- 2.26 squares 174/- 2.27 squares 174/- 2.28 squares	standard is required, or special lengths, add £1 per standard.	2/11 1 2/2 2/3 2/3 2/3 2/3 2/3 2/3 2/3 2/3 2/3
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M.Covering cap.: Weathering greens (V.M.S.) Covering cap.:	per 1,200	standard is required, or special lengths, add £1 per standard.	2/11 ½ 2/10 2/10 Z 2/10
Unselected greens (V.M.S.) Random sizes. Prices per ton and computed Ordinary grey greens Covering cap.: Weathering grey greens (V.M.Covering cap.: Weathering greens (V.M.S.) Covering cap.: Rustic reds (25%) and v. (V.M.S.) Covering cap.: Railway-rate to Nine Elmminimum 6 tons per truck,	per 1,200 cwts. 46½ 30 per 1,200 672 - 413 - 55½ 86 covering capacities in squares per ton. No. 1 Grading 24"/22" to 12"/10" 128 - 2.37 squares 2.19 squares 2.19 squares No. 2 Grading 24"/22" to 12"/10" 1.S.) per ton per ton (3" lap) per ton (3" lap) per ton (4" lap) 2.25 squares No. 2 Grading 24"/22" to 12"/10" 1. per ton (3" lap) 2.25 squares No. 2 Grading 24"/22" to 12"/10" 1. per ton (4" lap) 2.08 squares No. 2 Grading 24"/22" to 12"/10" 1.49 - 2.25 squares No. 2 Grading 24"/22" to 12"/10" 1.49 - 2.25 squares No. 2 Grading 24"/22" to 12"/10" 1.49 - 2.25 squares 2.08 squares No. 2 Grading 24"/22" to 12"/10" 1.49 - 2.25 squares 2.08 squares No. 2 Grading 24"/22" to 12"/10" 1.49 - 2.25 squares 2.08 squares No. 2 Grading 24"/22" to 12"/10" 1.49 - 2.25 squares 2.08 squares No. 2 Grading 24"/22" to 12"/10" 1.49 - 2.25 squares 2.08 squares No. 2 Grading 24"/22" to 12"/10" 1.49 - 2.25 squares 2.08 squares 2.08 squares 2.09 squares 2.0	standard is required, or special lengths, add £1 per standard.	2/11½ 2/10½

• Items marked thus have risen since March 16.

TO BE CONTINUED IN NEXT ISSUE