THE ARCHITECTS' JOURNAL

standard contents

every issue does not necessarily contain all these contents, but they are the regular features which continually recur.

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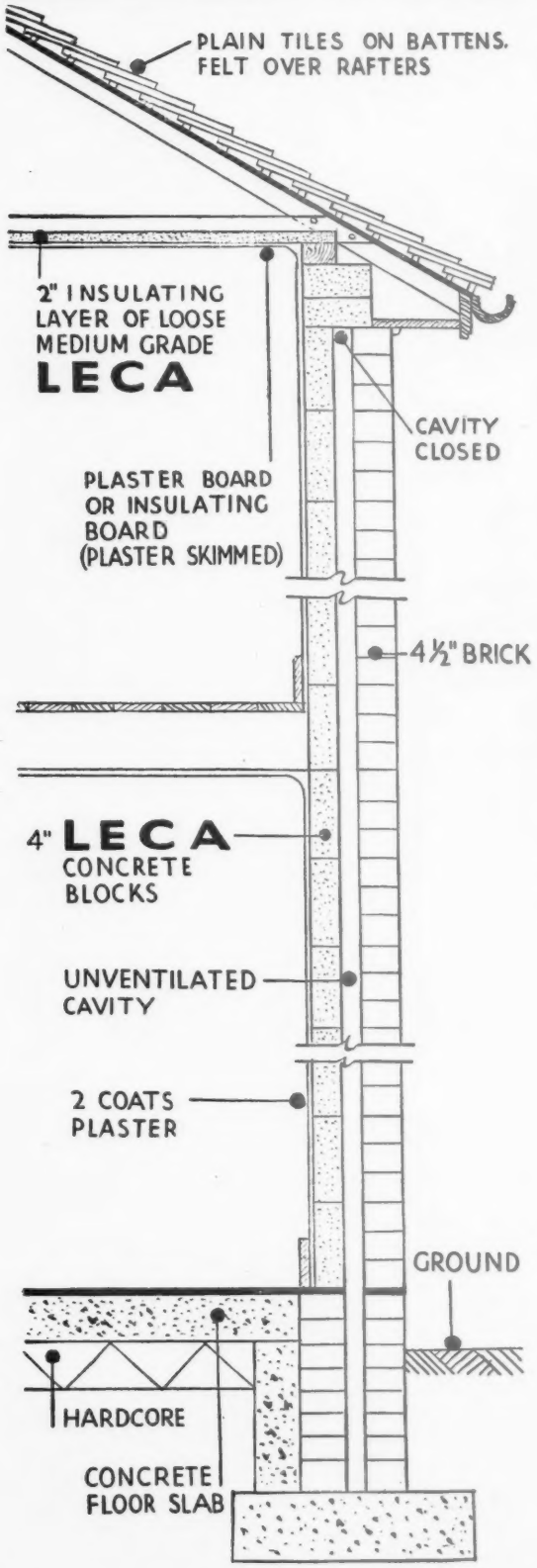
★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ig to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 75, Eaton Place, S.W.1.	Sloane 3158/1601
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
I of Arb.	Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197/5176
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
IWA	Inland Waterways Association. 11, Gower Street, W.C.1.	Museum 9200
LIDC	Lead Industries Development Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
MARS	Modern Architectural Research Group (English Branch of CIAM). Secretary : Gontran Goulden, Building Centre, 26, Store Street, W.C.1.	Museum 5400
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. 23. Saville Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James' Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94-98, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 4813
NBR	National Buildings Record. 37, Onslow Gardens, S.W.7.	Kensington 8161
NCBMP	National Council of Building Material Producers, 10, Princes Street, S.W.1.	Abbey5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4451
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4341
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NSA	National Sawmilling Association. 14, New Bridge Street, E.C.4.	City 1476
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Whitehall 9936
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Edinburgh 20396
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1.	Whitehall 5322/9242
RFAC	Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SCR	Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8.	Western 1571
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3.	Mansion House, 3921
SIA	Structural Insulation Association. 14, Moorgate, London, E.C.2.	Central 4444
SIA	Society of Industrial Artists. 7, Woburn Square, W.C.1.	Langham 1984
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.	
SPAB	Socitey for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 69, Cannon Street, E.C.4.	City 4444
WDC	War Damage Commission. Devonshire House, Mayfair Place, Piccadilly, W.1.	Mayfair 8866
WEDA	Welfare Equipment Development Association. 74, Victoria St., S.W.1.	Victoria 5783
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988

save fuel



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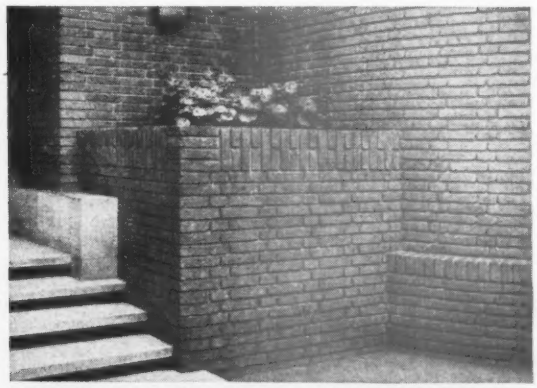

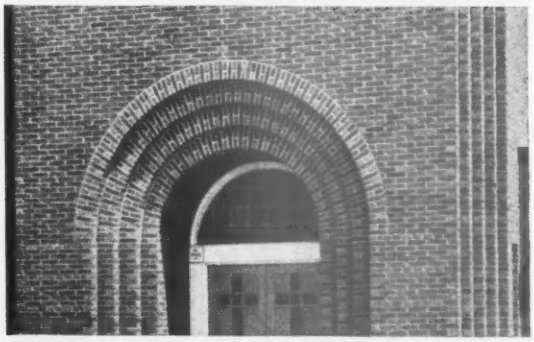

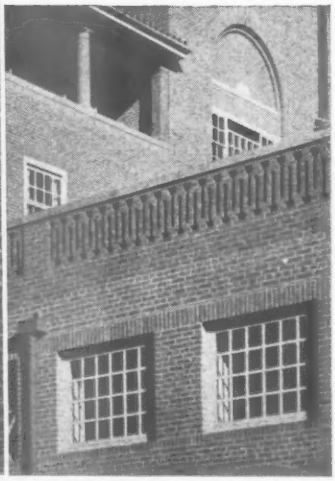

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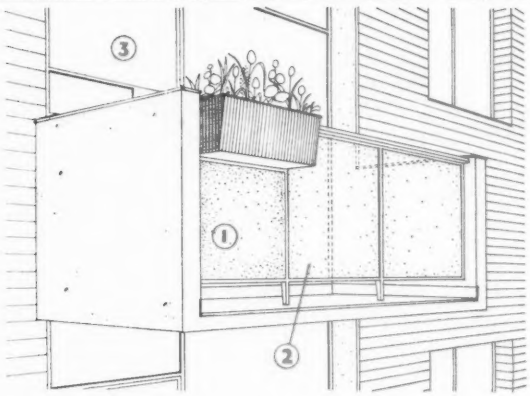
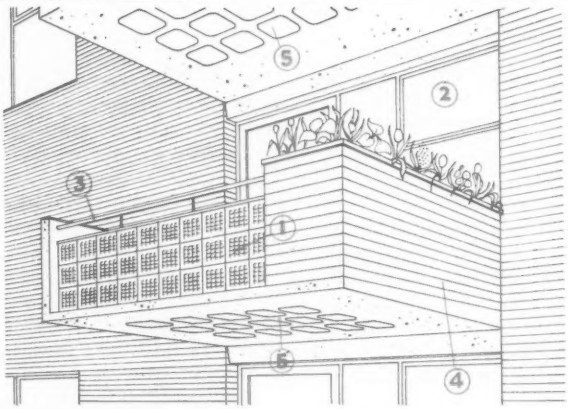


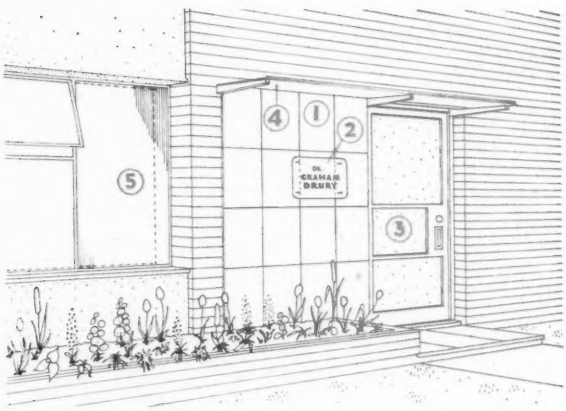
HOUSE BALCONY

1 "VITROLITE" panel
2 Georgian wired glass panels
3 S.Q. 32 oz. sheet glass, or ¼" polished plate glass



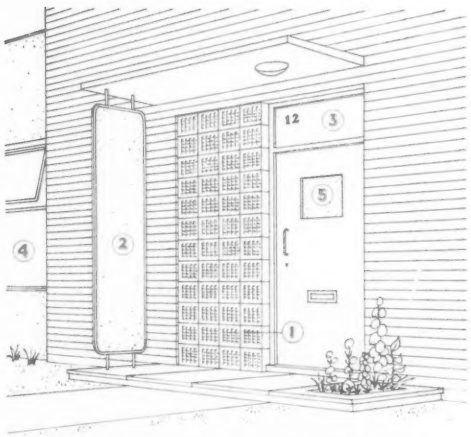
FLAT BALCONY

1 "INSULIGHT" hollow glass blocks or glass tile front
2 S.Q. sheet glass or ¼" polished plate glass
3 Metal flashing to top of glass front, and metal hand rail
4 Flower box
5 Nevada lenses in concrete slab



SURGERY ENTRANCE

1 "VITROLITE" panel in ashlar sizes
2 ¼" polished plate glass name plate, lettering painted and fired
3 ⅜" toughened rough cast glass in door
4 ⅜" toughened rough cast glass canopy with zinc drip guard
5 Hammerstripe glass to waiting room window

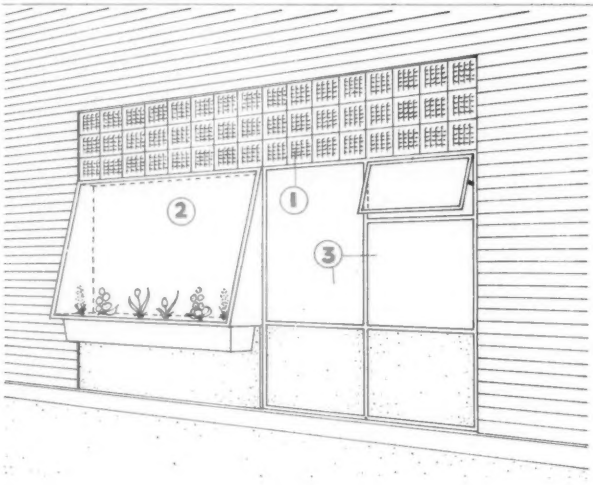


ENTRANCE DOOR

1 "INSULIGHT" hollow glass block panel
2 ¼" Georgian wired cast glass
3 'Pinstripe' glass above transom
4 S.Q. 24 oz. sheet glass
5 Peephole — one-way glass

OF GLASS

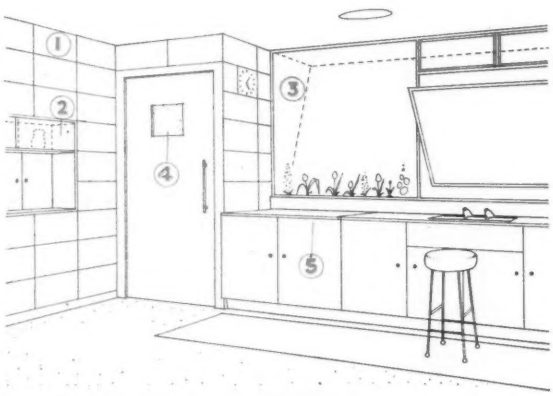
USES OF THE MATERIAL



DINING ROOM WINDOW

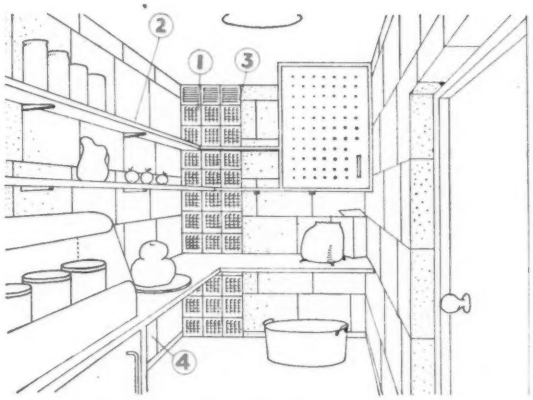
1 "INSULIGHT" hollow glass block panel
2 ¼" polished plate glass plant window
3 ¼" polished plate glass window

Designed by Edward D. Mills, F.R.I.B.A.



KITCHEN

1 "VITROLITE" panelled wall in standard ashlar sizes
2 Polished plate glass sliding doors
3 32 oz. sheet glass window
4 Standard flush door with polished Georgian wired glass
5 "VITROLITE" top to cupboard



LARDER

1 "INSULIGHT" hollow glass blocks
2 White "VITROLITE" tops to shelving
3 All glass louvred ventilator block with zinc fly screens
4 Walls lined with "VITROLITE" in ashlar sizes

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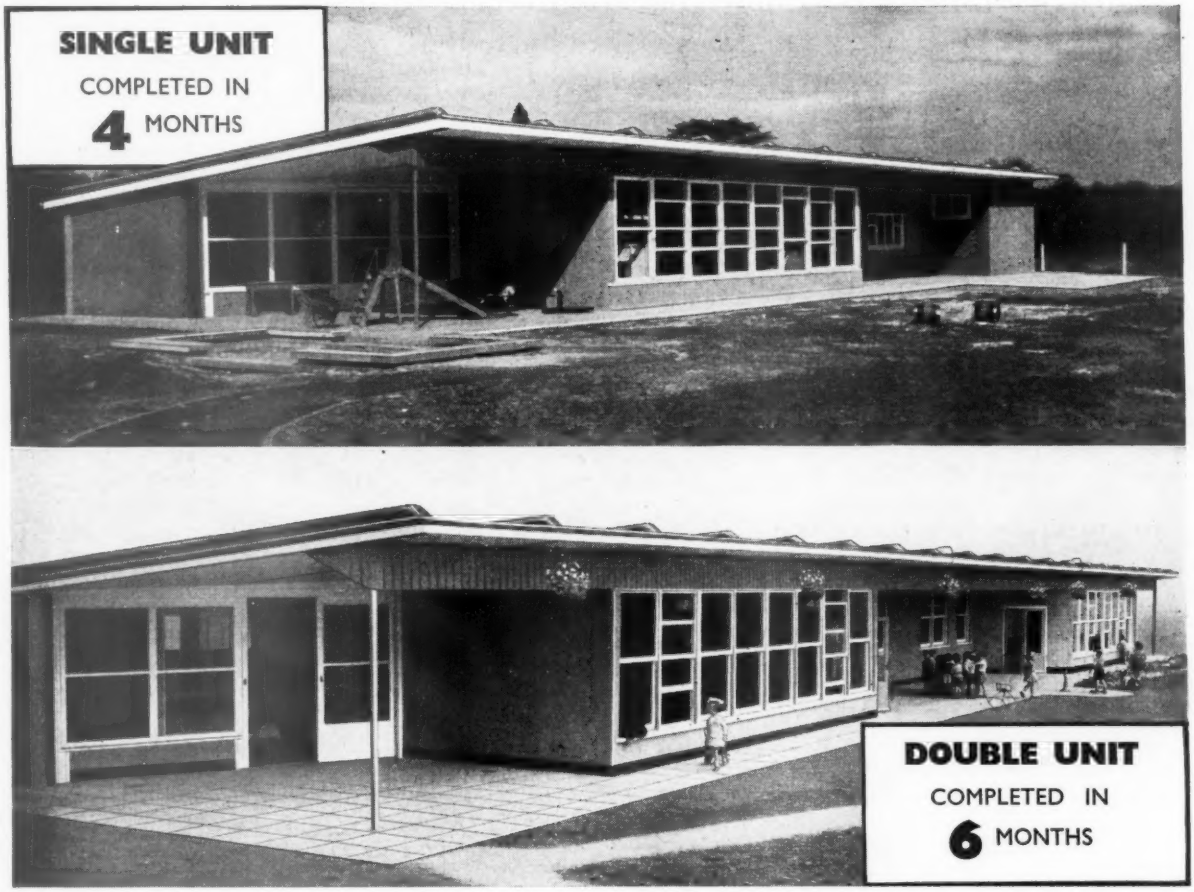

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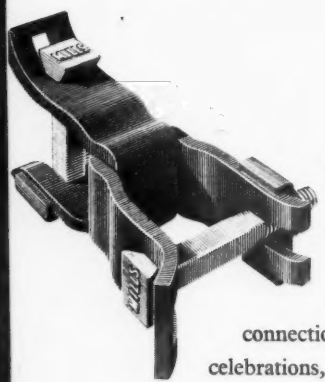

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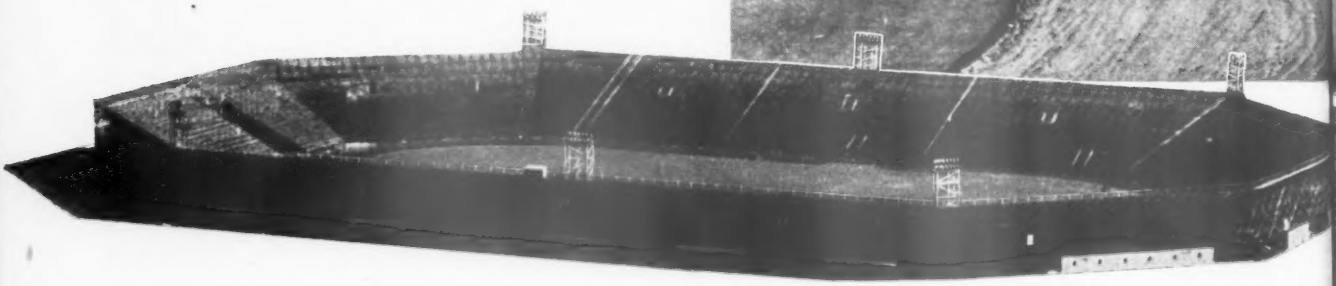

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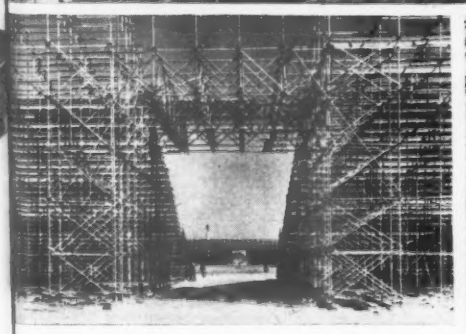

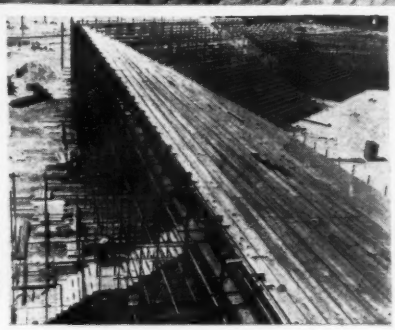

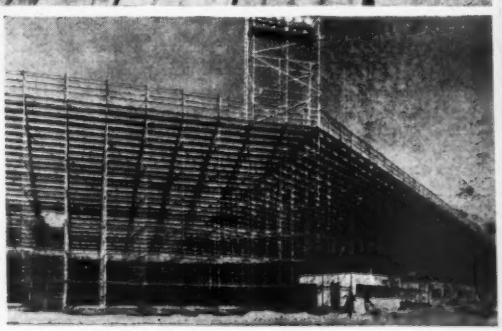

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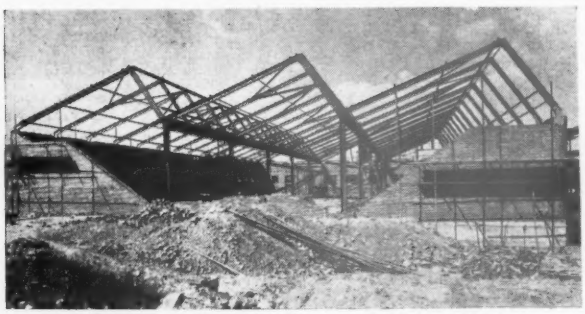
Welding in Progress.



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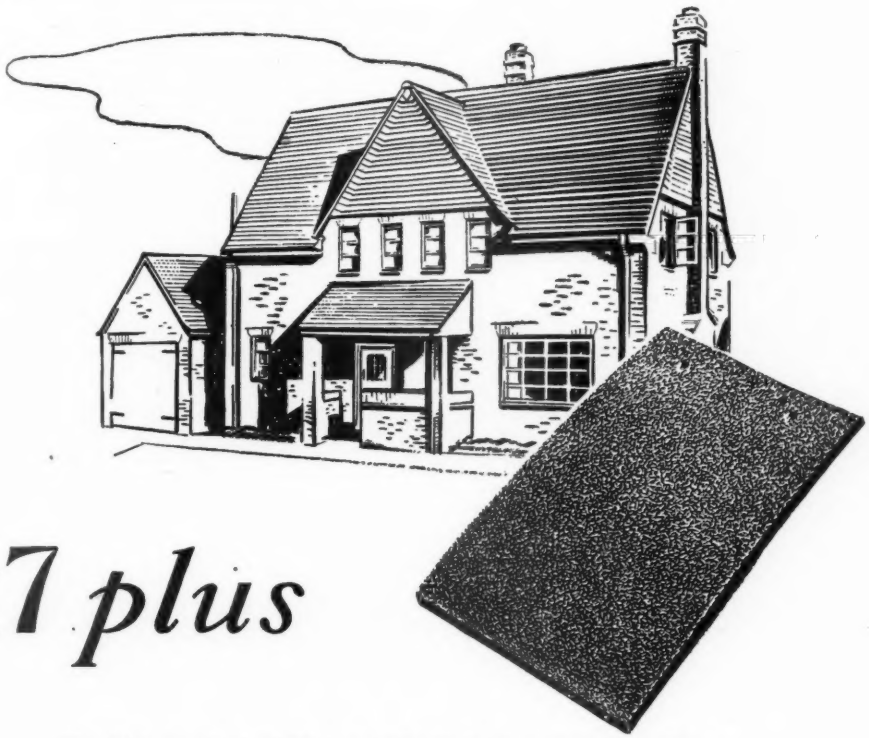

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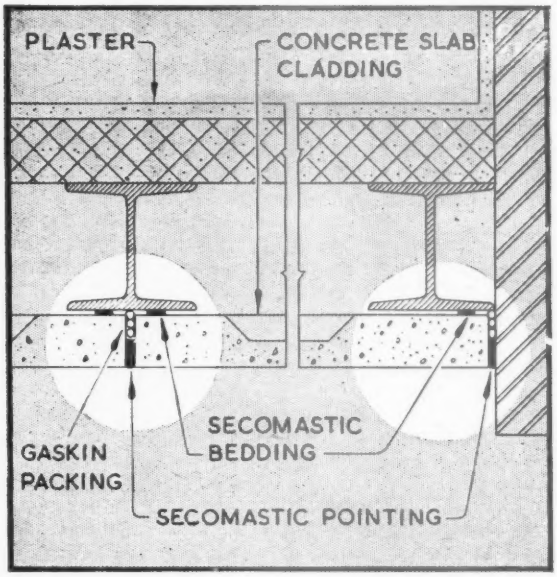

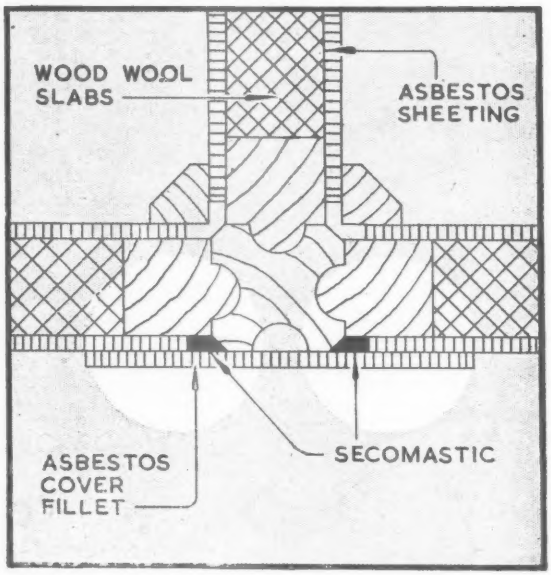

EXPANSION JOINT PROBLEMS

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The illustrations show typical examples of the use of SECOMASTIC for expansion joints. In each case the problem was to provide a weatherproof seal whilst at the same time allowing for the normal contraction and expansion of the joint.

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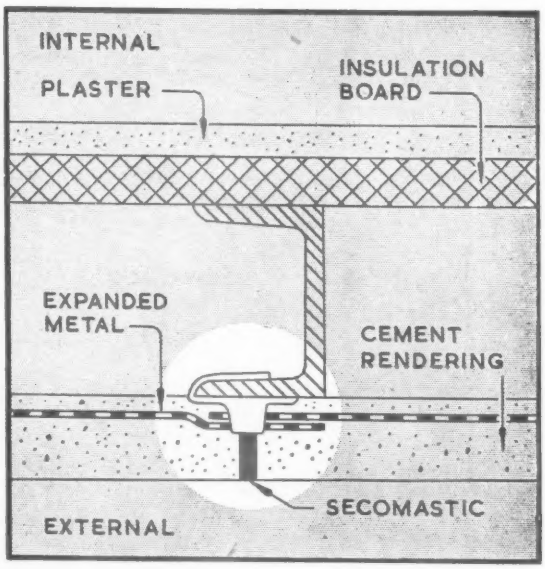
The problem of efficient and economical application of the mastic is solved by the SECO caulking gun, particularly when used with the SECOMASTIC patented extra-capacity cartridges.

Informative literature will be supplied on request and the SECOMASTIC Technical Staff, who know a great deal about jointing and sealing problems, will be pleased to advise on specific applications. Please address your enquiries to Architectural Department.



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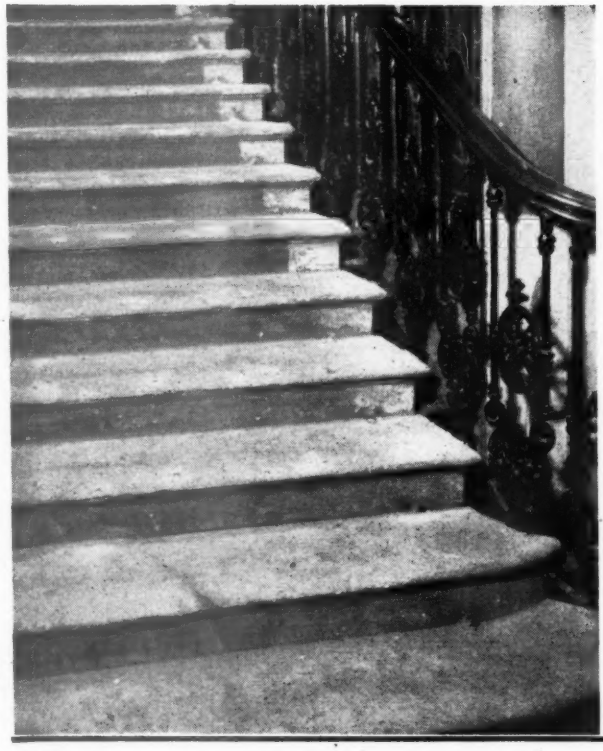

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The illustrations are of a recent conversion at Abbey House, Victoria, London, S.W.1. Architects: Boreham Son & Wallace, London, W.C.1. Contractors: Lewis Bros. (Kings Cross) Ltd. London, N.W.1.

FERODO

STAIRTREADS

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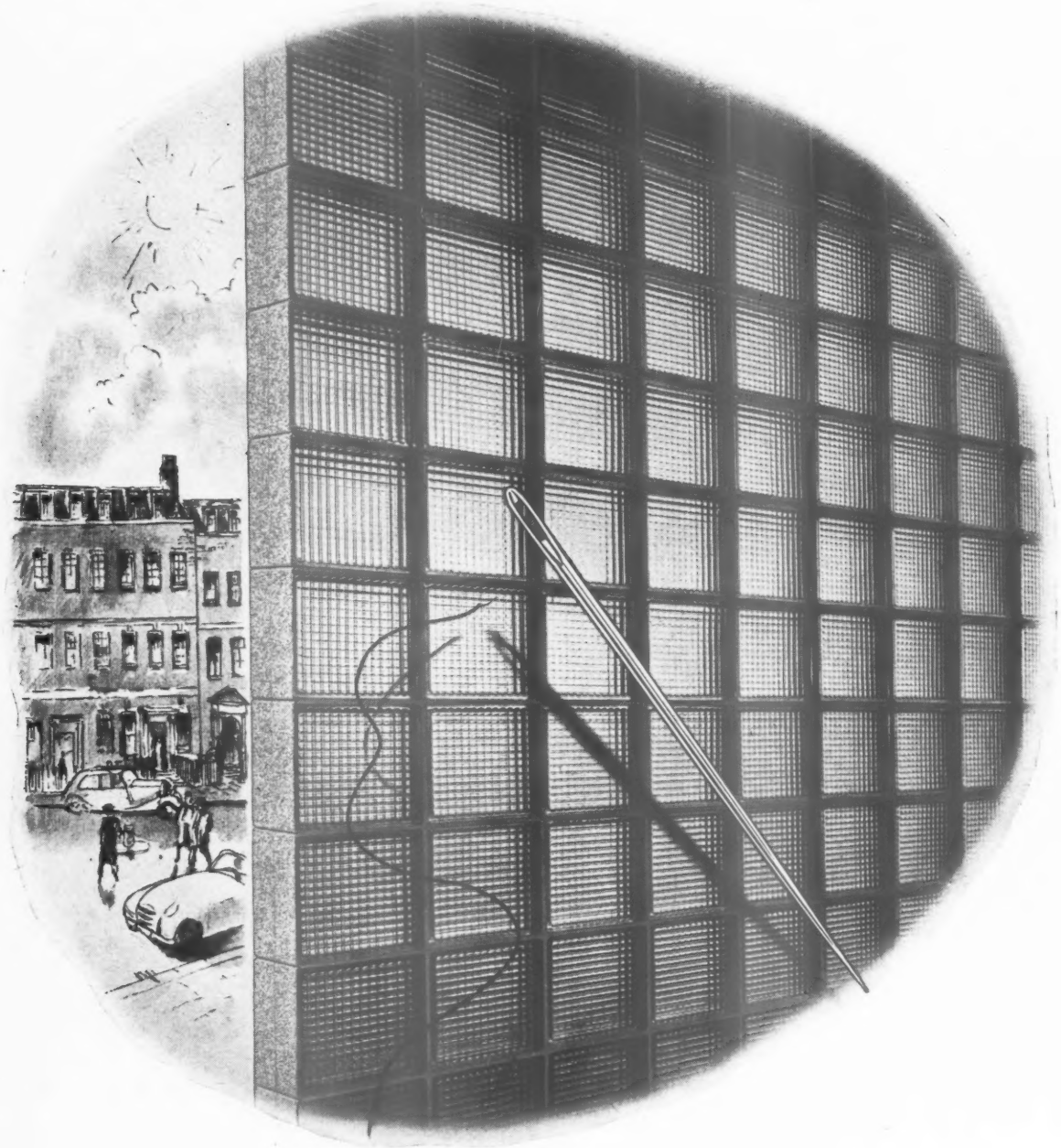

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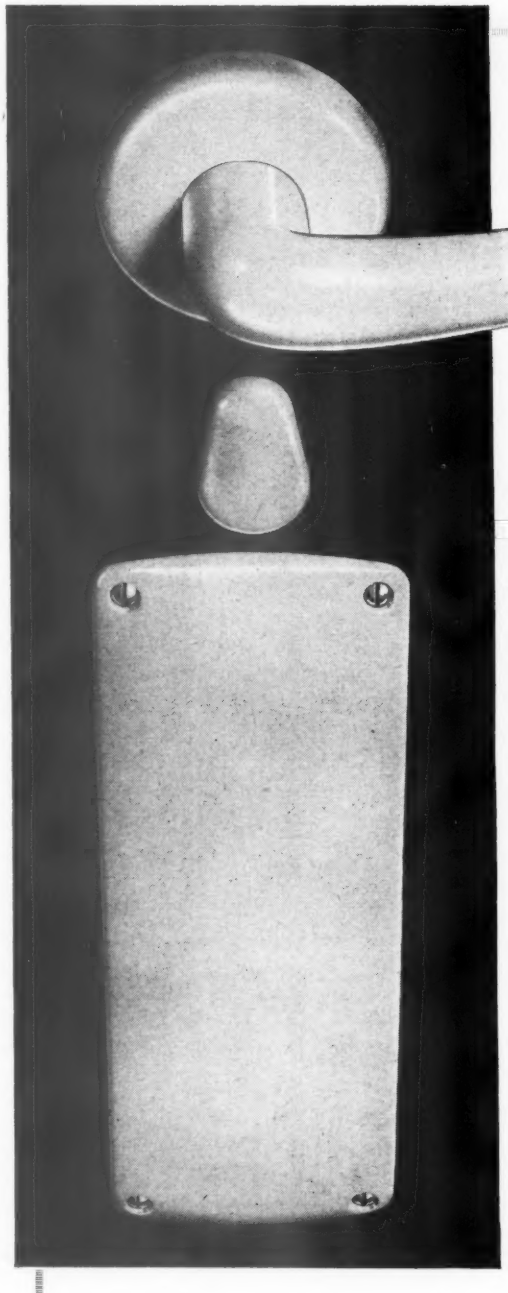

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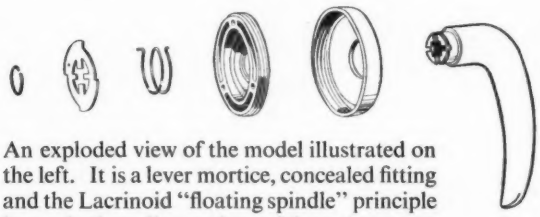

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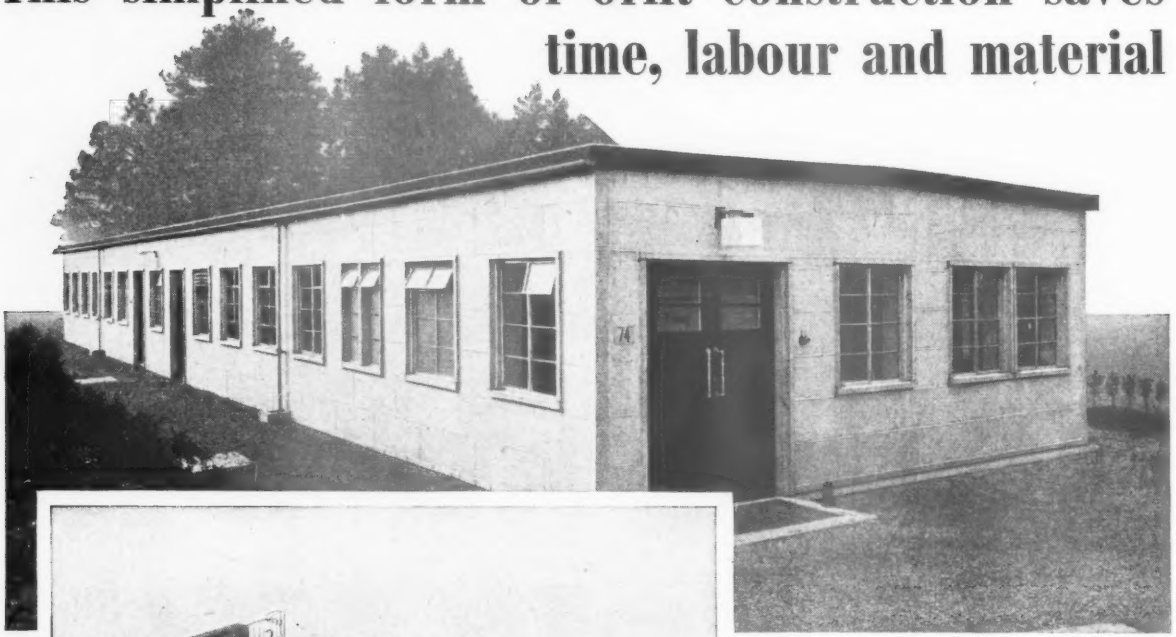

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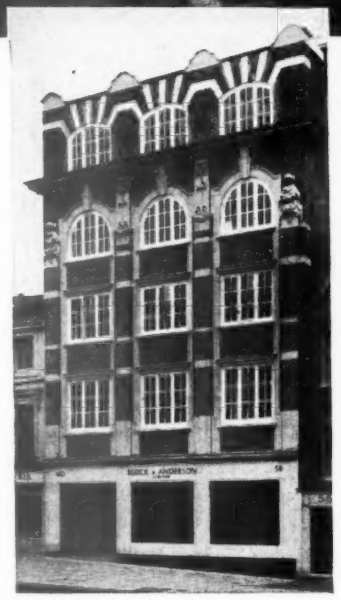

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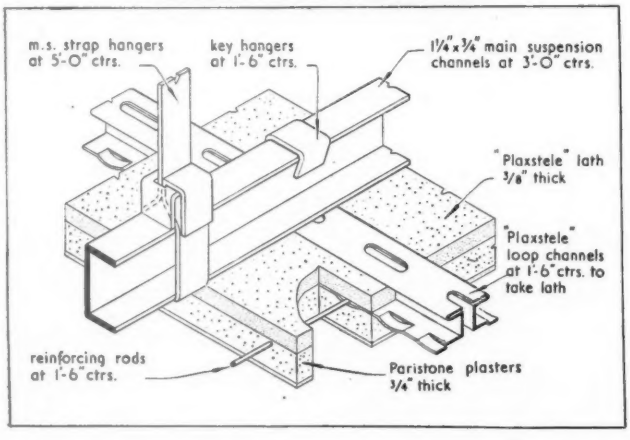

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CP5

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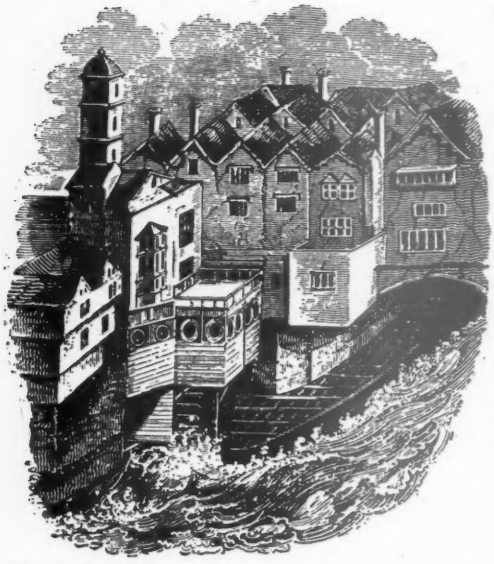
a record of Destruction and Survival

with a report on Reconstruction by the planning consultants:

C. H. Holden and W. G. Holford



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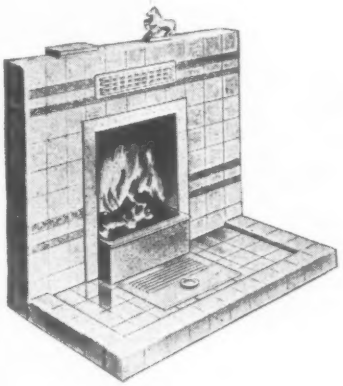

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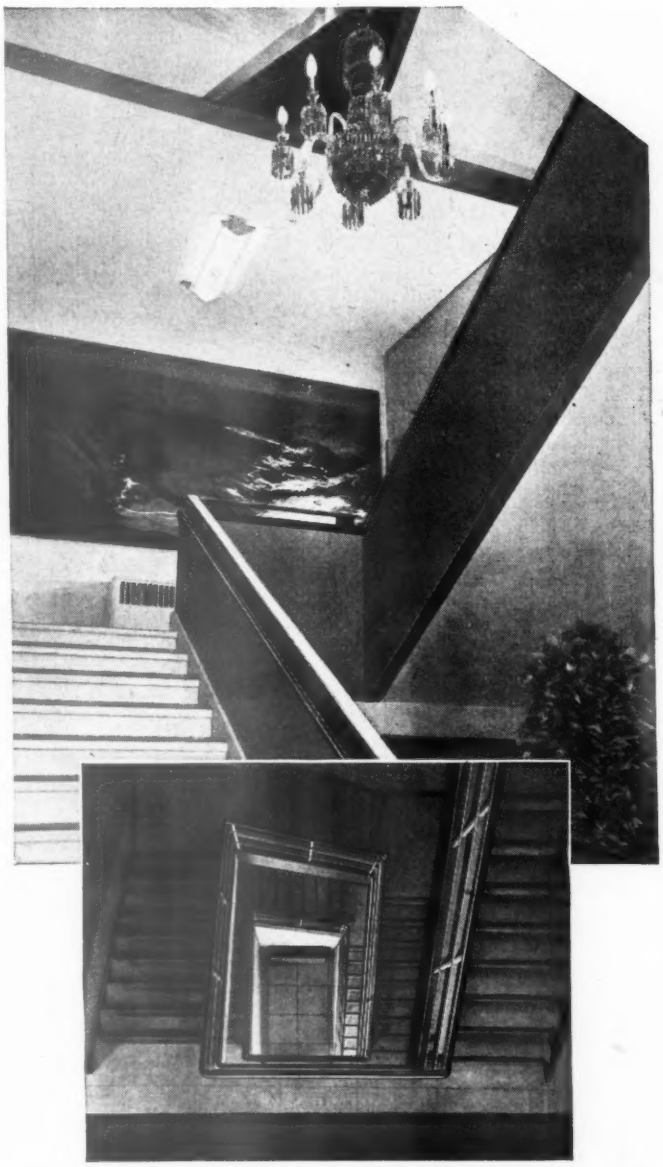

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AJ

THE ARCHITECTS' JOURNAL

No. 2985 May 15, 1952 VOL 115

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GROPIUS'S BOMB

The Chicago Chapter of the AIA is to study the lifting of the ban on architects engaging in building contracting. This is the result of what *The Magazine of Building* calls a " facts-of-life talk " by Walter Gropius. Good for Gropius. At the beginning of his career he did more than any man since Morris to bring designers back into contact with design technique; if, at the close of his career, he can bring them into something more than academic contact with the building industry then he will have done a big job indeed.

*

It is such a good thing, too, that this statement should come from Walter Gropius, whose motives are beyond suspicion. So vital is the point that Gropius raises—even more vital its ramifications—that the JOURNAL refers to it on page 595, at greater length than is possible in this column.

LLOYD WRIGHT EXHIBITION

When FLW stretched his giant limbs in the Strozzi Palace this JOURNAL published a comment by Jaqueline Tyrwhitt. Now that the show has moved rather nearer home—ironically enough to the Ecole des Beaux Arts—ASTRAGAL took his chance last week and slipped over to Paris to have a look. It *is* a gargantuan show, and none the better for that. I could not help wondering whether the old man had not done himself more harm than good. He has put in everything he's done, and no man can stand that.

*

Even Shakespeare and Shaw wrote some plays that are better left unacted. The world will remember Lloyd Wright because of Falling Waters, the Johnson Wax Building and one or two of his houses—and, I suppose, for reasons unarchitectural, the Imperial Hotel in Tokio—but all this art-nouveau-cum-Aztec would have been better buried and forgotten. It was fascinating to study the actual details which FLW drew himself some forty or fifty years ago—but as serious architecture they just don't start.

*

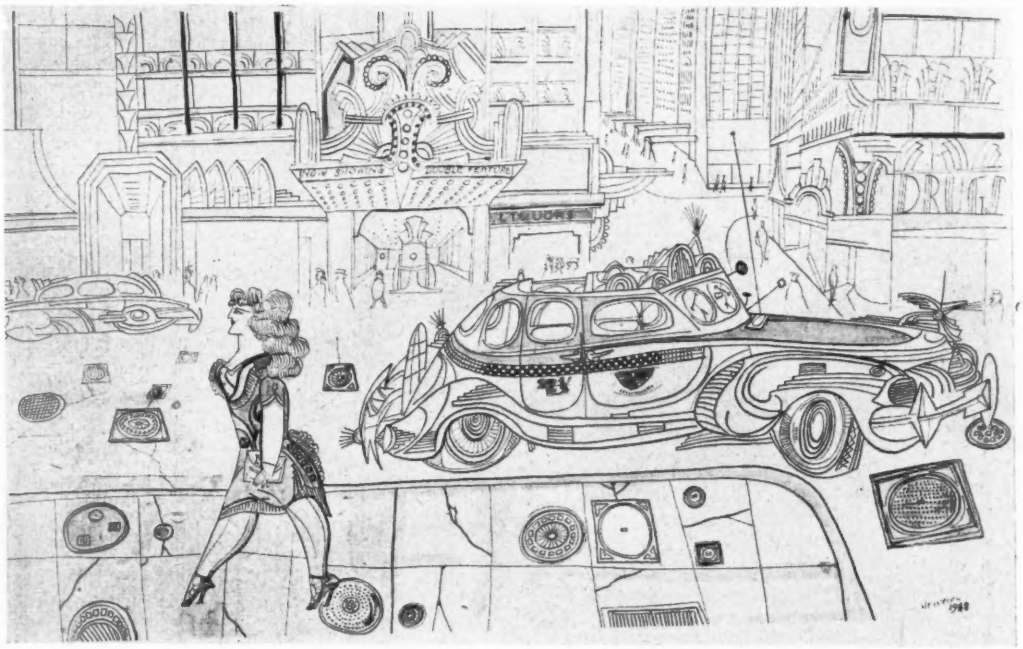
All the same it is something of a scandal that this great exhibition of the man whom Philip Johnson called " the greatest living architect of the nineteenth century " should never have come to this country. Gimbels, the great Philadelphia department store, staged the show originally. Since then most European countries have shown it, or will show it. Not England. At one time, I believe, the V & A were willing to provide the space, if someone else would find the money for erection and transport. At that point the idea collapsed, and so FLW disciples must console themselves with a flying visit to Paris. In spite of my strictures it is well worth it. The exhibition is a curiosity, if nothing more. The drawings are quite fascinating, the photographs are superb and the models are abominable.

GEORGIAN GROUP

The Georgian Group has sent me particulars of its students' competition for a measured drawing of a " Georgian building," *i.e.*, a building erected between 1688 and 1837. A well-written set of conditions, a £25 prize, no harm done and possibly much good. All the same the whole thing has a curiously old-fashioned ring and one wonders not only what sort of response there will be, but exactly what the Georgian Group's motives are—allegedly, of course, to " encourage the study of Georgian architecture," but what lies beyond that—the discovery of assistants who can detail the next batch of sham Georgian banks when we return to " normality," or what?

*

And why " a building "? Not many Georgian façades are now unmeasured, and Georgian means so much more than this: colour, interiors, urbanism, the scale of the street are all elements in the eighteenth century system which are so much more important to us than the array of carefully proportioned sash-windows which this competition will produce. There are a dozen ways of approaching the problem . . . . *e.g.*, the study of the County Town suburb,



This cautionary tale, "New York," is one of the drawings in the Steinberg exhibition at the ICA, which ASTRAGAL *commented on last week.*

the London terrace, urban planting, street furniture and so on. On second thoughts I suspect that the response will be enormous; the age limit is thirty and almost everyone who is eligible must have some fairly presentable drawing of a Georgian façade somewhere in their portfolio which they can clean up with some bread crumbs.

PLASTICS

All the experts who tackle plastics have so much to say about polymerizing and long molecular chains that the average architect gives up the unequal struggle and assumes that anything transparent is Perspex, while the rest are all lumped together as "plastics."

*

Good luck, therefore, to Joseph Singer, who has just produced a book* which attacks the whole problem from the architect's point of view, and deals mainly with uses and costs, the latter detail being all too often the one that the plastics enthusiasts forget. The arrangement of the whole thing is logical: first, the merits and limitations of plastics in general, and then two main sections on exterior and interior uses, with plenty of diagrams and photographs. And in what some people call a "plastic age," it's a relief to find only eight pages or so on "future possibilities," and even those are what you might call conservative.

* *Plastics in Building.* Architectural Press. 18s.

SITE VALUES

Interested in site values? or do you shuffle your feet and say "Oh well" when the subject is raised as you're relaxing at the Club with the Men who Matter? In any case, here's something to help you keep your end up in the conversation.

*

In November, 1947, a committee was set up to report on whether site values should make some additional contribution to local expenditure. The committee's report has just been published, at a discouraging price,* and architects who are trying to coax someone to develop something will be relieved to learn that by a majority of 6 to 3 the Committee recommend that nothing should be done.

*

People have been itching to tax site values for a century, for it was clear that a landowner in or near big towns was receiving unearned income in a big way. The first grand attack was the 1947 Act, which took the sunshine out of the landowner's future, and the Committee had to decide whether existing site values should be rated. The majority think that site values have been unsettled by the 1947 Act, that their equitable assessment—according to any definition—would be very difficult, and that the prospective revenue would not be worth the effort. The minority, containing a powerful LCC strain, are not to be thus put off. They believe the owner should be rated and could be without being able to shift the burden on to his tenant, and they are prepared to face the difficulties of valuation.

*

Now you can relax again.

* *The Rating of Site Values.* H.M.S.O., 1952. Price 5s.

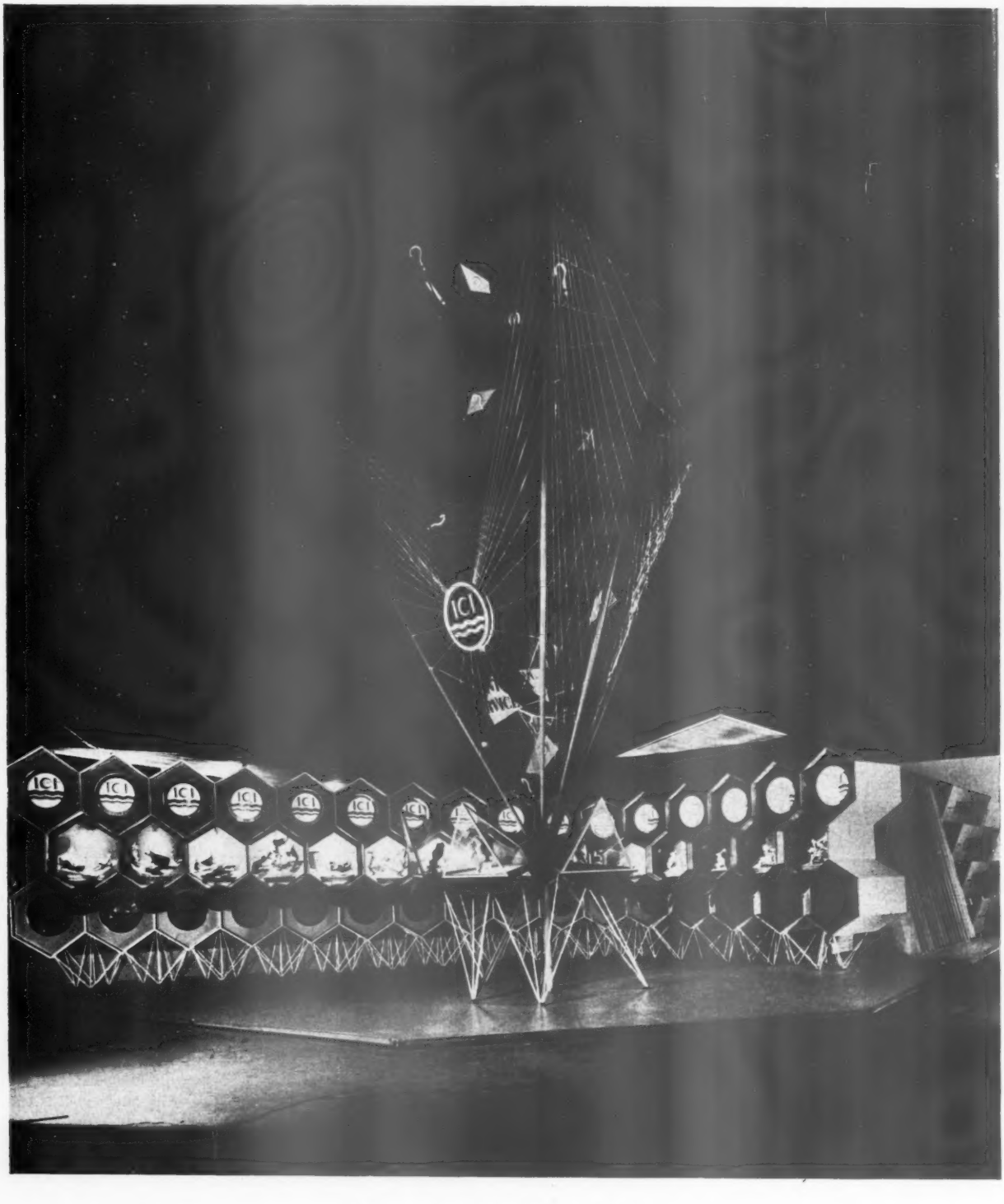
ANATOMY OF SCENERY

The theatre is a place where architecture and fantasy meet, and no architect can fail to be fascinated by the opportunities offered to the designer—especially the possibilities of spatial illusion—by stage scenery. Many great architects have availed themselves of these opportunities, not least Palladio and Inigo Jones, and many of the technical problems, and the solutions to them devised at different times, which Richard Southern describes and illustrates in his new book on theatrical scenery* are really architectural problems.

*

One architect whom it is surprising not to find mentioned is E. W. Godwin, Ellen Terry's husband, whom I referred to in another connection some weeks ago. The part he played in restoring to the designer in the late Victorian theatre some of the responsibility for the character of the production was considerable. Perhaps the explanation is that Godwin's contribu-

* *Changeable Scenery.* By Richard Southern. Faber & Faber. Price 63s



Netted Skylon

There is, perhaps, a little too much good taste at the BIF exhibition at Earls Court and Olympia this year. At first glance it seems that the standard of display design has improved. But, apart from the areas that house the larger free-standing displays, there is too much uniformity. Doubtless the organizers confuse uniformity with unity. There is something rather naïve and insipid about the "planned" avenues at both exhibition buildings this year. This "planning," combined with echoes of "South Bank Contemporary," almost makes one wish for a little more vulgarity. But, of course, it is only the copyist who endangers a style by using its elements in an irritatingly derivative manner. There are always imaginative designers who can make original use of the same elements. And it is encouraging to see that some of the BIF designers who are not hampered by restrictions—notably those of the larger stands—are avoiding the more blatant cliches, such as cantilevered platforms and flying staircases. It is amusing, too, to see that three of these have made use of vertical features. The one above, a mobile netted skylon by Richard Huws, is part of Basil Spence's Olympia stand for ICI. Others are on pages 601 to 603.

tion was one of taste and æsthetics rather than on the side of stage mechanism. It is the latter which is Mr. Southern's special concern, and no one is more knowledgeable than he about it.

*

His book is likely to become the standard work on the origin and evolution of movable scenery. It is a fascinating history, full of ingenuities and, to ASTRAGAL at least, surprises, such as the fact that, in Inigo Jones's day and long after, the changing of the scene was part of the spectacle; it came into existence in order to be watched and the idea of a curtain hiding the process is very new, the result of a desire to create an illusion of real life.

SAD ADS.

Fellow addicts of American magazines may have noticed a new move lately in the advertising field—the use of physical affliction in the cause of elegance. Recent colour pictures in praise of a new line of shirts show the usual Man of Distinction—Miami suntan, clipped moustache, greying temples—in his shirt sleeves, but with a difference. Over one eye is a large black patch. And very rakish and chic it looks. Now, of course, in the film and theatre business this is an old trick. The carefully adjusted head bandage over the naval officer's brow in Act III, the piece of sticking plaster poised like a dimple on a film-star's cheek after a road crash, the empty sleeve, the tapping stick—all of them have proved themselves sturdy and loyal winners of sympathy on stage and screen.

*

But so far as I know this is the first appearance in the ad. pages—and since many ad.-men, like many architects, live by extending and diluting each good idea as it turns up, no doubt we can expect to see more of it. Personally I am against it. Let's have done with this parade of *mutilés*. Let's stick to the plunging neckline and the rousing slogan and not have our sympathies aroused irrelevantly. And if we must see distinguished gentlemen in their shirt-sleeves let's see them where we've grown used to seeing them—in the locker room discussing a niblick with a friend, and not playing a recorder duet with a cripple.

ASTRAGAL

POINTS FROM THIS ISSUE

The Editors

THE ARCHITECT AS MASTER-BUILDER

WALTER GROPIUS spoke recently to the Chicago Chapter of the American Institute of Architects. His speech was important. "Architects," he said, "must regain the mediæval role of master-builder if they are to survive in the industrial age." And he said a good deal more about young architects doing site work and architects in general "heading the construction team."

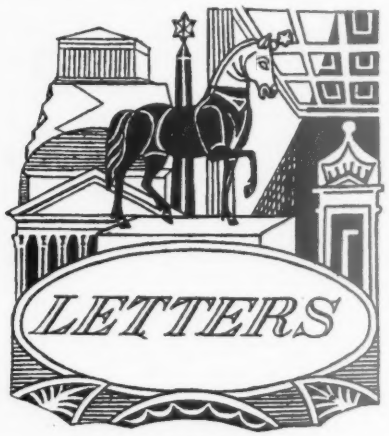
Now that is the sort of thing that almost anyone supports in a vague, after-dinner-speech sort of manner; it is also just the sort of thing that every senior architect, every Allied Society and every RIBA Committee turns down flat the moment its practical implications are realized. Gropius's speech could, of course, be made a text for an historical dissertation on all the harm that the Renaissance did. That is old stuff—though true as well as old—but the real issue raised is nothing more nor less than the survival of the architect. Not, please note, "survival of the profession." That is the point: in an industrial and scientific society a "profession" has no place. For half a century the architectural profession has been making itself pure, as if it bore the same sort of burden of intimate confidences as the doctor or lawyer.

Integrity, we say, must always come first. But the private client is dead and the small contractor dying. If the architect is to build in a big way for big corporate bodies—from the state downwards—then somehow he has got to get back into contracting and into building itself. That, after all, is where he was throughout the whole of Bannister Fletcher (except the last chapter) and that is something of which every young architect today is very much aware.

There is, however, a kind of dream "norm" to which the RIBA clings desperately; a tidy "norm" with a number of private offices, each employing from two to twenty subservient, competent and unambitious assistants, and each office putting up buildings—mainly brick and wood—for private gentlemen, at six per cent. each. Every departure from this dream "norm" has been only reluctantly admitted. Of course it never was a "norm"; it was a very temporary situation existing for only about fifty of the last five thousand years. As recently as 1891 such distinguished men as J. D. Sedding,

T. G. Jackson, Norman Shaw, Alma Tadema and Burne-Jones were writing to *The Times* to point out the disastrous consequences that might result from turning a great art into a closed profession.

Today the great designer, of extreme technical competence, is wanted as never before. His place is in the laboratory, the factory and the building contractor's office as much as in the planning departments of local authority. As a young man, Gropius realized dimly what was ahead of us and tried to meet the situation with the Bauhaus. Looking around him today he realizes that the time has come for the next step. In this country at any rate it will not be an easy one, but it has got to be taken.



J. Williams, G. H. Fletcher and L. Auton, A./A./A.R.I.B.A.
"17 Manchester Salaried Architects"
Peter D. Hammond, A.R.I.B.A.
"Associate"
H. R. Lister, A.R.I.B.A.

Architects' Salaries: Twenty-three Readers say Solution is in Ballot Box

SIR,—Further to the letter from the City Architect's Department, Coventry, published in your issue of April 10, regarding architect's salaries, an opportunity now arises to put into effect the remedy set out in their letter.

Elections for the RIBA council are to take place shortly, and it is the duty of all salaried members to use their vote and right of nomination to ensure that salaried architects obtain a more equitable representation on the councils of the RIBA.

J. WILLIAMS,
G. H. FLETCHER,
L. AUTON.

SIR,—Mr. L. C. Howitt, writing as chairman of the RIBA Salaried and Official Architects' Committee (AJ, May 1) clearly shows that amidst a changing and developing society the RIBA at least stands undeviating on the impregnable rock of its Regency ideals. But the wealthy and cultivated aristocrat who is the client about whom all the RIBA codes revolve has passed for ever from the scene. In his place is a patron of a new kind, who has little or no architectural consciousness, and is never likely to gain any if current policy persists: for the architect is debarred from advertising what he does or is, and the RIBA won't do it for him. Little wonder then that Mr. Howitt can write "We have not yet either the legal or the general public acceptance of the indispensability of our art, such as is enjoyed by the Medical Profession."

If this is the case, then we must leave no stone unturned to alter it, or our days as architects are numbered. We must, to put no finer point on it, present ourselves and our work in a clear and attractive manner to the Great British Public. The doctors indeed, have already taken this step with regard to their own profession: witness the launching of their popular magazine *Family Doctor*. Surely raising the standard of public consciousness and appreciation of architecture doesn't fall outside the Charter of the RIBA?

The Council of the RIBA, we are told, has never opposed the will of the Salaried and Official Architects' Committee on any important issue. This is not surprising in view of the fact that the Committee doesn't seem to have a will to oppose—or at least none that can really effect an improvement in the Salaried Architect's status. We have studied the latest RIBA report, and the nearest thing to an expression of will we could find was that "The Committee are considering whether there is any effective action they can properly recommend the Council to take in regard to certain aspects of the report (on Civil Service pay) which appeared to them to have dealt inadequately with some of the causes of dissatisfaction."

We wish to go on record as supporting whole-heartedly the views of the staff of the City Architect of Coventry: the RIBA must move with the times: it must provide the solid backing that the salaried architects—the majority of its members—need. And we will start the process with our ballot slips.

17 MANCHESTER SALARIED ARCHITECTS.

SIR,—I read with interest Leonard C. Howitt's reply to the recent letters in your columns dealing with architects in local government offices. Although I appreciate that his efforts on the RIBA Salaried and Official Architects' Committee are directed towards watching over the lot of salaried architects, it does appear that these efforts are not producing the results hoped for by his fellow official architects.

May I suggest that the main bone of contention is that the RIBA does lay down the scale of professional charges for private practitioners, but seems unable, at present, to similarly lay down scales of salaries for official architects. The remuneration of private practitioners being based upon a percentage fee basis is automatically increased or decreased by the cost of building and thus under present conditions, as the cost of building is continually rising due to the increased costs of labour and materials, the private practitioner's income has also increased and tends to keep in step with the rising cost of living. With the salaried architect, however, no such state of affairs exists and he is undoubtedly in a much less favourable position.

Surely it is in the interest of both the RIBA and the architectural profession generally that architects, whether private practitioners or salaried officials, should be adequately paid for their services and the correct body to assist in this object would appear to be the RIBA itself. If, therefore, as Mr. Howitt states in his letter, the RIBA is at present constitutionally unable to assist in negotiating and securing scales of salaries for its salaried members, I submit that the constitution should be changed to allow it to do so.

PETER D. HAMMOND.

Bristol.

SIR,—It is difficult to see how Leonard Howitt in his official capacities could reply differently to the recent correspondence in your columns.

Yet if we older associates, forced *nolens volens* into local government offices, cannot rely on the Institute to protect our interests where are we to turn? Are we to go to NALGO, an organization that appears to be mainly devoted to clerks?

Surely if the constitution of the Institute is such that it cannot act in these matters, then we should all get together and try to have it changed, there are enough of us goodness knows.

The real fact of the matter is that the RIBA by their encouragement of the official architect have brought down the value and standing of the qualified architect. We older associates should not have to seek employment in such offices, the work should be sent out to us as independent private architects.

What chance is there of our ever setting up on our own when work is carried out at cut rates by an official architects' department?

The Institute should be taking every possible step to get its qualified members into independent private practice.

"ASSOCIATE."

SIR,—Mr. Howitt's letter on the correspondence in your columns regarding architects' salaries appears to leave much to be desired.

To begin with, he accuses Coventry City Architect's Department of lack of knowledge of the work and objects of the RIBA Council. This can only be the fault of the RIBA in not keeping its members better informed.

It is obvious that one cannot compare the RIBA with the BMA—the comparison must be between the RIBA and the General Medical Council. The BMA was set up by members of the medical profession to safeguard their interests, and it would appear that some similar organization is required in the architectural profession.

I agree with the staff of the Coventry City Architect's Department that salaried architects should seek election to the RIBA Council, but I feel that there should be a co-ordinated effort to achieve this end. I suggest that a Salaried Architects' Association should be set up which could nominate its candidates for election to the RIBA Council. It should be open to the salaried architects in both public and private offices. I agree with Mr. Howitt that we do not want a split in the profession.

H. R. LISTER.

Suffolk.

The problems which have become apparent in existing and new public offices due to the very large increase of work of all kinds were pointed out by the Guest Editors in their last article. In previous articles they have briefly described the growth of Public Architecture and reviewed the present position. In particular the question of the size appeared to be a controversial aspect of public office in view of the general belief that the large office is unpleasant to work in and that it tends automatically to produce bad architecture. The large office, good and bad, exists as a typical development of modern society and it is idle to speculate on how to prevent its occurrence. The Guest Editors, however, feel that the size of the office is not necessarily the main difficulty, but that the key to the problem lies in the size of the groups into which the office is sub-divided, and the degree of responsibility accorded to them. Being aware that their opinions as chief officers on working in groups might not coincide with those of the rank and file of the profession, they have obtained the views of two young architects of proved ability who have worked as members of groups in offices where this system has been developed. The following article is therefore written to illustrate the point of view of the junior member of the profession who has decided to make his future in the Public Office. The Guest Editors are (from top left): Robert Gardner-Medwin, Chief Architect and Planning Officer to the Department of Health for Scotland; Robert Matthew, Architect to the LCC; Donald Gibson, City Architect and Planning Officer of Coventry; and Stirrat Johnson-Marshall, Chief Architect to the MOE.

The Guest Editors

GROUP WORKING AND THE LARGE OFFICE

EVERY form of corporate effort in society sets its own problems of organization. One of our tasks is to tackle the problems, real and imaginary, of the large public architectural office. It is, of course, mainly a challenge to our organizing ability, but it must be tackled not only from the point of view of the chief architect who has to run the office, but also from the point of view of the newly qualified architect who has decided to start his career in public architecture.

PUBLIC VERSUS PRIVATE PRACTICE

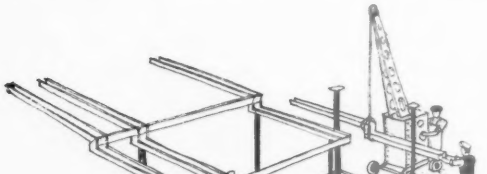
Now it is a popularly held idea among young architects that the small private office is the best, not only for the human conditions of work but also for the production of good architecture. We know that the best private architects today—and we judge them as best by the quality of their work and not from the wealth that derives from it—have arranged their offices so as to ensure that they are the master designers in the design team, and have consciously limited the size of their offices to ensure this. But here we need to distinguish between two things. The first is the keenness of the staff to produce their best work, and the second is being able to meet the architectural conditions of work which one is given. It might be possible in the small private office to get the very best work out of the staff and still not be able to meet certain conditions—such as developing techniques over a large continuing programme. Conversely, a large public office might be able to meet the actual conditions of work but may be unable to get the best work from its staff. We hope to show that the big public office is capable of achieving both.

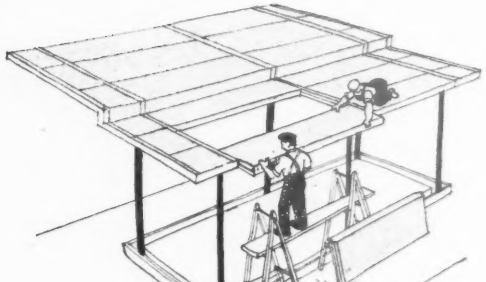
GROUP WORKING

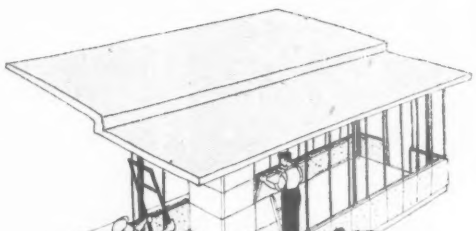
The greatest threat, real or imagined, to the architect in the large public office is the loss of individuality, the fear that he has become an impersonal factor in a large and unwieldy machine. Is it possible that the method of working in small groups, such as those being developed with success in some offices today, can be made generally applicable to all large offices?

Before discussing these practical experiments in group working we ought, to avoid misunderstanding, to consider an alternative system with which they are often confused. This alternative system also goes by the name of group working, and is practised at some of the more progressive architectural schools. In this system all the members of the group work on an extremely democratic basis and each member is responsible for a portion of the research essential before preparing a design. Each individual has equal responsibility in the design, and an attempt is made to utilize his designing capacity on architectural problems to the best advantage. One member of the group may, or may not be, appointed as chairman but at any rate it is usual to have one member responsible for the co-ordination of the activities of the other members. Such a system of group working has been tried out, with certain amendments, by at least one private architectural firm, but considerable modification proved necessary. In fact, it has arisen in architectural schools as a method of ensuring that a group of students cover in detail the diverse problems inherent in one complex modern structure, and the egalitarian form it takes is, perhaps, a result of the annual intake of students. It is extremely unlikely that any group system of this sort could ever work successfully in any public office.

In order to show the troubles inherent in, as well as the advantages of, group working, we asked for comments from







An example of development work in railway station design undertaken by a public architect's office—that of the LMS. Above left, and left, three stages in the construction. Above, a completed structure at Marsh Lane. (Sketches by Sir Hugh Casson.)

two architects who had had experience of it, both in a junior capacity. We put questions to these architects under the following four headings: First, what should be the size of a group and what should be the type of personality of a member of such a group? Second, what should be the groups' relationship with the chief architect and the remainder of the office both as regards administration and practice? Third, what should be the physical conditions under which they will work? Fourth, how do the external factors of architectural practice (*i.e.*, the planning controls, byelaws and other controls) impinge on group working?

THE SIZE OF THE GROUP

The first problem is, then, the correct size for a group. Inevitably this will vary according to the type of building which is to be designed and erected. Our two guests here gave an example from their own experience. They find that for a continuing programme for educational buildings costing between £50,000 and £250,000, the best number consists of about ten architects. Not all these will necessarily be of equal experience. Up to four can be newly qualified, and can function partly as draughtsmen. This figure of ten can only be taken as valid for those particular conditions of building schools of a certain size. It is difficult to obtain precise data of sizes of groups which have been proved effective for different types of buildings and different kinds of building programmes; but it is fair perhaps to assume that this size is nearing an upper limit for a group which will have the desirable qualities experienced in the best private offices.

As regards the type of person who is desirable for such an activity as group working, the architects whose views on these problems we had invited expressed a desire for people with considerable self-reliance and with a certain amount of experience. Obviously the architect straight from school cannot be given equal responsibility from the start with the rest of the group. However, a newcomer to such a group can see that he is entering at the bottom of what could be considered as a complete architectural cycle in which he can progress from assistant draughtsman to the position of group leader, or architect, in the truest sense of the word, and therefore nearly at the top of the architectural tree.

THE GROUP LEADER

Now it is this role of group leader which is essential to the efficient working of the system. It is vital that there should be one man in charge of the group who should have a very considerable amount of authority, and be responsible directly to the chief architect of the local authority. We must therefore study this position more closely.

Such a group leader, our guests agreed, need not necessarily be the strongest man on design. He is responsible for ensuring that the designing and building operations go forward smoothly, and he will arrange his team in collaboration with the chief architect so as to ensure a membership of his group which is most suitable for the production of the buildings for which he is responsible. It can be seen that if the system of group working is introduced into a public office it may be necessary to have a group wholly responsible for each type of building which is produced by the office. One therefore gets a set-up of chief architect, possibly with a deputy, and a number of groups which vary in size according to their building subject and programme, each in the charge of a group leader. It can be argued that the responsibilities of this group leader towards his staff should be considerable if he is to have their full confidence and support. There might be an argument for insisting that he is present at the selection of staff for his group by the chief architect. There is an objection to this, of course, on the part of chief architects, who may feel that such an action would limit the flexibility of their staff, and cause them to be unable to make those adjustments to sudden demands by moving assistants from one group to another, as the occasion merits.

GROUP WELFARE AND DISCIPLINE

In addition to his job of producing buildings, the group architect or leader, they suggest, should be responsible for both promotion and demotion, after discussion with his own boss, the chief architect. There is normally a certain reluctance on the part of the group leader to tell tales to the chief architect. This reluctance disappears with the increase of his own authority. He should also be responsible for the more trivial details of day-to-day discipline in the office. One such item which seems to cause controversy quite out of proportion to its importance is the problem of "signing on" on arrival in the morning at the office. There is a reluctance on the part of senior staff members to be forced to conform to this type of discipline, and the argument is that as there is no limit to the hours he may be called upon to work in the evenings there is no necessity to ensure punctuality in the morning. The whole system of time-keeping tends to be more thorough in the public office than in the private, and it is perhaps the outcome of architects having to work under the same conditions as clerks and other large bodies of staff in the public office. It is, of course, essential that there should be some form of time-keeping, so as to be able to show the "client" the amount of work which is being done by the architects on the various designs. The preparation of such a time-schedule could be the task of the group architect, and, if he is given sufficient responsibility for his staff, better feeling will prevail if he is able, when necessary, to cut red tape and ensure that the extra efforts of his staff in times of emergency are made up for when times and conditions are easier.

If good conditions of working are to be produced, all those factors which tend to make work be considered as a penance rather than a delight should be removed. Architects who have chosen freely their career should delight in their work, and should not count the time they spend at it by minutes. The discipline in their work should be self-imposed. If flexibility in the hours of work were permitted there would seem to be no cause for the paying of overtime. It is better that they should be paid a given salary for a given job and accept the full responsibility that goes with it, including the possibility of dismissal for real inefficiency.

There is also an incidental advantage in having a larger office. It often occurs that a man is inefficient in his job not because of inability but because he is not suited to it—in other words, a square peg in a round hole. The large office allows the chief architect a greater chance of finding the necessary "square holes" for such cases.

ARCHITECT-CLIENT RELATIONSHIP

If, by this system of grouping architects, good conditions of work are created which are comparable with those of the envied small private offices, it must not be forgotten that there are other important aspects of running an office which must also be met. The more intimate relationship between client and architect found in the best private offices must also be achieved in the public office. This, as far as the "client" committee is concerned, is often achieved by the group architect attending committee meetings, with, or without, the chief architect. In perfect conditions one would like the whole of the group to attend such meetings in order to discuss problems, but it is no more likely to be achieved in the public office than it is in a private one. On the other hand, it is often easier for the public office to go some way towards this if conditions are favourable. But more important is the fact that, in a public office responsible for educational buildings, for instance, it is possible for members of the architectural team designing schools to get to know well their opposite numbers in the educational department and be able to discuss day-to-day problems at almost any time. This will provide just that stimulus and detailed knowledge which is necessary to encourage good design, the principle being that the person doing the design should have direct access to whoever represents the client.

PHYSICAL CONDITIONS

Now a few words on the actual physical conditions in which one works. It is obvious that one's surroundings

A proposed College of Further Education at Ashton-under-Lyne, designed under the direction of G. Noel Hill, County Architect of Lancashire. This college, with two others in the same county, will be fully illustrated in a further issue.

are bound to have an influence on efficiency. Quite apart from the obvious aspect that drawing offices should have a reasonable standard of comfort, there is the problem of size. We mentioned earlier the dislikes all architects and their assistants have for feeling that they are cogs in an impersonal machine. Ideally, therefore, they should not be thrown all together in one vast drawing office. The prospect of doing creative work of sensitivity in a room with fifty other people and with a peep-hole at one end to ensure that discipline is maintained, is abhorrent to everyone. For the convenience of the team, the group leader should be either in the same room or in an office just off it, and similarly for his own convenience it is better that the chief architect should be as close as possible. It can make a considerable difference to the sense of impersonality in an office if the chief architect is not only physically close at hand and accessible to his staff, but also that he is able to visit the drawing office and study the work in progress for himself. In addition, the closest co-ordination, between the chief and the group leaders, which is most easily achieved by proximity of office, is obviously essential.

SUMMARY

Although we are well aware that there is a broad range of problems still left untouched, we think that one good form of office organization has been suggested in which the young architect can help to produce architecture of the best quality and feel at the same time that he is playing a vital part. There remains, however, the problem of the groups' relationship with the external factors—such as byelaws and building regulations—of architectural practice, and these very involved and contentious matters we propose tackling in in another article.

To summarize our conclusions so far, therefore: first, we think it is not so much a question of size of office (although there is undoubtedly an upper limit) as of organization. An organization of small or smallish groups or teams can do the job, provided the organization of the group, and its responsibilities, are carefully considered. It must have a good leader, and he must be given a generous measure not only of technical, but also of staff responsibility. The closest co-ordination must exist between the chief architect and the group leaders. Finally, the physical conditions must not be overlooked; cut out the one large drawing office, see that the group leader is right by his group, and that the chief is not too far away. Each architect, as a group member, must be treated as a responsible professional person, and, in being given greater opportunities and freedom he must also accept greater responsibilities and obligations.

GG

Prize Offered for Set of Measured Drawings

The Georgian Group is offering a prize of £25 for the best set of measured drawings of a Georgian building. The assessors will be Godfrey Allen, Edward Maufe and S. E. Dykes-Bower.

The competition will be open to any student of any school of architecture in England and Wales recognized for exemption from the RIBA Intermediate Examination, or the Institute's Intermediate and Final Examinations. Or, he may be attending any school of architecture approved by the RIBA, any art school, or he may be working in an architect's office. All candidates must be in one or other of these situations on June 1, 1952, and have not passed the RIBA Final or equivalent examination. In addition, he must not be over the age of 30. . Full details of the competition may be obtained from the Secretary, Georgian Group, 27, Grosvenor Place, S.W.1.

LIVERPOOL

Commonwealth Award for Student

A Commonwealth Fund Fellowship has this year again been awarded to a graduate of the Liverpool School of Architecture—Derek R. H. Phillips. This is the tenth to be gained by a graduate of the School since the Fellowships were first inaugurated in 1925.

The Fellowship, which is tenable in an American University for a period of twelve months in the first instance, may be extended for a further nine months. It covers the full expenses of travel to, from and in the United States and of residence and study there.

Whilst in America, Mr. Phillips will be working in the University of California. There he will investigate the possibilities of achieving economies in urban planning and building by the application of the results of research in the field of natural illumination. In choosing this subject he will be pursuing further a programme of independent study which has involved visits to Italy and Spain, and on which he has been engaged since 1948.

The photograph above shows the sideboard by George M. H. Richardson, which won the first-class award of £70, at a competition held in Glasgow recently by the C O I D Scottish Committee. The competition was organized for the benefit of Scottish craftsmen and all the furniture was hand-made.

COID

Furniture Design: New Approach Being Sought

Professor R. D. Russell, of the Royal College of Art, London, urged a re-examination of their problem on furniture designers when speaking in Glasgow recently.

"I am sure that the development of a contemporary vernacular depends firstly upon finding out what people want and like in the broadest sense," he said. "I think they like warm colour and a certain solidity and although Jacobean reproductions give them these there must be dozens of alternatives, for it is not really Jacobean furniture that people really want but furniture that is warm and cosy."

He was speaking at a meeting in the Building Centre, Glasgow, arranged by the Council of Industrial Design Scottish Committee to give entrants to their recent Furniture Design Competition an opportunity to discuss the results with the judges, Professor Russell, Neil Morris, the Glasgow manufacturer, and David Woolfson of Elders, the Glasgow retailers.

"This particular competition seemed to be a particularly interesting and pertinent one, for its aim was to make at least the beginnings of a new and at the same time popular vernacular in contemporary furniture," said Professor Russell. "It seemed to the jury that this challenge had not been accepted by the great majority of the entrants and the purpose of this meeting is to make clear the terms of reference and to discuss possible next steps.

"To be really successful furniture must not only be well and sensitively designed; it must also be capable of being economically produced for a mass market and it must be acceptable by that market. If it fails in any one of these three respects it is, to some extent, a failure in total. The essential relationship, the trinity, of designer, maker and buyer must be maintained and it may be quite as illogical to say that any design is really good in spite of the fact that it does not sell well as it is to say that one is really good because it does sell. Both things are, in fact, said only too often.

"Let us just consider for a moment the development of contemporary furniture design. This has been, broadly speaking, either evolutionary or revolutionary; obviously it is not, in fact, quite as black and white as this for most designs have been a mixture of the two to some extent. It is possible to break this down even further by saying that furniture has been either evolutionary or revolutionary both in its plan or arrangement of storage which effects the general form and also in its structure which effects the detail and perhaps the form too.

"For instance, the storage unit for a dining room might be planned in a revolutionary sense ignoring the form of a traditional and functionally outmoded sideboard and yet, at the same time, might be of traditional structure; in the case of a chair, on the other hand, the fundamental requirement of providing surfaces on which to sit and rest your back against has never changed so that here the form is bound to be an evolution although the structure may be a revolution.

"Now the market for furniture of revolutionary structure is bound, I think, to be an intellectual one and a very small one. From the point of view of this competition, intended to produce furniture for a pretty conservative mass market in Scotland, the evolutionary approach to structure seems to be inescapable.

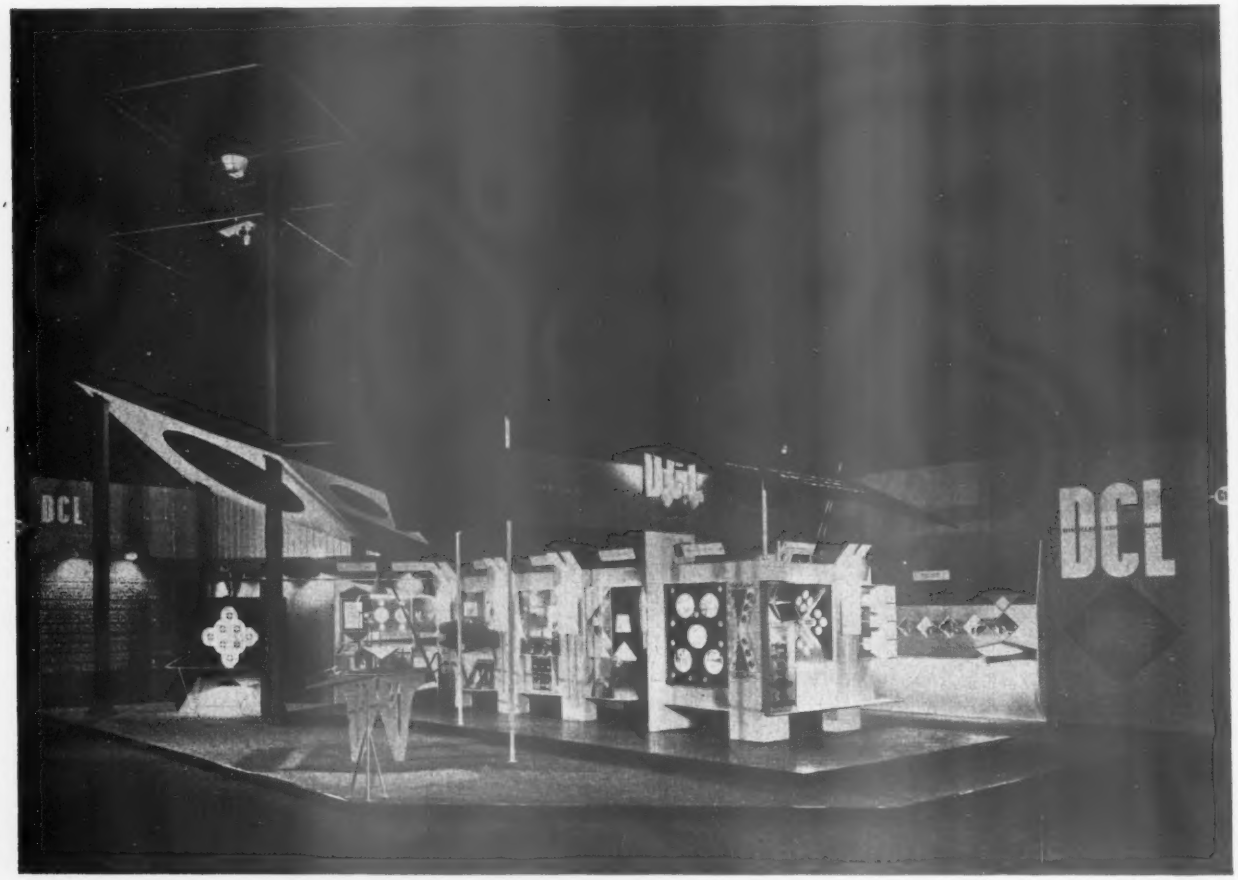
"I think it is fair to say that the best Scandinavian furniture, and notably the best Danish, has been designed in this way: on the other hand, the most interesting Italian and American furniture has been revolutionary. Now, Scandinavian design is

THE BIF: OLYMPIA AND EARL'S COURT

The stand for Shell Chemicals at Olympia was designed by Ronald Dickens to give an impression of a control room at the Stanlow refinery chemical plant. A world map, to the right of the photograph, is floating on water and indicates the distribution areas controlled by the company. The vertical feature symbolizes a distillation tower. The basic structure of the stand is 2 in. tubular steel. Below, the Guinness stand's interior at Earl's Court, designed by Robert Wetmore, of Cockade, Ltd.

THE BRITISH INDUSTRY FAIR: STANDS AT EARL'S COURT AND OLYMPIA

Left: the Monsanto Chemicals' stand was designed by F. M. Gross, who won a limited competition organised by the firm. It contains 4 interviewing offices, 1 general office, a large reception area and a bar. Below: the stand for Distillers Company, designed by Edwin Galligan. The tower of girders, supporting a stainless steel distillation column, is part of a plant soon to be used in development work. Opposite, top: Howards' stand, designed by Albert Smith. The large vertical background screen, built up of a pattern of coloured casement cloth supported by tubular steel, attracts attention from a distance and acts as a foil to the model bee (wing span 18 ft.) by Richard Dendy, which acts as a symbol for the activities of the chemical industry. An office is placed centrally on the site. Opposite, bottom: the BOAC and BEA stand by John Lansdell has a central enquiry counter and office accommodation. From it spring 3 single piece pine pylons, 29 ft. long. These support models of the "Comet" and the "Viscount."



accepted by designers throughout the world as the best of its type but I think that both designers and makers of furniture have pretty consistently made the mistake of taking their inspiration from the best contemporary designs on the one hand or from the best selling lines on the other without going back to the root causes that made them either good or acceptable.

"The Scandinavian tradition, and again particularly the Danish one, has been based on the work of the British eighteenth century. It has been adopted by men with great feeling for quality and detail for use in Scandinavian rooms. These rooms tend to be light and airy and centrally heated and could not be much more different from the usual run of small British homes which are fairly dark and fairly stuffy and often exceedingly cold except for a minute area of intense heat round the fire. So the light, hard, elegant furniture of Scandinavia just will not go down in the mass market in this country and quite rightly.

"Now there is no reason in the world why other furniture should not be as good in its own way as the best Scandinavian furniture. It will not be the same and it will not sell in Denmark, but then Danish furniture as we have suggested will not sell in Scotland. The source when you come down to it, is the same; it is the best of the British eighteenth and early nineteenth centuries, and do not forget that this includes the work of immensely distinguished Scotsmen such as the brothers Adam.

"So there, as I see it, is the problem. First the analysis of public demand and then the evolution of a contemporary type of furniture from the splendid inspiration of the past. But it is no good taking somebody else's solution designed for a different purpose, using the attractive tricks to be found in this and giving it a bit more weight for Scottish homes and it is no good just drifting mindlessly back towards reproductions of reproductions of old furniture."

Correction

In the issue of April 24 the south elevation of the north side of St. George's Street, Canterbury, published on pages 514 and 515, the elevation of Barclays Bank is not a true reproduction of the elevation designed by the architects, Messrs. Willan, Stewart & Waite. The caption to the illustration stated that there was only one design by a local private architect. This was incorrect; the firm of Willan, Stewart & Waite practise in Canterbury as well as at Dover and Folkestone.

DIARY

Hammersmith School of Building and Arts and Crafts and Architectural Training Exhibition. At BC, 26, Store Street, Tottenham Court Road, W.C.1. Weekdays, 9.30 a.m. to 5 p.m. Saturdays, 9.30 a.m. to 1 p.m.
UNTIL MAY 24

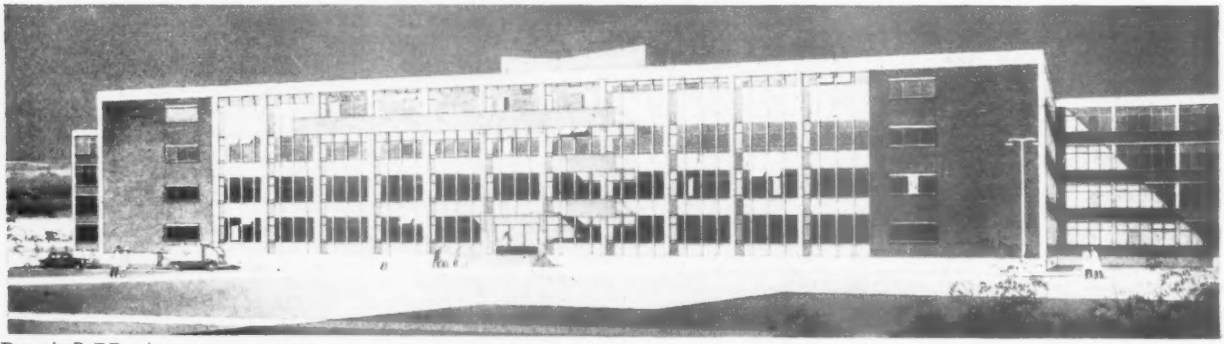
The Festival of Britain in Retrospect. Sir Gerald Barry. At RSA, John Adam Street, W.C.2. 6 p.m.
MAY 19

National Parks with Particular Reference to the Pennine Way. Tom Stephenson. At 28, King Street, Covent Garden, W.C.2. (Sponsor: TCPA, Students' Planning Group.) 6.30 p.m.
MAY 15

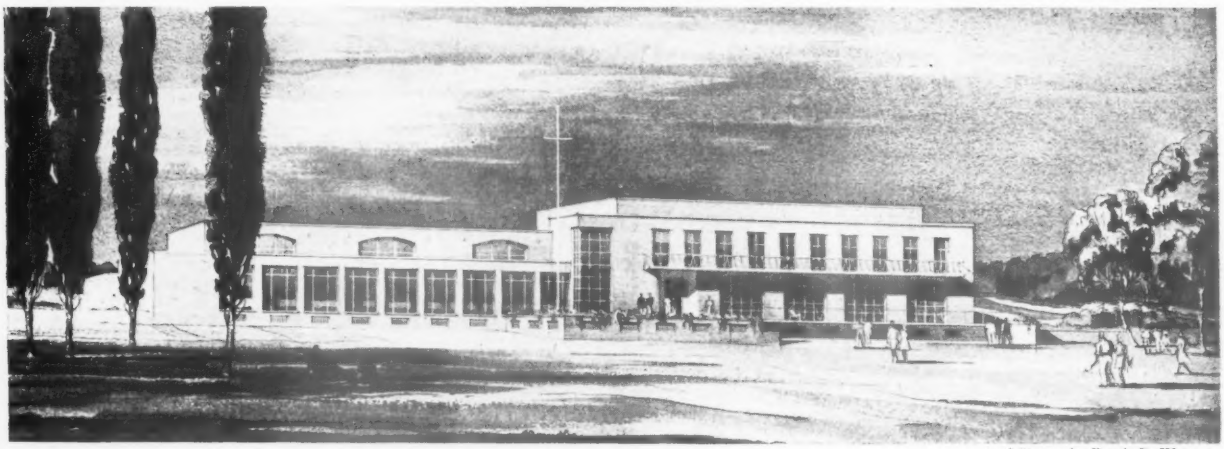
Town Planning in Kuwait. P. W. Macfarlane. At 28, King Street, Covent Garden, W.C.2. (Sponsor: TCPA Students' Planning Group.) 6.30 p.m.
MAY 22

IES Summer Meeting. At Winter Garden Pavilion, Eastbourne. Those wishing to attend should write to: The Secretary, IES, 32, Victoria Street, London, S.W.1.
MAY 20-23

ROYAL ACADEMY SUMMER EXHIBITION: A SELECTION



Drawn by R. T Dennis.

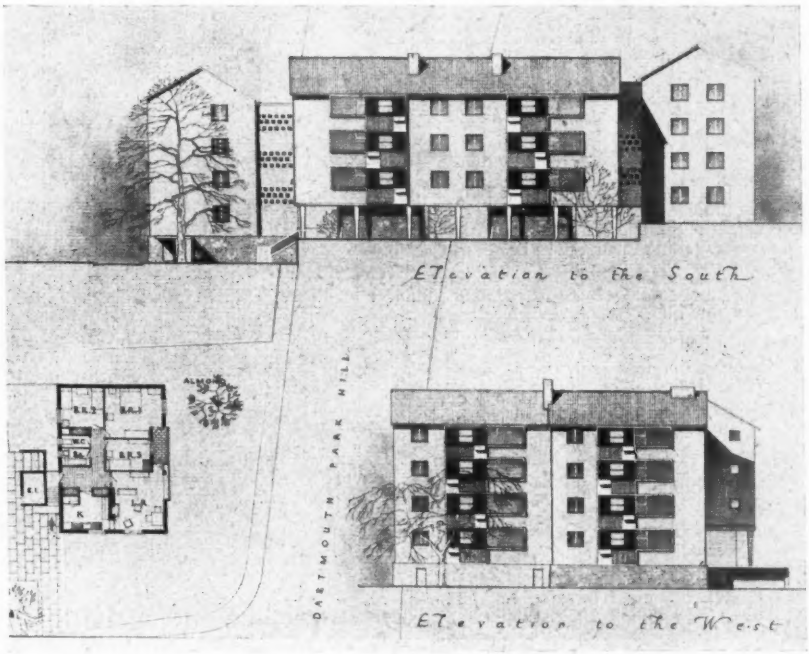


Drawn by Frank R. Weemys.

On this and the following three pages are some of the designs on view in the Architecture Room at the Royal Academy Summer Exhibition, Burlington House. Other designs were published last week. Top: new research laboratories, Beeston, Nottinghamshire, by C. St. Clair Oakes. Above: canteen building for a printing works, by Howard Robertson (Easton & Robertson), the nominated President of the RIBA. Below: The Provincial Insurance Company, Kendal, by Basil R. Ward.

OF DESIGNS FROM THE ARCHITECTURE ROOM

Right : Metropolitan Police housing, The Towers, Highgate, N.19, by William S. Grice. Below : Leigham Court Road Housing Scheme, S.W.16, for the Metropolitan Borough of Lambeth, by William F. Howard.



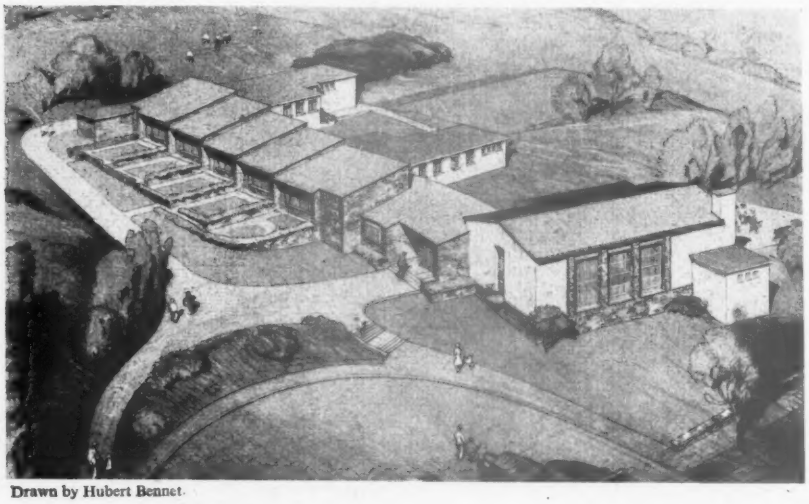
Drawn by J. McLellan.

Drawn by F. A Evans.

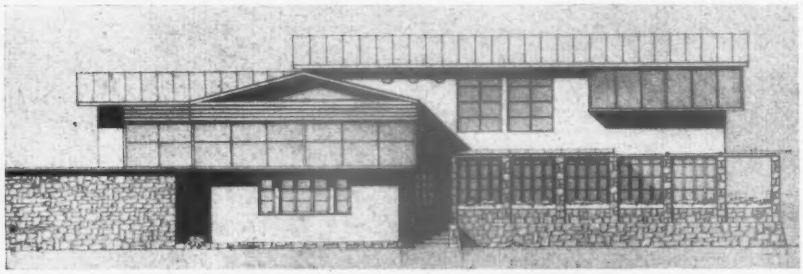
Proposed Guildhall office block, by Sir Giles Gilbert Scott.

Drawn by Philip Hepworth.

ROYAL ACADEMY SUMMER EXHIBITION: A SELECTION



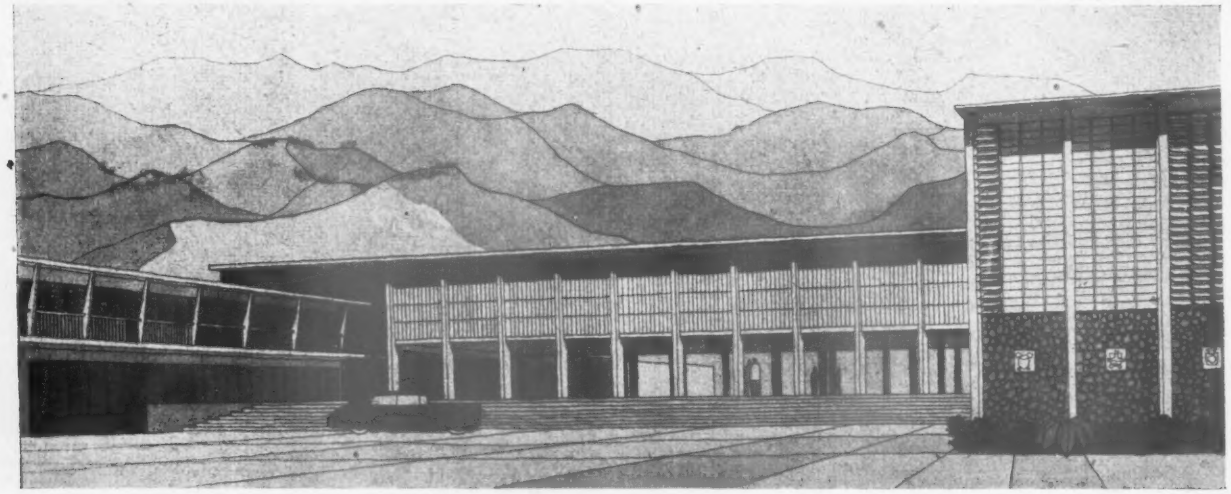
Drawn by Hubert Bennet.



Left: Bardsey Primary School, Yorkshire, by Hubert Bennet. Left, below: houses for the Ministers of the Gold Coast Government, by F. Heather Hughes and John P. Lomax. Below: LCC's Finchley Road flats by Louis de Soissons. Bottom: University College, West Indies, Great Hall and Senate, by Graham Dawbarn (Norman & Dawbarn). Opposite page—Top: Marchwood Generating Station, by F. Q. Farmer and F. Dark. Centre: Harlow New Town, Mark Hall Shopping Centre, by Frederick E. Gibberd. Bottom: Harlow New Town, Areas 16 and 17, by Graham Dawbarn.

Drawn by Lawrence Wright.

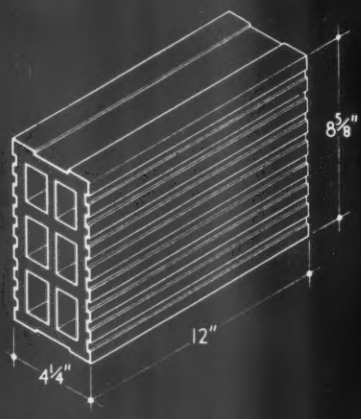
Drawn by Gordon Cullen.



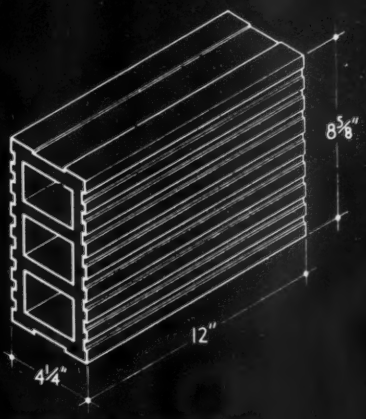
BUILDING BLOCKS | HOLLOW CLAY | GENERAL DATA

The Architects' Journal Library of Information Sheets 363. Editor: Cotterell Butler, A.R.I.B.A.

REVISED 15.5.52

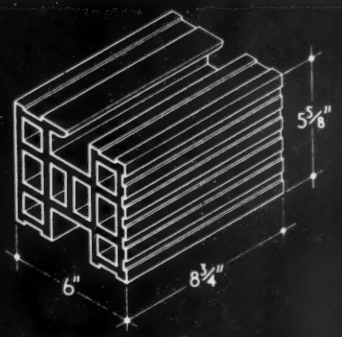


standard six-cavity block

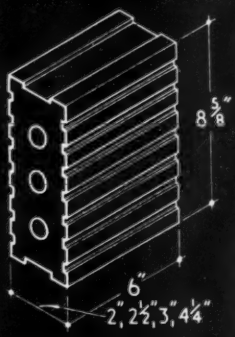


standard three-cavity block

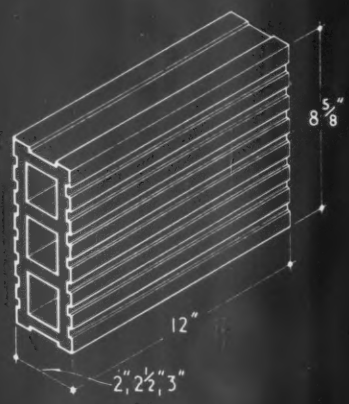
BUILDING BLOCKS: KEYED. (half blocks also available)



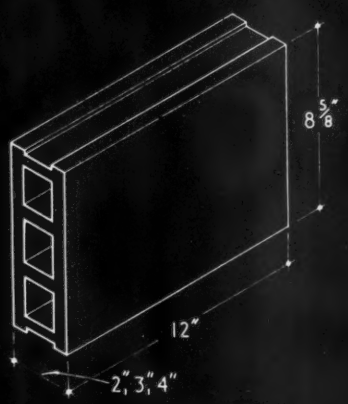
BUILDING BLOCK: RUG-FACE OR KEYED.



FIXING BLOCKS.

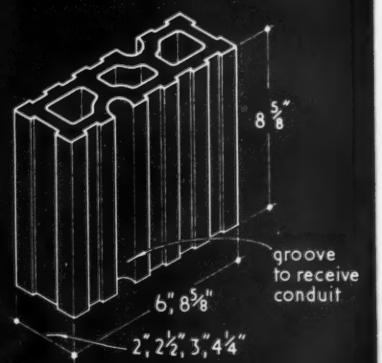


standard keyed block

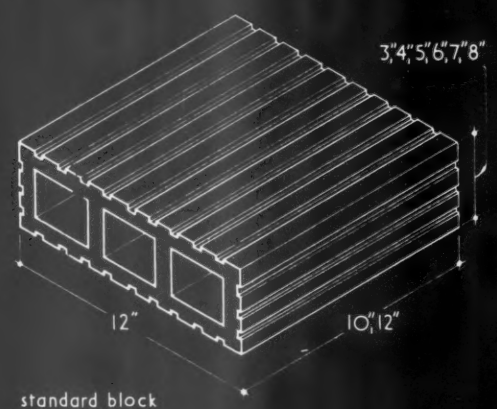


standard smooth-faced block

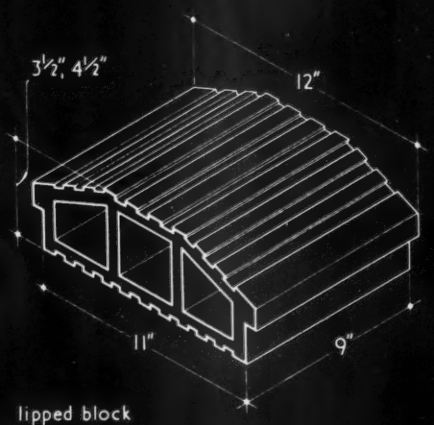
PARTITION BLOCKS: KEYED AND SMOOTH-FACED. (half blocks also available)



CONDUIT BLOCKS.

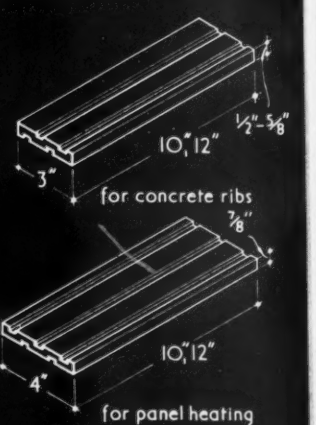


standard block



lipped block

FLOOR BLOCKS.



FILLER TILES. (supplied in blocks of ten)

PHORPRES· HOLLOW CLAY BLOCKS FOR WALLS, PARTITIONS AND FLOORS.

Manufacturer: London Brick Company Limited.

14.B1 'PHORPRES' HOLLOW CLAY BLOCKS FOR WALLS, PARTITIONS AND FLOORS

This Sheet supersedes Sheet 14.B1 published 10.1.52 and describes Phorpres hollow clay blocks for walls, partitions and floors.

Materials

Phorpres blocks are manufactured from gault (buff in colour) and also terra cotta (weald clay) which are high quality engineering clays.

The clays are extensively tempered and extruded into hollow blocks which are then entirely mechanically handled throughout a strictly controlled drying and burning process. The clays contain no lime or other injurious salts, and the burning process renders the material entirely inert, minimizing the occurrence of shrinkage or cracking in the finished plastered surface. The finished product is uniform in size and shape and free from excessive winding and bowing (see B.S. 1190:1951 for tolerances) ensuring minimum laying and plastering costs.

Sizes and Weights of Building and Partition Blocks

Type of block	Size	Wt. of blocks (lb. per sq. yd.)*		Yards per ton	
		Gault	Terra cotta	Gault	Terra cotta
Partition blocks	12″ × 8⅝″ × 2″	89	97	25½	23½
	12″ × 8⅝″ × 2½″	94	97	24	23½
	12″ × 8⅝″ × 3″	108	116	21	19½
Building blocks	12″ × 8⅝″ × 4½″ (3-cavity)	129	142	17½	15½
	12″ × 8⅝″ × 4½″ (6-cavity)	145	168	15½	13½
	8¼″ × 5⅛″ × 6″	—	258 (24 blocks)	—	8½

* 12 blocks per sq. yd. except where otherwise stated.

Crushing Strength

Type of block		Crushing strength (lb. per sq. in.)
Loadbearing building blocks	4½″ (6-cavity) ..	600* (B.S. requires 500)
	4½″ (3-cavity) ..	500* (,, ,, 500)
	3″ (3-cavity) ..	700* (,, ,, 500)
Non-loadbearing partition blocks	2½″–3″	600/800* (B.S. requires 200)
	2″	750* (B.S. requires 200)
Floor blocks (terra cotta)	10″ × 12″ × 4″ ..	3080 (B.S. requires 2500)

* Average crushing strengths of individual blocks (terra cotta and gault) tested on edge.

Strength of Walls

For the purposes of test, wall panels 9 ft. high × 4 ft. 6 in. wide were built in 1: 3 rapid-hardening cement and the following results were obtained:—

Load tests on wall panels	2″ blocks	3″ blocks
Failing load—tons	44·1	65·0
Failing load per ft. run—tons	9·53	13·91
Failing stress—lb. per sq. in.	890	866
tons per sq. ft.	57·2	55·7
Failing stress in wall of blocks—lb. per sq. in. ..	1420	1890

Applications

Walls and partitions : Phorpres hollow clay blocks are adaptable building units for all types of partition work, internal linings to brickwork and party wall construction. They are manufactured to comply with the crushing strength tests laid down in B.S. 1190 : 1951, and can therefore take a full structural and loadbearing part in building construction. Their strength is combined with lightness in weight and high fire-resisting qualities.

The course height of 8⅝ in. enables the block to be bonded perfectly with 2⅝ in. brickwork.

Constructional floors : Phorpres hollow clay floor blocks are also manufactured to comply with B.S. 1190 : 1951 and the requirements of local authorities for the construction of structural floors and roofs.

Key for plaster : The bond or physical adhesion of a rendering or plaster is dependent upon the inherent porosity of the backing material, and in this respect Phorpres blocks possess a balanced absorption or suction value. This is further assisted by the mechanical keying provided by grooves of definite dovetail form. This mechanical key is of first importance in the early stages of drying and setting, when cracking may result from vibration, inevitable during construction. Such vibration without the support provided by mechanical keying may also interfere with, or even prevent, the development of the necessary physical adhesion.

Laying Instructions

The general practice is to lay Phorpres hollow blocks in 1 : 1 : 6 cement/lime/sand. This mix can, of course, be varied to suit particular conditions but too rich a mortar and thick joints should be avoided. Elasticity of joint is of great importance in all partition work and for this reason also partitions should not be pinned up too tightly under beams. The amount of water in the mix is reduced to a minimum owing to the texture of the material.

Thermal Transmittance " U " of Double-Skin Cavity Walling

4½ in. brick + 4½ in. block (unventilated)* = 0·17 to 0·20
4½ in. brick + 3 in. block (unventilated)* = 0·25
4½ in. block + 4½ in. block (unventilated)* = 0·17

* Plastered internally.

It should be noted that 11″ brickwork (unventilated), plastered internally, has a " U " value of 0·30.

Conduit Partition Blocks

These blocks have been specially designed to eliminate chasing for electrical conduits in finished work and to bond in with main partition walls.

The groove in each block coincides with that of the blocks above and below it to form a continuous channel. In this way a conduit can be provided for on one or both sides of the partition.

Fixing Blocks

These are manufactured for use with the standard partition blocks, to be built in where fixings for skirtings, picture rails etc. are known to be required.

Patents

Conduit partition blocks : The manufacturers are the patentees of these blocks.

This Series of Sheets on bricks and brickwork covers general data on, and applications of, common, facing, cellular and keyed bricks, hollow walling, partition and floor blocks.

Compiled from information supplied by :

London Brick Company Limited.
Head Office : Africa House, Kingsway, London, W.C.2.
Telephone : Holborn 8282.
Telegrams : Phorpres, Westcent, London.

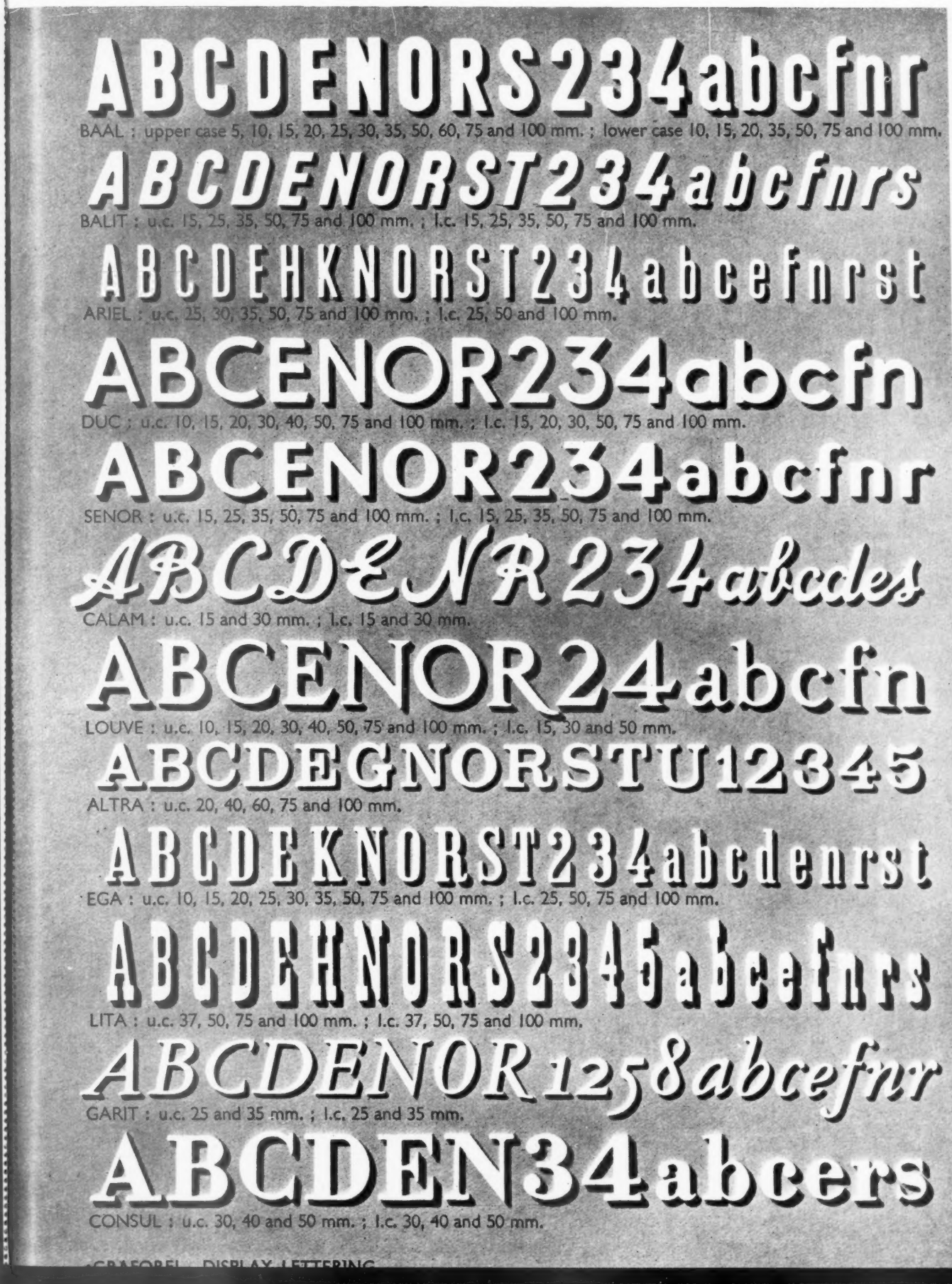
Midland District Office : Prudential Buildings, St. Philip's Place, Birmingham, 3.
Telephone : Colmore 4141.

South Western District Office : 11, Orchard Street, Bristol, 1.
Telephone : Bristol 23004-5.

Northern District Office : Gascoigne Street, Boar Lane, Leeds, 1.
Telephone : Leeds 20771.

DRAUGHTSMANSHIP | LETTERING

The Architects' Journal Library of Information Sheets 364. Editor: Cotterell Butler, A.R.I.B.A.



1.B60 ·GRAFOREL· DISPLAY LETTERING

This Sheet describes a range of cut-out letters which have been designed primarily for indoor exhibition work, displays, etc.
The letters are of cork and the standard range at present consists of 12 types as illustrated ; other types can be made to suit requirements.

Sizes

Stock letters are available in the sizes shown on the face of this Sheet ; they vary in thickness from $\frac{1}{16}$ in. to $\frac{3}{16}$ in. dependent on their height. Letters 5 in., 6 in. and 8 in. high may also be supplied to order. They are normally $\frac{1}{4}$ in., $\frac{3}{8}$ in. and $\frac{1}{2}$ in. thick respectively.

Fixing

The letters can be applied to any material provided the surface is clean and dry ; they should not be applied to newly distempered surfaces.
Each letter is supplied with an adhesive coating on the back for moistening before fixing. This is quite adequate where only a temporary fixing is required ; for exhibition and permanent work an additional adhesive is advisable. Rubber latex adhesives are recommended.

Finish

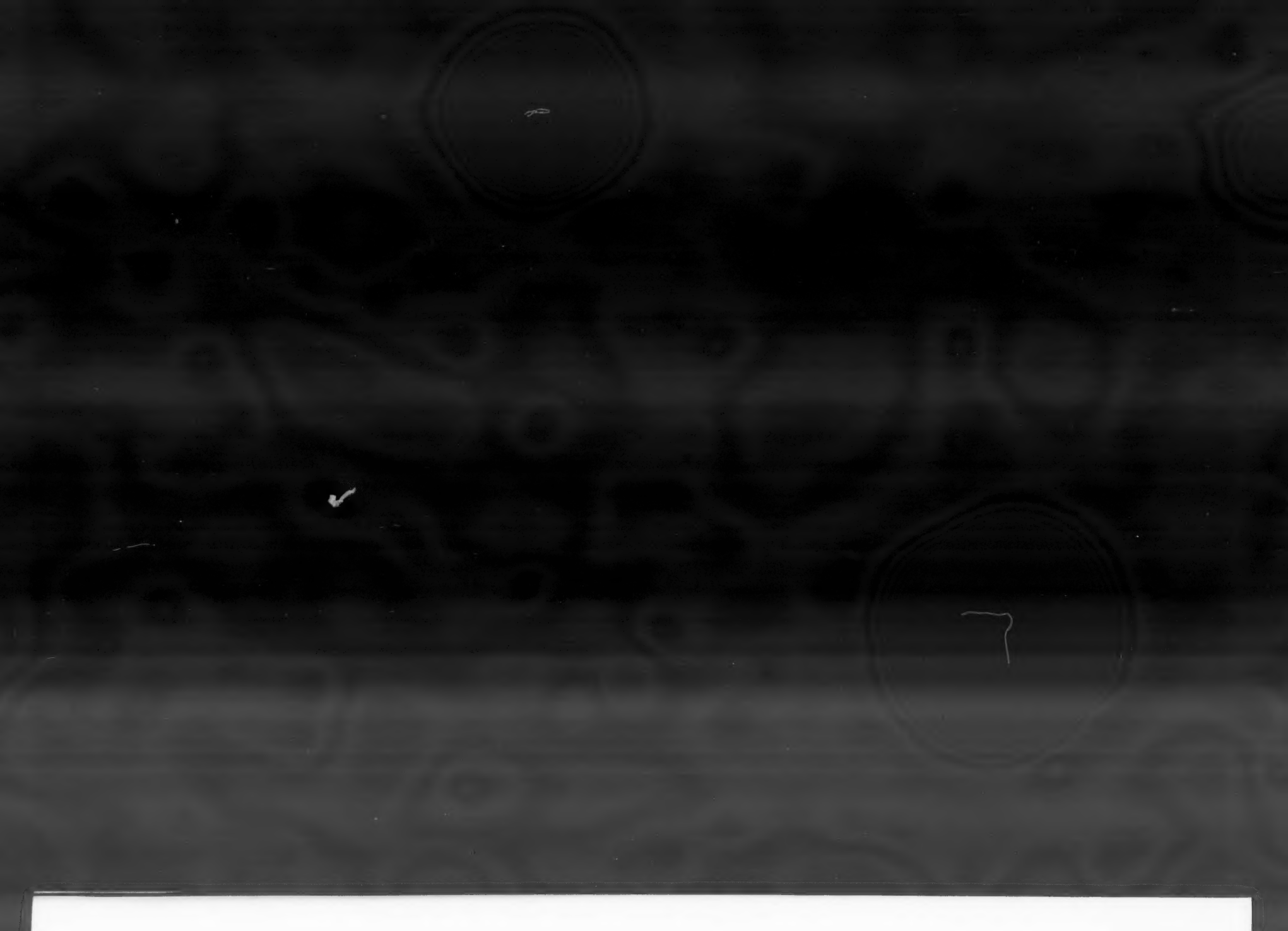
The letters are supplied in their natural colour. The faces of the letters may be picked out with any type of paint or colour using a brush or by dabbing with the finger.
For outdoor use and to improve their wearing properties the letters should be painted in with the background, the faces being picked out in the required colour afterwards.

Spacing Guide

The following table gives the average number of either upper or lower case letters occupying a given width, based on normal spacing. Spaces between words count as one letter.

Type		Average number of letters														
		per 12 inches							per 36 inches							
size		5	10	15	20	25	30	35	40	50	60	75	100	125	150	200
mm.																
in.		$\frac{3}{16}$	$\frac{3}{8}$	$\frac{9}{16}$	$\frac{13}{16}$	1	$1\frac{3}{16}$	$1\frac{3}{8}$	$1\frac{9}{16}$	2	$2\frac{3}{8}$	3	4	5	6	8
Baal	*u.c.*	60	38	31	21	18	16	14		33	25	21	16	12	10	8
	l.c.		50	37	40			21		36		29	22			
Balit				24		16		12		26		17	13	11	9	7
				31		20		15		31		20	15			
Ariel						25	21	18		38		25	22	17	13	11
						29				44			25			
Duc			29	21	15		10		24	20		13	10	8	6–7	5
				25	19		13			24		16	12			
Senor				20		12		8		19		13	10	8	6–7	5
				25		16		11		25		17	13			
Calam				15			8									
				24			15									
Louve		38	27	18	13		10		23	19		13	9	7–8	6	4–5
				24			12			22						
Altra					14				19		13	11–12	8–9	7	6	4
Ega			44	29	23	20	17	15		32		20	16	12	10	8
						26				40		25	20			
Lita								20		40		31	20	16	14	10
								24		50			25			
Garit						13		9								
						16		11								
Consul							9		20	16						
							13		29	23						

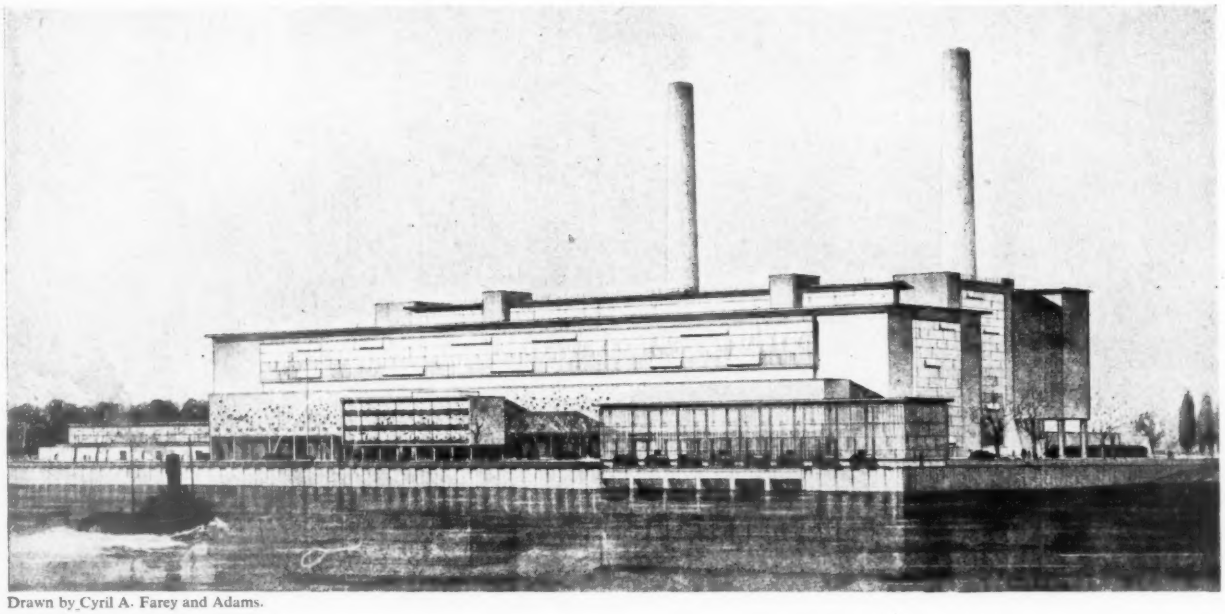
Compiled from information supplied by :
London Industrial Art Ltd.
Address : 3, All Saints Road, London, W.11.
Telephone : Park 9431



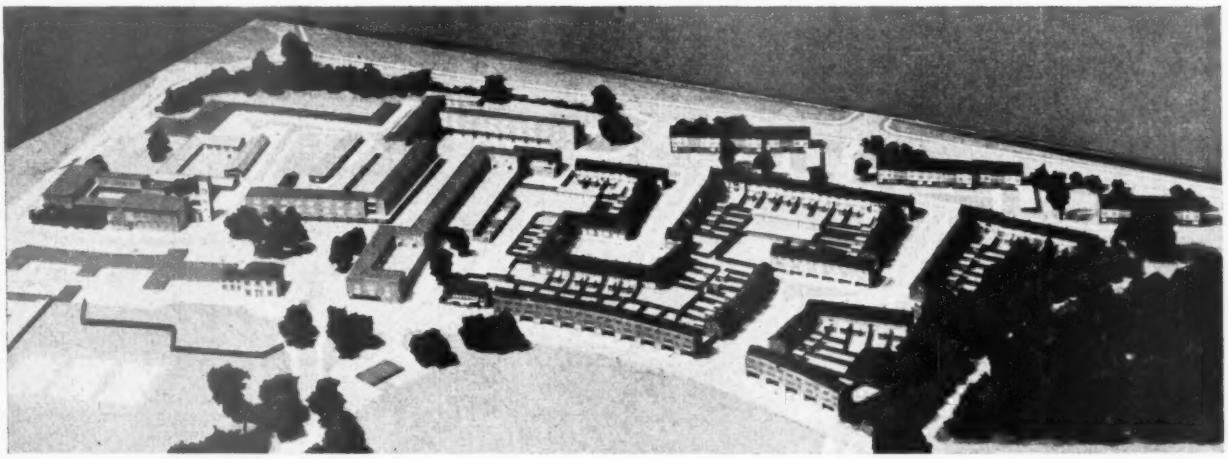
O

Draw

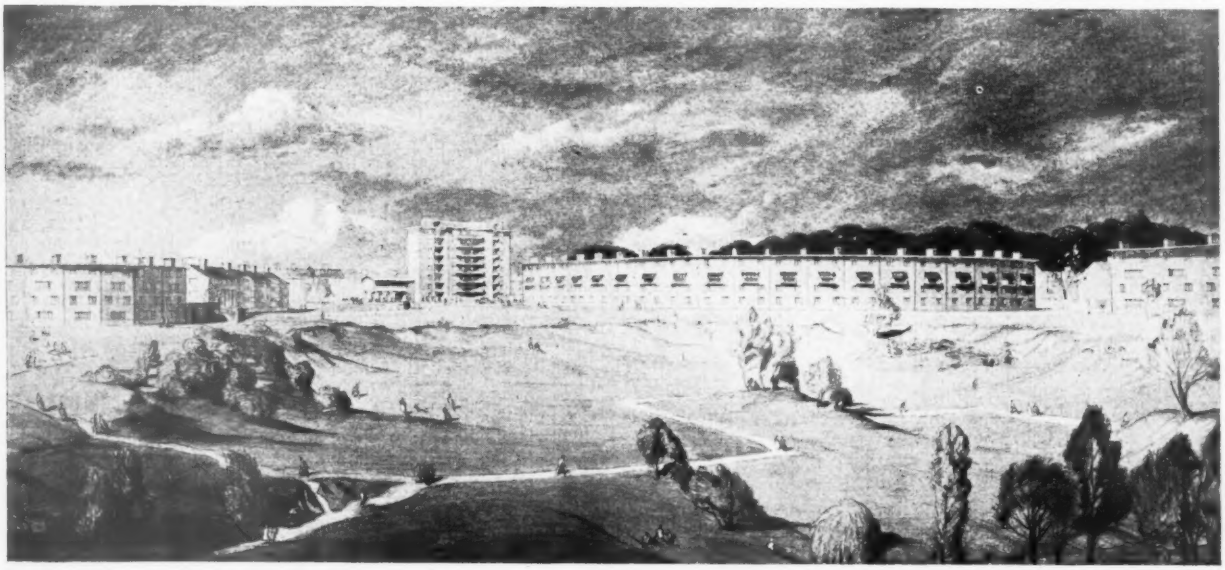
OF DESIGNS FROM THE ARCHITECTURE ROOM



Drawn by Cyril A. Farey and Adams.



Drawn by J. D. M. Harvey

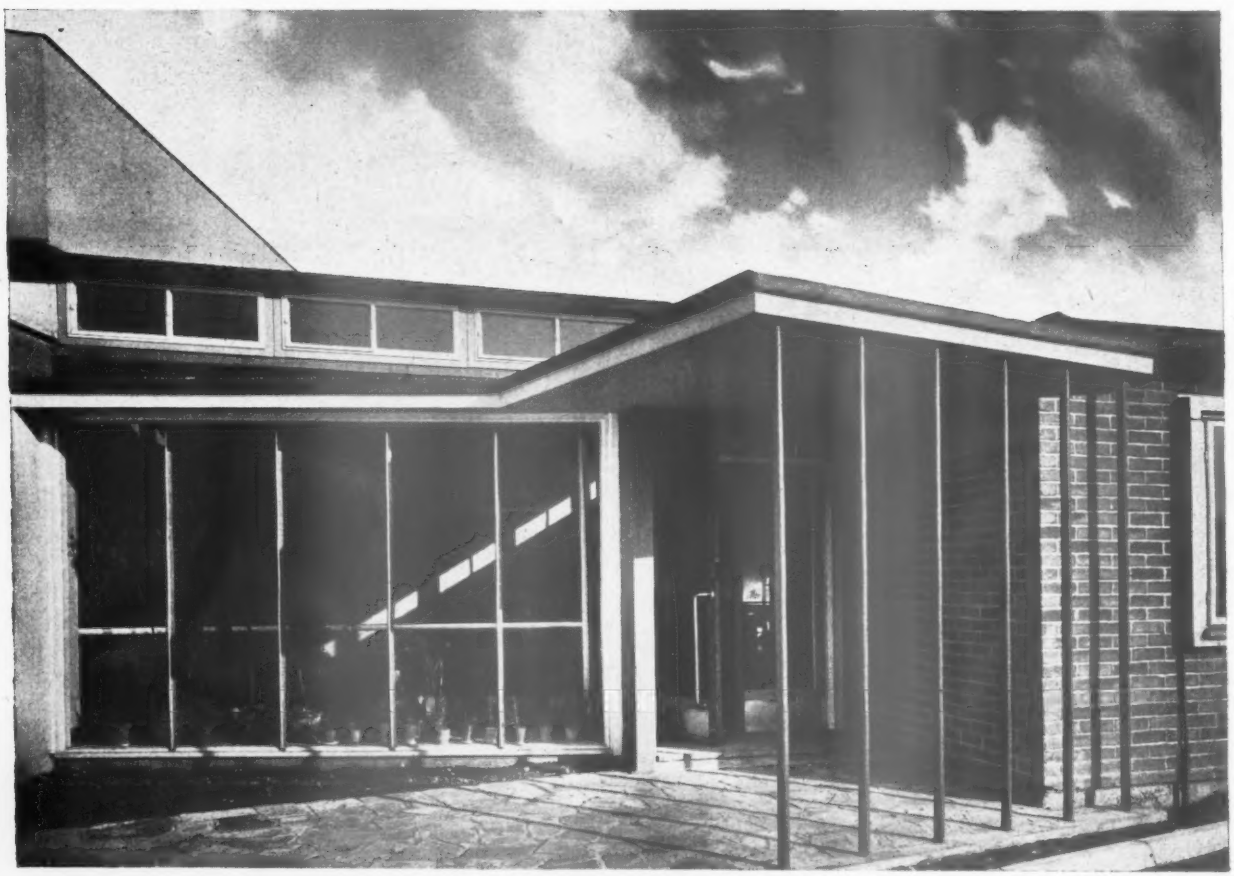


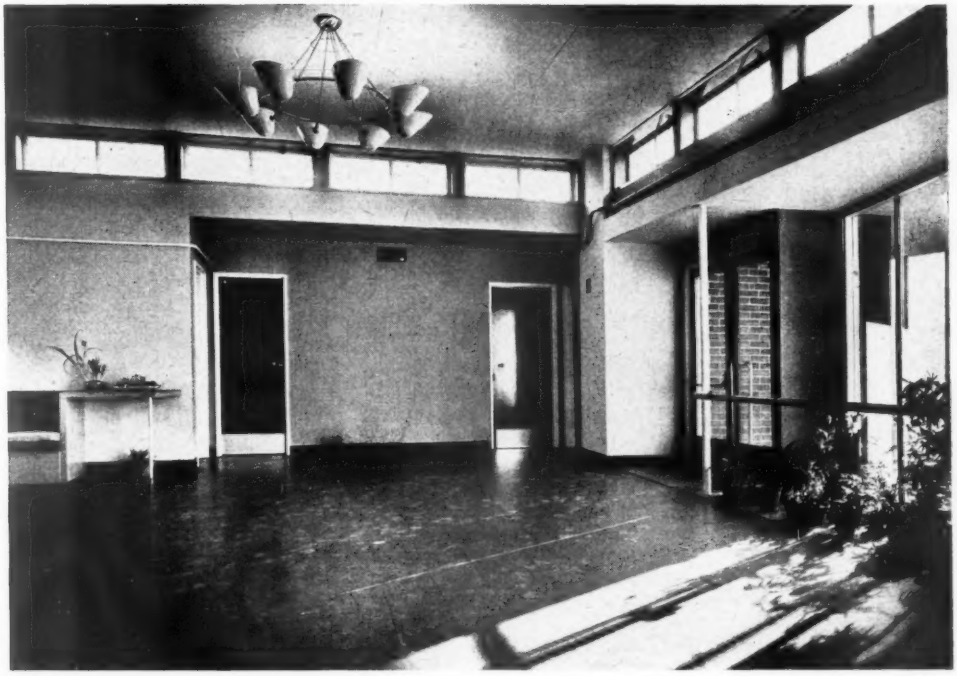
PRIMARY SCHOOL

in MARLBOROUGH LANE, GREENWICH, LONDON, S.E.7
designed by DENIS CLARKE HALL and L. W. ELLIOTT
assistant architect-in-charge H. G. MONTGOMERIE

The Cherry Orchard school for the LCC provides accommodation for 200 children from 5 to 7 years old in accordance with the regulations in force when the school was designed, allowing 55 sq. ft. per place. Covered areas are provided by the entrances for parents calling to collect children, and for children, who often arrive before the school is open. The area of outside teaching space was reduced at the request of the education officer, since it was felt that only part of a class would use it at any time and outside teaching of the whole class would take place in the garden area to the south.

The main entrance on the west facade.



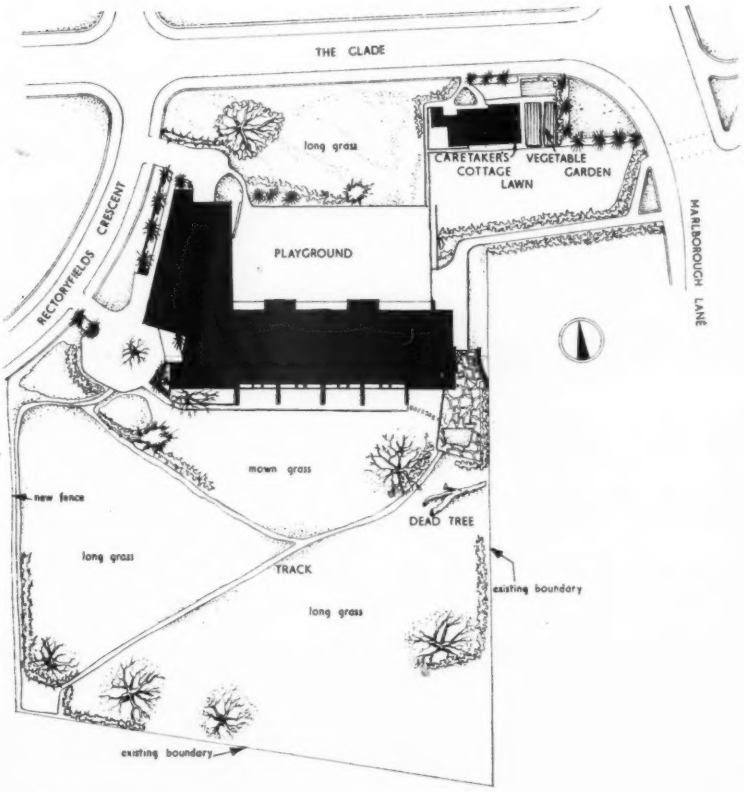


Above, the entrance hall with main entrance doors on the right. Left, looking south-west across the playground with the assembly hall on the right.

SITE.—The building has been built to the north of the site to keep access roads to a minimum and allow for a future nursery school or children's play area to the south. Some large elm trees on the north boundary of the site were diseased and had to be felled. The trunks have, however, been left on the site for the children to climb on.

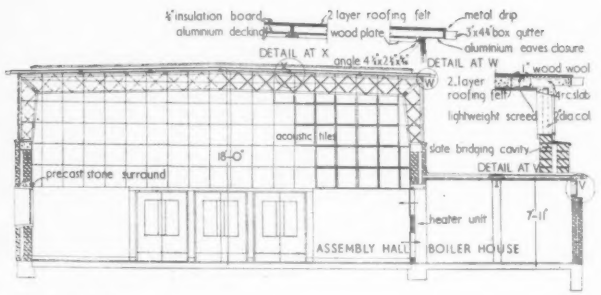
PLAN.—The plan, which arises naturally from the clients' requirements, consists of a wing containing classrooms, cloakrooms and lavatories, linked to the assembly hall and kitchen wing by the entrance hall, from which the staff rooms open. The caretaker's cottage is sited so that the occupant can supervise the playground from his living room. The corridor ceiling is kept low to be in scale with the children, while still acceptable to adults, and allows cross ventilation in classrooms. This ceiling height is similar in the entrance hall to maintain the unity and to give an added sense of drama when entering the assembly hall.

CONSTRUCTION.—The construction is comparatively fluid and has affected the elevational treatment less than the rigid grid system. The classroom unit and brick dimension are the module and it is considered by the architect that this gives greater flexibility of planning, proportions and construction. Walls are load bearing with beams and trusses carrying aluminium roof decking, the whole standing on a 6-in. concrete slab reinforced with square mesh weighing 5·5 lb. per sq. ft. and



Site plan

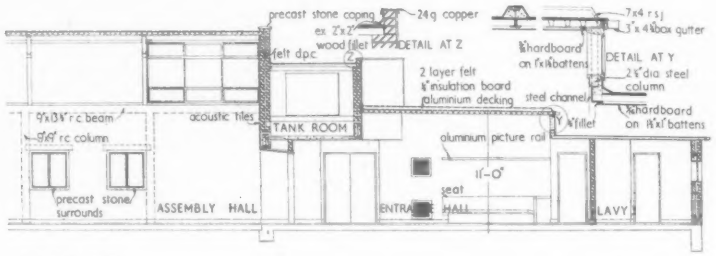
Left, the assembly hall with kitchen serving hatches in the background.



Section A-A

with sinkings under the main load-bearing walls and external walls reinforced with 2⅝-in. diam. rods. The weight of steel is kept to the minimum by the lightness of the roof, the continuity of the beams and the use of lattice portal frames for the large spans. The external walls are 11-in. cavity construction with the inner skin of breeze or brick and the internal walls are of 9-in. or 4½-in. brickwork.

FINISHES.—The internal treatment generally has

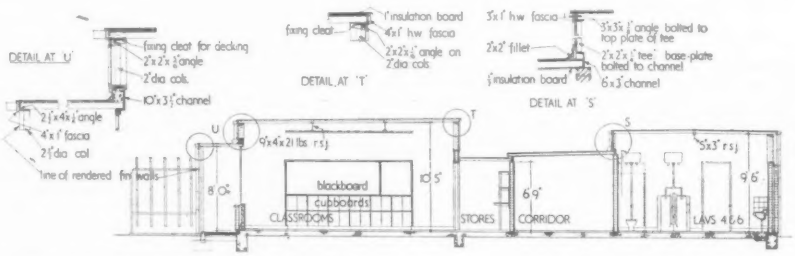


Section B-B

PRIMARY SCHOOL

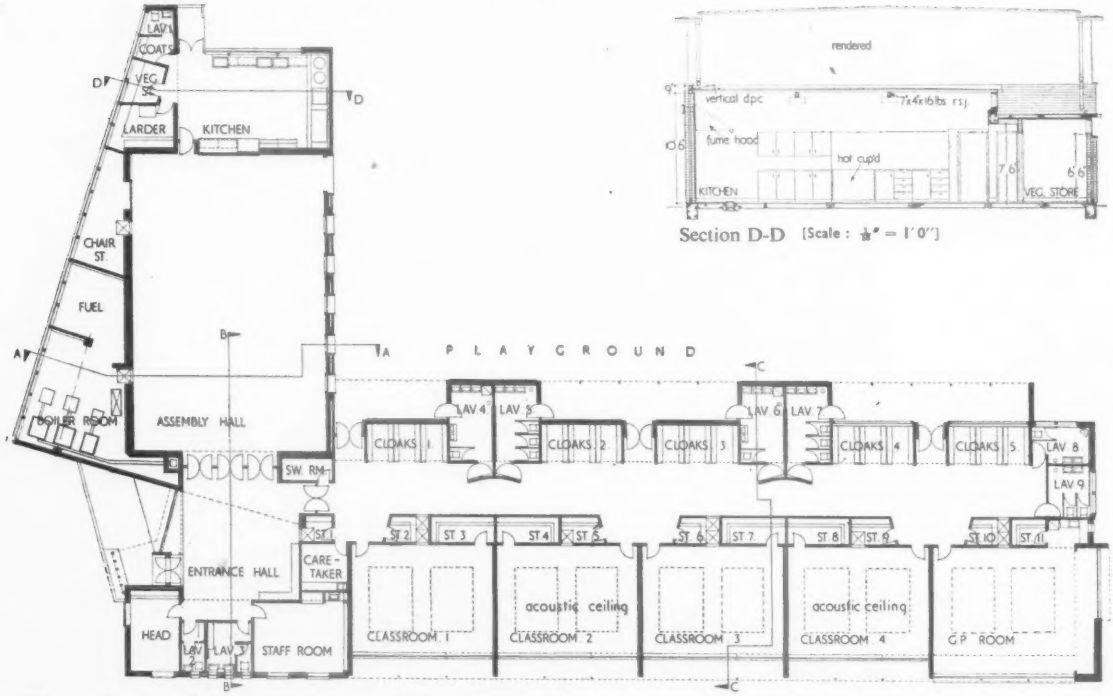
in GREENWICH, LONDON, S.E.7

designed by DENIS CLARKE HALL and L. W. ELLIOTT

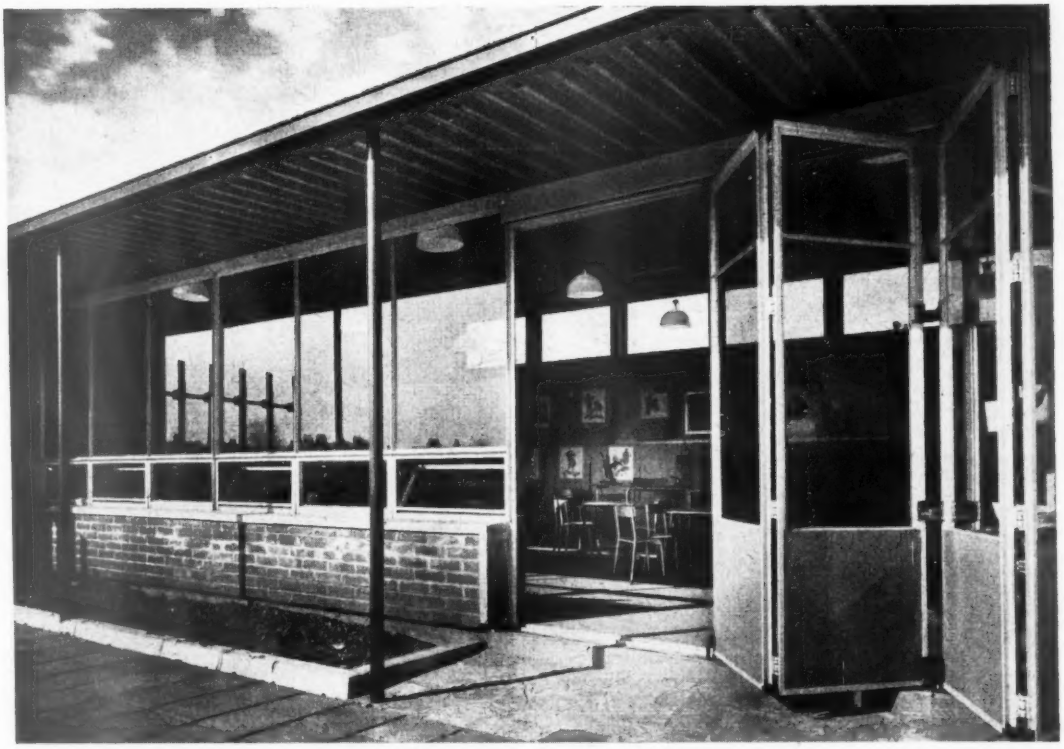


Section C-C [Scale : ½" and ⅛" = 1' 0"]

Section D-D [Scale : ½" = 1' 0"]



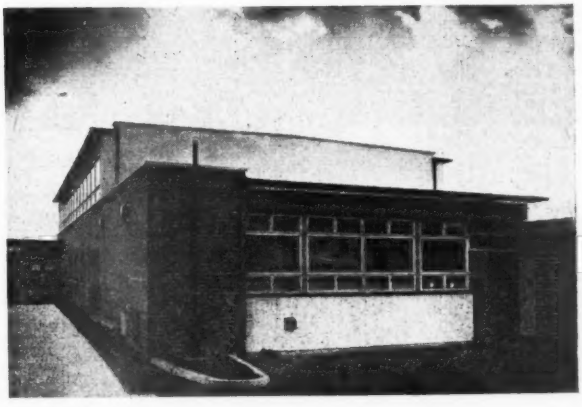
Plan [Scale : ½" = 1' 0"]



been to use strong colour, either to emphasise some important functional requirement or to set a colour key for a particular area. For example, all boys' lavatory doors are french grey and girls' lavatory doors lemon yellow. In each classroom the ceilings are deep royal blue with two suspended panels of fibreboard for acoustic purposes, painted white, which sets the colour key and the various walls are kept to less strong colours, such as cornflower or pale lemon. Paint on walls and ceilings is either sprayed on or applied as distemper and a gloss paint is used on metal and woodwork. Window and door frames are white and sub-frames grey. Floors are wood strip in the assembly hall, cork in staff and head teacher's rooms and elsewhere thermoplastic tiles.

SERVICES.—The heating is generally by low-pressure hot water mains, unlagged, under clerestory windows, to heater batteries with an electric air fan situated in the stores. The two heating boilers and the small hot water boiler for the hot water system have hopper-type automatic stokers.

An analysis of the job progress was made and the following are some of the data obtained. After instructions had been received from the LCC in May, 1950, working drawings (approximately 45 double elephant sheets and 10 schedules were prepared apart from specialist drawings) and bill of quantities were completed and the tender accepted



Top, typical classroom bay on the south facade. Centre, typical classroom looking west. Bottom, kitchen windows on the north facade with the assembly hall behind.

Top, north facade from the playground showing windows to cloakroom and lavatories. Centre, south facade of classroom wing showing outside teaching space. Right, staff room showing built-in wash basin.

PRIMARY SCHOOL

in GREENWICH, LONDON, S.E.7

designed by DENIS CLARKE HALL and L. W. ELLIOTT

by October, 1950. Work was started in October, 1950, and completed within the scheduled time, 1 year, using an average of 20 men. Excluding the principal's time, sketch plans occupied 96 hours of office time, working drawings 1,552 hours, supervision and preparation of ancillary details 632 hours, giving total assistants' time 2,280 hours or 74 hours per £1,000 of work. Costs were £2,774 on preliminaries, £22,116 on school building, £1,771 on caretaker's cottage, £4,288 on external works and drainage, giving a total tender figure of £30,949. The nett cost per child place is £127, per sq. ft. £2 6s., and per cub. ft. 2s. 10½d. (MOE ceiling: £140) Heating, hot water: £2,340, electrical installation £1,370, and metal windows and sub-frames £2,010. The general contractors were Walter Gladding & Co. Ltd. For sub-contractors see page 620.

TECHNICAL SECTION

The building industry is frequently accused of being unwilling or unable to adapt itself to modern techniques. This is debatable, but there is no doubt that the building industry devotes a smaller proportion of its annual expenditure to research than do many other industries.

The largest contribution to building research in this country is made by the Department of Scientific and Industrial Research (and in particular by BRS), but DSIR's recently published annual report* makes it clear that sufficient finance has not been forthcoming to enable DSIR to carry out its post-war plans for new buildings and increased staff.

It is widely appreciated that economy in research is a false economy, but are the various organizations which represent the building industry sufficiently aware of DSIR's difficulties? In particular, does the RIBA not regard the state of affairs revealed by the report as a matter for urgent discussion and representation?

SPECIALIST EDITOR No. 12

* Report for the year 1950/51. Department of Scientific and Industrial Research (HMSO 1952. 7s.6d.)

This week's special feature

8 ESTIMATING
measured rates

Current prices for measured work prepared by Davis, Belfield and Everest, Chartered Quantity Surveyors. Prices are for work executed complete and are for an average job in the London area. All prices include overhead charges and profit for the general contractor.

PRELIMINARIES

To all valuations for measured work add for Preliminaries, Water and Insurances, according to the nature of the job (say)		10%

EXCAVATOR

Excavation

N.B.—The following prices are applicable to hand excavation in heavy soil.

Surface digging, 6" deep	per yard super	–/11
Ditto, 12" deep	per yard super	1/10
Excavating not exceeding 10′ 0″ deep to reduce levels	per yard cube	7/4
Excavating not exceeding 5′ 0″ deep to form basement	per yard cube	8/3
Ditto, exceeding 5′ 0″ and not exceeding 10′ 0″ deep ditto	per yard cube	11/11
Excavating not exceeding 5′ 0″ deep to form surface trenches	per yard cube	10/1
Ditto exceeding 5′ 0″ deep and not exceeding 10′ 0″ deep ditto	per yard cube	13/9
Excavating not exceeding 5′ 0″ deep to form basement trench, commencing 10′ 0″ deep	per yard cube	17/5

EXCAVATOR—(*continued*)

Disposal

Returning, filling and ramming around foundations	per yard cube	3/3
Wheeling excavated soil not exceeding 100 yards and depositing	per yard cube	3/8
Ditto and spreading and levelling	per yard cube	4/9
Ditto, ditto, and consolidating to make up levels under floors and pavings	per yard cube	6/–
Filling into lorries and carting away	per yard cube	11/11

Planking and Strutting

Planking and strutting to sides of surface or basement excavation not exceeding 5′ 0″ deep	per ft. super	–/6½
Ditto not exceeding 10′ 0″ deep	per ft. super	–/8
Planking and strutting to sides of surface trenches not exceeding 5′ 0″ deep (both sides measured)	per ft. super	–/1¼
Ditto not exceeding 10′ 0″ deep (ditto)	per ft. super	–/3

CONCRETOR

Concrete (Basic Prices)

Portland cement concrete 1 : 3 : 6 with 1½″ coarse aggregate in foundations and masses exceeding 12″ thick	per yard cube	66/8
Ditto 1 : 2 : 4 with ¾″ coarse aggregate ditto	per yard cube	67/8

CONCRETOR—(*continued*)

Add to Basic Prices for :—

Working around rod or mesh reinforcement	per yard cube	3/8
Being in beds less than 12″ thick (6″-12″)	per yard cube	1/10
Ditto less than 6″ thick (4½″-6″)	per yard cube	5/6
Being in small quantities not exceeding 3′ cube	per yard cube	14/8
Being in suspended floors and roofs	per yard cube	11/–
Being in walls not exceeding 6″ thick	per yard cube	18/4
Ditto exceeding 6″ but not exceeding 12″ thick	per yard cube	12/10
Ditto exceeding 12″ thick	per yard cube	9/2
Being in lintels, beams, etc., not exceeding 72 sq. in. sectional area	per yard cube	27/6
Ditto exceeding 72 and not exceeding 144 sq. in. sectional area	per yard cube	22/–
Ditto exceeding 144 sq. in. sectional area	per yard cube	18/4
Being in columns not exceeding 72 sq. in. sectional area	per yard cube	34/10
Ditto exceeding 72 and not exceeding 144 sq. in. sectional area	per yard cube	27/6
Ditto exceeding 144 sq. in. sectional area	per yard cube	22/–

Formwork

Close boarded formwork and supports to soffites of floors not exceeding 12′ high	per yard super	15/9
Ditto to vertical faces of walls (both sides measured)	per yard super	15/6
Ditto to sides and soffites of lintols and beams	per ft. super	2/4
Add to any of the above for wrot formwork and rubbing down concrete	per yard super	2/4½

Reinforcement

⅜″ to 1″ diameter mild steel rod reinforcement, hooked, bent and tied at intersections as required and fixing in concrete	per cwt.	50/6
1″ diameter ditto	per cwt.	54/7
¼″ diameter ditto	per cwt.	67/–
Steel wire mesh fabric reinforcement to B.S. 1221, weighing 4·71 lb. per yard super, well lapped at joints and embedded in concrete	per yard super	3/3
Ditto weighing 9·32 lb. per yard super ditto	per yard super	6/2

BRICKLAYER

Common Brickwork

		Flettons	Rough stocks
Reduced brickwork one brick thick in cement-lime mortar (1 : 3 : 9)	per yard super	27/6	32/5
Add to the above :—			
If in cement mortar (1 : 3)	per yard super	–/3	–/3
If circular on plan to flat sweep	per yard super	4/4	4/8
Ditto to quick sweep	per yard super	8/8	9/3
Half brick wall in cement lime mortar (1 : 3 : 9)	per yard super	14/10	17/4
Ditto built fair and pointed both sides with a neat flush joint	per yard super	16/9	19/2

		Flettons	Rough stocks
One brick wall built fair and pointed both sides with a neat flush joint	per yard super	32/4	37/3
11″ hollow wall with 2″ cavity and galvanized iron twisted ties	per yard super	32/3	37/2

Engineering Brickwork

		Lingfield Engineering Wirecute	Blue Pressed bricks
Reduced brickwork one brick thick in cement mortar (1 : 3)	per yard super	40/5	59/–
Half brick wall in cement mortar (1 : 3)	per yard super	21/9	31/3
Ditto built fair and pointed both sides with a neat flush joint	per yard super	23/6	33/9
One brick wall built fair and ditto	per yard super	44/5	63/6

Sundries

Extra for internal fair face and flush pointing	per yard super	1/–
Horizontal damp-proof course of two courses of slates and bedding and pointing	per foot super	3/5
Ditto of hessian base bitumen well lapped at joints	per foot super	–/10½
Fixing only metal window, size 1′ 8″ × 4′ 0″, including cutting and pinning lugs to brickwork, bedding frames and pointing in mastic one side	each	7/7
Ditto, 3′ 3″ × 4′ 0″ ditto	each	11/9
Ditto, 6′ 6″ × 4′ 0 ditto	each	20/8

BRICKLAYER—(*continued*)

Partitions

		2″	2½″	3″	4½″
Breeze concrete solid partition blocks to B.S. 492 and setting in cement mortar	per yard super	8/–	9/4	10/8	13/4
Hollow clay partition blocks to B.S. 1190, keyed on both sides and ditto	per yard super	8/3	9/3	10/6	
Moler hollow partition blocks, keyed on both sides and ditto	per yard super	14/9	18/4	20/6	4″ 23/4

Facings

		Ordinary facings, p.c. 227/6 M.	Ordinary facings, p.c. 237/4 M.	White glazed facings p.c. 1,270/– M for stretchers 1,254/6 M for headers and pointing with white cement
Extra over common brickwork built with bricks p.c.105/3 M for facings as described, and pointing with a neat weathered joint :—				
To solid wall in Flemish bond	per yard super	13/2	13/11	77/8
To cavity wall in stretcher bond	per yard super	10/9	11/4	62/1
To ditto in Flemish bond with snapped headers	per yard super	12/9	13/6	—
Half brick wall in facings in stretcher bond built fair and pointed one side with a neat weathered joint	per yard super	24/3	24/9	—
Ditto pointed both sides	per yard super	25/6	26/–	—
One brick wall in facings built fair and pointed one side	per yard super	46/–	47/–	—
Ditto pointed both sides	per yard super	47/–	48/–	—
Brick on end flat arch in facings 4½″ on soffite and 9″ high and pointing	per foot run	2/10	2/11	—
Brick on edge coping to 9″ wall with two courses plain tiles under, laid breaking joint, two cement angle fillets and pointing	per foot run	4/10	4/10½	—

ASPHALTER

Tanking

		To B.S. 1097	To B.S. 1418
Horizontal asphalt tanking in three thicknesses on brick or concrete	per yard super	18/4	28/4
Vertical ditto	per yard super	23/1	31/6

Roofing

		To B.S. 988	To B.S. 1162
¾″ asphalt flat in two thicknesses on and including felt underlay	per yard super	13/5	23/1
½″ asphalt skirting 6″ high with angle fillet at bottom and rounded top, turned into groove	per foot run	2/1	2/7½
½″ asphalt fascia 6″ high with solid water check roll at top and undercut drip at bottom	per foot run	3/8	4/3

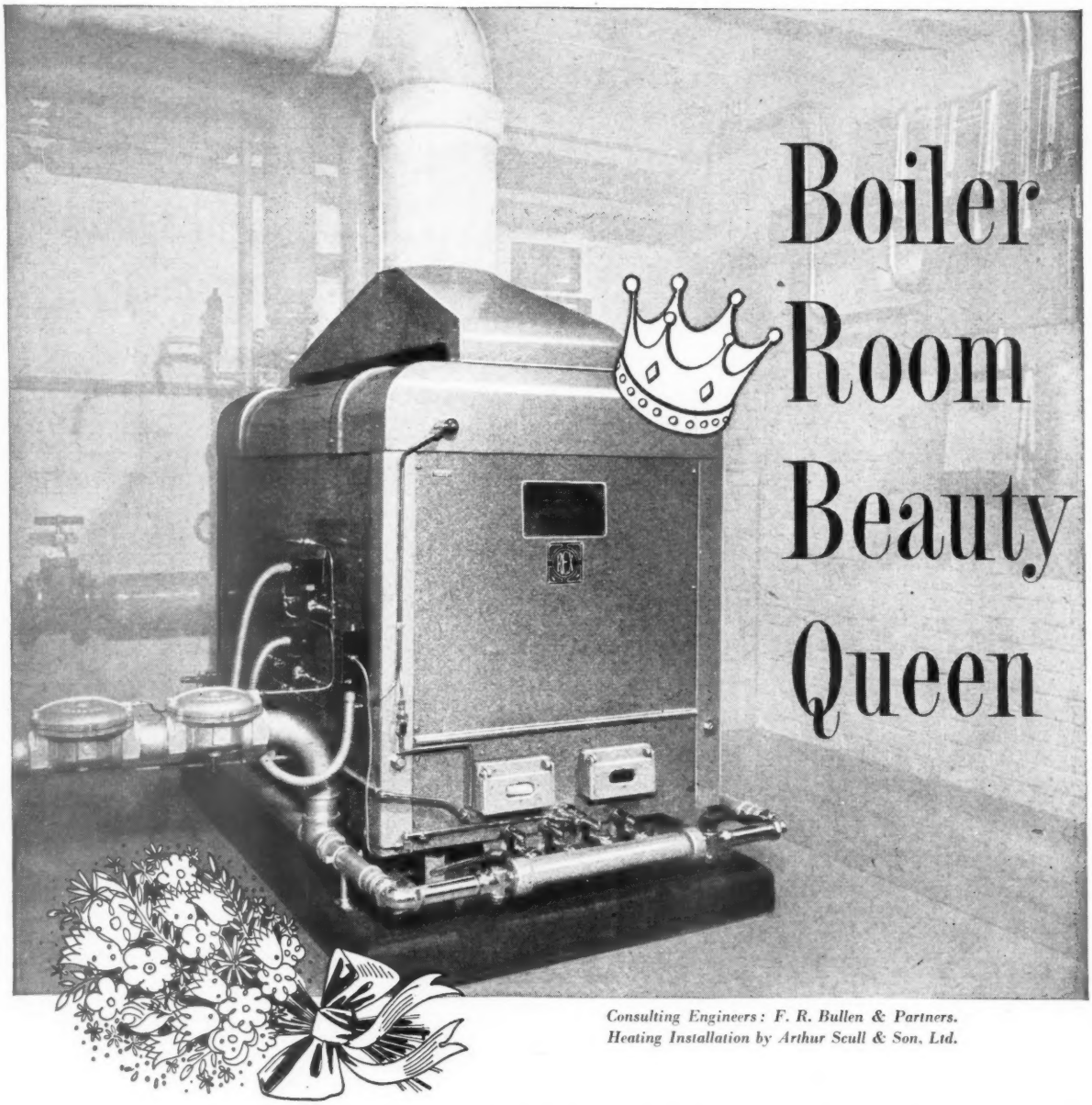
DRAINLAYER

Trenches and Beds

N.B.—The following prices are applicable to hand excavation in heavy soil, only requiring planking and strutting for depths of 3′ or more.

Excavate trenches for 4″-9″ pipes, including planking and strutting, filling in and ramming, and wheeling and spreading surplus :—		
For each 12″ in depth, for trenches not exceeding 3′ 0″ deep	per yard run	2/11
Ditto for trenches exceeding 3′ 0″ and not exceeding 5′ 0″ deep	per yard run	4/3
Ditto for trenches exceeding 5′ 0″ and not exceeding 10′ 0″ deep	per yard run	6/10

		4″	6″
6″ concrete (1 : 3 : 6) bed and benching for pipes	per yard run	8/11	10/4
6″ ditto, and surround	per yard run	14/5	16/4



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Heating Installation by Arthur Scull & Son, Ltd.

If ever there is a beauty contest for boiler installations, that at the new office buildings of Bowthorpe Holdings Ltd., at Crawley, will certainly get the first prize. With a boiler room colour scheme of cream, pale grey and burgundy, it not only looks good but possesses many other desirable qualities as well. It is spotlessly clean, thoroughly reliable, economical, easy to manage, behaves with complete lack of temperament and is perfectly self-controlled at all times. Chief credit for these virtues must go, of course, to Gas — and the POTTERTON Gas-Fired Boiler.

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POTTERTON
GAS FIRED BOILERS
MADE BY
DE LA RUE

DRAINLAYER—(*continued*)

Drains

		3″	4″	6″
Clayware butt-jointed land drains and laying in trench	per foot run	-/4½	-/5	-/9½
" Seconds " quality glazed stoneware socketed drains and laying and jointing in trench	per foot run	4″ 1/11½	6″ 2/9½	9″ 4/8
" British Standard " quality ditto	per foot run	2/4	3/4½	5/9
Extra on " Seconds " quality for bends	each	3/1	4/7	13/4
Ditto " British Standard " quality ditto	each	3/10	5/9	17/-
Extra on " Seconds " quality for single junction	each	5/3	7/6	16/8
Ditto " British Standard " quality ditto	each	6/5	9/5	20/8
Cast iron socketed drains to B.S. 437 and laying and jointing in trench	per foot run	10/5	15/11	31/2
Extra for short radius bend (Fig. No. 4)	each	20/9	39/5	116/-
Extra for single junction (Fig. No. 18)	each	37/10	73/10	218/9

Fittings, etc.

		4″	6″
Glazed stoneware trapped gulley with galvanized grating and outlet and setting in concrete	each	22/5	41/4
Ditto with vertical inlet ditto	each	27/9	46/9
Cast iron trapped gulley with high invert, grating, and 4″ outlet and setting in concrete	each	53/4	—
Ditto with vertical inlet ditto	each	60/10	—
Glazed stoneware intercepting trap with inspection arm, stopper and chain and fixing in manhole and jointing to drain	each	70/3	81/11
Brown glazed stoneware half round straight channels and bedding and jointing in cement mortar	per foot run	1/9	2/8½
Ditto ordinary channel bend and ditto	each	5/5½	7/5
Cast iron coated single seal manhole cover and frame to B.S. 497 Grade C and setting frame in cement and cover in grease	each	24″ × 18″ 49/9	24″ × 24″ 69/11
Galvanized ditto	each	83/4	121/9

PAVIOR

		¾″	1″	1¼″
Cement and sand (1 : 3) floated screed to receive pavings	per yard super	3/5	4/2	4/8
Ditto trowelled smooth to receive linoleum	per yard super	3/9	4/6	5/-
Cement and sand (1 : 3) paving trowelled hard and smooth	per yard super	3/9½	4/6½	5/-½
Granolithic paving (1 : 2½) laid on concrete	per yard super	1″ 6/2	1¼″ 7/-	1½″ 7/10
½″ Red composition paving to B.S. 776 laid on prepared screed	per yard super			16/-
⅝″ Terrazzo paving (Portland cement and spar aggregate) laid on prepared screed	per yard super			37/3
Extra for white or cream cement	per yard super			5/3
⅛″ Rubber flooring in all colours, laid on prepared screed	per yard super			51/-
⅛″ × 12″ × 12″ Rubber tile flooring ditto	per yard super			41/6
1/10″ × 12″ × 12″ Cork tile flooring (brown shades) laid in mastic on prepared screed, surfaced and polished	per yard super			40/8
1½″ Hard red paving bricks p.c. 404/6 per M. laid flat on prepared bed in cement mortar	per yard super			21/9
1½″ Ditto laid herringbone	per yard super			23/8

		⅝″	¾″
6″ × 6″ Red quarry tile paving to B.S. 1286 laid on prepared screed with straight joints	per yard super	20/9	23/4
6″ × 6″ Buff quarry tiles as last	per yard super	23/4	26/3
2½″ (Finished) Gravel path laid on prepared bed, well watered and rolled to cambers and falls	per yard super		2/4½

MASON

Portland stone and all labours in pilasters, quoins, jambs, lintols, etc.	per foot cube	37/10
Ditto in arches, columns, cornices, etc.	per foot cube	52/3
Ashlar av. 6½″ on bed with plain dressed face	per foot super	31/6

		Portland	Artificial
Portland stone or artificial stone to B.S. 1217 :—			
4½″ × 4″ Sill, sunk, weathered, throated and grooved for water bar, set and jointed in cement mortar	per foot run	7/1	4/7

MASON—(*continued*)

9″ × 3″ ditto	per foot run	8/5	6/4
2″ × 12″ Coping, weathered and twice throated, set and jointed as last	per foot run	7/9	5/9
3″ × 12″ Ditto	per foot run	10/8	8/4
5″ × 12″ Saddle back coping twice throated, set and jointed as last	per foot run	18/-	12/11
6″ × 12″ Ditto	per foot run	19/7	15/11

SLATER, TILER AND ROOFER

Slate

		20″ × 10″	16″ × 10″
Best Bangor slates to B.S. 680 laid with 3″ lap, each slate nailed with two stout copper nails	per square	246/9	233/8
Ditto hung vertically to dormer cheeks and gables	per square	256/3	246/9

Tiles

		Hand made	Machine made
Best sand faced plain (nibbed) tiles to B.S. 402, 10½″ × 6″ laid to a 4″ gauge with each tile in every fourth course nailed with galvanized nails	per square	165/11	161/9
Ditto hung vertically to dormer cheeks and gables to 4½″ gauge with each tile nailed with galvanized nails	per square	163/9	159/8
Berkshire hand made sand faced red pantiles 14½″ × 10″ laid to 2½″ head and 1½″ side laps, each tile in every third course nailed with galvanized nails	per square	161/9	
Ditto to mansard slopes	per square	170/8	
Concrete plain (nibbed) tiles to B.S. 473, 10½″ × 6″ laid as before described for plain tiles	per square	102/8	
Ditto hung vertically to dormer cheeks, and gables, ditto	per square	107/8	
Concrete interlocking tiles 15″ × 9″ laid to 3″ lap, each tile in every third course nailed with galvanized nails	per square	81/4	
Ditto to mansard slopes ditto	per square	90/3	

Asbestos Cement

6″ Corrugated asbestos cement sheeting fixed to wood roofs with galvanized drive screws and washers with a side lap of 1½ corrugations and an end lap of 6″	per square	87/2
6″ Ditto but fixed vertically	per square	93/5
Add to both last if fixed to steel purlins or sheeting rails with galvanized hook bolts	per square	3/5

Felt

Reinforced bituminous roofing felt laid with 3″ laps and nailed to rafters at 18″ centres with galvanized clout nails	per square	29/5

		Two layer	Three layer
One-ply bitumen felt to B.S. 989 laid on concrete. Each layer bedded in hot bitumen	per yard super	8/8	11/6

CARPENTER

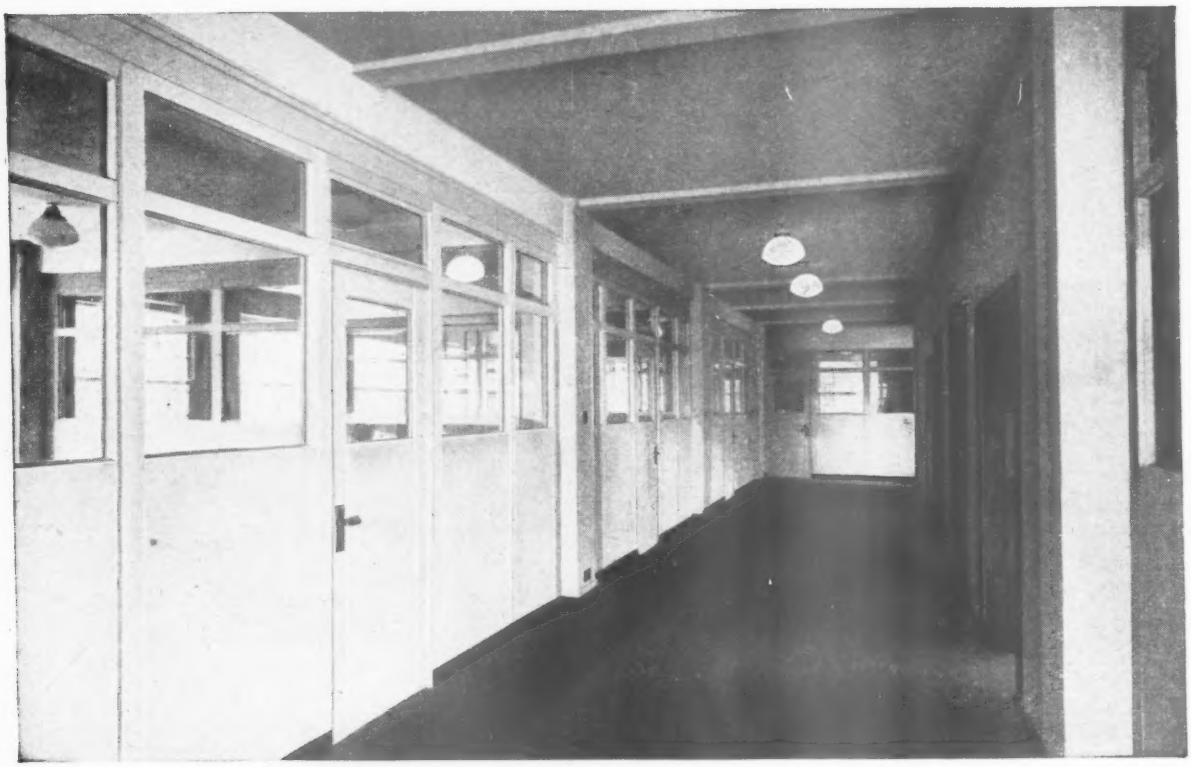
Carcassing

Softwood, sawn and fixed, in plates, sleeper joists and lintols	per foot cube	18/-
Ditto in floor and ceiling joists	per foot cube	19/9
Ditto in stud partitions	per foot cube	21/4
Ditto in rafters	per foot cube	21/2
Ditto in purlins and struts	per foot cube	21/4
Ditto and framing in ridge	per foot cube	21/2
Ditto in hip and valley rafters including cutting rafters to sizes	per foot cube	23/3

Battening and Boarding

		Roof slopes	Vertical hanging
¾″ × 1½″ Battens nailed to softwood for 20″ × 10″ slates to 8½″ gauge	per square	29/11	31/6
Ditto 16″ × 10″ slates to 6½″ gauge	per square	37/10	39/11
Ditto 10½″ × 6″ tiles to 4″ gauge (4½″ for vertical hanging)	per square	60/4	57/9

		Roof Slopes	Mansards
Ditto 14½″ × 10″ pantiles to 12″ gauge	per square	21/-	21/6
Ditto 15″ × 9″ concrete interlocking tiles to 12″ gauge	per square	21/-	21/6
Roof boarding in batten widths close jointed and fixed to flat or sloping roofs	per square	¾″ 126/-	1″ 162/-
Ditto tongued and grooved and prepared for felt roofing including firring to falls	per square	185/4	221/8
Sawn gang boarding fixed to joists in roof	per foot super	1/4	1/9
Wrot and crosstongued eaves soffite	per foot super	2/1	2/6
6″ Wrot and grooved eaves fascia planted on	per foot run	-/11	1/1½



Movable Walls of Impeccable Appearance

There is nothing temporary in the appearance or performance of the Luxfer-Snead System of partitions—yet a complete suite of offices can be re-positioned in a week-end if so needed.

The 3 in. thick wall units are of double sheet steel with insulation board cemented to the inner side and 1¾ in. dead air gap. Panel units lock together with internal concealed link plates. Single or double glazing is secured by positive ' snap on ' glazing strips. Door and panel units of the same size are interchangeable.

In these Luxfer partitions the functional advantages of good sound and heat insulation and provision for enclosed electric wiring are combined with modernity and dignity of appearance. You will find them in many important buildings where their handsome highly finished plain surfaces and practical attributes make them the obvious choice.

Solid or glazed walls are available in both standard units or purpose-built. Full particulars will be sent gladly on request.

LUXFER LONDON

LUXFER LIMITED

WAXLOW ROAD · HARLESDEN · LONDON · N.W.10

Telephone: ELGAR 7292-5 *Telegrams:* LUXFER, HARLES, LONDON.

CARPENTER—(*continued*)

Wall and Ceiling Boards

		Vertically	Soffites
½″ Fibre board to B.S. 1142 fixed with galvanized flat headed nails to softwood	per yard super	6/8	6/9½
5/16″ Asbestos cement flat sheeting to B.S. 690 fixed as last	per yard super	5/10	6/2½
¼″ Ditto	per yard super	7/–	7/4½

JOINER

Floors and Skirtings
(All thicknesses stated are nominal)

		⅞″	1″	1¼″
Plain edge softwood flooring in batten widths nailed to floor joists	per square	154/–	172/–	208/3
Tongued and grooved ditto	per square	163/9	182/9	220/3
1″ Double grooved and tongued and grooved wood block floor laid herringbone with two-block border, set in hot mastic composition on prepared screed and wax polished :—				
Swedish softwood	per yard super			29/8
European Beech	per yard super			36/9
English Oak	per yard super			45/10
European Oak	per yard super			36/9
Burma Teak	per yard super			47/–
Softwood skirtings with splayed or molded top edge, planted on (per inch sectional area)	per foot run	Sectional area 3″ to 6″ –/3		Over 6″ –/2½
Extra for grounds plugged to brickwork	per foot run		–/8	

Windows in Softwood

		1½″	2″
Rebated and molded softwood fanlights and casement sashes divided into squares for glass	per foot super	3/4	3/7
Extra for hanging	each	6/7	6/7
Cased frames with 6″ × 3″ Oak sill and 2″ molded double hung sashes including pulleys, line and weights	per foot super	—	10/2

N.B.—The above prices are for purpose made joinery. Standard pattern casement windows and double hung sashes and frames to B.S. 644 are cheaper.

Doors in Softwood

		1½″	1¾″	2″
Framed ledged and braced doors filled in with 1″ T. & G. and V-jointed boarding and hanging	per foot super	6/6	7/2	7/2
Four-panel door, square both sides and hanging	per foot super	5/5	6/–	6/–
Ditto molded one side	per foot super	5/11	6/7	6/7
Ditto molded both sides	per foot super	6/6	7/2	7/2

N.B.—The above prices are for purpose made doors. Standard panelled doors to B.S. 459 are cheaper.

1½″ Standard flush doors 2′ 6″ × 6′ 6″ internal pattern	each	115/6
2″ Ditto external pattern	each	123/9

Linings, Frames, etc., in Softwood

		Sectional area Up to 6″	6″ to 12″
Window and door linings etc. (per inch in sectional area)	per foot run	–/4¼	–/4
Frames wrot all round and framed (ditto)	per foot run	–/4	–/3¼
Mullions, transomes and cills (ditto)	per foot run	–/4	–/3½
		2″ to 4″	4″ to 6″
Moldings, architraves, etc. (ditto)	per foot run	–/3¾	–/3½
		Thickness 1″	1¼″
6″ Window boards with rounded nosings, tongued at back and including bearers	per foot run	3/2	3/5½
9″ Ditto	per foot run	3/7	3/11

Shelving and Fittings in Softwood

		¾″	1″
Shelving of 2″ slats spaced 1″ apart on bearers (measured separately)	per foot super	2/9	3/–
Shelving on ditto	per foot super	2/7	3/2
Crosstongued shelving on ditto	per foot super	3/2	3/9
Shelving 9″ wide on ditto	per foot run	1/10	2/5
2″ Shelf bearers plugged to walls	per foot run	1/–	1/2
The following in framed up cupboard fittings :—			
T. & G. & V-jointed back	per foot super	2/3	2/8
Crosstongued top, bottom shelf or division	per foot super	3/3	3/10
1¼″ Flush cupboard doors	per foot super	7/1	
Labour rebate or groove	per foot run	–/3	
Ditto cross-grain	per foot run	–/4½	
1″ × 2″ Bearers screwed on	per foot run	–/6½	

N.B.—The above prices are for purpose-made cupboard fittings. Standard pattern kitchen fittings to B.S. 1195 are cheaper.

IRONMONGERY

		Soft-wood	Hard-wood
3″ Steel butts (medium quality)	per pair	1/5	1/5
4″ Ditto (ditto)	per pair	2/3½	2/3½
Double action floor springs and top centres including filling boxes with oil P.C. 149/3	each	180/9	186/3
Overhead check action door springs. P.C. 66/8	each	83/8	87/1
6″ Barrel bolts. P.C. 5/6	each	7/6	8/–
Cupboard locks. P.C. 8/2	each	12/1	13/1
Norfolk latches. P.C. 5/6	each	10/2	11/7
Cylinder night latch. P.C. 15/11	each	22/8	24/5
Mortice latch. P.C. 9/4	each	14/5	15/9
Rim lock. P.C. 10/–	each	14/1	15/2
Mortice lock. P.C. 15/2	each	21/10	23/7
Door furniture. P.C. 24/–	per set	27/5	27/9
Sash fasteners. P.C. 9/–	each	11/7	12/1
Casement fasteners. P.C. 7/11	each	10/–	10/4
Casement stays. P.C. 11/6	each	13/11	14/4

STEEL AND IRONWORKER

Structural Steelwork

The following prices are for Basic sections (5″ × 4½″ to 16″ × 6″) only. Prices for other sections vary roughly in proportion to the price of the steel ex mills—see "Current Market Prices of Materials."

		£	s.	d.
R.S.J.—in steel framed structures hoisted and fixed complete	per ton	59	6	6
Riveted compound girders including plates and rivets	per ton	63	15	9
R.S. Stanchions including caps, bases, cleats, etc	per ton	65	7	3
Riveted compound stanchions ditto	per ton	67	14	6
Riveted roof trusses with flat and angle members, plates, cleats, etc., 30′ span	per ton	92	18	6
Ditto 40′ span	per ton	90	16	6

Sundries

Simple wrot iron balustrades fixed complete (excluding mortices etc.)	per cwt.	11	7	0
Bolts with heads, nuts and washers and fixing	per cwt.	11	3	0

PLASTERER AND TILE FIXER

24 gauge expanded metal lathing and fixing to softwood soffites	per yard super	6/2

Lime and Gypsum Plaster

		Lime	Sirapite
Three coat lime and two coat Sirapite or similar Gypsum plaster :—			
On brick walls and partitions	per yard super	5/9	4/5
On concrete soffites including hacking	per yard super	6/10	6/3
On soffite of E.M.L. (measured separately)	per yard super	5/10	6/10
On and including wood laths, to soffites	per yard super	11/7	—
⅜″ Gypsum plasterboard fixed to softwood soffites, in accordance with manufacturer's instructions, scrimmed and finished with setting coat of suitable plaster	per yard super		7/4
Plaster moulded cornice or cove (per inch in girth)	per foot run		–/4½

Cement Rendering

Rendering in Portland cement and sand (1 : 4) and setting in Keenes cement on brick walls and partitions	per yard super 5/7
Portland cement and sand (1 : 3) plain face trowelled smooth on ditto	per yard super 5/1½
Portland cement and sand (1 : 3) screed for tiling on ditto	per yard super 2/9

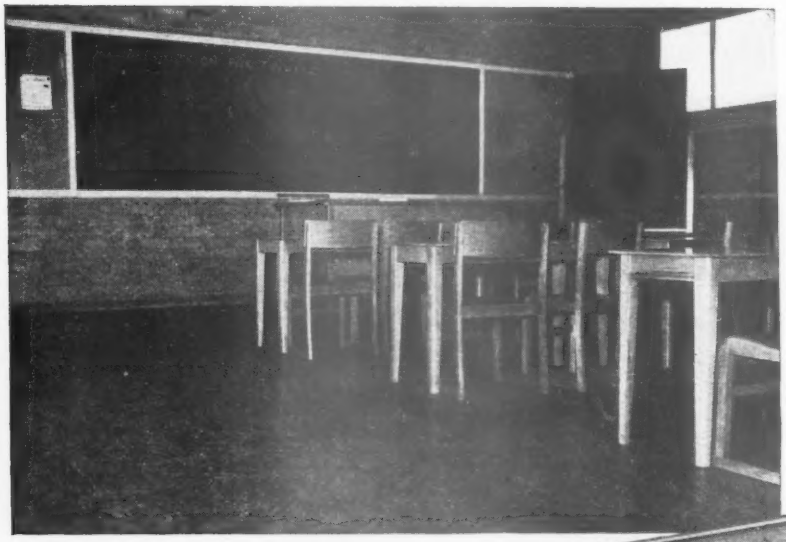
Wall Tiler

6″ × 6″ × ⅜″ Standard quality white glazed wall tiles set and jointed on prepared screed	per yard super 36/9
Ditto eggshell matt or glossy glazed enamelled	per yard super 46/6

EXTERNAL PLUMBER AND COPPERSMITH AND ZINC WORKER

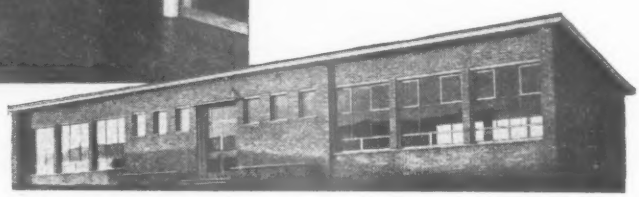
		Flats	Gutters, flashings, etc.	Stepped flashings
Milled sheet lead and labour	per cwt.	267/–	267/–	275/4
24 S.W.G. sheet copper and labour	per foot super	5/3	5/6	5/9
23 S.W.G. sheet copper and labour	per foot super	5/9	6/–	6/4
14 gauge zinc and labour	per foot super	4/–	4/3	4/7

County Architect beats Shortages



THE HENGIST SCHEME

for providing additional school accommodation in the West Riding has involved a rush building programme; all materials used had to be readily available. Accotile, specified by Mr. Hubert Bennett, F.R.I.B.A., West Riding County Architect, for flooring the sixty buildings in the scheme, was chosen primarily because it was readily available, and because for special reasons (see below) the cost of installation was remarkably low — but it has proved more successful than old-fashioned alternatives. Picture shows the Hengist annex at Mansel Crescent Infants' School, Parson's Cross, Sheffield.



VERSATILE NEW MATERIAL SOLVES FLOORING PROBLEM

One of the most urgent tasks confronting public authorities in the post-war years has been the provision of new school accommodation. In the West Riding of Yorkshire, population rise has so far outstripped the regular building programme that an emergency scheme has been put into operation for enlarging the present schools. Sixty annexes of standard design (see illustration) are being built in the grounds of existing schools, mostly comprising two classrooms, cloakroom and sanitary accommodation, in order to meet the emergency.

Owing to the urgency of the work, only readily available materials could be specified. At the same time, the budget would not permit luxuries.

Choosing a floor

One problem of great importance has been flooring. A floor had to be found that was at once durable, readily available, and not too expensive.

The material chosen by Mr. Hubert Bennett, F.R.I.B.A., the county architect, was "Accotile," the asphalt tile flooring made by the Armstrong Cork Company — firstly, because it is readily obtainable, and secondly, because Accotile, with its damp-resisting qualities, can be laid direct on to screeded concrete without the necessity of a damp-course — hence the installation is much lower in cost than for most floors.

Accotile provides the flooring for the classrooms and vestibules of every building in the Hengist Scheme.

Qualities of Accotile

Accotile is a composition of inert, asbestos fibres and ground rock fillers, fadeless mineral pigment and asphalt or resin-binders. It provides an extremely durable floor (floors laid in this country in 1938 and 1939 are still giving excellent service) that has a strong resistance to alkaline moisture. Accotile remains non-slip under all conditions, which makes it particularly suitable for schools and institutions.

There are almost unlimited possibilities of design for Accotile, and it can be laid to harmonize with existing decorations. Inconvenience is cut down to a minimum, since Accotile can be used as soon as it is laid.

Standard Accotile is cleaned by washing with water, and can be polished when desired. It is resistant to stains and dilute acids. Where conditions make it advisable, a special Grease Resisting Accotile is recommended.

Accotile is available in two sizes of tile (12" x 12" and 9" x 9"); in two thicknesses ($\frac{1}{8}$" x $\frac{3}{16}$"); and in 19 different colours. In addition, Accotile Coved Skirting, supplied in 36" lengths, obviates the need for timber; and, as there are no corners for dust to collect in, it provides a hygienic, as well as decorative, finish to the room.

ACCOTILE*

"The low-cost floor with the luxury look"

*British Registered Trade Mark 663698. Armstrong Cork Company Ltd., Registered Users.

FOR FURTHER INFORMATION

about Accotile, architects and builders are invited to write or telephone to

ARMSTRONG CORK COMPANY LIMITED

London Office: Flooring Department, Bush House, Aldwych, W.C.2. *Tel.: Chancery 6281.*

Birmingham Office: Westminster Chambers, 93a Corporation Street. *Tel.: Central 1271.*

Glasgow Office: 5 Oswald Street, C.1. *Tel.: Central 5703.*

Dublin Office: 54 Middle Abbey Street. *Tel.: Dublin 54901.*

In addition to Armstrong's own service, forty-two approved contractors with branches all over the country handle Accotile.

EXTERNAL PLUMBER AND COPPERSMITH AND ZINC-WORKER—(*continued*)

Rainwater Pipes and Gutters

		3″		4″	
		With holder-bats	With nails	With holder-bats	With nails
Cast iron medium section (5/16″ metal) R.W. pipes and jointing and fixing to walls with pipe nails and distance pieces or holderbats (cutting and pinning holderbats measured separately)	per foot run	4/8	3/9	5/8	4/9
		24 G.		20 G.	
Pressed steel R.W. pipes and ditto	per foot run	4/3	3/4	5/11	4/11
Asbestos cement R.W. pipes and ditto	per foot run	2/11	—	3/7	—
		4″		6″	
		1/4″	5/16″	1/4″	5/16″
Cast iron half round eaves gutter and jointed and fixed with brackets to fascia	per foot run	2/6½	3/–	3/10	4/7
Ditto O.G. ditto	per foot run	2/11	3/9	4/4	5/9½
18 Gauge pressed steel half round ditto	per foot run	2/8½		3/9	
Ditto O.G. ditto	per foot run	3/3		4/6	
Asbestos cement half round ditto	per foot run	2/3		3/8	

Soil and Ventilating Pipes

		3″	4″
Lead soil, waste and ventilating pipes (17 lb. per yard for 3″ and 22·8 lb. per yard for 4″ diameter) fixed to walls with lead tacks and brass screws	per foot run	15/10	22/–

		Heavy 11/64″	Medium 5/16″	Heavy 11/64″	Medium 5/16″
Medium or heavy section cast iron soil, waste and ventilating pipes with caulked joints, fixed to walls, with pipe nails and distance pieces	per foot run	4/10	4/6	6/2	6/1

INTERNAL PLUMBER

Lead Pipes

Prices are based upon the following weights per yard.

		1/2″ lb.	3/4″ lb.	1″ lb.	1½″ lb.
Supply		7	11	16	21
Distributing		6	9	12·5	16
Flushing and overflow		3	5	7	9
Waste and ventilating		—	—	—	7

		1/2″	3/4″	1″	1¼
Supply pipe in trench (measured separately)	per foot run	5/2½	8/–	11/5	15/–
Ditto fixed to walls and ceilings	per foot run	5/7	8/6	12/2	16/1
Distributing pipe fixed to walls and ceilings	per foot run	4/11	7/2	9/9	12/10
Flushing and overflow pipe ditto	per foot run	3/1	4/7	6/2	8/2
Waste and ventilating pipe ditto	per foot run	—	—	—	6/11
Joints to fittings	each	5/3	6/3	6/9	7/7
Bends	each	–/9½	1/–½	1/4	1/9
Branch joints	each	6/4½	7/6	8/–½	9/6

Steel Tubes and Fittings

		1/2″	3/4″	1″	1½″
Galvanized steel tubes to B.S. 1387 Class C with screwed joints in red lead as supply pipe laid in trench (measured separately)	per foot run	2/1	2/5½	2/6½	3/5½
Ditto Class B ditto fixed to walls and ceilings as supply, distributing, waste pipe, etc.	per foot run	2/–	2/5	2/6½	3/3
Joints to fittings	each	3/8	4/4½	5/4	6/5
Bends	each	2/–	2/5	3/2	4/7
Tee, equal or reducing	each	2/1	2/4	3/–	3/10

Copper Tubes and Fittings

Prices are based upon the following gauges :—

		1/2″	3/4″	1″	1¼″
Supply		18	17	16	16
Distributing, waste, etc.		19	19	18	18
Copper tubes to B.S. 1386, as supply pipe laid in trench (couplings and trench measured separately)	per foot run	1/10	2/8	3/8	5/6½
Ditto to B.S. 659 as distributing, waste pipes, etc. fixed to walls and ceilings. Couplings measured separately	per foot run	1/9½	2/3½	3/3	3/10
Brass compression type couplings—copper to copper	each	4/10	5/10	8/–	10/3
Ditto bends	each	6/6	7/8½	11/–	13/11
Ditto tees	each	8/5	9/7	14/11	21/3

INTERNAL PLUMBER—(*continued*)

Sanitary Fittings

		£	s.	d
Fireclay sinks 24″ × 18″ × 10″ including cutting and pinning brackets to tiled wall. P.C. 75/–	each	4	15	4
Combined metal sink and drainer 42″ × 18″ × 8½″ to bearers (measured separately). P.C. 330/–	each	18	11	0
Fireclay lavatory basin 25″ × 18″ with taps and towel rail bracket including screwing brackets to tiled wall. P.C. 138/6	each	8	3	10
Rectangular cast iron porcelain enamelled bath 5′ 6″ long, with taps, and panels to side and one end fixed to framing (measured separately) P.C. 390/6	each	23	7	3
Fireclay w.c. pan with trap, plastic seat, high level cistern and flush pipe, including screwing pan to floor and cistern brackets to backboard. P.C. 200/–	each	12	10	0
Ditto with low level cistern. P.C. 240/–	each	14	15	0

GLAZIER

		To wood	To metal
18 oz. Ordinary quality sheet glass and glazing with putty in squares not exceeding 4 ft. sup.	per foot super	–/10½	1/–
24 oz. Ditto and ditto	per foot super	1/–	1/1½
32 oz. Ditto and ditto	per foot super	1/5	1/6½
1/8″ Figured, rolled, and cathedral—untinted and ditto	per foot super	1/2	1/3½
1/4″ Rough cast and ditto	per foot super	1/4½	1/6
1/4″ Wired cast and ditto	per foot super	1/6	1/7½
1/4″ Georgian wired cast and ditto	per foot super	1/6½	1/8

		To wood	To metal
1/4″ Georgian wired polished plate and ditto	per foot super	5/6	5/7½
1/4″ Polished plate (glazing quality) and ditto	per foot super	5/3	5/5

PAINTER

Whitening, Distemper and Paint on Walls

Prepare and twice whiten plastered walls and ceilings	per yard super	1/1
Prepare and twice distemper with washable distemper on plastered walls and ceilings	per yard super	1/8½
Ditto on brick or concrete	per yard super	2/3
Prepare, prime, and paint two coats oil colour on plastered walls and ceilings	per yard super	4/8½

Paint on Metal

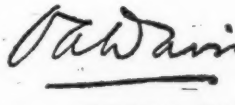
		Basic price	Add for each additional coat
Prepare, prime, and paint one coat oil colour on general surfaces	per yard super	3/1	1/5
Ditto metal casements	per yard super	4/7	2/–
Ditto members of roof trusses	per yard super	3/10	1/8½
Ditto balustrades one side	per yard super	4/7	2/–
Ditto bars, etc., not exceeding 6″ girth	per yard run	–/9	–/4
Ditto small pipe	per yard run	–/9	–/4
Ditto large pipe	per yard run	1/6	–/8

Paint on Wood

		Basic price	Add for each additional coat
Knot, prime, stop and paint one coat oil colour on general surfaces of woodwork	per yard super	3/5	1/5
Ditto on skirtings, rails, frames, etc., not exceeding 3″ girth	per yard run	–/5	–/2
Ditto ditto for each additional 3″ in girth	per yard run	–/4½	–/2
Ditto on sash squares one side	per dozen	4/4	1/9
Ditto on large sash squares one side	per dozen	7/9	3/1

Stain and Varnish on Wood

Prepare, size, stain and twice varnish on general surfaces of woodwork	per yard super	3/7
Ditto on skirtings, rails, frames, etc. not exceeding 3″ girth	per yard run	–/5½
Ditto ditto for each additional 3″ in girth	per yard run	–/5



F.R.I.C.S., F.I.Arb.

THE INDUSTRY

From the Industry this week Brian Grant describes two new cooking stoves, a fire and a house heating unit, all on show at the BIF.

BIRMINGHAM, BIF

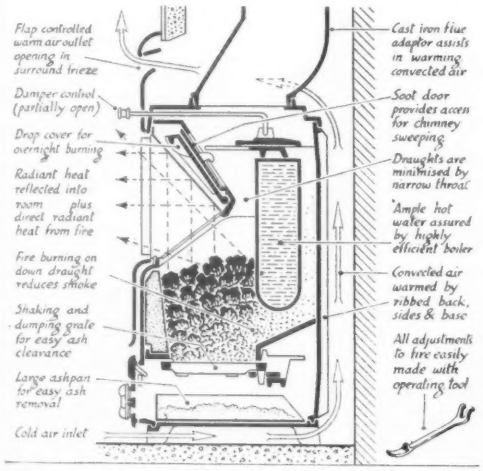
There is such an acreage at the Castle Bromwich section of the British Industries Fair that it becomes a virtual impossibility to give more than a glance to the majority of the exhibits. There are, however, several new devices which merit a fairly full description.

On the stand of the Radiation group of companies there are several new models, including a type 32 "Raymax" fire, a new "Yorkvale" heat retention cooker which is astonishingly low in price, and a modified version of the whole house heating unit shown in part sections and with glass sides so that it is possible to see how the whole thing works.

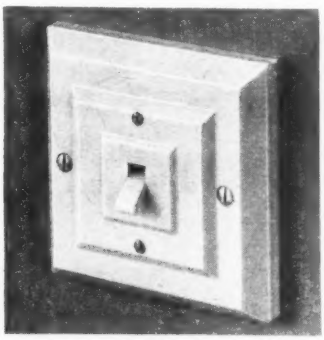
The section below, left, shows the circulation and method of working of the older type 28 "Raymax," the newer type 32, being the same in principle, but having a one-piece front so that it can be installed with grilles in the tiled surround, or to duct convected warm air to another room. The fire works mainly on the down-draught principle and gives direct and reflected radiant heat, convected warm air and hot water.

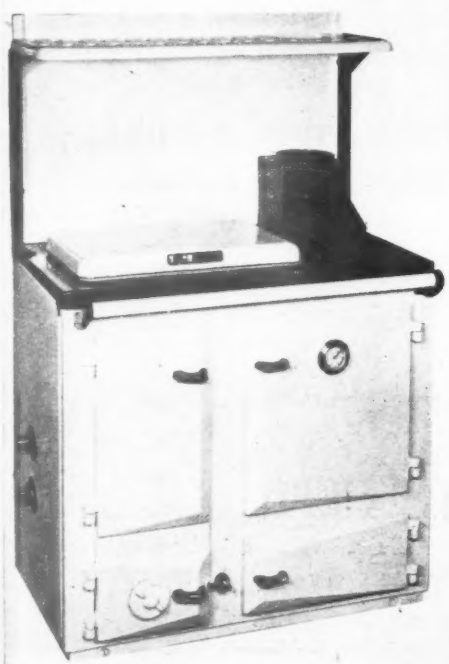
The radiant heat directed upwards from the fuel bed of the fire is reflected outwards into the room by a polished reflector which is removed when the fire is closed down for night burning. Fuel consumption varies from ½ to 5 pounds of fuel an hour, according to output. Boiler output is enough for normal domestic hot water plus from 20 to 50 square feet of radiator surface, including pipe runs.

So far as space heating is concerned the appliance is large enough for rooms up to 2,000 cu. ft., provided that the convected air is supplied to the same room. In rooms up to 800 cu. ft. or so the convected air can be used for one or two average size bedrooms.



Below, the "Surflush" Switch by Falk, Stadelmann & Co., Ltd. Left, the "Raymax" fire. Bottom, left, the "Yorkvale" solid-fuel cooker, finished in cream and black vitreous enamel. Bottom, right, the "Sunbeam Superior" solid-fuel cooker.





"YORKVALE" COOKER

The "Yorkvale" cooker (not to be confused with the "Yorkvale" back to back range) is an entirely new design. Heavily insulated, it has a large general purpose oven and a smaller plate warming cupboard. The hot plate is large, and has the now usual hinged insulating lid while there is also a boiler for hot water supply. The price, from £42 and upwards, according to the type of boiler and extra fittings required, seems very low. (*Radiation Ltd., 7 Stratford Place, London, W.*1.)

ANOTHER COOKER

It is interesting to compare this "Yorkvale" cooker with the "Sunbeam Superior" shown by Chatwins. This model has the blessing of the Council of Industrial Design and will provide hot water for three radiators as well as the normal domestic supply. Ovens, fire and ash container all have drop doors, and the heavily insulated bolster over the hot plate is spring loaded so that it can be lifted with one finger. There is also an extra control to give quick warming-up in the morning. Attention has also been paid to ease of use and maintenance: control of draught is by a sleeve type damper, there is a rapid ash clearing device, and the firebricks can be replaced in an hour or less—quite a major job with the majority of cookers of this type. Price is £48 15s. (*Chatwins Ltd., Tipton, Staffs.*)

ELECTRICAL FITTINGS

Falk, Stadelmann were showing the air conditioning fan illustrated in the last instalment of these notes, and also a new "Surflush" switch designed for alternating current supplies. It is, in fact, a surface type switch, but the projection from the wall is very small, so that it appears almost to be a flush type. It can, however, be mounted direct on the wall at the cable exit, without the use of a block or a sunk box. The slight projection is, if anything, an advantage, as a completely flush switch can be a little difficult to find in the dark with the result that there are too many dirty fingermarks on the wall. (*Falk, Stadelmann & Co. Ltd., 91 Farringdon Road, London, E.C.*1.)

BRIAN GRANT

Buildings Illustrated

Cherry Orchard Primary School in Marlborough Lane, Greenwich, London, S.E.7, for the London County Council. (Pages 608-612.) Architect: Denis Clarke Hall, F.R.I.B.A., and L. W. Elliott, A.R.I.B.A., A.M.I.C.E., A.M.I.STRUCT.E. Assistant in Charge: H. G. Montgomerie, A.R.I.B.A. General contractor: Walter Gladding & Co. Ltd. Clerk of works: H. E. Fuller. General foreman: S. W. Parris. Sub-contractors: bricks, Henry J. Greenham Ltd.; artificial stone, W. C. Richardson Ltd.; bitumetal roofing, William Briggs & Sons Ltd.; W.C. partitions and terrazzo, Mosaic & Terrazzo Co. Ltd.; heat resisting glass, Chance Bros. Ltd.; woodblock flooring, New Flooring Installations Ltd.; accotile flooring, Neuchatel Asphalte Co. Ltd.; central heating, The Ray-Heeting

ENQUIRY FORM

I am interested in the following advertisements appearing in this issue of "The Architects' Journal." (BLOCK LETTERS, and list in alphabetical order of manufacturers names please).

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Please ask manufacturers to send further particulars to :—

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AJ. 15.5.52

Co. Ltd.; electric wiring, fixtures and electric heating, Kirkdale Electrical Co.; door and window furniture, A. J. Binns Ltd.; casements, Williams & Williams Ltd.; servery hatch shutter, Haskins Ltd.; entrance hall seat cushions, Dunns of Bromley; furniture, L.C.C. Supply Division, Educational Supply Association Ltd (tables and chairs), Story & Co. Ltd. (staff rooms); cloakroom fittings, Comyn Ching & Co. Ltd.

(The following lists of sub-contractors refer to canteens illustrated in last week's JOURNAL.)

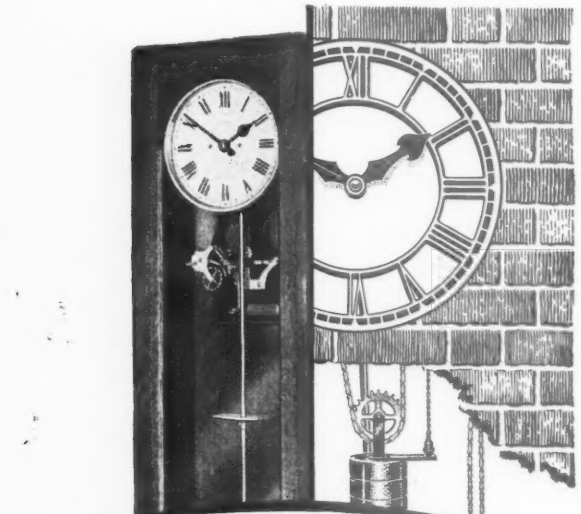
Canteen at Stoke Poges, Bucks., for the Fulmer Research Institute Ltd. (Page 571.) Architects: A. F. Hare & Partners, A.R.I.B.A.; assistant architect-in-charge, G. F. Kendrew, A.R.I.B.A. General contractors: William Hartley & Sons. Sub-contractors: aluminium structure, Structural & Mechanical Development Engineers Ltd.; bricks, Marston Valley Brick Co.; insulating blocks, Thermalite Ltd.; roofing, Stramit Boards Ltd.; roof covering, Bitumen Industries Ltd.; floor, Granwood Flooring Co. Ltd.; wall tiles, Carter & Co. (London) Ltd.; gas installation and heaters, North Thames Gas Board.

Canteen & Mechanics' Lobby Buildings, Gas Works, Bromley-by-Bow, E.3. (Page 572.) Architect: Elie Mayorcas, F.R.I.B.A. Quantity Surveyor: C. E. Kenney, F.R.I.C.S. General Contractor: Thomas & Edge Ltd. Sub-contractors: Excavation, dampcourses, joinery, Thomas & Edge Ltd.; bricks, Cement Marketing Co. Ltd.; built-up ply roofs and aluminium decking, roofing felt, William Briggs & Sons Ltd.; lavatory partitions, Art Pavement & Decorations Ltd.; glass, Aygee & Co. Ltd.; lay lights, John Williams & Sons (Cardiff) Ltd.; concrete roof lights, Haywards Ltd.; woodblock flooring, Horsley Smith & Co. (Hayes) Ltd.; electric light fixtures, Troughton & Young Ltd.; rolling shutters, G. Brady & Co. Ltd.; iron staircases, Fredrick Braby & Co. Ltd.; doors, Esavian Ltd.; kitchen equipment, Gardiner & Gulland Ltd.; acoustic tiles, Horace Cullum & Co.; furniture, Dare-Inglis Products Ltd.; cloakroom fittings, Speedwell Gear Case Co.; clocks, Smith & Co. Ltd.

Canteen at the factory for Aspro (Ireland) Ltd., at Inchicore, Dublin, Ireland. (Page 573.) Architect: Alan Hope, B.ARCH., M.R.I.A.I., A.R.I.B.A., A.M.T.P.I. Quantity surveyor: Beckett and Metcalf. Consulting engineer: J. P. Tierney & Co. General contractor: T. & G. Crampton Ltd. Sub-contractors: Thermoplastic tile flooring ("Accotile"), Armstrong Cork Co. Ltd.; heating, Matthew Hall Ltd.; rubber floors, the Irish Dunlop Co.; built-up roofing ("Ruberoid"), S. G. Glorney; sewerage disposal, Tuke & Bell Ltd.

Canteen at Newbury Park Bus Station, Newbury Park, Ilford. (Page 577.) Architect: Oliver Hill, F.R.I.B.A. Assistant Architect: Edward Duley, L.R.I.B.A., A.I.A.A. London Transport Executive Liaison Architect: G. C. Manley, L.R.I.B.A. General contractor (inc. reinforced concrete): Higgs & Hill Ltd. Sub-contractors: asphalt, Excel Asphalte Co.; built-up roofing, Ruberoid Co., Ltd.; glass, Aygee, Ltd.; patent glazing, dome light, Pilkington Bros., Ltd.; patent flooring and art pavements, Semtex, Ltd.; sanitary fittings, Shanks & Co., Ltd.; door furniture, Nettlefolds; casements, window furniture, Wiggins-Sankey, Ltd.; folding gates, rolling shutters, Haywards, Ltd., decorative plaster, Tyrolean finish, Cement Marketing Co., Ltd.; metalwork fittings (anti-flu sash), Fredk. Sage & Co., Ltd.; kitchen equipment, R. Crittall & Co., Jackson Electric Stove Co., Ltd.

Canteen at 1-4 Gt. Tower Street, E.C.3, for Harrisons & Crosfield Ltd. (Page 579.) Architects: Ernest Bates & Wm. G. Sinning, F./A.R.I.B.A.; assistants, Frederick Painter and Maurice Jay. Consulting engineers: Handcock & Dykes. General contractor: Trollope & Colls Ltd. Sub-contractors: kitchen equipment, Benham & Sons Ltd.; terrazzo flooring, Art Pavements & Decorations Ltd.; wall tiles, Carter & Co. (London) Ltd.; heating and hot water supply, Rosser & Russell Ltd.; extract ventilation, Ozonair Ltd.; roller shutters, Arthur L. Gibson & Co. Ltd.; "Dunlopillo" seating in directors' room, N.A.P. Latex Products Ltd.; door furniture, etc., Yannedis & Co. Ltd.



Pendulum control for accurate timekeeping

Complete accuracy in time keeping can only be assured by pendulum control. The G. & J. electric clock system —consisting of a Master, driving any number of slave dials — works on this principle. Independent of mains supplies, the system can also control time recorders, job costers, programme controllers, and similar apparatus.

Infallible pendulum control is the basis, also, of the G. & J. weight-driven, automatically wound Tower Clock mechanisms. Different movements are available to meet varying local conditions, but all are based on the accuracy of the pendulum movement. Dials of any size can be operated.

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Thornton Heath
3221

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at a cost of only £48 per Ton

Hot material applied to a cold surface solidifies immediately, will not penetrate the concrete and thus will not adhere. Even where it is possible to wait 28 days for concrete to dry and mature, there is still water left and, in this case, the application of pitch or hot bitumen causes evaporation and the steam pressure prevents satisfactory adhesion. The use of EVODE Cold Bitumen Covering gets over these troubles.

It adheres to moist surfaces.
It can be applied to green concrete.
It is stable to temperature changes.

★ Foolproof in application and readily available at £48 per ton, free d/d in 40 gallon returnable drums.

Write for leaflet P7730 to :

EVODE LTD. GLOVER STREET, STAFFORD
Telephone: 1590/1/2 Telegrams: Evode, Stafford

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

Public and Official Announcements

25s. per inch; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

CITY OF BIRMINGHAM
EDUCATION COMMITTEE.
APPOINTMENT OF ARCHITECT.

Applications are invited for the post of Architect to the Birmingham Education Committee. Salary: £1,750×£100—£2,150. Further particulars of the post, together with forms of application which should be returned not later than 26th May, 1952, may be obtained (s.a.e.) from the undersigned.

E. L. RUSSELL,
Chief Education Officer.

Education Office,
General Purposes Branch,
Council House, Margaret Street,
Birmingham, 3. 6775

ROYAL WEST OF ENGLAND ACADEMY
SCHOOL OF ARCHITECTURE, BRISTOL.

Owing to the retirement of the present Principal, applications are invited for the post of PRINCIPAL, who will also be a Year Master, at a salary of £1,200 p.a., rising by annual increments of £50 to £1,400 p.a., the appointment to take effect from 1st September, 1952.

Applications should be made in writing, stating particulars of previous experience and the names of two referees, by 14th June, 1952, to the Honorary Secretary, Eustace H. Button, 23, Berkeley Square, Bristol, 8. 6791

COUNTY BOROUGH OF GREAT YARMOUTH
EDUCATION COMMITTEE.
APPOINTMENT OF CLERK OF WORKS.

Applications are invited for the appointment of a Clerk of Works to supervise the erection of the new Peterhouse Junior School.

The appointment will be temporary, for approximately two years, and subject to one month's notice on either side.

The salary will be £12 per week.

Applicants must have a thorough knowledge of the building trade, including experience in connection with steel-framed buildings. They must be conversant with plans, specifications, bills of quantities and competent to set out work, give levels and keep all necessary records and progress reports.

Applications, stating age, qualifications, present employment and previous experience, accompanied by copies of three testimonials, should be enclosed in an envelope endorsed "Clerk of Works, Schools" and must be received by me not later than 30th May, 1952.

Canvassing directly or indirectly will be deemed a disqualification, and candidates must disclose in writing whether, to their knowledge, they are related to any member, or holder of any senior office under the Council. Candidates who fail to do so will be disqualified and, if appointed, will be liable to dismissal without notice.

D. G. FARROW,
Chief Education Officer.

22, Euston Road,
Great Yarmouth.
18th April, 1952. 6789

METROPOLITAN BOROUGH OF HACKNEY.
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT.
APPOINTMENT OF ASSISTANT ARCHITECT.

Applications are invited for this permanent appointment at a salary in accordance with Grades A.P.T., Va-VI (£600 p.a. to £710 p.a.) plus London Weighting Allowance. The commencing salary may be fixed at a point above the minimum according to the qualifications and experience of the successful candidate.

Candidates must have had a good general experience in design and construction and hold an appropriate professional qualification.

The successful candidate will be required to undertake the oversight of the maintenance of Council's properties, including the preparation of specifications for and the technical supervision of repairs, alterations and improvements, in addition to general architectural work.

Conditions of appointment and application form may be obtained from the undersigned upon receipt of a stamped addressed foolscap envelope.

Completed application forms endorsed "Assistant Architect" must be returned not later than first post on 30th May, 1952. The Council is unable to provide any housing accommodation for the successful candidate.

DUDLEY SORRELL,
Town Clerk.

Town Hall, Hackney, E.8.
6th May, 1952. 6826

LONDON COUNTY COUNCIL.
ARCHITECT'S DEPARTMENT.
DISTRICT SURVEYORS' SERVICE. Vacancies for:

(*a*) Grade II positions (£837 10s. to £1,002).
(*b*) Technical Assistants (up to £696).

Candidates should be A.M.I.Struct.E. (or equivalent), A.R.I.B.A. or A.R.I.C.S. Structural knowledge essential. Interesting pensionable career. Particulars and application form from Architect (quote EK/DS5), County Hall, S.E.1, specifying (*a*) or (*b*). (449) 6814

SINGAPORE IMPROVEMENT TRUST.

TWO ASSISTANT ARCHITECTS are required by the Singapore Improvement Trust, the appointment being in the first instance on a three years' agreement. Age between 23 and 35 years.

Applicants must be qualified by examination as Associates of the Royal Institute of British Architects.

Salary scale, $500-$1,000 per month. Point of entry depending on the age, qualifications and experience of the appointees. Expatriation allowance, $110 to $190 per month, according to basic salary. Cost-of-living allowance, 95 per cent. of the first $200 p.m. of basic salary, plus (i) single officers, 40 per cent. of next $100 and 25 per cent. of next $400 p.m. of basic salary (maximum allowance, $330 p.m.), (ii) married officers with no dependent children, 55 per cent. of next $200 and 45 per cent. of next $300 p.m. of basic salary (maximum allowance, $435 p.m.), (iii) married officers with one or more dependent children, 75 per cent. of next $400 and 65 per cent. of next $100 p.m. of basic salary (maximum allowance, $555 p.m.). An allowance will be paid to cover cost of duty transport. All allowances are subject to revision. ($1 Malayan=2s. 4d.)

Strict medical examination. Provident Fund, to which the appointees must contribute 7½ per cent. of salary; the Trust contributes a minimum of 7½ per cent., rising by stages to 20 per cent. after 20 years' service. Leave and passages in accordance with Regulations. Quarters (with heavy furniture) are provided at a rental of 8 per cent. of salary, or a housing allowance (12 per cent. of salary) paid in lieu.

Applications in duplicate, with full personal and technical information, including copies of three recent testimonials, to Messrs. Peirce & Williams (Agents to the Trust), 1, Victoria Street, London, S.W.1, before Wednesday, 4th June. 6815

COUNTY BOROUGH OF TYNEMOUTH.
BOROUGH SURVEYOR'S DEPARTMENT.

Appointment of:

(1) SENIOR ASSISTANT ENGINEER.
(2) JUNIOR ASSISTANT ARCHITECT.
(3) ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the above appointments, with salaries on the following grades of the National Salary Scales:

(1) Grade VA/VI, £600-£710.
(2) Grade II, £470-£515.
(3) Grade II, £470-£515.

The appointments are superannuable.

The Corporation will be prepared to assist in the provision of housing accommodation in cases of difficulty in respect of appointment (1) only.

Application Forms and Conditions of Appointment may be obtained from Mr. D. M. O'Herlihy, B.Sc.(Eng.), M.I.C.E., Borough Surveyor, 16, Northumberland Square, North Shields, to whom they should be returned by the 7th day of June, 1952.

(Sgd.) FRED. G. EGNER,
Town Clerk.

5, Northumberland Square, North Shields. 6813

UNIVERSITY COLLEGE OF NORTH
STAFFORDSHIRE.

Applications are invited for the post of ASSISTANT ARCHITECT on the staff of the Buildings Officer and Architect. Salary £600×£20—£700×£10—£710. Initial salary will depend upon qualifications and experience. The duties may include work on buildings for teaching and research in the humanities and sciences, general purpose buildings, students' hostels, staff residences and general services. Superannuation and child allowances will be paid. Three copies of applications, giving full details of age, qualifications, experience, etc., and the names of three referees, should be sent to: The Registrar, The College, Keele, Staffordshire, to reach him not later than the 24th May, 1952. 6808

MONMOUTHSHIRE COUNTY COUNCIL.
APPOINTMENT OF ARCHITECTURAL STAFF.

Applications are invited for the following posts in the County Architect's Department under N.J.C. service conditions:—

THREE SENIOR ARCHITECTURAL ASSISTANTS. Salary £735-£810 (A.P.T., VIII).

TWO ARCHITECTURAL ASSISTANTS. Salary £685-£760 (A.P.T., VII).

TWO ARCHITECTURAL ASSISTANTS. Salary £645-£710 (A.P.T., VI).

THREE ARCHITECTURAL ASSISTANTS. Salary £500-£545 (A.P.T., III).

TWO ASSISTANT QUANTITY SURVEYORS. Salary £685-£760 (A.P.T., VII).

THREE ASSISTANT QUANTITY SURVEYORS. Salary £645-£710 (A.P.T., VI).

Forms of Applications, particulars of posts and conditions of service can be obtained from the undersigned. Applications, together with copies of three testimonials, must be forwarded to the County Architect, Queen's Hill, Newport, Mon., not later than 30th May, 1952.

VERNON LAWRENCE,
Clerk of the Council.

County Hall, Newport, Mon. 6805

AYCLIFFE DEVELOPMENT CORPORATION.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.

Applications are invited from fully qualified Architects for the post of Architectural Assistant to the Chief Architect of the Corporation (Mr. G. A. Goldstraw) at a salary in accordance with Grade VI of the A.P.T. Division of the National Scale for Staffs of Local Authorities, *i.e.*, £645 per annum, rising by two annual increments of £20 and one of £25 to £710 per annum.

The successful applicant will be engaged on the Corporation's capital works programme for the building of the New Town of Newton Aycliffe, and candidates for the post must have had extensive experience in the external control of building contracts, including the issue of Variation Orders, instructions to Clerks of Works, etc.

The appointment will be subject to termination by one month's notice in writing on either side; to the provision of the Local Government Superannuation Act, 1937, and to the conditions of service of the National Joint Council.

The Corporation are prepared to offer housing accommodation to the successful applicant, if necessary.

Applications, stating age, qualifications, present and past appointments and details of experience, together with the names and addresses of two persons to whom reference can be made as to ability, should be forwarded to the undersigned, to arrive not later than 24th May, 1952.

A. W. THOMAS,
General Manager.

Newton Aycliffe, Co. Durham.
7th May, 1952. 6820

LEEDS EDUCATION COMMITTEE.
LEEDS COLLEGE OF ART.
Principal: E. E. PULLEE, A.R.C.A., F.S.A.E., F.R.S.A.

(1) HEAD OF THE SCHOOL OF ARCHITECTURE AND TOWN PLANNING.

Applications are invited for the above post, duties to begin on the 1st September, 1952. The Diploma of the School is recognised for exemption from the Final Examination for the Associateship of the R.I.B.A. The Town Planning Course is similarly recognised by the Institute Town Planning.

Salary: Burnham Technical Scale, Head of Department, Grade IV, £1,300×£25—£1,450.

(2) SENIOR LECTURER IN TOWN PLANNING.

Applications are invited for a Senior Lecturer, to take charge of the Course for the Diploma in Town Planning. Candidates should hold a recognised Degree or Diploma in Architecture, together with a recognised Diploma in Town Planning or Civic Design, and should have had experience of work under the Town and Country Planning Acts, 1947, or the New Town Acts, 1946.

Salary: Burnham Technical Scale for Senior Lecturers, £1,000×£25—£1,150.

Application forms (stamped addressed envelope) and further particulars may be obtained from the Chief Education Officer, Education Offices, Leeds, 1, and should be returned within 14 days of this notice. 6819

BOROUGH OF RICHMOND, SURREY.
APPOINTMENT OF ARCHITECTURAL
ASSISTANT.

Applications are invited for the above appointment on the established staff of the Borough Engineer and Surveyor from persons having experience in building work, particularly the maintenance of dwellings and public buildings, the preparation of estimates and reports.

The salary is on Grade A.P.T., III, of the National Scale of Salaries (£500×£15—£545 per annum), plus the appropriate London area weighting.

The appointment is subject to the provisions of the National Scheme of Conditions of Service and the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination.

Applications, stating age, education and training, qualifications, experience, with particulars of present and previous appointments, together with the names and addresses of two persons to whom reference as to suitability for the appointment may be made, should be delivered to the undersigned not later than 30th May, 1952.

Canvassing will disqualify. Candidates shall, when making application, disclose in writing whether to their knowledge they are related to any member of the Council or any Senior Officer.

The Council is unable to assist in the provision of housing accommodation.

CLIFFORD HEYWORTH,
Town Clerk.

Municipal Offices, Parkshot,
Richmond, Surrey.
May, 1952. 6818

STAFFORDSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL
STAFF.

Experienced ARCHITECTURAL ASSISTANTS are invited to apply for the above, stating salary required and giving full details of experience, qualifications, age and present salary and position, etc. Applications, together with copies of three recent testimonials should be forwarded, as soon as possible, to C. M. Coombs, F.R.I.B.A., County Architect, Martin Street, Stafford.

T. H. EVANS,
The Clerk of the County Council.

County Buildings, Stafford.
5th May, 1952. 6831

WALTHAMSTOW COMMITTEE FOR EDUCATION.

Applications are invited for the following permanent appointments in the office of the Architect to the Committee, Mr. Frank H. Heaven, A.R.I.B.A., A.R.I.C.S.

(*a*) ASSISTANT ARCHITECT at a salary of £570 rising by two increments of £15 and one of £20 to £620 per annum (Grade A.P.T. V of National Scales).

(*b*) ASSISTANT ARCHITECT at a salary of £530 rising by increments of £15 to £575 per annum (Grade A.P.T. IV of National Scales).

In addition, a London Weighting of £30 if 26 years of age and over, or £20 age 21 to 25, is payable.

Applications by letter giving full particulars should be made to The Borough Education Officer, Town Hall, Forest Road, Walthamstow, E.17, within three weeks of the appearance of this notice. 6834

COUNTY BOROUGH OF BURNLEY.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT in the Borough Engineer's Department. The salary grade will be fixed in accordance with experience and qualifications, but the maximum salary offered is Grade V of the National Scales (£570 rising to £620 per annum).

Applicants for this appointment should at least have passed the Intermediate R.I.B.A. Examination and have had good general experience in a Municipal Architect's office.

Conditions of service are those formulated by the National Joint Council. The appointment is on the established staff and subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination.

Canvassing, either directly or indirectly, will disqualify the candidates, and any known relationship to a member or senior officer of the Council must be clearly stated in the application.

Forms of application may be obtained from the Borough Engineer and Surveyor, 22-24 Nicholas Street, Burnley, to whom applications should be returned not later than Wednesday, 4th June, 1952.

C. V. THORNLEY.
Town Clerk.
6832

THE UNIVERSITY OF LEEDS. Applications are invited for the post of DEPUTY SURVEYOR of the Fabric. Candidates should possess a wide general knowledge of building construction and have had practical experience of supervision. Preference will be given to Registered Architects or Members of the Royal Institute of Chartered Surveyors. Commencing salary £600-£700, according to qualifications and experience. Applications, stating age, training, experience, qualifications and other relative information, together with copies of three recent testimonials, should be addresesd to The Bursar, The University of Leeds, Leeds, 2, and endorsed "Deputy Surveyor." 6807

BOROUGH OF BRIDGWATER.
APPOINTMENT OF BOROUGH ARCHITECT.

Applications for the above appointment are invited from qualified Architects, with wide Municipal experience, especially in housing. Salary £850 per annum, rising by increments of £50 per annum to a maximum of £1,000 per annum.

The person appointed will be responsible for the whole of the Council's architectural work, and the appointment will be subject to the recommendations of the Joint Negotiating Committee for Chief Officers of Local Authorities.

The appointment is also subject (*a*) to the provisions of the Local Government Superannuation Act, 1937, (*b*) to the passing of a medical examination, and will be terminable by three months' notice on either side.

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, must reach the undersigned not later than the 26th May, 1952.

Canvassing in any form will disqualify, and applicants must disclose whether they are related to any member or senior officer of the Council.

H. A. CLIDERO,
Town Clerk.

Town Hall, Bridgwater.
30th April, 1952. 6806

BOROUGH OF EALING.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
APPOINTMENT OF TOWN PLANNING ASSISTANT.

Applications are invited for the permanent appointment of Town Planning Assistant, at a salary in accordance with Grade VI of the A.P.T. Division of the National Scheme of Conditions of Service, commencing at £675 per annum, rising by annual increments to £740 per annum, inclusive of London weighting.

Candidates must have had a wide practical experience of town planning and knowledge of the Town and Country Planning Act, 1947, and its Regulations, and possess a recognised planning qualification.

The Council is unable to provide housing accommodation for the successful candidate.

Forms of application, together with Conditions of Appointment, may be obtained from the Borough Engineer and Surveyor, Town Hall, Ealing, W.5, and must be returned to me not later than the 3rd June, 1952.

E. J. COPE-BROWN,
Town Clerk.

Town Hall, Ealing, W.5.
7th May, 1952. 6821

COUNTY BOROUGH OF BURY.

Applications are invited for the appointments of an ARCHITECTURAL ASSISTANT and a QUANTITY SURVEYOR in the Borough Engineer's Department. The salary for each of the appointments is up to Grade A.P.T. III (£500-£545) of the National Scales of Salaries.

The appointments are subject to the Local Government Superannuation Act, 1937, and to medical examination.

Applications, stating age, details of training, qualifications and experience, together with the names and addresses of two persons to whom reference may be made must be received by me not later than the 31st May, 1952.

EDWARD S. SMITH,
Town Clerk.

Town Hall, Bury.
9th May, 1952. 6833

Architectural Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

EXPERIENCED SENIOR required in Architect's Department in City. Qualified office trained man of about 35/40 preferred. Must be used to good class work and taking charge from cketch plan to final account for both new and maintenance works. Secure future for suitable applicant. State complete details of past work, also age and salary required. Box 6784.

ASSISTANT required, aged 20-25. Write giving full particulars, salary required. C. W. Shrimplin, A.R.I.B.A., Prudential Chambers, Upper George Street, Luton, Beds. 6752

ARCHITECTURAL ASSISTANTS required for Victoria Street Office for detailing contemporary industrial buildings. Apply giving experience, salary required and date available. Box 6799.

ARCHITECTURAL ASSISTANT required at once in Architect's office in South Kensington. Intermediate standard, and preferably experience in flats and housing. Good draughtsman essential. Five-day week. Salary according to experience. Apply Box 6825.

JUNIOR required in London office, S.W.1. Age 16 years. Required to carry out usual office boy duties and will have scope for gaining experience as draughtsman and surveyor's assistant. Duties to commence June. Box 6824.

ASSISTANT ARCHITECT required by large industrial concern for work on Factories, Canteens, Offices, etc., in Preston area. Applicants should be aged 24-30, A.R.I.B.A., and preferably school trained. Previous industrial experience is not essential. The post is permanent and offers good experience and prospects to the right man. Reply, giving details to Box 6823.

ARCHITECTURAL ASSISTANT required for work in London office. Apply in writing, giving age, education, experience, and salary required. Houchin, Harrison & Stevens, 9, Great James Street, Bedford Row, London, W.C.1. 6816

ARCHITECTURAL ASSISTANT required for small London office. Contemporary architectural and interior design, etc. Efficient draughtsman. State age, experience, salary required. Partnership not excluded. Box 6838.

ARCHITECTURAL DRAUGHTSMAN required London office Petroleum and Chemical Plant Engineering Organisation. Experience in industrial building and detailing with thorough knowledge of building construction. Apply in writing. Box 6829.

OPPORTUNITY established London office for ARCHITECT experienced in controlling staff and supervising large contracts. Salary according to experience. Box 6836.

GOLLINS, MELVIN & PARTNERS require JUNIOR STAFF with office experience capable working drawings. Salary £350/£450 per annum; 5-day week. Telephone Museum 0883. 6837

SENIOR ARCHITECT required for London office of Engineering Organisation. A.R.I.B.A. desirable, but not essential, provided applicant has extensive experience on design layout and detailing of wide range of industrial buildings associated with petroleum oil refineries. Salary commensurate with qualifications and experience. Apply in writing to Personnel Manager, Kellogg International Corporation, Stone House, Bishopsgate, London, E.C.2. 6828

CADBURY BROTHERS LIMITED require an ARCHITECTURAL ASSISTANT with knowledge of industrial design, able to assist with a large new factory on which construction is now commencing. Write, stating age, experience, and salary required to E.M.A., Cadbury Brothers Ltd., Bournville, Birmingham. 6827

Architectural Appointments Wanted

DIP.ARCH.(Leeds), A.R.I.B.A. (31, and single), with a little experience—qualified also in Planning—seeks post at home or abroad offering sound experience and prospects. (Ex-Major R.E.). Box 447.

DUTCHMAN (22), with general architectural and building education, seeks employment in office or with British firm abroad. Some practical experience in England and abroad. Willing to study R.I.B.A. examinations. English, French, German, and driving offered. Box 446.

B. ARCH., A.R.I.B.A., with 3 years' post-graduate office experience, requires temporary post from July to September in Oxford area (alternatively London). Any type of work considered. Box 6573.

ARCHITECT requires part-time position. Available 2-3 days per week. Box 6822.

A.R.I.B.A. (34), with good general experience, seeks position with well-established firm practising in S.W. Hants., Isle of Wight, or Dorset, with a view to eventually obtaining a partnership. Box 452.

EXPERIENCED ASSISTANT requires post in contemporary office. Polish (35), trained and experienced in this country. Specially interested church design. Box 451.

M.A. (Cantab.), A.R.I.B.A., 9 years' experience, including handling of large contracts, seeks post as SENIOR ASSISTANT (London Area). Box 6811.

ARCHITECTURAL ASSISTANT of many years experience requires post in Architect's office in the London area. Box 453.

Other Appointments Vacant

4 lines or under, 7s. 6d.; each additional line, 2s.

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

FREE APPRENTICESHIPS are now being offered at Army Apprentices Schools for boys between 14½ and 16½. Pay and allowances start from the first day at School. Kit and clothing issued free. Extensive facilities exist for sports and hobbies whilst learning a skilled trade, and there are 8 weeks' paid holiday every year. For Entry Exam. on July 3, 1952, entry forms must be returned by June 7. Send for details now to: War Office (A.G.10/EP3), London, S.W.1. 6809

YOUNG Lady (18/20) required in Architect's office. Shorthand/typing, copy typing, and general office duties. Houchin, Harrison & Stevens, 9, Great James Street, Bedford Row, London, W.C.1 6817

Services Offered

4 lines or under, 7s. 6d.; each additional line, 2s.

DESIGNS, Layouts, Perspectives to commercial or Academy standard. Moderate fees. Turner, 3, George Street, Croydon. 2930 and Brighton 27938. 6622

WIDOW of late member of R.I.B.A. requires position as Secretary to firm of Architects. Wide experience, shorthand, typing, specifications. Fluent French. Salary by arrangement. Box 6835.

For Sale or Wanted

4 lines or under, 7s. 6d.; each additional line, 2s.

RECONDITIONED EX-ARMY HUTS, and manufactured buildings. Timber, Asbestos, Nissen type, Hall type, etc. All sizes and prices. Write, call, or telephone, Universal Supplies (Belvedere) Ltd., Dept. 25, Crabtree Manorway, Belvedere, Kent. Tel.: Erith 2948. 6803

MEMBER requires Suite of Offices, not less than 600 sq. ft., South-West or West-Central area preferred, agreeable to take over existing fittings. Full information and terms to Box 6810.

FOR SALE.—American Architectural Forum, Record, Progressive Architecture. 60 copies in all, 1947-1951, in mint condition. Box 6812.

EXPRESS LIFT for 8 persons to serve 8 floors, almost new, for sale. Apply Messrs. Allard & Saunders Ltd., 73, Upper Richmond Road, Putney, S.W.15. Tel.: Vandyke 2334. 6830.

Miscellaneous

4 lines or under, 7s. 6d.; each additional line, 2s.

A. J. BINNS, LTD., Specialists in the supply and fixing of all types of Fencing, Gates and Cloakroom Equipment. Harvest Works 96/107, St. Paul's Road, N.1. Canonbury 2061.

HOTELS

DOUGLAS (I.O.M.).—HOTEL METROPOLE. Tel. 2381. Fully licensed. Resident orchestra. Ballroom. Room service. Manx farm produce. 'Phones all rooms. Moderate tariff. Winter commercial terms. Brochure. I. Barker. 6705

BUCKLEY & GIBBONS for Built-in-furniture and French Polishing in all branches to Architect's specifications. 76, Chiltern Street, W.1. WEL. 8384. 6783

FENCING FOR ALL PURPOSES supplied and erected. Established over 100 years. Cloakroom equipment also a speciality. Write Parker, Winder & Achurch Ltd., 80, Broad Street, Birmingham, 1. (MIDland 6001.) 6526

Educational Announcements

4 lines or under, 7s. 6d.; each additional line, 2s.

R.I.B.A. and T.P.I. EXAMS.—Stuart Stanley (Tutor Sch. of Arch., Lon. Univ.) and G. A. Crockett, M.A./B.A., F./A.R.I.B.A., M./A.M.T.P.I. (Prof. Sir Patrick Abercrombie in assn.) prepare Students by correspondence tuition. 10, Adelaide Street, Strand, W.C.2. TEM. 1603/4.

GUIDE ANSWERS R.I.B.A. FINAL. Special announcement on remaining issues. S.A.E. for particulars to S. Underwood, A.R.I.B.A., M.R.San.I., 13, Langham Court, Raynes Park, S.W.20. 6744

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For Appointments (Wanted or Vacant), Competitions Open, Drawings, Tracings, etc., Education, Legal Notices, Miscellaneous, Property Land and Sales, see lxxvi, lxxvii, lxxviii, lxxix

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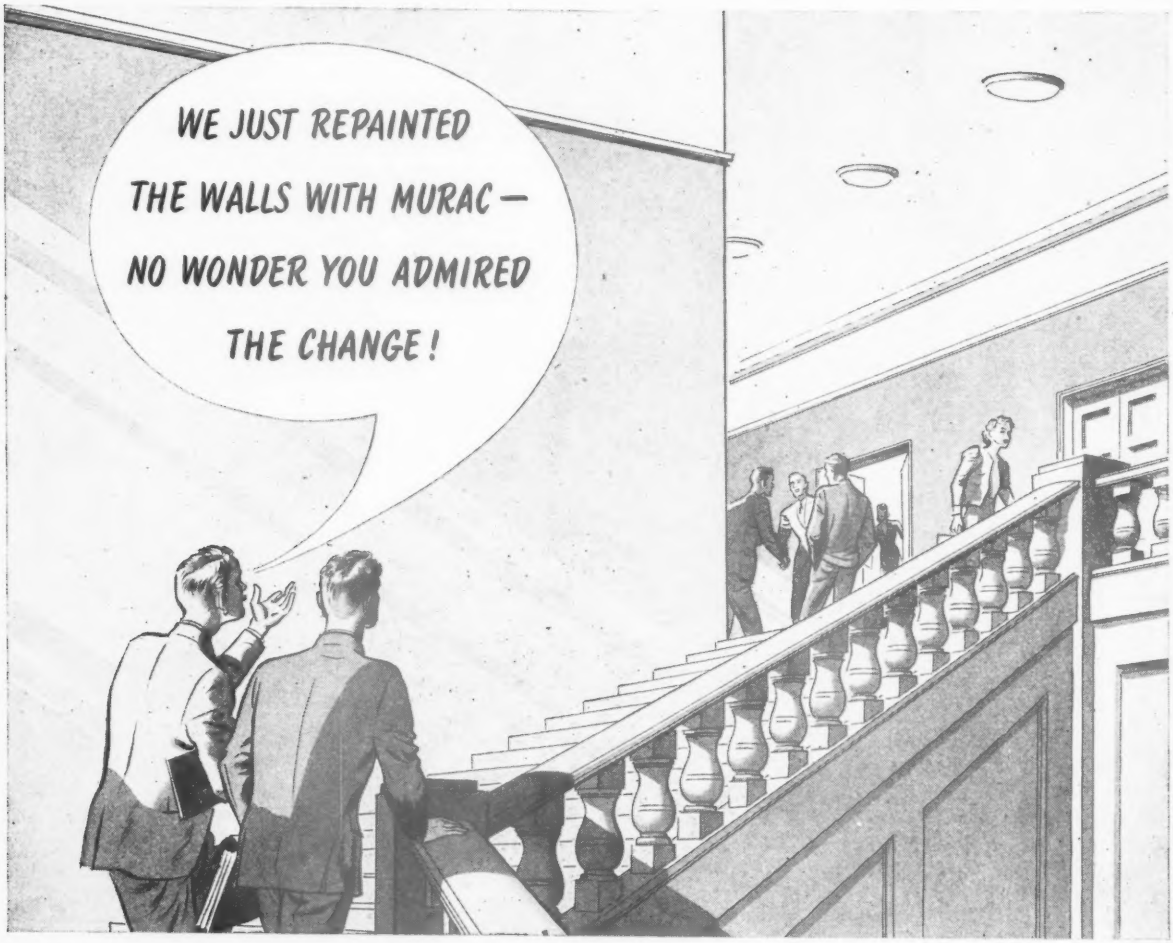
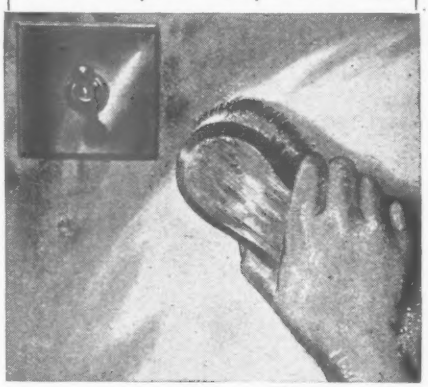


IN hotels, flats, private homes and offices; in hospitals, schools, public and factory buildings, MURAC gives a finish to walls that is quickly and economically applied, beautiful to see, easy to clean and *long lasting!*

MURAC SUPERSEDES DISTEMPER & WATER PAINT

Here's a matt oil paint as easy to put on as distemper, using a 6" flat wall brush. What a saving in labour costs alone! MURAC dries with a beautiful dull sheen, and its surface is so hard that not only can it be rubbed and scrubbed again and again, but it is also hygienic and impenetrable to dirt. MURAC is long-lasting, won't powder or flake, and comes in eighteen basic colours, easily blended to any shade you could want. It is made in the Brolac works by John Hall & Sons Ltd., who will gladly send you a **free colour scheme booklet** if you will write to them at the address below.

YOU CAN WASH IT, RUB IT, SCRUB IT!



Murac MATT OIL FINISH FOR WALLS

JOHN HALL & SONS (BRISTOL & LONDON) LIMITED, HENGROVE, BRISTOL, 4

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