

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). Gontran Goulden, Building Centre, 26, Store Street, W.C.1.	Secretary : 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.	Abbey 5111
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.	Molesley 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	Society 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

No. 3001]

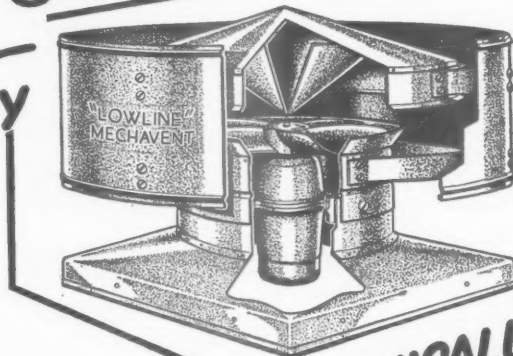
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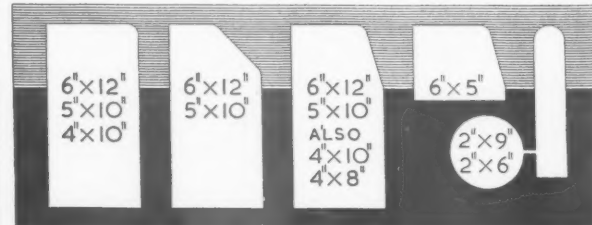
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4" x 10" " " 3	" "	18½ " "
6" x 12" " " 4	Splayed Section	11 " "
5" x 10" " " 5	" "	16½ " "
6" x 12" " " 6	Half Batter Section	10½ " "
5" x 10" " " 7	" "	15½ " "

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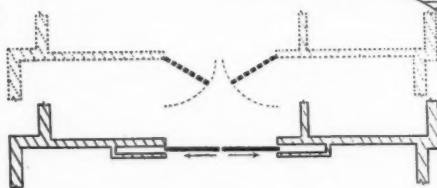
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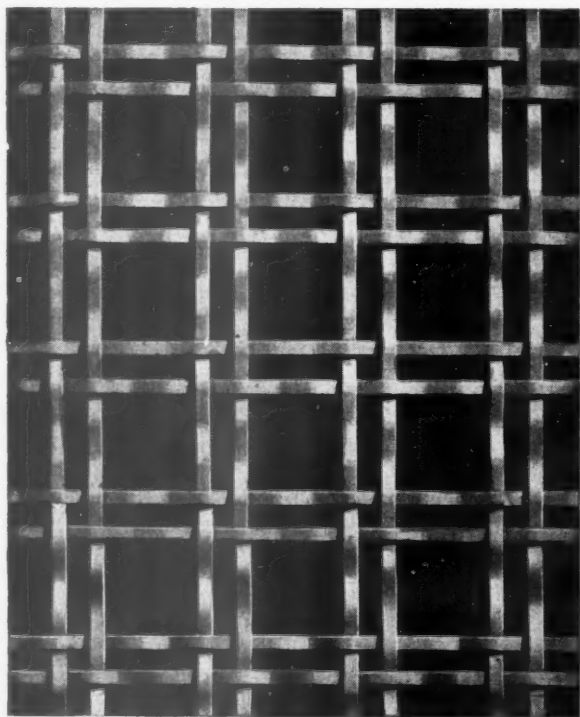


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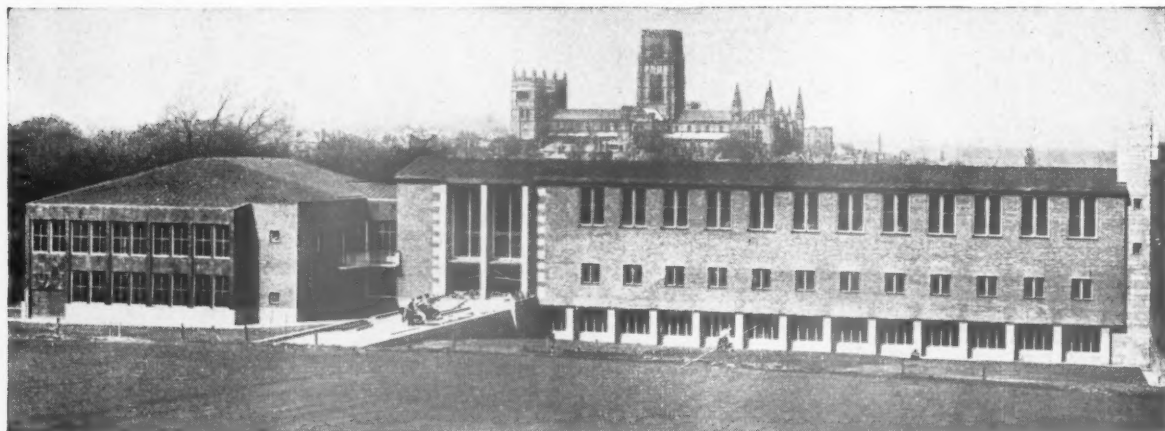


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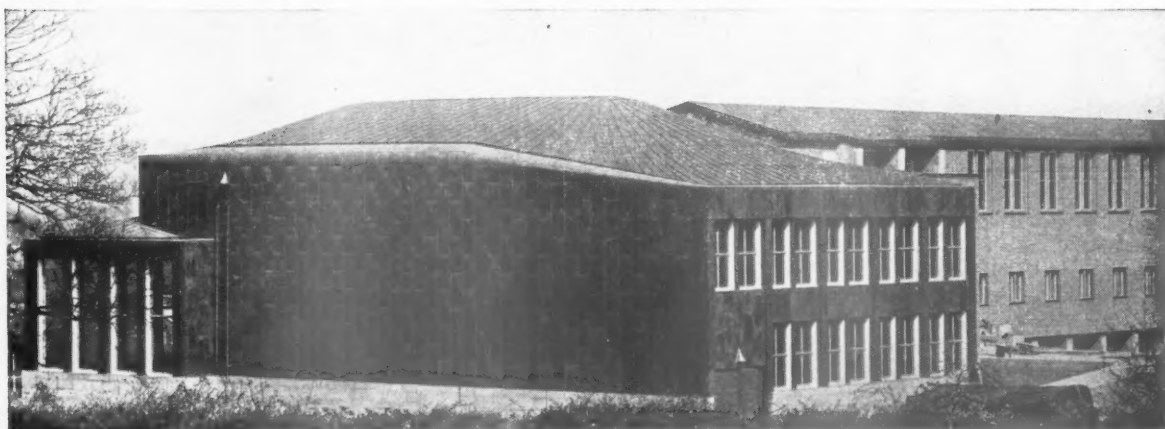
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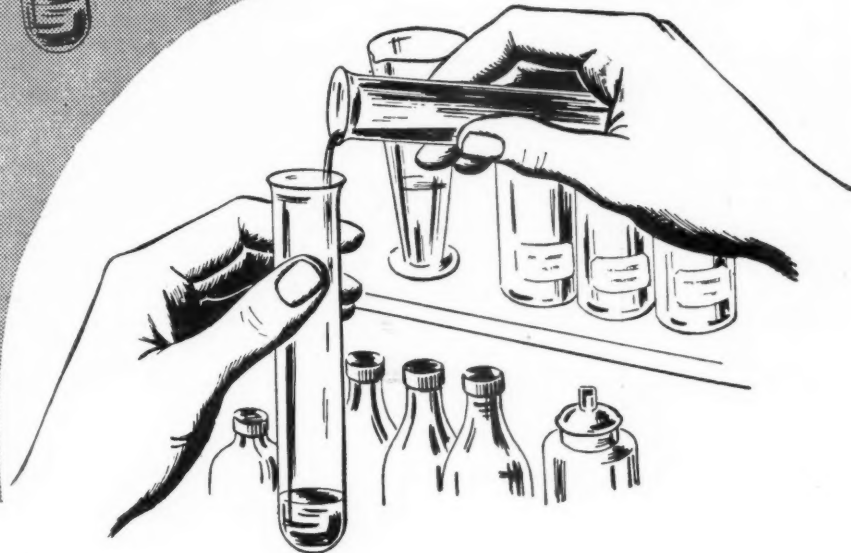


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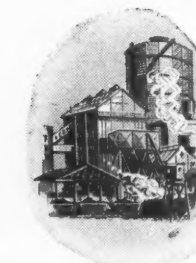
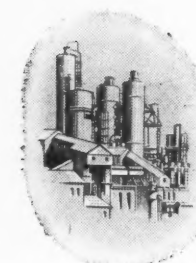
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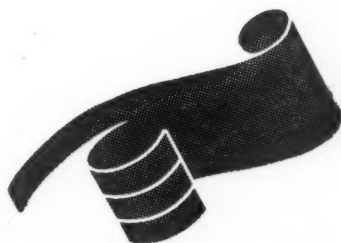
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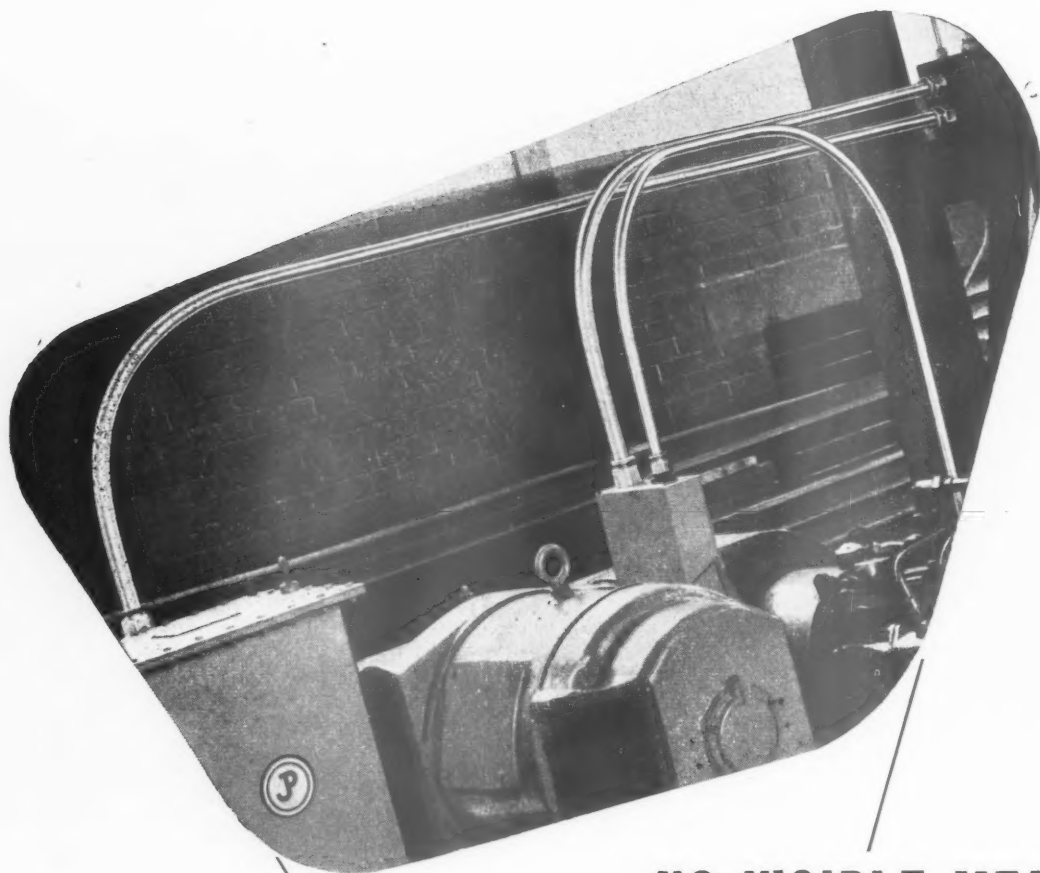
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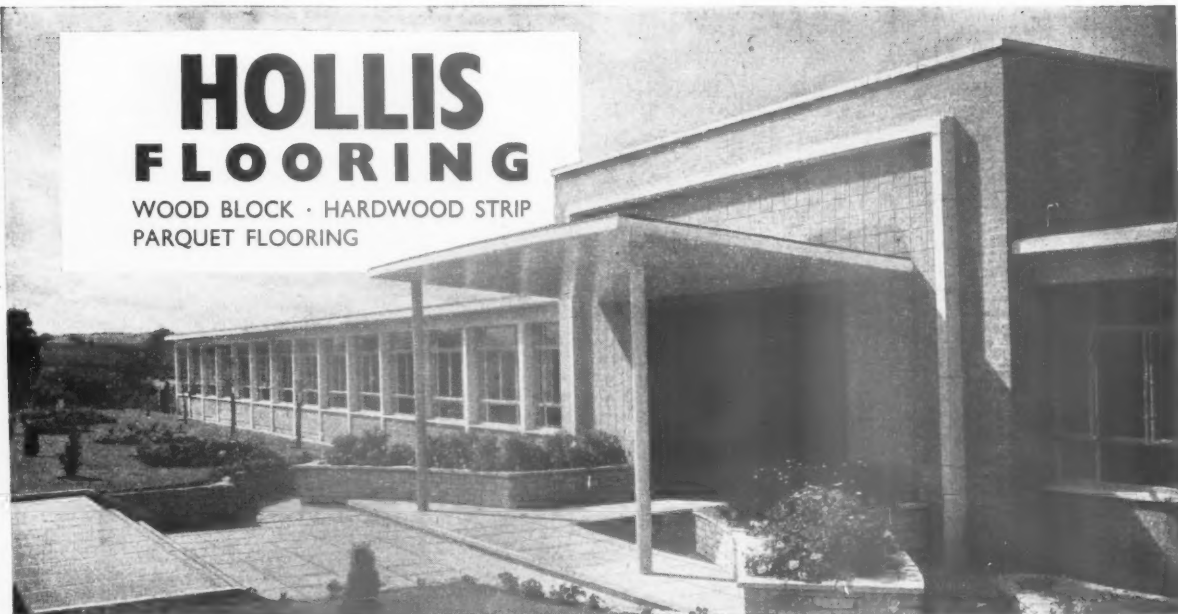
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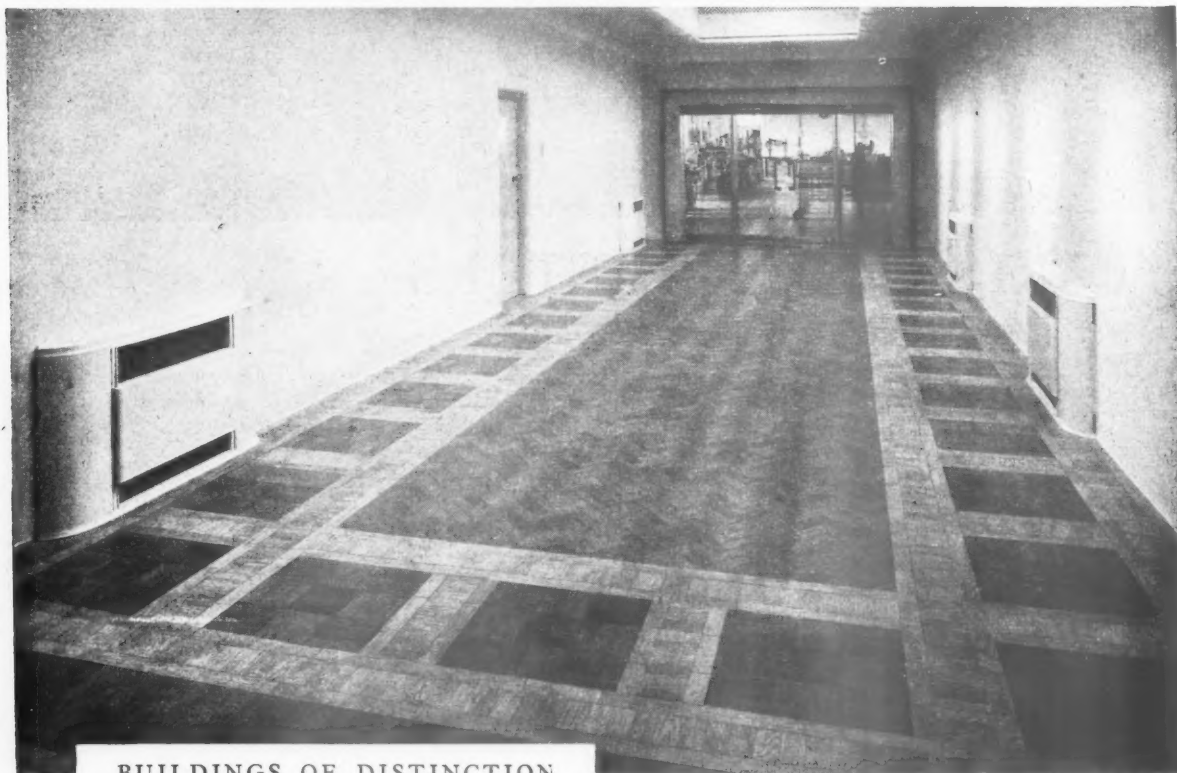
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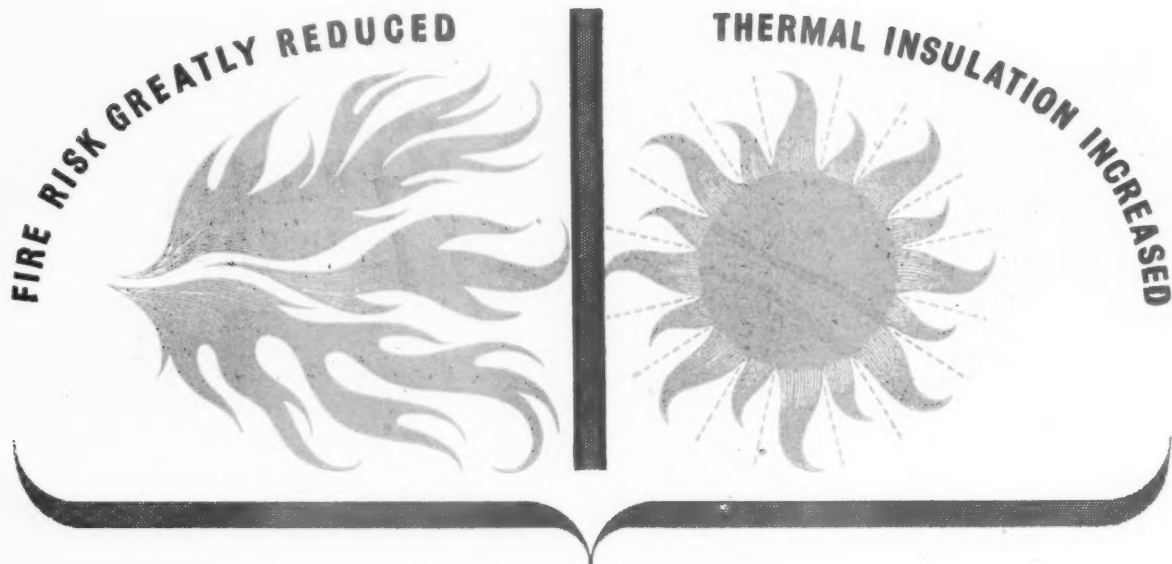
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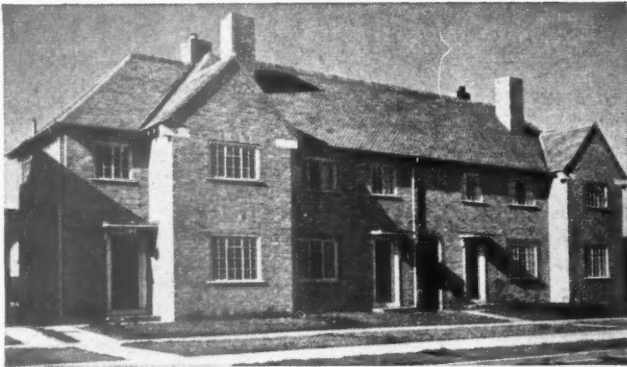
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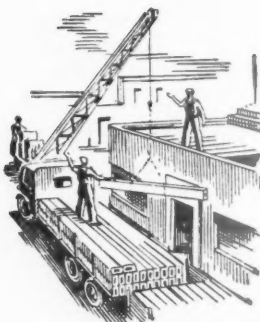
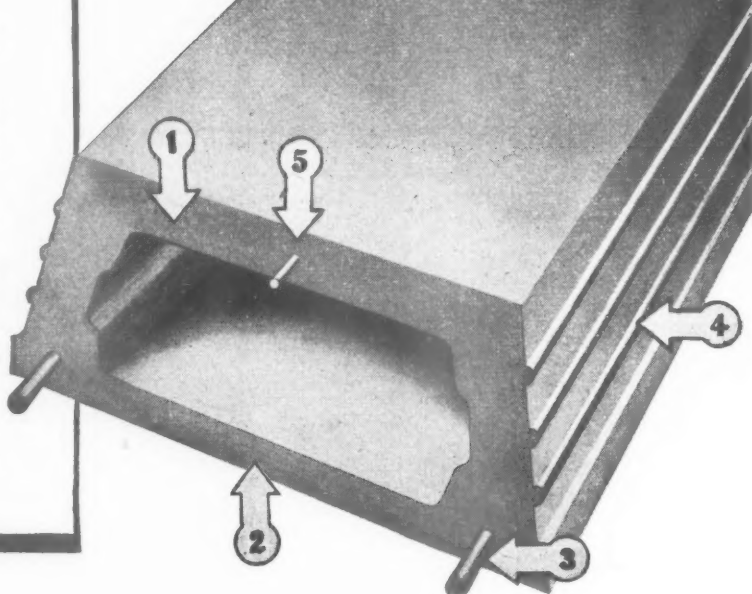
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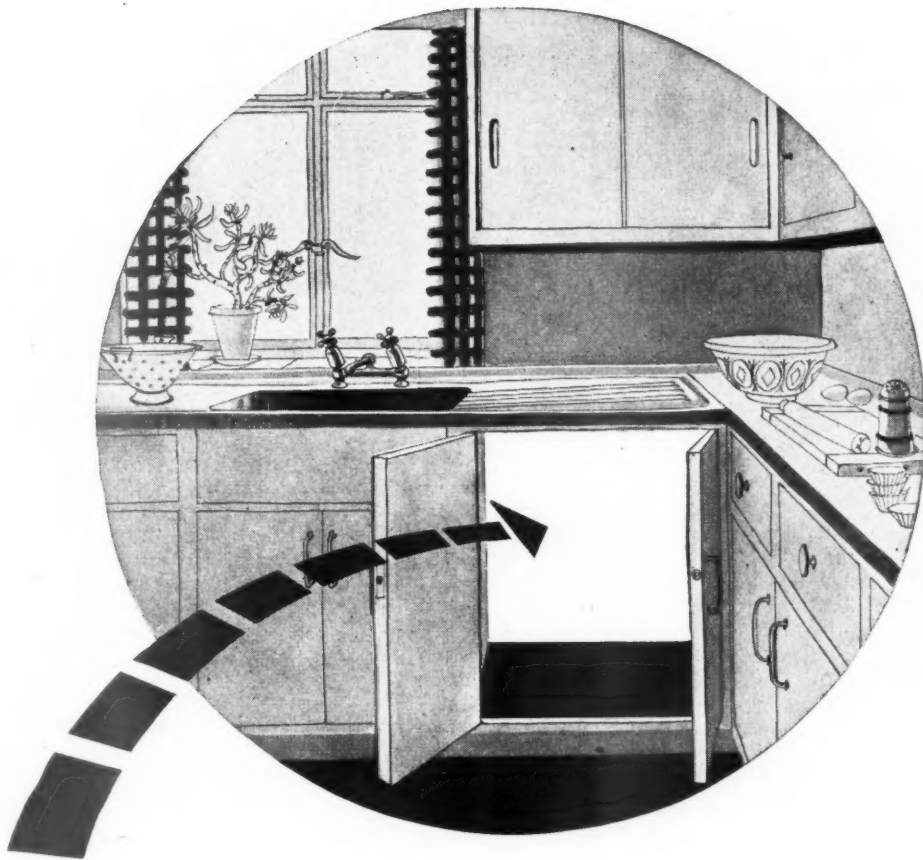
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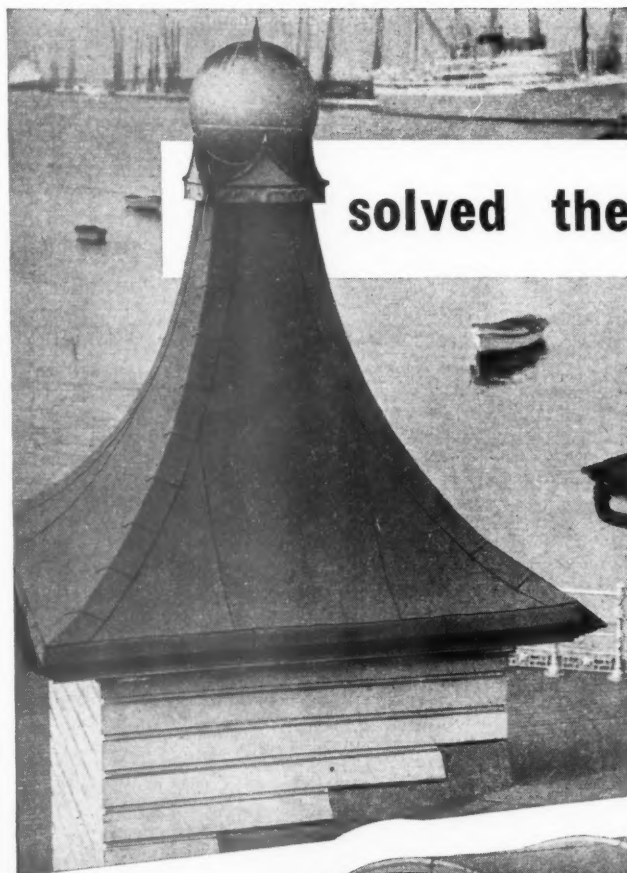


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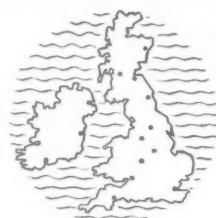
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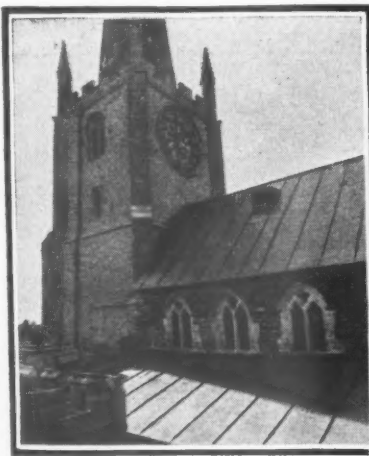
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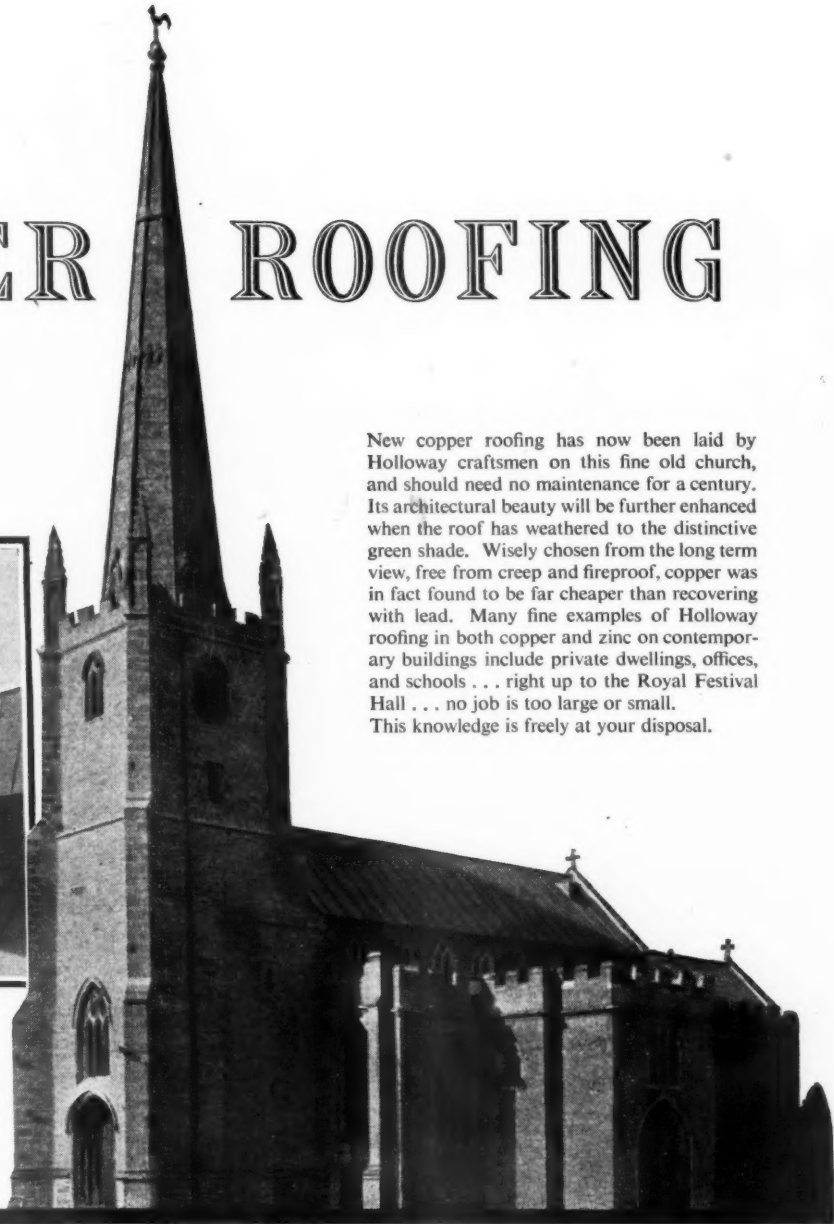
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Continuous Mill Motor Room in the Abbey Steel Works, Margam.

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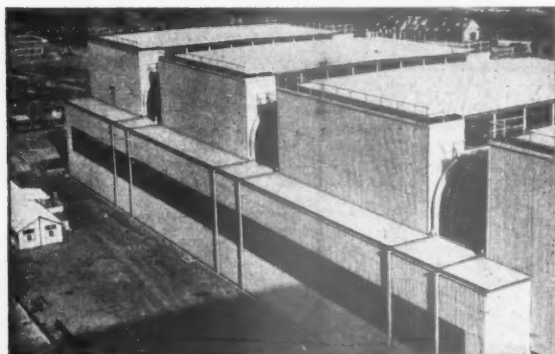
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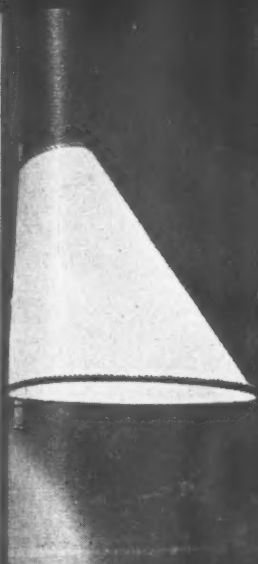
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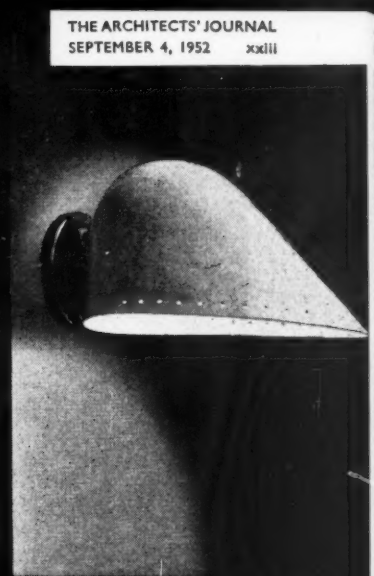
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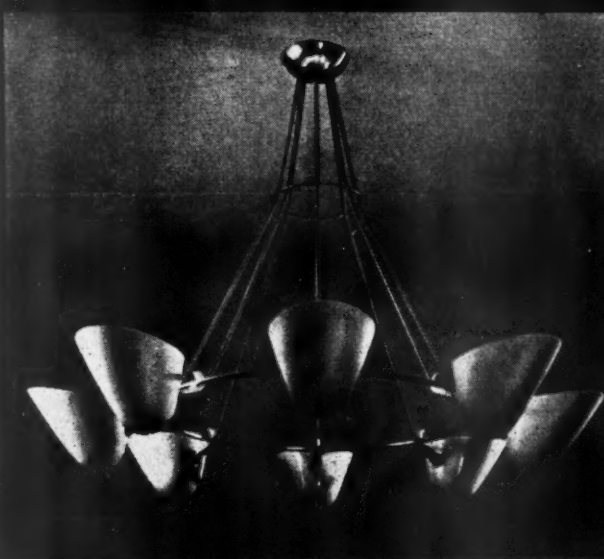
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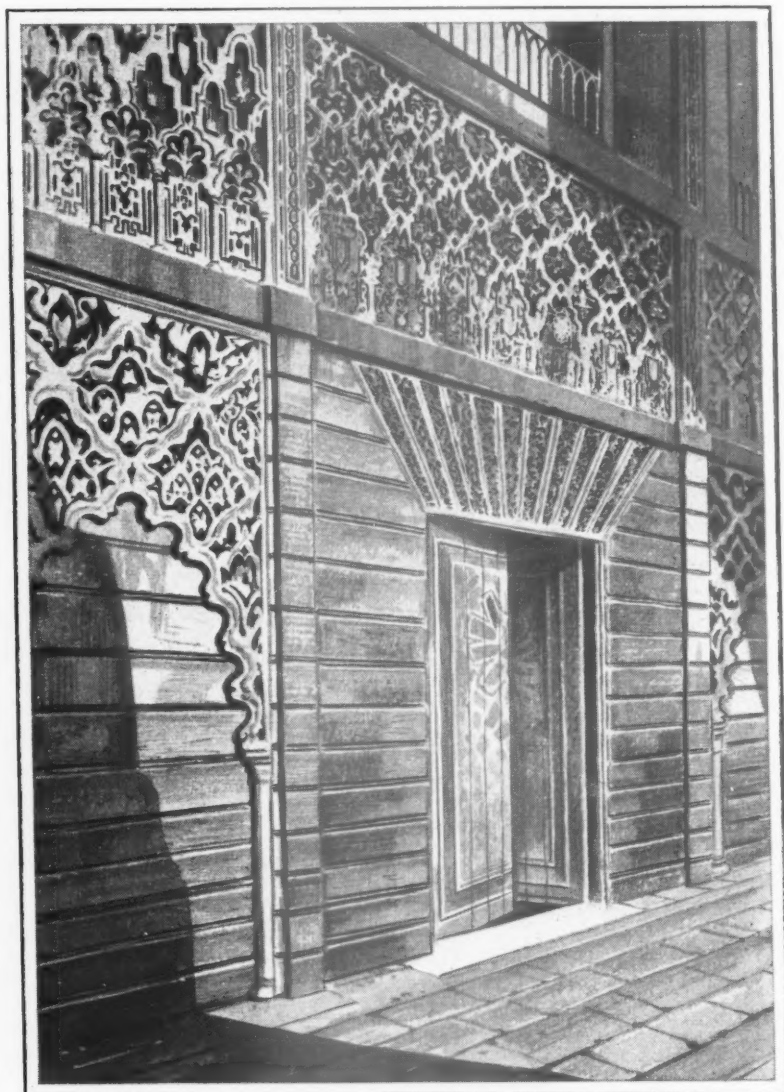


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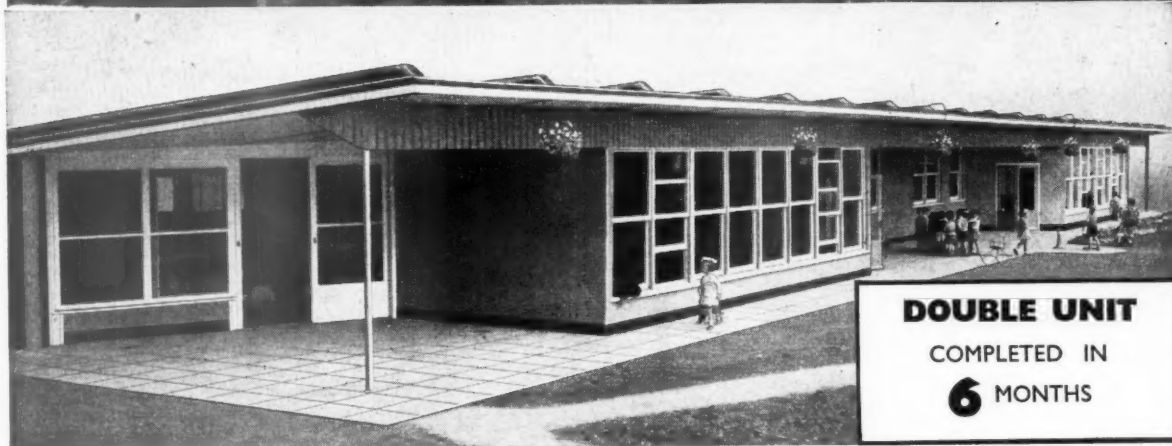
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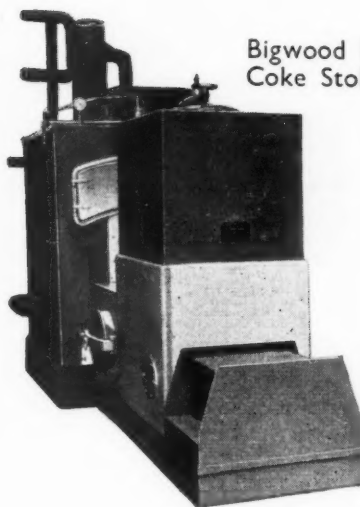
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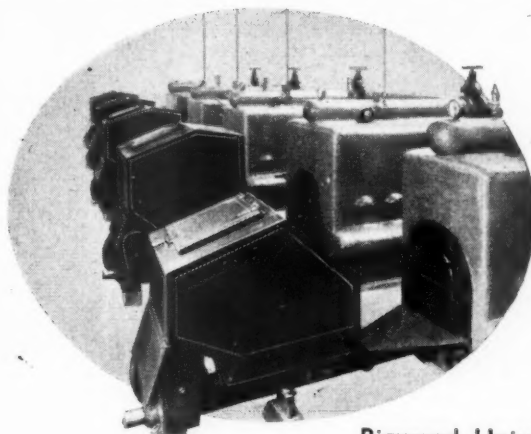
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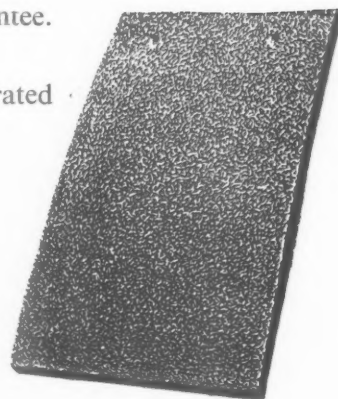
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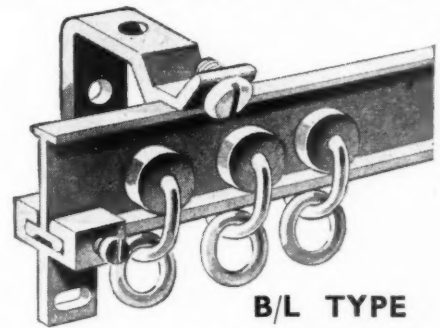
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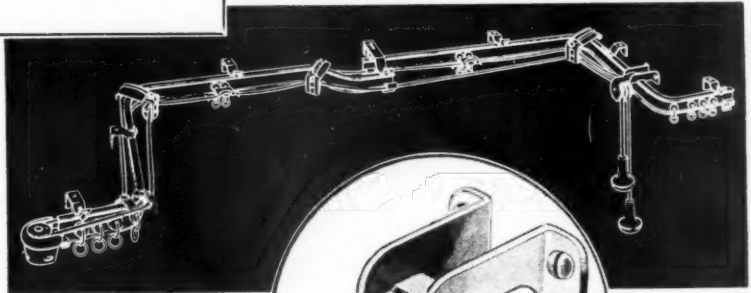


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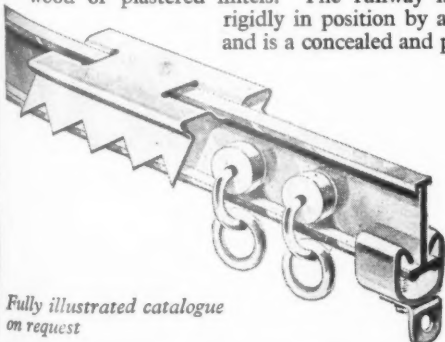
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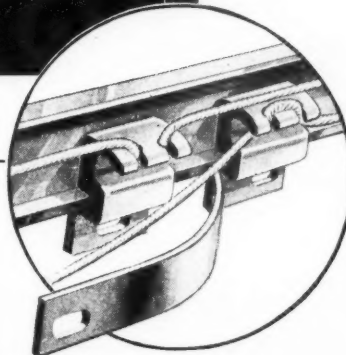
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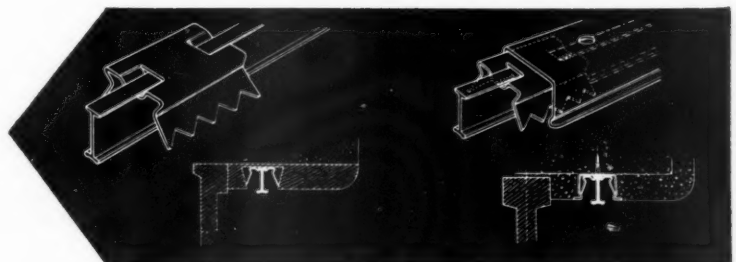


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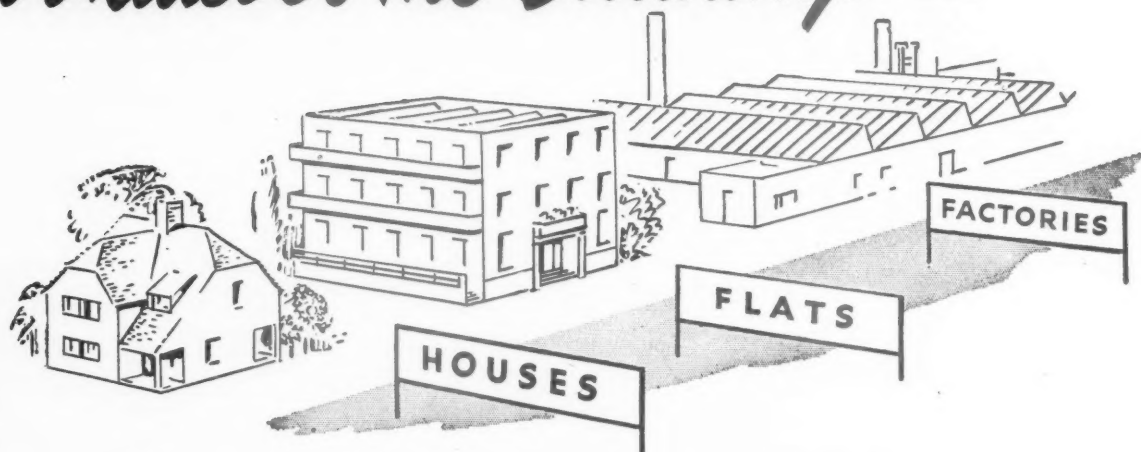
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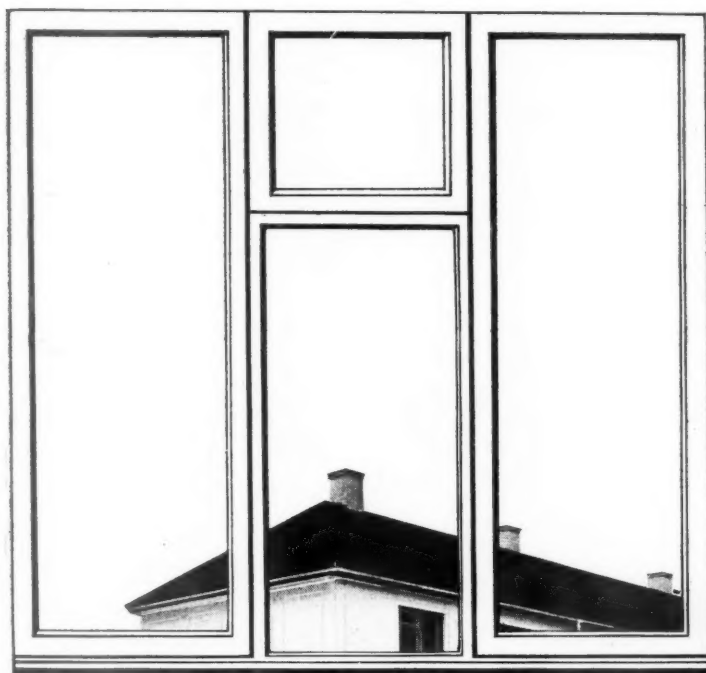
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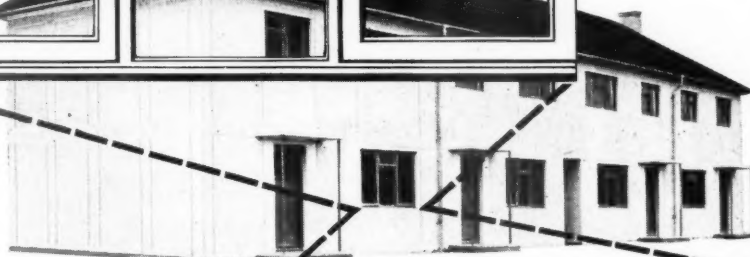
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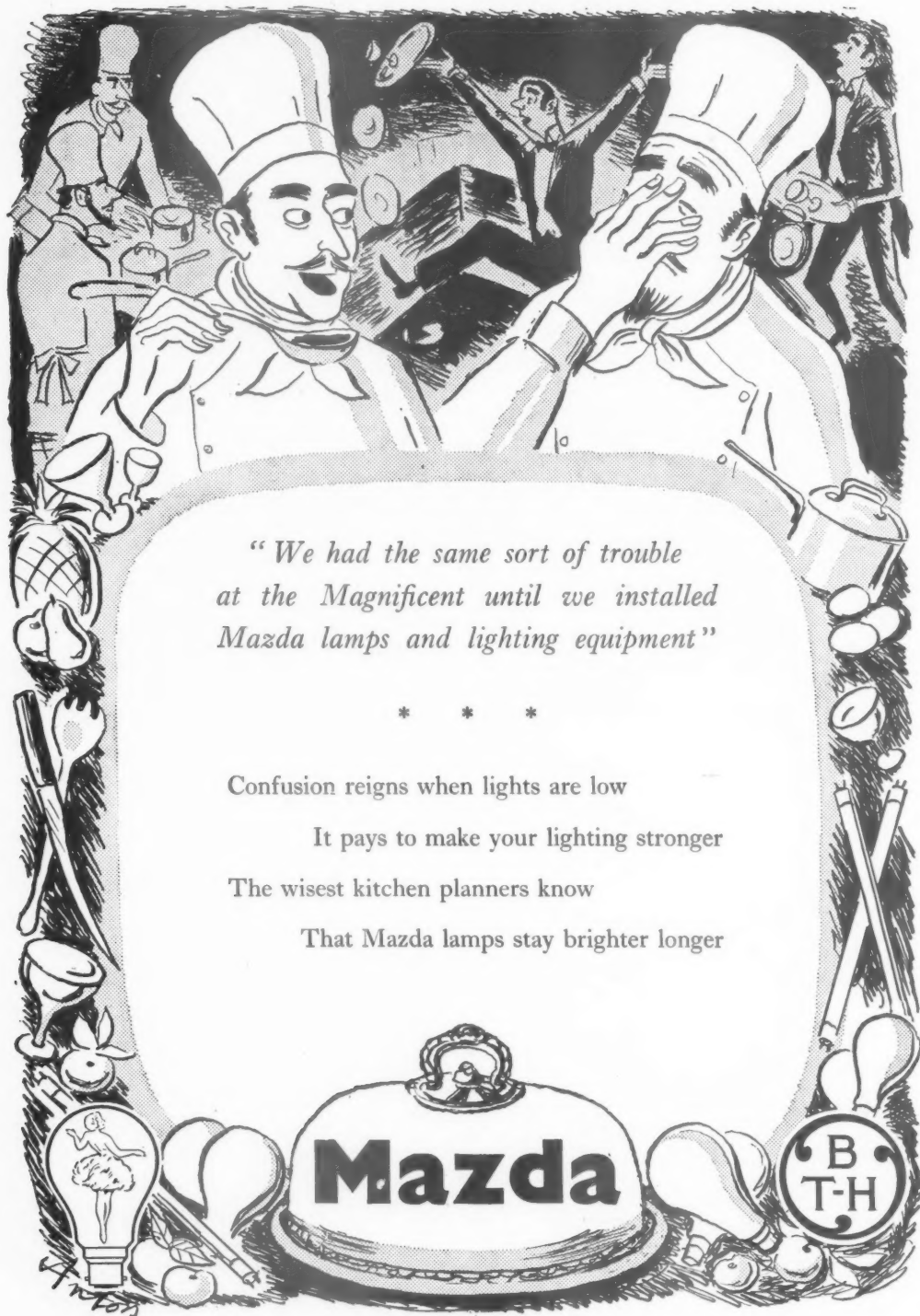
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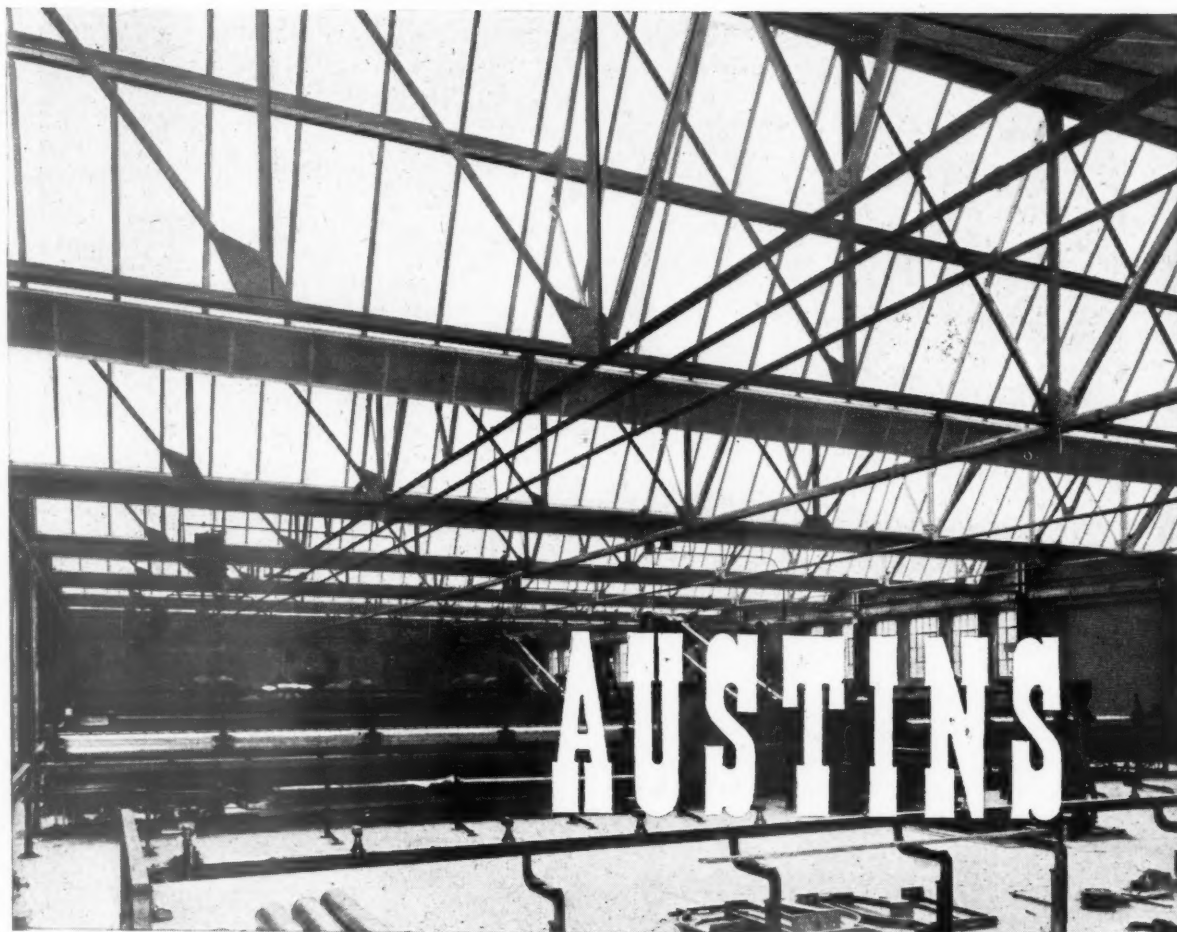
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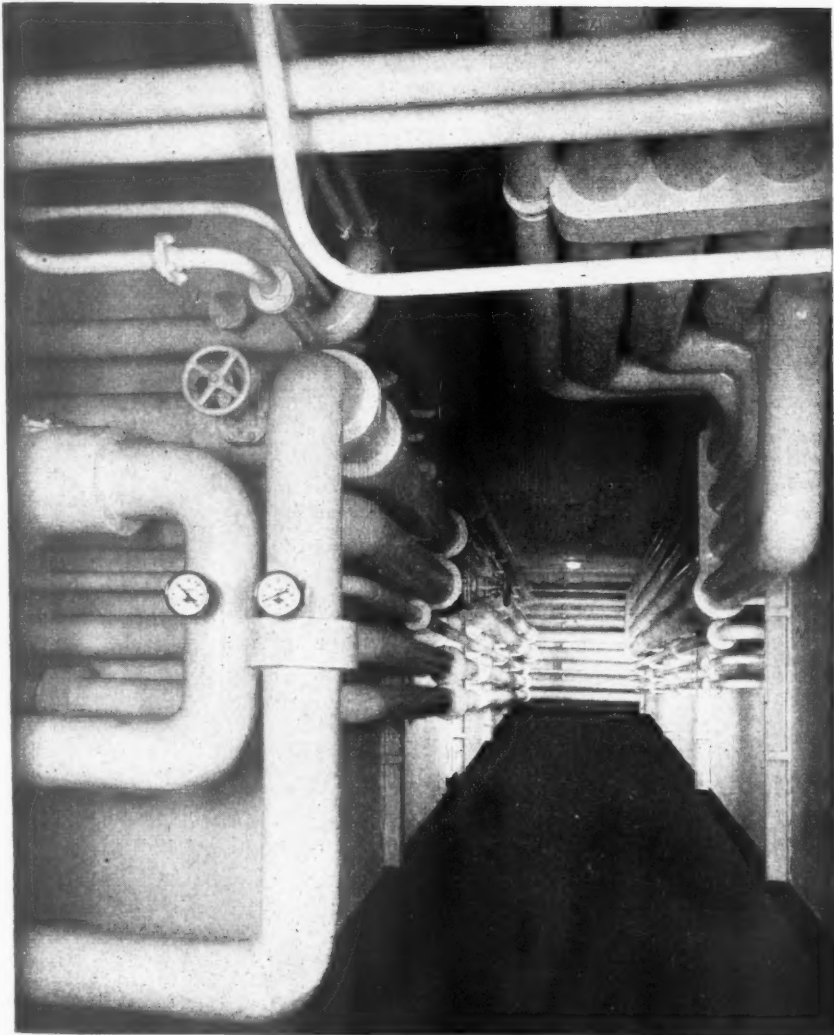
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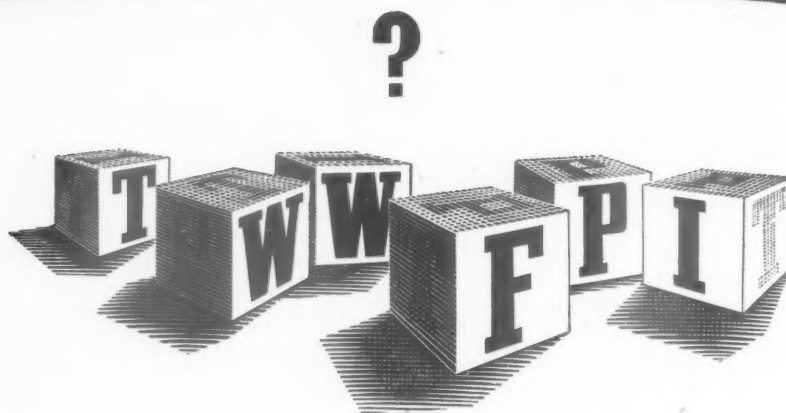
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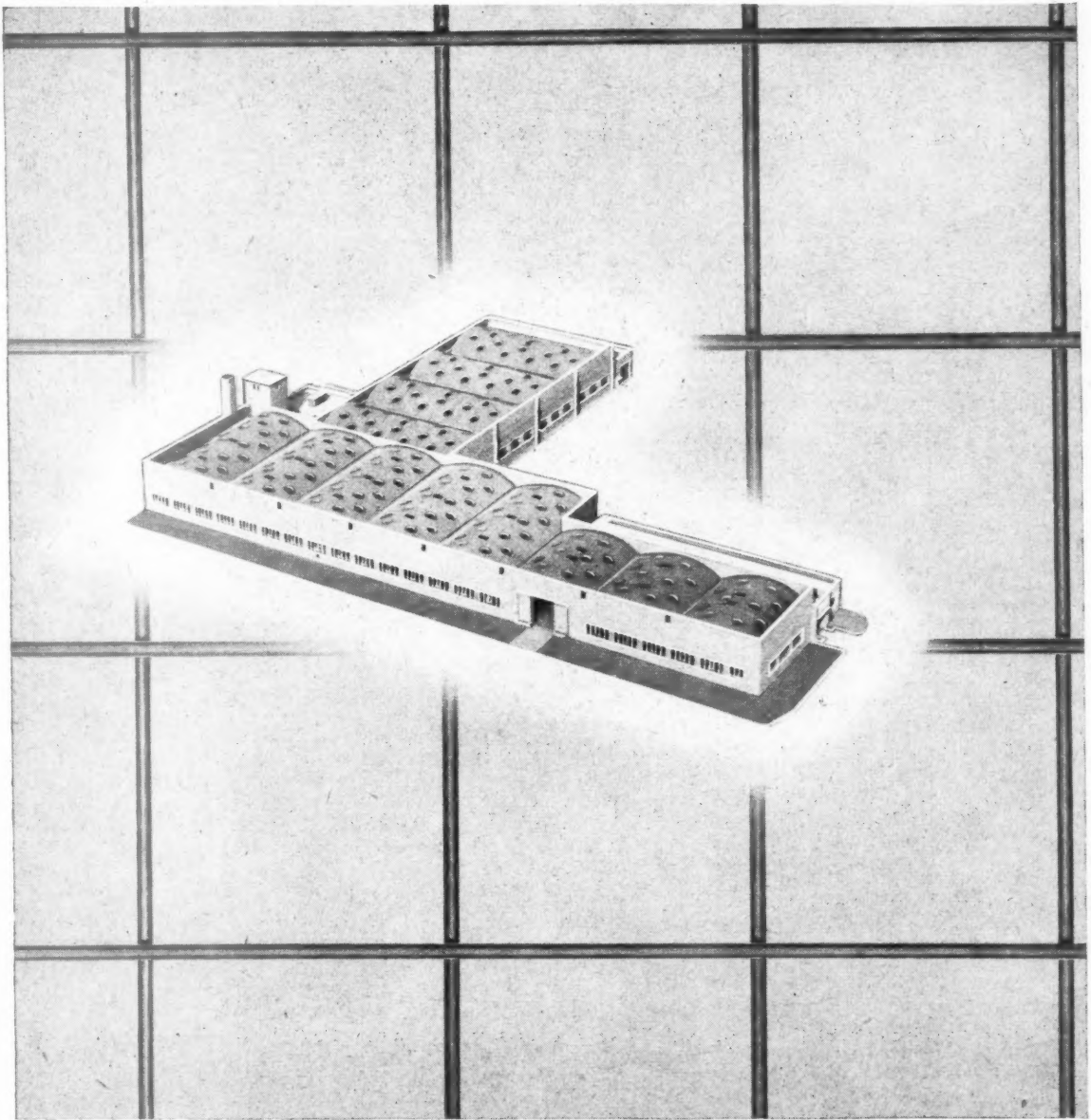
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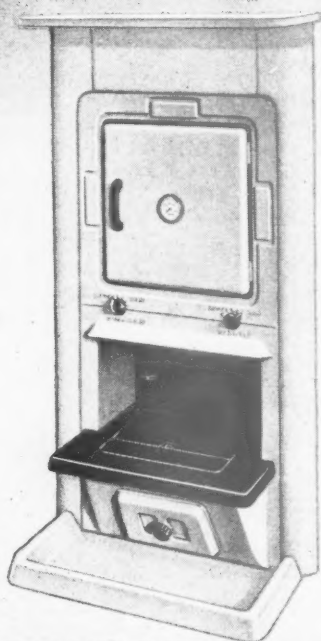
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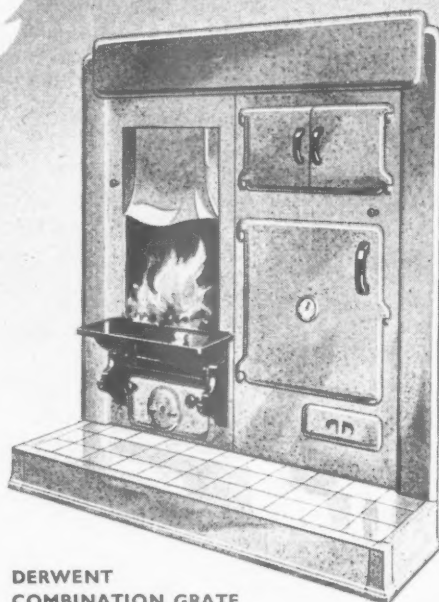


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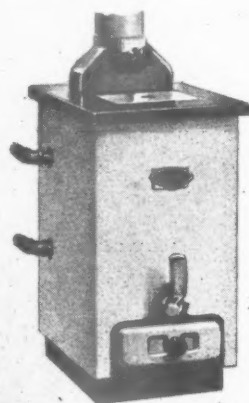
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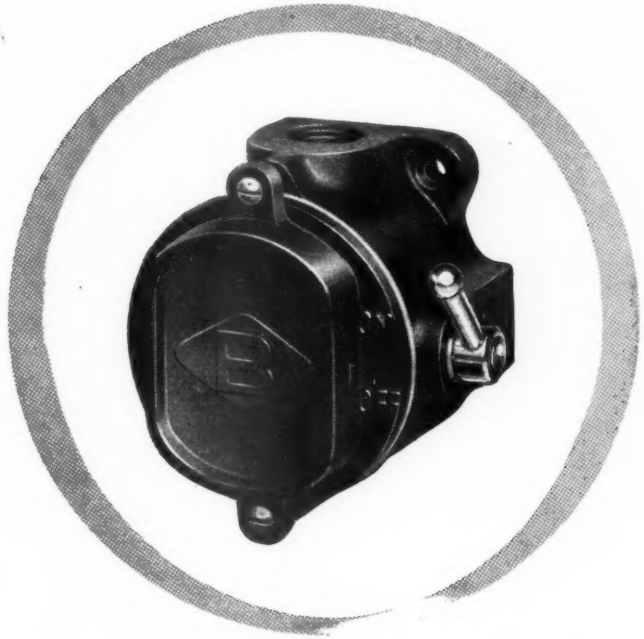
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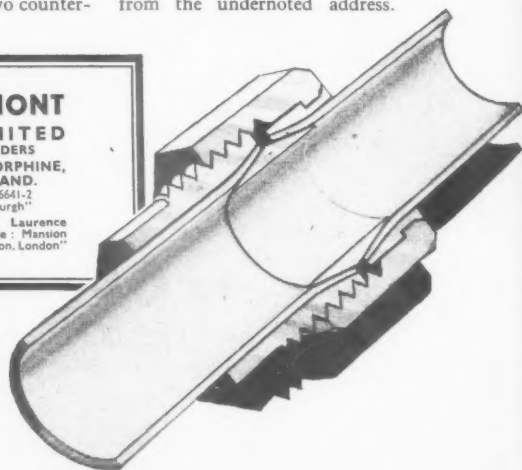
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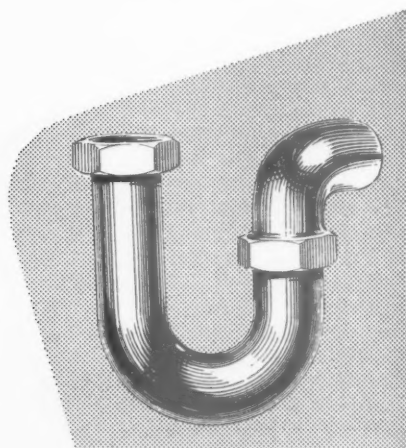
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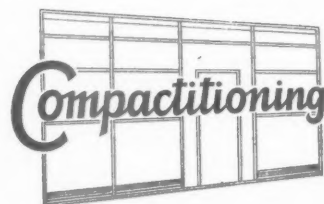
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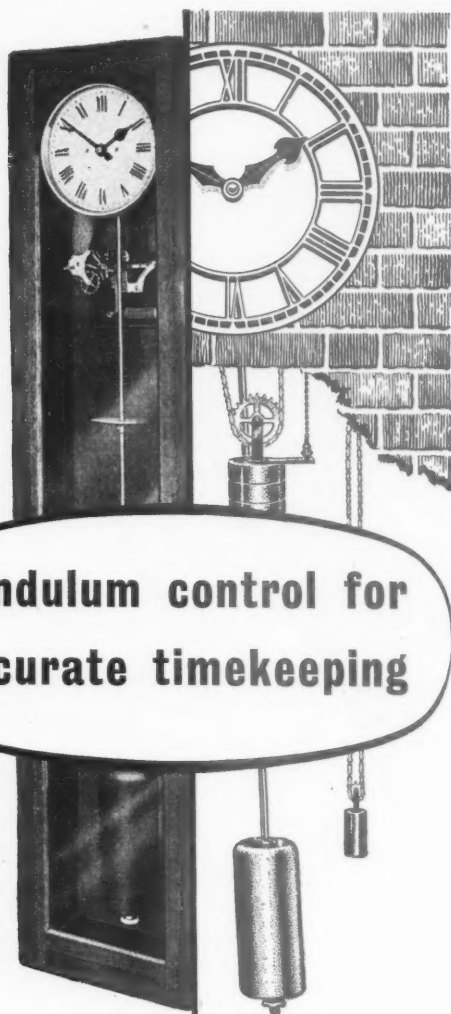
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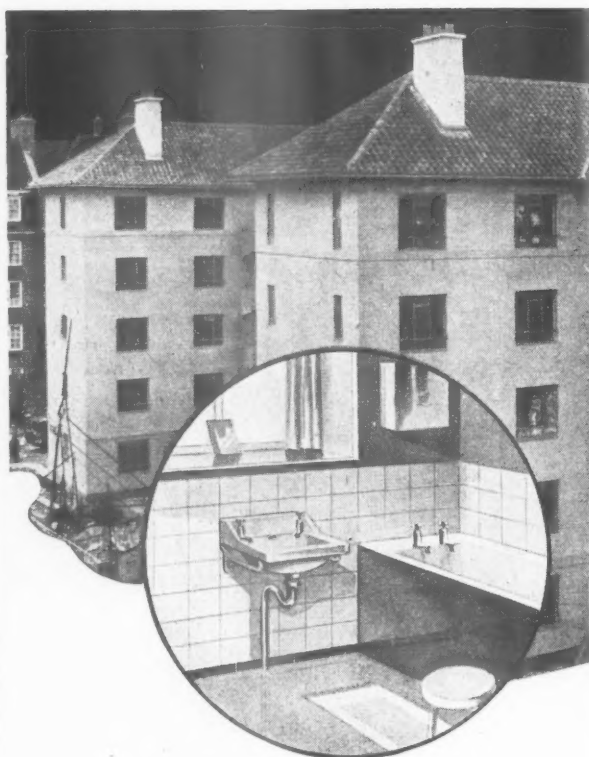
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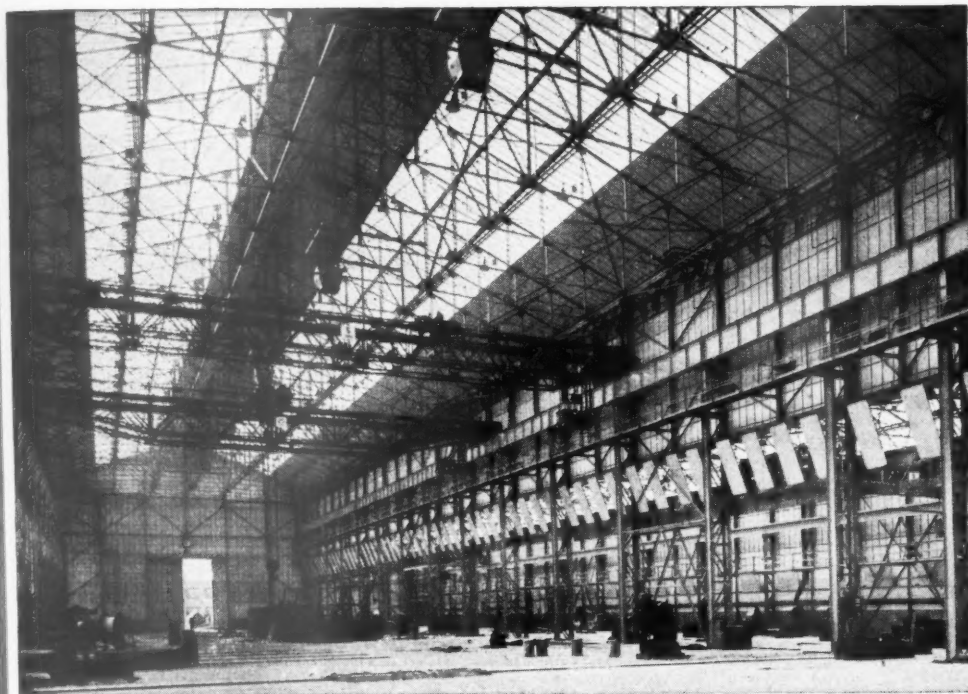
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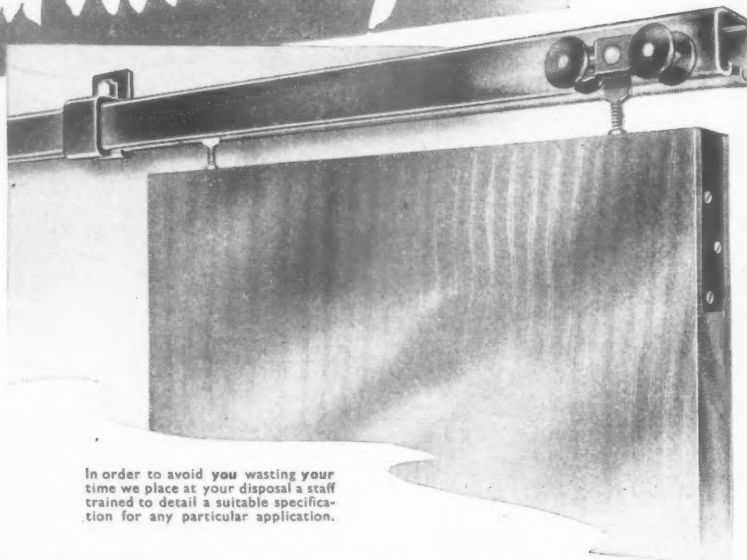
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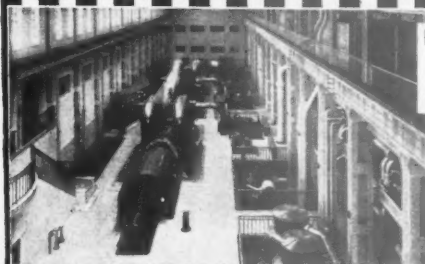
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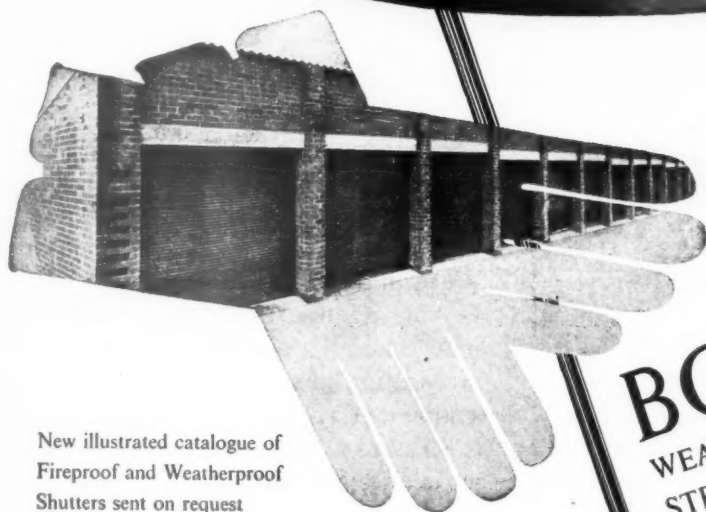
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We cannot rely on the weather

Last winter, thanks to the good fortune of mild weather, the co-operation of consumers, and the special efforts of British Electricity, there were practically no power cuts. We cannot, unfortunately, rely on mild weather again. British Electricity are once more making special efforts to ensure that the maximum generating capacity will be available in the coming winter, and Industry is asked to take heed now : to ensure that the most effective and efficient use of power is being made at all times. We must all avoid waste. Then we can hope for a 'cut-free' winter.

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This new housing estate has decorative low-cost flooring



The new housing estate at Riverside Drive, Ham, Surrey, comprises 50 houses. All living-rooms and kitchens are floored with Accotile, as well as the entrance halls.

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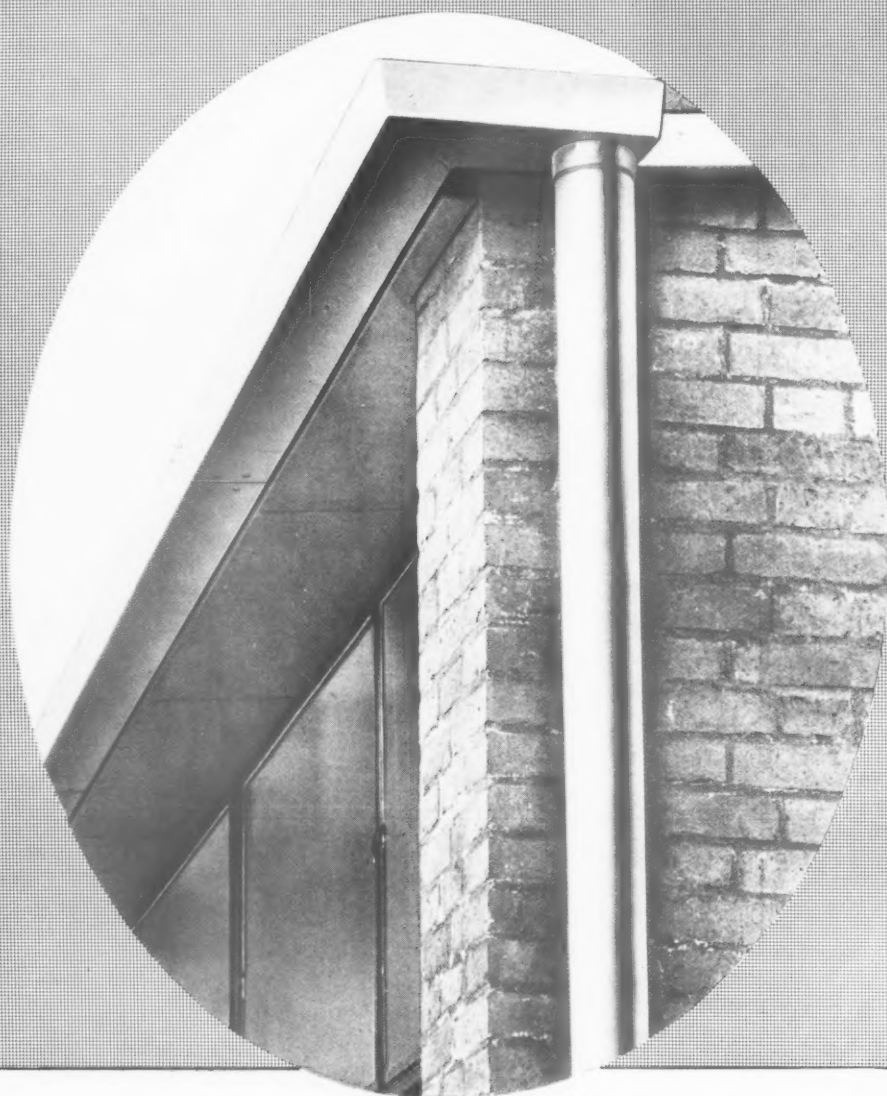
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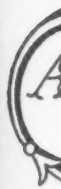
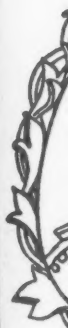
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No. 3001 September 4, 1952 VOL 116



A BALANCED PROFESSION

In this week's correspondence columns you will see a letter from a reader who suggests that the number of unemployed architects in London, referred to in this column two weeks back, would be "multiplied several times" if the numbers registered for employment with the Technical and Scientific Register of the MOL were added. ASTRAGAL has been in touch with the MOL, which gives a figure of 101 unemployed architects throughout the United Kingdom—excluding a few who prefer to register with a local employment exchange which is not a branch of the MOL.

So, despite the rumours, the situation is far from being a major issue—yet.

Last week the JOURNAL asked for steps to be taken to balance the intake and wastage of architects to and from the profession. Who is to take these "necessary steps"? To those who reply "The RIBA" the answer is surely that the RIBA has neither the resources (financial or staff) nor the mandate to undertake such a thing. This throws the ball right back into the profession's lap—and pocket—that is, your spare time and money, and mine. ASTRAGAL's private opinion is that the reason why the profession is overcrowded is that there are far too many people in it calling themselves architects; people, to be frank, who are not and never will be architects, whether they do one month, or thirty years' office experience. The only way to deal with that question is to make it far harder to become an architect with a capital A.

The rest of us can call ourselves something else and can even enter the building industry if we like and earn a Boreham Wood bonus. Alternatively, why not make the distinction of Fellow of the Institute a *real* distinction—no offence, Fellows—instead of a nominal one?

Who, comes the cry, would award the distinction? By whose haphazard word would our professional fate be decided? "No man," the Boreham Wood shop steward is reported to have said—his face apparently as straight as the pin-stripes on the trousers of a Union official—"should be forced to stop work like this at the whim of an individual or a group of individuals." True enough. But when does a whim become a principle, an opinion become

a judgment? Answer (as I remember some of the recent industrial disputes): When the whim is yours and not the other man's, when the opinion is yours and not the other man's.

So we're back at first base after a nice run round the paddock, as winded and puzzled as ever.

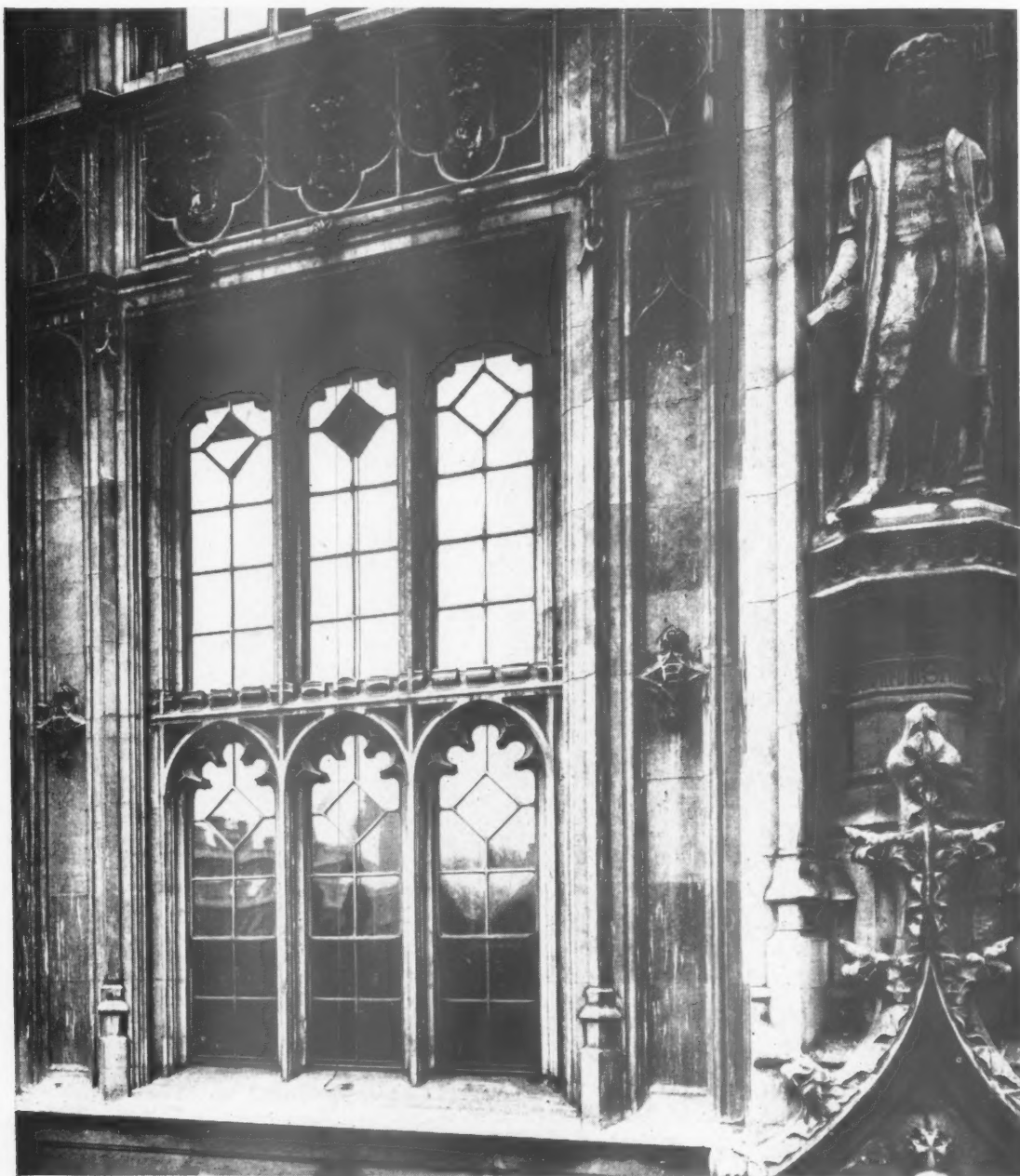
A CLIENT REBELS

The row at the LCC's Boreham Wood site was a little puzzling. But one point that occurs to me is that, for the first time for goodness knows how long, a client has done the shouting and threatened to close down the job. It is difficult to see why this threat was made. The usual rise and fall clause applies to wages and material prices, and increases on these grounds would, presumably, have occurred whoever had been doing the job. It is usually the contractor who worries about a "go slow" or material waste and it should not, therefore, affect the client's payments.

One footnote: did you see some of the bonus figures quoted by the *Evening Standard*? £11 more for labourers over and above their basic £6 15s. makes architects look like amateurs. If these rates are at all usual it is not surprising that the building industry has suddenly become frightened of pricing itself out of the market, and is organizing protests against the "Do it yourself" programmes on TV.

ACCENT ON SEEING

TV, by the way, is given more emphasis than radio at this year's Earl's



'HOPE'S Bronze Windows were supplied to the Houses of Parliament when they were built in 1847 to Sir Charles Barry's design.'

PAGE 71

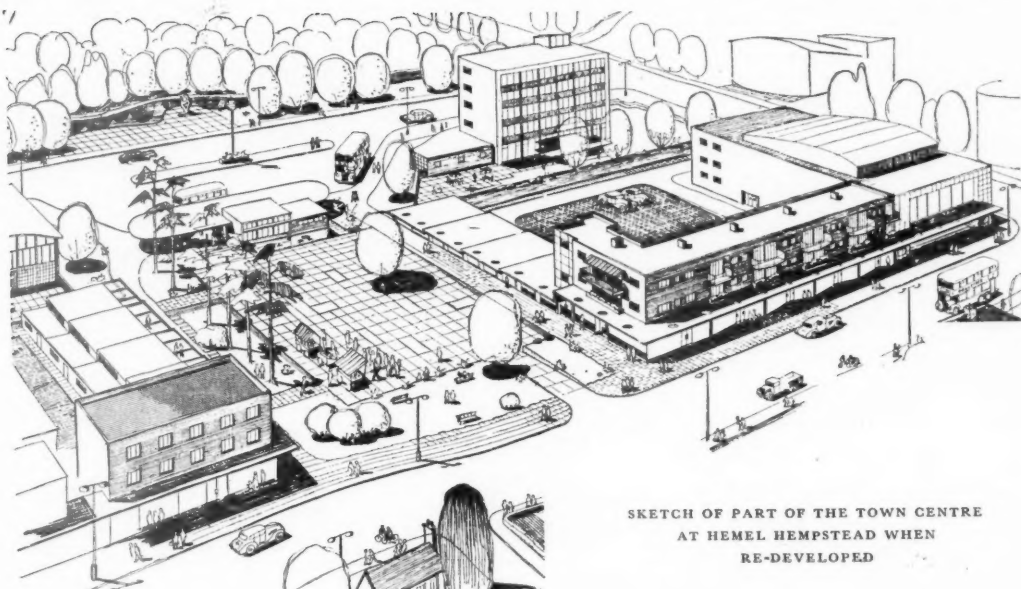
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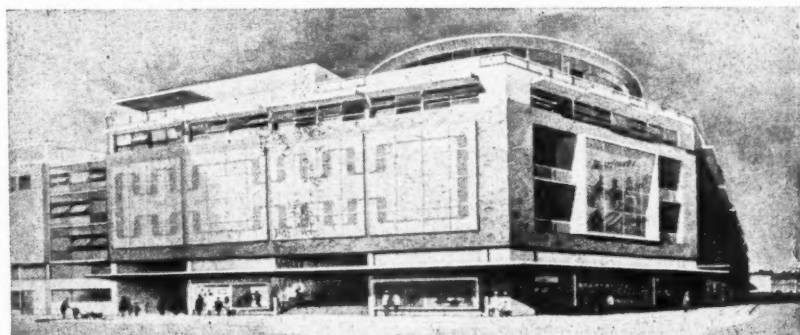
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SKETCH OF PART OF THE TOWN CENTRE
AT HEMEL HEMPSTEAD WHEN
RE-DEVELOPED

Designs for the proposed town centre at Hemel Hempstead New Town. (Chief architect: H. Kellett Ablett). Above: the square is flanked by shops with a bus inter-change station behind it. The multi-storey hotel overlooks Water Gardens. Right: study for department store by Louis de Soissons and Partners.



Court Radio Show. Although the technical improvements, both in television and in sound radio, are no doubt considerable, the design of the cabinets themselves shows a falling off from previous years. There are one or two real horrors (see my illustrations). But more worrying is the general poverty of design even among the firms normally thought of as being really enlightened. Must all the woods be so highly lacquered that they look sticky? Must all the radiograms have so much boxed air? (What about using it for record storage?)

All this sounds rather ungracious, for the average level is much better, even among firms which, in the past, have delighted in trimmings. It's just that there's nothing outstandingly good.

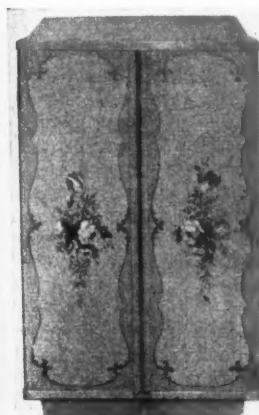
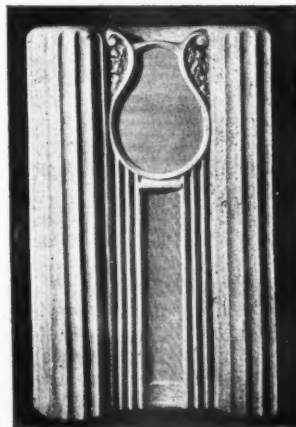
NEW TOWN AND NEW VILLAGE

JOURNAL readers are, by now, familiar with the look of Hemel Hempstead New Town—at least so far as the housing is concerned. Less well-known, perhaps, are some of the designs for the new town centre, which are reproduced on this page from the handsome booklet just published by the town's Development Corporation. This booklet describes briefly what has been done so far, and what is going to be done

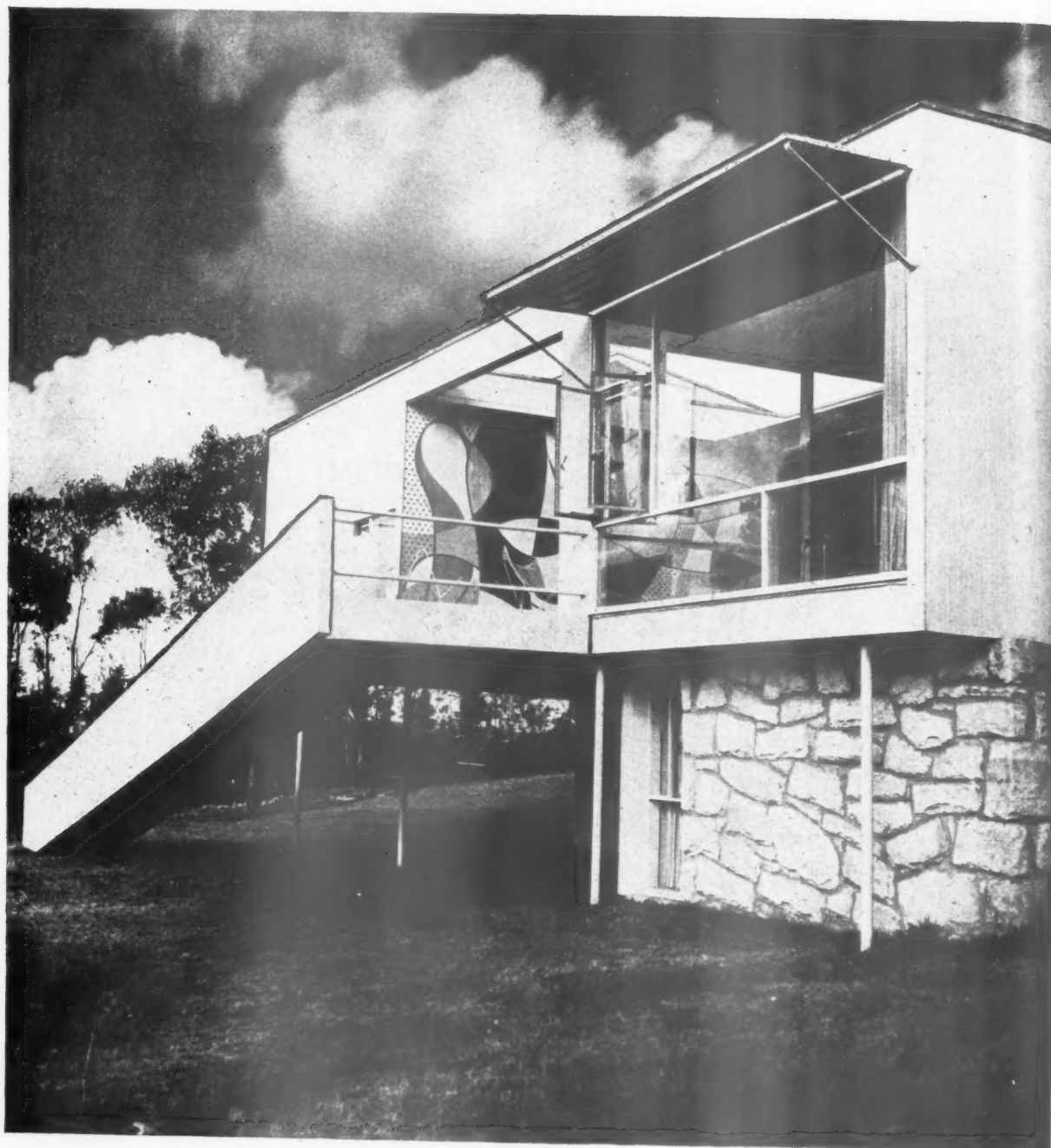
(HM Government permitting). Presumably it was written primarily for the benefit of the industrialist in search of a site and labour, and it certainly deserves to catch a few so beguilingly baited in the book.

Equally familiar by now—though in less happy circumstances—is Lynmouth, which must surely be suffering from an embarrassment of sympathy.

Exhibits at the National Radio Show. The radio (left) by Sali, Ltd. consists of "acoustically perfect materials moulded into exquisite form." This "Sculptured Sound" instrument is quite unlike its veneered predecessor which, with its inherent acoustical deficiencies and limitations in design, unalterably belongs to its own age." The straw-berries-and-cream TV set on its right is by Peto Scott Ltd.



ASTRAGAL raises the matter only to say that he hopes any emergency bungalow operations will be strictly limited and strictly temporary, and that he hopes the suggestion made by the *New Statesman* (and by one of our correspondents this week) that there should be a national competition for a design for a seaside village will be seriously considered. It seems just the sort of enterprise which a national newspaper



National Architecture?

A cynical little note in a recent issue of the Journal of the Royal Australian Institute of Architects reminds us of one of the problems of a country whose architecture we never seem to hear much about. "Modern Americans are not snobbish about the kinds of materials they use in their buildings," writes a columnist in that journal. "If timber and concrete solve the problem, they'll pass up marble with gilt trimmings." "Frankly," the columnist continues, "we wouldn't be snobbish about a brick wall if we could find enough bricks to build one." The time has now come when the building industry in Australia can no longer afford to meet the rising costs of importing traditional building materials. This is regarded by some Australian architects, including the President of their profession's institute, as an ill wind that may blow them a lot good. They foresee that by being forced to

further experiments in the testing of native materials, the country may at last develop a truly national architecture. Bearing in mind this prevalent desire for the evolution of a national style, one is tempted to ask what type of building now receives official blessing. Such a building is shown above—a house in Turramurra, New South Wales, designed by Harry Seidler, who comes from Canada. This house—of local sandstone, with steel columns, concrete floor, and timber walls and roof—has just won the John Sulman medal, one of Australia's most important architectural prizes. Is it typical of Australia's idea of a "truly national architecture"? It is unlikely that even architects "down under" could answer that question yet. It will be interesting to see whether something really indigenous grows up as a result of shortage of materials in a country which has always had to build quicker than it thinks.

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POINTS FROM THIS ISSUE

Design at the National Radio Show	pages 273 and 278
The BRS cut: its possible effects	page 275
MOW publishes steel economy bulletin	page 279
News of Warsaw's rebuilding schemes	page 281

might be persuaded to sponsor. With the right advice it might make a real contribution to a very tricky problem. The blitzed towns, with their twelve-year-old scars, might have a grievance, but then everyone—HM Government included—seems to have decided that Lynmouth is to be a special case.

ARCHITECTURE RAISES LAUGHS

One of the July issues of the *New Yorker* contains in its column entitled "Talk of the Town" a breezy description of the eighty-fourth annual conference of the American Institute of Architects. RIBA conferences usually get a brief notice in *The Times* and may be fairly fully reported in the local papers of the town where the Conference is held, but surely none of our professional humorists (funny on purpose, I mean) has ever struggled through all the lectures and conducted tours in order to scrape together a little light writing? Not, mind you, that the *New Yorker* prostrates the reader with belly laughs, but it gave the best description of Frank Lloyd Wright putting it over an audience of architects since Philip Johnson spoke at the RIBA last year. Frank was abolishing the box which is, he says, a Fascist symbol, and is his way of describing the inorganic room such as we have been building so many of in our post-war housing schemes. He also indulged in his usual badinage with the audience; for instance, holding up a glass, he asked: "What is the reality of this glass, boys?" The answer, as we all know, is "The space within."

DOWN WITH THE READS BY POOLE

ASTRAGAL'S good wishes to A. B. Read, RDI, who has just joined the Carter group of companies as Director of Design. You don't have to be told that he was responsible for the Troughton and Young Ultralux range—pretty well the first decent designs to be marketed by an English firm, and widely copied by quite a lot of others—not to mention quite a lot of other designs since. Mr. Read has been so long associated with light fittings that one will almost expect his first ceramic products to light up at the touch of a switch, but even if they don't, one can be sure they will be equally distinguished in their own way. It should be worth keeping an eye open for Carter lists in a few months time.

ASTRAGAL

The Editors

A GRIM PROPHECY FULFILLED

IN order to save £25,000 per year, less than .0000025 per cent. of the building industry's annual turnover, forty members of the staff of BRS are to be dismissed at the end of October. Most of these men and women work in the Operational Research Unit—probably the BRS's most important section.

The scientists of this unit provide all the essential statistical data for research on building efficiency. They are the only men at BRS who work "in the field," studying and comparing work on actual building sites, measuring improvements which the introduction of new methods developed by their colleagues at Garston bring about, and finding out why some firms of contractors are more efficient than others.

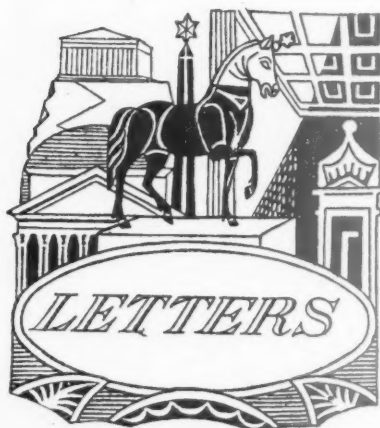
This section of BRS has, therefore, never been popular amongst some types of builder, who consider the scientist's intrusion into, and criticism of, their activities impertinent. How far this has been responsible for the cuts it might be better not to enquire, but it is significant that most of the BRS staff being dismissed are from the Operational Research Unit. This unit would not be so vital if the building industry itself organized, or even supported financially, another research establishment which studied building efficiency and productivity. Although there are in the industry many excellent research organizations, such as the Cement and Concrete Association, concerned with particular aspects of building, there is no body which does the type of work done by the Operational Research Unit, and David Eccles has pertinently suggested more than once that the building industry should devote some of its income towards the support of such an organization.

The official reason for the cut—the transfer to BRS of the MOW chief scientific advisor's section in 1950—is as ludicrous as the reason given last month for the disbanding of the MOW advisory service on payment-by-result schemes, which, incidentally, worked in close collaboration with the Operational Research Unit, in publicising improved methods of building. (The statement belatedly issued by the MOW press office

said that "it has always been intended that the Ministry should carry out these activities only for a transitional period." The real reasons, admitted by a spokesman of DSIR, are the "general economy measures" of the government.

Once again, we must protest, as has the Institution of Professional Civil Servants, that this is "false economy." The cut, coupled with the reductions in housing standards which have taken place during the last two years shows that those responsible for our housing and building policy have decided to take the easiest way of reducing expenditure. The more difficult way—the way we have always recommended—is to increase expenditure on research, apply the results of it, and thus avoid the need for reductions in standards.

Eighteen months ago we foresaw the danger that a government with a small majority might "look for a way of economizing that would displease the fewest people." It seemed probable to us then that research might be considered "the easiest thing to cut." We are shocked to find our prophecy being fulfilled and our warning, which we were by no means alone in giving, being ignored. We said, in March, 1951, that "any cut in the BRS budget will be deplored by all members of the profession who have seen the benefit of the research carried out at the Station." We say now that if the proposed cut is made, whatever changes in organization are made at BRS to soften its effects, the research programme, which has already been a great help to the industry, is bound to suffer. More serious than the direct effect that these cuts will have on the research programme is the principle that will have been established if the government is not persuaded to change its mind—the principle that cutting research work is an economy measure. We shall watch out jealously for further signs of this principle being applied.



Overcrowded Profession

SIR,—On reading through your article "Seeing the Red Light" in the journal for August 21, I venture to suggest that ASTRAGAL underestimates the serious position with regard to young architects about to enter the profession, particularly to those

who had their studies interrupted by war service.

Having just finished a five-year full-time course I cannot find employment, either with a local council or a private architect. Qualifications mean but little to the employer, the main requirement being experience, and ASTRAGAL'S words on this aspect are very true.

Where he does miss the point is to suggest that the number affected is so few. Not many students go to the RIBA to be registered for employment (I have not done

so myself), more go to the Technical and Scientific Register of the Ministry of Labour, where there are long lists of architects seeking employment, and many rely on the advertisement column of the technical press. Add these and your figures for the London area alone will be multiplied several times.

I first started applying for positions as far back as February of this year, and all my letters of applications have been turned down, without even so much as an interview. Most of my colleagues are still in the same boat, and we can only hope that you will look further into this uneasy state of affairs and bring the facts accurately and forcibly before every member of the profession.

HAROLD W. STURGES

Chiswick.

See "A Balanced Profession," page 271.—Ed.

SIR,—Your editorial on this subject (August 28) is so painfully true that one is prompted to plead for a full inquiry into all the circumstances surrounding the problem as it affects young architects.

It is certainly true, as you say, that they are looking in vain for employment for the first time since 1945. It is our experience that the position has sharply deteriorated during the last twelve months. A full-scale investigation is urgently called for to prevent further deterioration and, what is equally important, to avoid disillusionment of highly qualified young men—and women—at a critical stage of their professional life.

Unemployment is very much a human problem and it is distressing to have to paint a dark picture to keen and capable people who have so much to contribute to the profession. But more than human consideration are involved; there are cold-blooded economic and statistical aspects of the problem and it is these which call for objective examination.

A. E. WARD

London.

SIR,—It seems your correspondent "Mendicant" (August 14) is taking a negative attitude towards the many men who are "flooding" the profession. Far better to insist that all buildings over a certain size, say 60 sq. ft., should be designed by a properly qualified person.

This would have the treble effect of increasing salary prospects, doing away with the flooding difficulties and helping to reduce the "visual muck," as Ian McCallum so aptly terms it, with which our landscape is being, and will be, desecrated.

JOHN K. WEARING

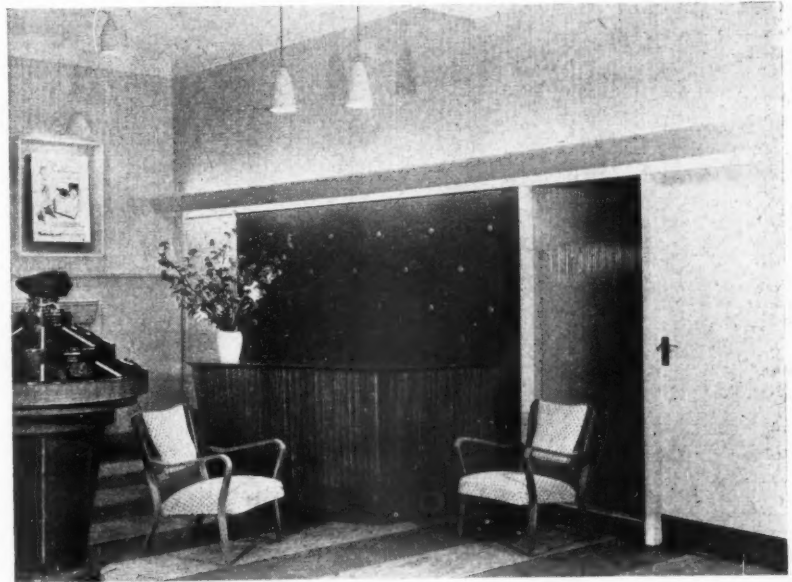
Wallington.

SIR,—With reference to "QED" of ASTRAGAL'S Notes and Topics in a recent issue (August 14). I feel bound to make some reply to disgruntled character A.

While fully sympathizing with him because of his "misfortune," I would like to point out that, twelve months ago, in spite of being debarred from the associateship of the RIBA, he was eligible to be registered with ARCUK, and, on looking through the advertisements of appointments, I find that, nine times out of ten, the required person has to be a "registered architect." That much he did gain, because before character B had taken his final exam, the registration council had amended their requirements to correspond to those required by the RIBA for associateship.

Some of my colleagues are in a similar position to character A, but they got themselves "registered" and so secured a salary APT Grade V—they are sitting for their professional practice exam, next month. I am similar to character B, and, although I passed the same exams and attended the same five-

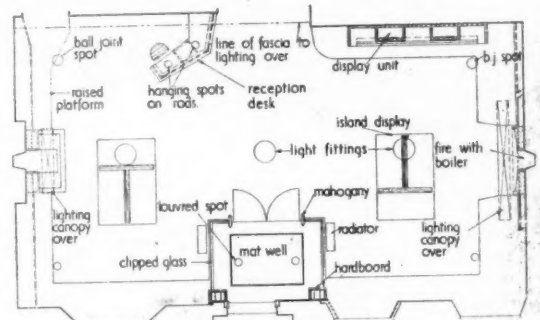
SHOWROOM IN BATH STREET, GLASGOW



A combined showroom and information centre of the Scottish branch of the Coal Utilisation Council was recently opened at 341, Bath Street, Glasgow. The new premises, designed by A. Buchanan Campbell, comprise a showroom of 700 sq. ft., office accommodation of about 500 sq. ft., and a large basement, which has been adapted to provide two demonstration rooms and a lecture hall to seat about 20 people. The photograph above shows the reception desk, which is in mahogany with a fluted front, and has as a background a rough-textured, rust coloured panel, studded with beech buttons and measuring 12 ft. by 7 ft. Below is a view of the armourplate glass entrance doors leading

from the newly-formed vestibule, which is surrounded by glass and contains an aluminium trough for flowers. The showroom walls are covered with a wood-paper having a light oak finish.

The main lighting is by three anodized brass fittings, with louvred spotlights in each corner of the showroom. The floor is covered with linoleum in brown and red strips 18 in. wide. The cost was approximately £4,500. The general contractors were Archibald Hamilton (Shopfitters), Ltd. Sub-contractors on page 300.



Plan of showroom (Scale: 1/2" = 1' 0")



year course as A, I find that I must be satisfied with a salary APT Grade II, until I also become "registered." Also, I must wait until November or December before I can take my professional practice exam., and, presuming that I pass, it will be at least six months after the finish of my school course before I can call myself either "registered" or "chartered architect."

I am not moaning, dear ASTRAGAL, I am not moaning.

J. E. BELL

Co. Durham.

Rebuilding Lynmouth

SIR.—The recent disaster at Lynmouth has robbed the West Country of one of its many coastal beauty spots. When the debris has been cleared away, what form is the rebuilding to take?

Surely this is an ideal opportunity to hold an architectural competition. Much of the town, including the sea wall, has been completely destroyed. Many of the former building sites have ceased to exist. The subject, which is of national interest, offers a chance to show that architects can design for contemporary needs and yet not destroy the character of an old world town renowned for its charm.

R. A. MEREDITH

Surrey.

University or Prison?

SIR.—Poor Exeter Phoenix! What an ugly duckling it has turned out to be. Or has the wicked publisher played a prank with the dates and this is really a reprinted issue of August 21, 1932. And surely the caption writer has boobed: on page 237 that cannot be an extension to that seat of intellectual sensibility, culture and imagination, the University; is it not the new and greatly heralded addition to Newgate Prison?

Yes, I know the Festival is all over and Sir Giles and Sir Hugh strange bedfellows in London, but must we forget it so soon? After all we still have Battersea—but I'll take my Passport to Pimlico.

KENNETH WOOD

Surrey.

No Truck with Trucks

SIR.—In your JOURNAL for July 31 you published a letter by Peat, Marwick, Mitchell & Co. In reply I must say that architects have nothing whatever to do with lifting trucks, and I speak as one who has planned and dealt with a number of factories, including the largest in London. I act on behalf of a firm of lifting truck makers.

Architects are given instructions on the amount of work people to be employed, shops, offices, conveniences—judged by the amount of workpeople to be employed, including the canteen, storage and loading banks, and often we have to work out bases for heavy machinery to be installed, and we do our best to achieve the space required and give the most pleasing features for the amount of money available for the scheme.

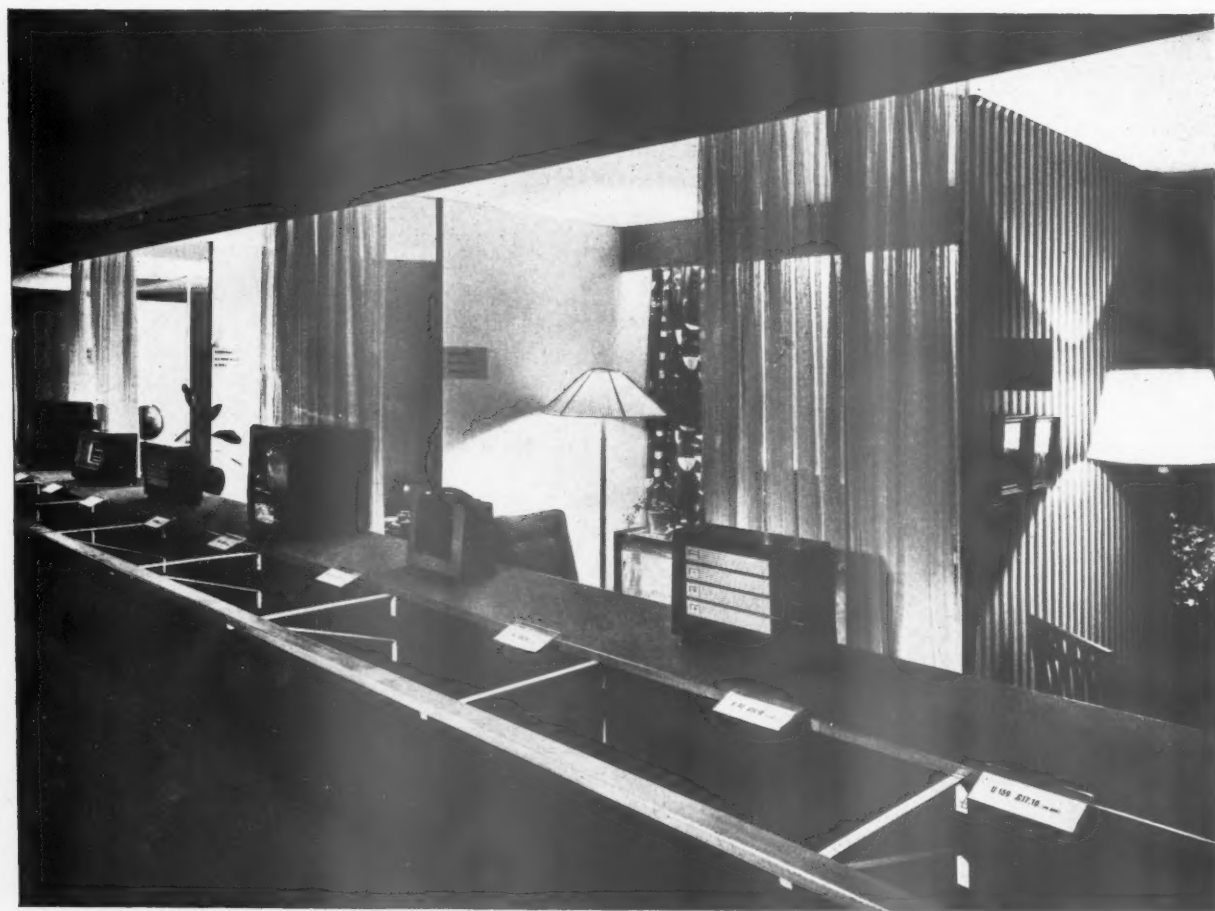
When the land limits the size of the factory on plan and the cubic contents in feet exceed 250,000, or more particularly 1,000,000 FC, we have quite enough to do to satisfy the authorities—and particularly the fire chief—to cause enough delay without being called upon to mess around with various associations. I give credit to managements of factories of knowing how to plan equipment and plant to be installed, better than any outsiders who know nothing about factories and the manufacture of any particular commodity.

W. MACDONALD

London.

EXHIBITION STANDS AT THE NATIONAL RADIO SHOW,

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EARLS COURT, LONDON



The Ekco stand shown above and on the opposite page, top, was designed by Robin Day for the National Radio Show at Earls Court, which closes on Saturday. At the bottom of the opposite page is a demonstration theatre for Ekco. The television demonstration cubicles are furnished by Heal & Co., Ltd., in the form of (right to left) a drawing room, a living room, a lounge and a school classroom. Robin Day, designed this theatre. The associate designer was Sylvia Reid. The stand below for Stella Radio and Television Co., Ltd., was designed by V. Rotter and constructed by City Display, Ltd. Comments on this year's Radio Show by ASTRAGAL will be found on page 273.



MOW

Steel Economy Bulletin Published

The first of a series of steel economy bulletins "The Design of Buildings" was published yesterday by the MOW.

The bulletin was prepared jointly by the MOW, the Ministry of Supply, the Department of Scientific and Industrial Research (Building Research Station) and the Service Departments. With two or three exceptions the recommendations it contains are in accordance with BS 449 and the relevant Codes of Practice. Though the British Standard and the Codes have been drawn up with careful attention to economy, their main object is not to secure savings, and the Bulletin is complementary to them. The MOW hopes that local authorities will have full regard to the recommendations in the Bulletin when approving designs under the byelaws.

The recommendations are in general intended to secure the maximum efficiency from the steel used, and are applicable to all buildings. In applying them, the bulletin states, attention must be paid to civil defence requirements, and in considering the robustness of a structure, the type of construction and the material of which it is to be constructed, due regard must be paid to the purpose for which the structure is to be used, the location of the site and other aspects affecting civil defence, since these may be a determining factor in deciding, for instance, between a framed structure and load carrying brick walls; between a sheeted roof and a reinforced concrete roof.

Further steel economy bulletins will deal with particular aspects of building and civil engineering work.

In future the MOW will examine licence applications for new buildings in the light of the recommendations of this and any later relevant bulletin, and will normally require a certificate by the architect or the engineer that the recommendations have been fully taken into account.

TPI

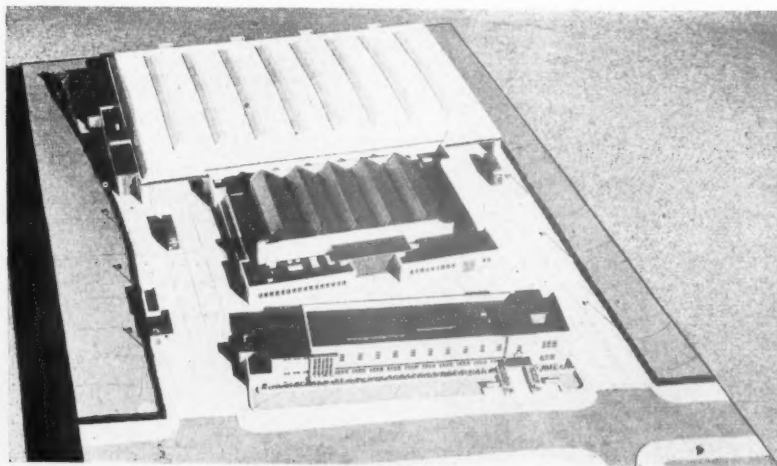
Housing Subsidies Criticized at Summer School

Although the housing policy was right seven years ago it was not necessarily right today, said Professor Gordon Stephenson, of Liverpool University, when he spoke to members of the Town and Country Planning Summer School (sponsored by the TPI) at

LONDON TRANSPORT GARAGE, GARSTON



The bus garage at Garston, Watford, is the first garage built for the operation of country buses and coaches since the war. The operating and welfare block is seen above. The photograph below shows the model of the complete scheme. The garage is designed by Thomas Bilbow, the Executive's Architect. The general contractors were Leslie & Co., Ltd.



Bangor last week. Professor Gordon Stephenson, who was discussing design in its relation to economic factors, said it was wrong that targets should be set which disregarded our economic position. It was wrong that the financial arrangements should induce authorities to spend in a profligate manner, and it was wrong that the building industry should still be spread in a pre-war pattern. Because of this it was at variance with the declared national land use policy.

How much housing was a question that could only be settled by central government. Numbers were one thing; the question of where houses should be built and at what cost was another. Housing economics were completely distorted by subsidy arrangements. These were still conceived in pre-war terms, even though they had been enormously increased and the general situation was very different. To appreciate what they meant they should be capitalized at present value.

On normal houses the value of the 1952 subsidy, at 4½ per cent., was £769. On flats with lifts on land at £10,000 to £12,000 an acre the subsidy was £2,094.

In the past year or two many authorities had shown concern at the rate of dilapidation of the many millions of houses which were built before the first world war. In one large city about 400 houses a year had been abandoned through collapse or the danger of it. The Rent Restriction Acts, which now bore so severely on some landlords that they were prepared to give their houses away, should be most closely scrutinized and revised.

HOUSING

Tenants' Recommendation for Reducing Costs

The National Council of Tenants and Residents Association has issued a statement calling for the complete re-organization of the building industry, on the grounds that considerable time is wasted on nearly every project because of lack of organization. As a result of bad management, the statement continues, jobs are done twice, materials wasted, and tradesmen have to "hang about" waiting for their next task.

The Association recommends four steps to reduce the cost of houses: the reduction of interest rates and profits in the industry; the use of correctly managed direct labour schemes; the speeding up of construction by increased mechanization of the industry; the increased use of prefabricated units.

The Association also recommends an increase in the government housing subsidy (at present £26 14s. per year per house), on the grounds that the cost of repairs is still rising and that the housing repairs funds of many local authorities are dangerously low. Moreover, the statement concludes, "the present level of rents of new council houses is so high that a large proportion of families on the priority lists now offered such accommodation are having to refuse."

MOH

Prototype Timber Cottages

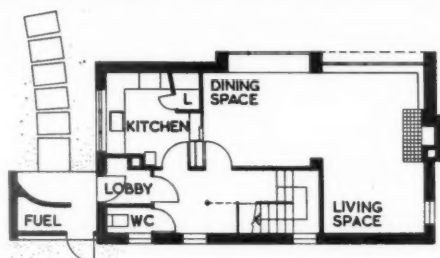
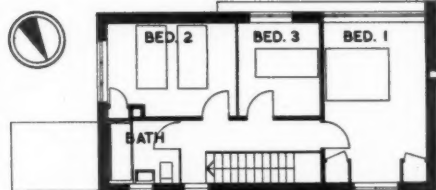
A prototype pair of timber cottages now being erected, under the auspices of the MOH, by Messrs. W. H. Colt, Son & Co., Ltd., are to be open to the public from September 7 to October 11. Architects, in particular, are invited to see them. The cottages, which are suitable for rural council and private housing, are at Bethersden, near Ashford, Kent. They will be illustrated and described in a future issue of the JOURNAL.

PRIVATE HOUSE AT HOLT, NORFOLK



The site of this house at Holt, designed by T. C. Ralph, was abandoned by a speculative builder after the foundations and surface concrete had been laid for 10 pairs of semi-detached houses. The revised layout provides for a cul-de-sac

using three of the concrete rectangles, while some of the remainder are included as paved terraces or garage bases. The area of the house, measured inside external walls and including outbuildings is 995 sq. ft. Walls are of 11-in. cavity brickwork. The ground floor is 4-in. concrete on 9-in. hardcore and finished with $\frac{1}{2}$ -in. oak blocks in the living space and tiles elsewhere. The

Ground floor plan [Scale: $\frac{1}{4}'' = 1' 0''$]

First floor plan

upper floor is of 7-in. by 2-in. fir joists at 14-in. centres and $\frac{3}{4}$ -in. boarding. The open fire in the living room is connected to air ducts in the living room and bedroom over and to combustion air ducts under the floor. Aluminium foil is used as added insulation over the main bedroom ceiling. The photograph above is of the south facade.

POLAND

British Architects' Visit

Fifty architects and town planners from twenty-two countries returned home recently, after a two weeks' visit to Warsaw. The British party consisted of Max Lock, David and Mary Crawley and Graeme Shankland.

Mr. Shankland, interviewed last week by one of the JOURNAL's staff, spoke of the tremendous feat of rebuilding which has taken place and is taking place in Warsaw. Not only has its population of 800,000 (before the war it was about 1,300,000) been rehoused at an average density of two persons per room (in fact there is little variation above or below this figure, which is considerably better than the pre-war standard), but large numbers of factories, schools and public buildings have been built. Each residential area has its own community centre, shops, youth club and meeting rooms, and large numbers of churches and palaces (the latter now used by learned societies, trade unions and ministries) have also been rebuilt in their original

form. In some cases the churches have been improved in rebuilding by the omission, for example, of tasteless 19th century additions to 18th century buildings.

All the architects and planners on this international excursion were impressed by the amount of work executed. No building whatsoever is permitted other than that incorporated in the plan. The application of the plan is much simplified by the fact that all freehold interests in land are vested in the municipality and high land values, the scourge of planners, are no longer a problem.

There was less unanimity of opinion about the style of some of Poland's newest buildings, which Graeme Shankland describes as "classic in spirit, but not classical in design." Important buildings erected immediately after (and just before) the war have a more "modern movement" look, but resemble the work of the movement during the '30's rather than the '50's. These buildings have not proved popular amongst the citizens of Warsaw. (Readers will be able to judge for themselves as we intend to publish soon some of the photographs which the British members of the excursion brought back.)

All new building is now carried out by nationalized enterprises; the man in charge of the reconstruction of Warsaw, Joseph Sigalin, is an architect of about 40 years of age. Seventy-thousand building workers are engaged on construction and reconstruction in Warsaw (a city, it should be remembered, which, before the war, had a population only slightly larger than that of Birmingham). Wages in the industry are as high as in other key industries and generous incentive schemes are in operation.

There is also a bonus scheme for architects (of which, incidentally, there is still a shortage in relation to the work in hand). During the first few years of reconstruction, architects worked for a percentage fee, much as in this country. Now, however, they work for a fixed fee agreed at the beginning of the contract and receive a bonus of 25 per cent. if the contract is completed satisfactorily and on time, an additional bonus if the work was of a particularly complicated nature, and further percentages for early completion, etc. It is possible, theoretically, to earn bonus up to 125 per cent. of the contract fee and 100 per cent. bonus is quite common.

MOHLG

Council Houses for Sale

Harold Macmillan, Minister of Housing and Local Government, has given general consent to all local authorities in England and Wales to sell any of their council houses subject to certain conditions. This consent is contained in a circular which explains in detail the powers which councils now have to sell council houses and to build houses for sale.

The circular points out that while the government have made it clear that it is their general policy to encourage house ownership, it is for each local authority to decide whether or not it wishes to sell its houses. The minister, however, wishes to ensure that where an applicant wants to buy and the local authority wants to sell, an agreement for sale should not be frustrated by any difficulty in obtaining his consent.

Subject to the conditions laid down in the circular, local authorities now have discretion to sell occupied houses to the sitting tenants. The circular also gives them discretion to sell houses which are unoccupied, or have not previously been let, provided that they go to persons in need of homes. It is for each local authority to decide whether or not to sell any of its houses and, if so, how many.

The Housing Act, 1952, which received the Royal Assent on August 1 and which is explained in detail to local authorities in another circular, enables the minister to require that certain conditions shall be imposed by the local authority before giving his consent to sale. It amends earlier legislation which would have compelled local authorities to exact a price which represented the existing scarcity value of property, but authorizes the imposition of conditions of sale to prevent the purchaser from reselling at an inflated price, or letting at an excessive rent.

The minister has, therefore, in giving his general consent to the sale of council houses, laid down the following general conditions:—In the case of a house completed on or before May 8, 1945, the sale price is to be not less than twenty times the net annual rent exclusive of rates, water charges, etc. In the case of a house built after May 8, 1945, the sale price is to be not less than the total cost to the authority of providing the house.

For five years from the date of sale the house is not to be let at a higher rent than that fixed by the local authority, nor is it to be resold at a higher price than that at which it was bought, subject to allowance for improvements or depreciation.

An owner who wishes to resell the house must first offer it to the local authority at the price at which it was bought, subject to allowance for improvements or depreciation.

DIARY

Protection and Repair of Ancient Buildings. First of a series of courses at St. Anthony's Hall, York. Addresses by the Lord Mayor of York and Lord Euston. Reply by Dr. W. A. Singleton. Chairman: Dr. J. B. Morrell. (Sponsor: The Academic Committee of the York Civic Trust.) 8 p.m.

SEPTEMBER 8

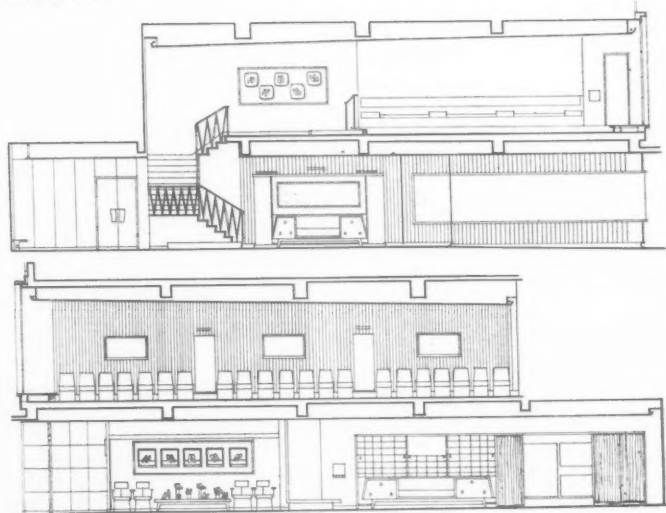
Students' Exhibition. At Liberty, Regent Street. Ceramics, silver, furniture and fabrics designed by students of the Interior Design section (under Sir Hugh Casson) of the RCA will be on view during normal shopping hours.

UNTIL SEPTEMBER 20

SHOE SHOP IN COMMERCIAL



Section A-A



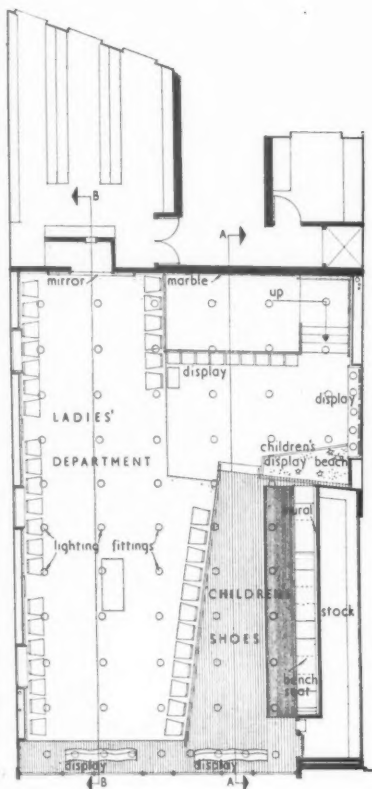
Section B-B [Scale: 1/4" = 1' 0"]



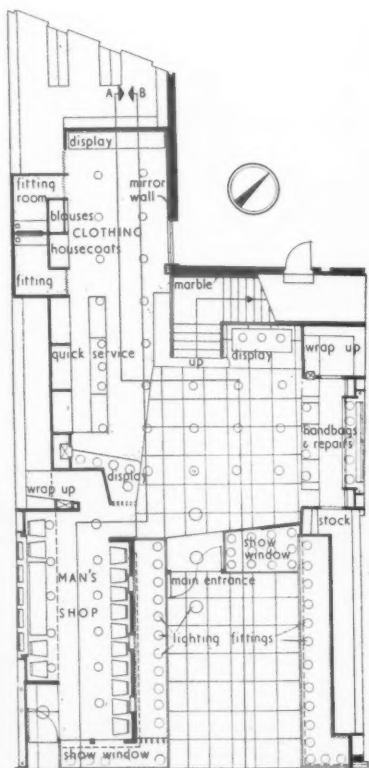
The new Dolcis store, recently opened at Portsmouth, replaces the client's original shop, which was completely destroyed during the war. The building forms part of a block of four shops with a common elevation and is situated in the main shopping thoroughfare of the city. The architect is Ellis E. Somake, staff architect to

the Dolcis Shoe Co.; assistant architects, Geoffrey Uffindell and Donald Goldie. Above left is the facade to Commercial Road, left is a view of the men's depart-

ROAD, PORTSMOUTH, HAMPSHIRE



First floor plan



Ground floor plan (Scale: 1/4" = 1' 0")



partment on the ground floor; at the top of this page, the handbag counter on the ground floor; centre, another view of the men's shop; below, the first-floor children's department, showing part of a mural by Victor Freeborn. The entrance has a spacious recessed lobby flanked by display windows and having a completely glazed rear wall, making the interior display visible to the public. The children's department on the first floor has been fitted with gaily coloured canvas panels. The rear wall of the staircase is faced with panels of Derbyshire fossil marble. The structure is a RC frame, wall panels of 11-in. cavity brickwork and hollow tile floor slabs. The general contractors were Jno. Croad, Ltd. Sub-contractors, on page 300.



SECONDARY SCHOOL

at WHITSTABLE, KENT

designed by F. R. S. YORKE, E. ROSENBERG and C. S. MARDALL

in collaboration with S. H. LOWETH, County Architect

consulting engineers, CLARKE, NICHOLLS and MARCÉL

The Sir William Nottidge School in Church Street, Whitstable, was designed for 450 pupils. At present it is being used by boys and girls, but will later be converted for boys only. The site is on a hill behind the town and is surrounded by meadows and a few scattered houses, but there are no trees adjacent. The planning is open and extended in order to make the best use of the views, and to enclose the playground.

Rear elevation of the entrance hall.





Above, south facade of the main staircase hall, which forms a link between the two main classroom blocks. Right, a general view looking west.



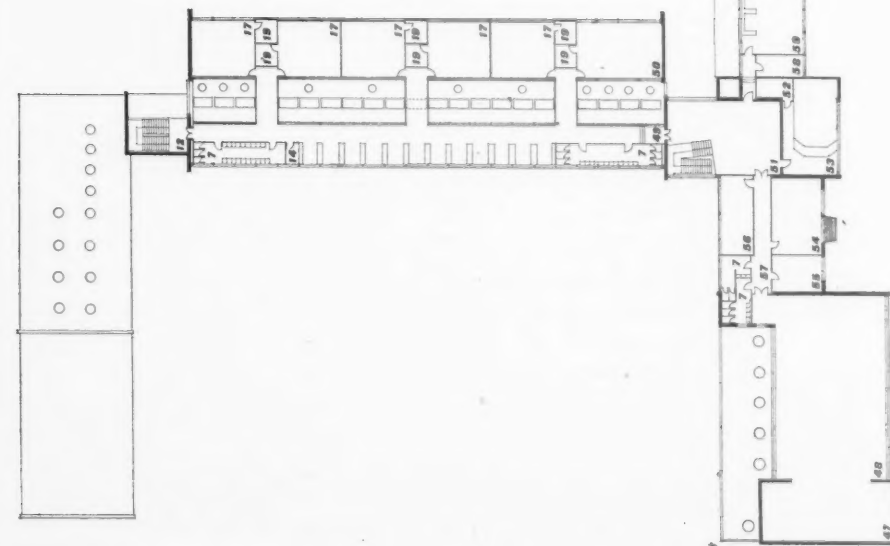
SITE.—The building forms a silhouette on the skyline when seen from the town, and has a wide view to the north-west over the Thames estuary to the Essex coast. There is a slight slope to the south-east, where the view is of the North Downs. The subsoil is heavy clay, with gravel streaks.

PLAN.—The main teaching wing, containing formal teaching rooms, is a two-storey block facing south. Both this block and the two-storey science and special subjects wing, which faces west, are planned on an 8-ft. 3-in. grid. This grid is also used for the gymnasium, workshops and dining room, but the

assembly hall is on a 12-ft. grid. These main units are linked by small blocks containing staircases. The ground floor is on three levels because of the fall of the ground. The main classroom block allows classrooms on both floors to have clerestorey lighting and ventilation by the use of bridge links at first floor level. The proscenium opening in the assembly hall is the full width of the hall, defined by a narrow timber surround and the removable apron stage is in three steps. The music room also has a stepped platform, in two tiers, to accommodate small instrumental and singing groups conducted from the main floor. The assembly hall and dining hall

SECONDARY SCHOOL

at WHITSTABLE, KENT
designed by YORKE, ROSENBERG
and MARDALL



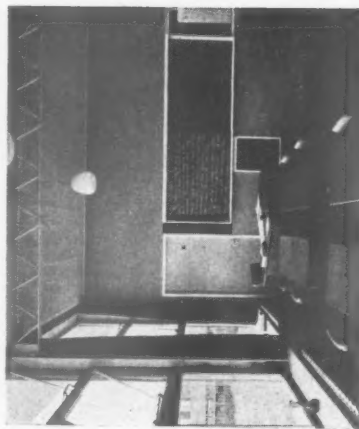
- KEY**
- 1. Gymnasium
 - 2. Gymnasium
 - 3. Towel laundry
 - 4. Games store
 - 5. Changing and showers
 - 6. Gym. Instructor
 - 7. Lavatory
 - 8. Corridor
 - 9. Men's inspection
 - 10. Changing and division
 - 11. Lockers
 - 12. Staircase
 - 13. Staircase
 - 14. Cleaner
 - 15. Drying room
 - 16. School store
 - 17. Classroom
 - 18. Store
 - 19. Green room
 - 20. Green store
 - 21. Classroom
 - 22. Stage
 - 23. Assembly hall
 - 24. Entrance hall and exhibition
 - 25. Secretary
 - 26. Head
 - 27. Meters and electrical equipment
 - 28. Science lecture
 - 29. General science
 - 30. Needlework
 - 31. Domestic science
 - 32. Dressing
 - 33. Larder
 - 34. Dining room

First floor plan [Scale: 1/4" = 1' 0"]

Above, right, typical classroom. Right, serving counter in the school dining hall. The tiles were designed by Peggy Angus.

have clerestory lighting and low windows in the direction of the view. Coat racks are recessed off the main circulation in the corridors.

CONSTRUCTION.—A steel frame with I section, exposed stanchions and exposed lattice beams. Link blocks have a reinforced concrete frame and brick infilling. The tank tower has a light steel frame and a concrete platform supported on a vertical duct in brickwork and a RC flue. Aluminium decking is used for the roof to the assembly hall and dining hall; elsewhere first floors and roofs are



The tiles were designed by Peggy Angus.

32. Order room
33. Dining room

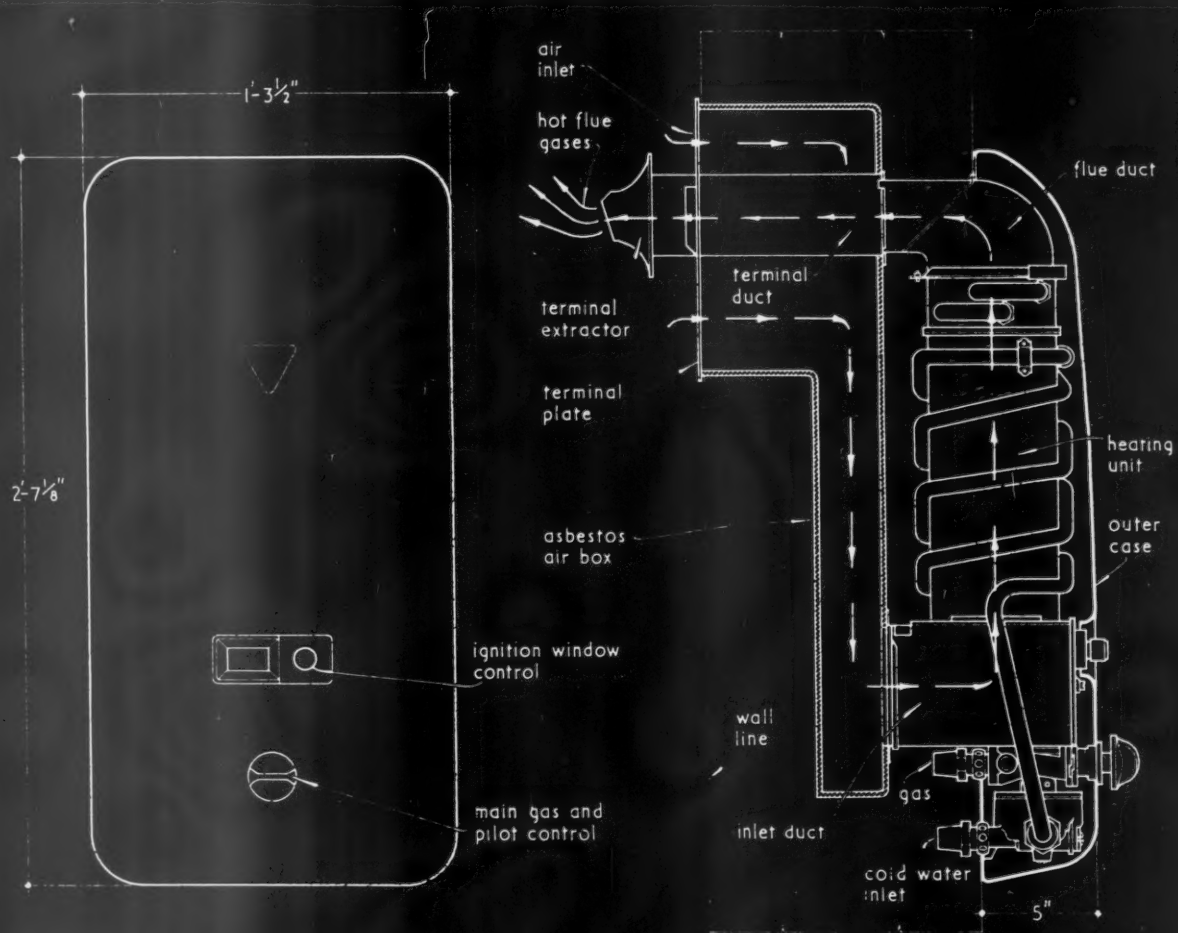
22. Stage
23. Assembly hall

10. Changing and
division

WATER HEATING UNITS | GAS

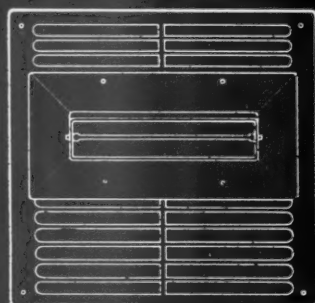
32.C31

The Architects' Journal Library of Information Sheets 379. Editor: Cotterell Butler, A.R.I.B.A.

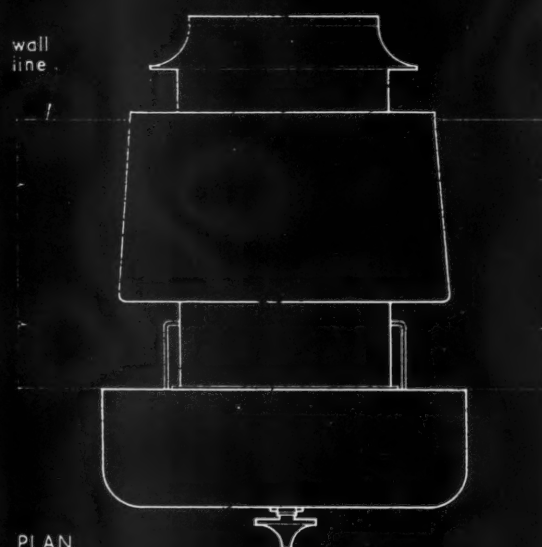


FRONT ELEVATION.

SIDE ELEVATION AND PART SECTION



ELEVATION OF TERMINAL.



PLAN.

ASCOT BALANCED FLUE GAS WATER HEATER, TYPE NO. 715: GENERAL DATA.
 Manufacturer: Ascot Gas Water Heaters Ltd.

32.C31 ASCOT BALANCED FLUE GAS WATER HEATER, TYPE NO. 715 : GENERAL DATA

This Sheet describes the Ascot balanced flue of gas water heater (type 715) which differs fundamentally from previously designed heaters in having a sealed air circuit, incorporating air inlet and flue, and no draught diverter and vertical flue outlet. It gives a full instantaneous multi-point hot water service. For details of fixing the heater in 9 in. and 11 in. cavity walls see Sheet 32.C32.

Principle and Design

The heater must be fitted in an outside wall, as the air necessary for combustion is drawn through a duct from the external atmosphere. The products of combustion are expelled through an adjacent flueway. The design of the wall terminal admits air to the inlet duct, allows unobstructed escape for the flue gases and prevents recirculation. Wind conditions affecting the pressure at the flue outlet similarly affect the air inlet, so the balance of pressure is maintained. Hot flue gases escape in the normal way by convection and internal frictional losses are minimized by a single-stage heat exchanger of new design. The absence of draught diverter and vertical flue make for a compact and unobtrusive appearance inside the room, while the external terminal is convenient in multi-storey buildings where the old type of flue terminal would be impracticable.

Characteristics

Output : 3 gal./min. raised through 40° F., or
2.5 gal./min. raised through 50° F., or
1.25 gal./min. raised through 100° F.

Input : 1,625 B.Th.U./min.
or 3.25 cu. ft./min. of 500 C.V. gas.

Components

Automatic valve : Prevents gas passing to the burner unless a predetermined minimum quantity of water is flowing through the heater.

Heating body : A single-stage high efficiency heat exchanger of the finned type with combustion chamber.

Burner : Luminous pinhole type, incorporating pilot safety device.

Main gas and pilot controls : These are interlocking and are of the rotary control type.

Gas governor : A gas pressure governor is supplied with the heater.

Outer casing : Sheet steel or aluminium.

Finish

The casing is white or cream enamelled with black plastic control knob and polished metal surround to ignition window.

Installation

The heater must always be sited in an outside wall but may be installed in any room, closet or duct without regard to the ventilation available therein as it relies solely upon the outside air for intake and there is no possibility of any products of combustion escaping inside the building. It should be installed

as closely as possible to the most frequently used draw-off tap (normally at the kitchen sink) in a position convenient for normal access and maintenance. Support brackets are fitted as an integral part of the heater. A model (type No. 715/1) which, without the outer enamelled casing, has overall dimensions of 2 ft. 8½ in. high by 1 ft. 2½ in. wide, is available for building into a duct behind a flush panel. (This panel is not supplied by the manufacturers but detailed drawings showing its dimensions, together with details of the necessary asbestos lining, may be obtained from them on application.)

Gas

Connection : ¾ in. tapered B.S.P. male thread.

Supply pipe : Up to 15 ft. from the meter—¾ in. int. dia.

15 ft.-30 ft. from the meter—1 in. int. dia.

Pressure governor : ¾ in. to 1 in. B.S.P. female connection. Can be fitted to the heater or in the supply pipe adjacent to the heater.

Meter : Rated capacity to be not less than 200 cu. ft./hour of 500 B.Th.U. gas in addition to requirements for all other gas appliances.

Stop cock : Must be fitted in the supply line close to the heater to facilitate maintenance.

Water

The heater should be connected for preference to a tank supply but may be supplied from the mains if desired.

Tank supply : Minimum head required 10 ft. measured vertically from the level of the water in the tank to the level of the highest draw-off point.

Mains supply : Permission must be obtained from the Water Authority. The minimum working pressure required is 4½ lb./sq. in.

Connection : ¾ in. B.S.P. male taper thread.

Supply pipes : Mains: ½ in. to ¾ in.

Tank: ¾ in. to 1 in. dependent on head of water and length of run.

Stop cock : A stop cock (of pattern approved by the Water Authority) must be fitted in the cold water supply close to the heater.

Further Information

The manufacturers maintain a Technical Department and an outside staff who are available to answer questions and advise generally on technical problems dealing with the installation of the 715 balanced flue heater in any part of the country.

Compiled from information supplied by :

Ascot Gas Water Heaters, Ltd.

Head Office : 43, Park Street, London, W.1.

Telephone : Grosvenor 4491.

Works : Ascot Works, Neasden, London, N.W.10.

Telephone : Willesden 5121.

Telegrams : Gascot, Phone, London.

Branch Offices and

Service Depots : Belfast, Birmingham, Bournemouth and Glasgow.

Service Depots : Bristol, Cambridge, Manchester, Oxford, Southampton and Stoke.

BUILDING MATERIALS WEIGHTS

2. B5

The Architects' Journal Library of Information Sheets 380 Editor: Cotterell Butler A.R.I.B.A.

This Sheet sets out a selection of weights of building materials. It has been made from B.S. 648 : 1949 *Schedule of weights of building materials* by permission. The B.S. in question states : "In preparing this schedule every care has been exercised to ensure that the standard weights represent average materials of normal composition or structure and, where described as 'as laid,' fixed in the usual manner. The values given have been derived from actual tests or have been otherwise checked." "... weights have been agreed as nominal weights for use in calculations and are not necessarily the actual weights of particular samples."

The extracts given below do not purport to cover the whole of the schedule given in B.S. 648 : 1949 which also includes appendices of supplementary information giving guidance where a range greater than that covered by the schedule is desired.

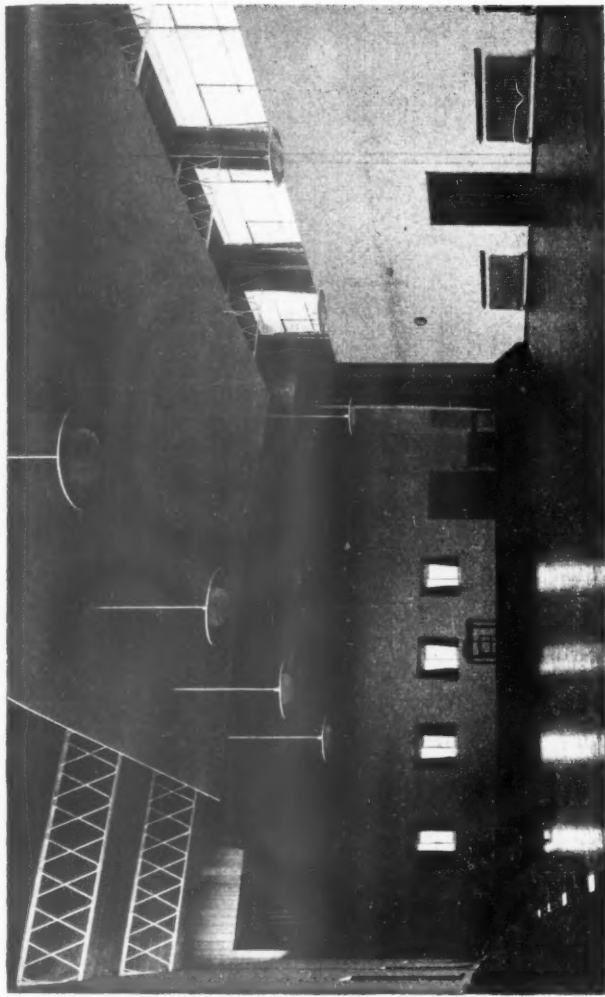
Copies of B.S. 648 : 1949 can be obtained from the British Standards Institution, 24, Victoria Street, London, S.W.1., price 3s. 0d., post free.

Material	Nominal thickness or size	Weight	
		lb.	per
Asbestos cement roofing rectangular pattern slating (as laid) ..	$\frac{3}{8}$ in.	4.0	sq. ft.
add for $1\frac{1}{2}$ in. \times $\frac{3}{4}$ in. battens at $11\frac{1}{4}$ in. gauge ..	—	0.9	"
Asbestos cement sheeting corrugated (as laid and including 10 per cent. for laps) ..	$\frac{1}{8}$ in.	3.3	"
flat ..	$\frac{1}{8}$ in.	2.3	"
Asphalt (as laid) ..	per 1 in.	12.0	"
add for $\frac{1}{2}$ in. macadam finish ..	—	7.0	"
Blockboard ..	per 1 in.	2.5	"
Blocks, walling : hollow (overall thickness as laid), ballast, air-cooled slag and clinker concretes : clay ..	per 1 in.	5.25-5.8	"
coke breeze, foamed slag and pumice concretes ..	per 1 in.	4.6-5	"
diatomaceous earth ..	per 1 in.	2.5	"
Blocks, walling : solid (overall thickness as laid), coke breeze, pumice and foamed slag concretes ..	per 1 in.	5.8-6.7	"
ballast and air cooled slag concretes ..	per 1 in.	12	"
clinker concrete ..	per 1 in.	8	"
Boarding softwood, rough sawn	1 in.	2.5	"
Boards			
hardboard ..	$\frac{1}{8}$ in.	0.85	"
insulating ..	$\frac{1}{8}$ in.	0.75	"
plasterboard ..	$\frac{3}{8}$ in.	2.0	"
add for setting coat ..	—	1.0	"
Brickwork			
common or light (London stock, fletton) and including sand-lime ..	—	125	cu. ft.
diatomaceous earth ..	—	45	"
engineering, dense ..	—	150	"
glazed ..	—	130	"
pressed ..	—	140	"
Cast iron ..	—	450	"
Cast stone ..	—	140	"
Concrete			
brick aggregate ..	—	115	"
clinker aggregate ..	—	95	"
foamed slag aggregate ..	—	80	"
pumice aggregate ..	—	70	"
sand or gravel or crushed natural stone aggregate (plain) ..	—	144	"

Material	Nominal thickness or size	Weight	
		lb.	per
sand or gravel or crushed natural stone aggregate (reinforced, about 2 per cent. steel)	—	150	cu. ft.
Copper roofing sheet (add $33\frac{1}{3}$ per cent. for laps and rolls, as laid)	24 S.W.G.	1	sq. ft.
Cork insulation slabs ..	per 1 in.	1	"
Corrugated steel sheeting, galvanised (as laid)	18 B.G.	2.7	"
Felt, bituminous roofing add for $\frac{1}{2}$ in. macadam finish ..	—	1.0	"
..	—	7.0	"
Flooring			
compressed cork ..	1 in.	2.0	"
granolithic ..	1 in.	12.5	"
magnesium oxychloride : normal type (sawdust filler) ..	1 in.	7.5	"
magnesium oxychloride : heavy-duty type (mineral filler) ..	1 in.	11.5	"
rubber ..	$\frac{1}{4}$ in.	2.7	"
Floors, structural			
hollow clay blocks, including reinforcement and mortar jointing between blocks, but excluding any concrete topping (these weights are based on the use of blocks of varying size)	4 in.	30	"
..	5 in.	35	"
..	6 in.	39	"
..	7 in.	46	"
..	8 in.	53	"
Add for each 1 in. thickness of concrete topping ..	—	12	"
hollow clay blocks, including reinforcement and concrete ribs between blocks but excluding any concrete topping. (These weights are based on the use of blocks of varying size and of lesser density than those used without concrete ribs between blocks).	4 in.	25	"
..	$4\frac{1}{2}$ in.	27	"
..	5 in.	29	"
..	$5\frac{1}{2}$ in.	31	"
..	6 in.	33	"
..	7 in.	37	"
..	8 in.	41	"
Add for each 1 in. thickness of concrete topping ..	—	12	"
hollow concrete units, including any concrete topping necessary for constructional purposes	4 in.	35	"
..	5 in.	40	"
..	6 in.	45	"
..	7 in.	50	"
..	8 in.	55	"
..	9 in.	65	"

2.B5 WEIGHTS OF BUILDING MATERIALS

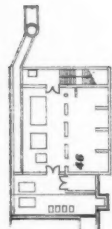
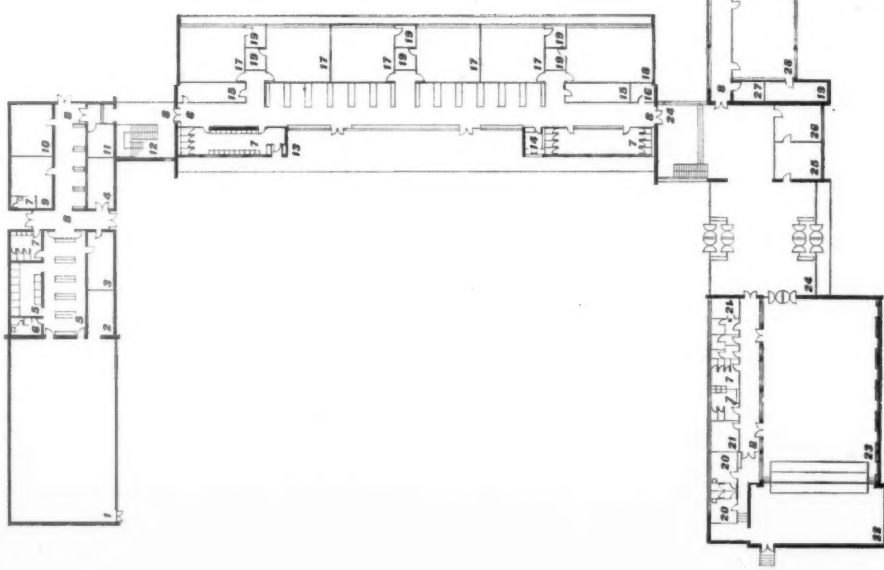
Material	Nominal thickness or size	Weight	
		lb.	per
Floors, wood			
hardwood (oak, maple)	$\frac{7}{8}$ in.	3.3	sq. ft.
	$1\frac{1}{8}$ in.	4.3	"
pitchpine, longleaf	$\frac{7}{8}$ in.	3.1	"
dense	$1\frac{1}{8}$ in.	3.9	"
softwood (redwood, whitewood, Douglas fir)	$\frac{7}{8}$ in.	2.3	"
	$1\frac{1}{8}$ in.	2.8	"
	(finished sizes)		
weight of mastic used in laying block flooring	—	0.30	"
Glass	$\frac{1}{4}$ in.	3.5	"
Glazed pavement and roof lights	$2\frac{1}{2}$ in. approx.	25	"
Glazed roofing			
patent glazing with lead-covered steel bars at 2 ft. centres :			
spans up to 6 ft. ..	$\frac{1}{4}$ in.	5.25	"
spans 6 ft. to 11 ft. ..	$\frac{1}{4}$ in.	6.0	"
patent glazing with aluminium alloy bars :			
spans up to 11 ft. ..	$\frac{1}{4}$ in.	4.0	"
Gutters, eaves			
asbestos cement: 4 in. ..	—	2.2	ft. run
cast iron: 4 in. ..	$\frac{1}{4}$ in.	2.5	"
Lead sheet (add 33½ per cent. for rolls, laps, drips, turn-ups, etc., as laid)	$\frac{1}{16}$ in.	6	sq. ft.
Plaster			
acoustic	$\frac{1}{2}$ in.	2.0	"
anhydrite	$\frac{1}{2}$ in.	5.5	"
barium sulphate	$\frac{1}{2}$ in.	7.5	"
fibrous	$\frac{1}{2}$ in.	3.0	"
gypsum or lime	$\frac{1}{2}$ in.	5.0	"
hydraulic lime or Portland cement	$\frac{1}{2}$ in.	6.0	"
add when wood or metal lathing is used ..	—	1.25	"
Plasterboards	$\frac{3}{8}$ in.	2.0	"
add for setting coat ..	—	1.0	"
Plywood	per mm.	0.14	"
Reinforced concrete (about 2 per cent. steel)	—	150	cu. ft.
Screeding			
Portland cement (1: 3) ..	$\frac{1}{2}$ in.	6	sq. ft.
Shingles, cedar wood slabs	—	1.5	"
Slag wool	—	17	cu. ft.
Slate			
sawn slab	per 1 in.	15.0	sq. ft.
Slatting			
thin	—	6.0-9.0	"
medium	—	7.5-11.5	"
thick	—	11.5-15.5	"
(all weights as laid with 3 in. lap including nails but not battens)			
Add for $1\frac{1}{2}$ in. \times $\frac{3}{4}$ in. battens :			
at $7\frac{1}{2}$ in. gauge ..	—	1.2	"
at $8\frac{1}{2}$ in. gauge ..	—	1.1	"
at $10\frac{1}{2}$ in. gauge ..	—	1.0	"
Steel			
cast	—	490	cu. ft.
mild	—	489	"
Steel sheet, galvanised (add 20 per cent. for laps as laid)			
corrugated	18 B.G.	2.3	sq. ft.
flat	18 B.G.	2.0	"
Stone			
Bath	—	130	cu. ft.
cast, Portland, sandstone	—	140	"
granite	—	165	"
marble	—	170	"
Terra cotta, solid	—	132	"
Terrazzo			
paving (as laid) ..	$\frac{1}{4}$ in.	7	sq. ft.
cast partitions ..	$1\frac{1}{2}$ in.	18.25	"
Thatch, reed (weight includes battens)	12 in.	8.5	"
Tiling, clay floor (weight as laid excluding screeding)	per $\frac{1}{2}$ in.	5.8	"
Tiling, clay roof			
plain : machine-made at 4 in. gauge ..	—	13.0	"
plain : hand-made at 4 in. gauge ..	—	14.5	"
add for $1\frac{1}{2}$ in. \times $\frac{3}{4}$ in. battens at 4 in. gauge interlocking (Roman, Marseilles, pan) ..	—	2.3	"
add for $1\frac{1}{2}$ in. \times $\frac{3}{4}$ in. battens :			
at $7\frac{1}{2}$ in. gauge ..	—	1.2	"
at $8\frac{1}{2}$ in. gauge ..	—	1.1	"
at $10\frac{1}{2}$ in. gauge ..	—	1.0	"
Tiling, concrete roof			
plain at 4 in. gauge ..	—	14.5	"
add for $1\frac{1}{2}$ in. \times $\frac{3}{4}$ in. battens at 4 in. gauge interlocking ..	—	2.3	"
add for $1\frac{1}{2}$ in. \times $\frac{3}{4}$ in. battens at $7\frac{1}{2}$ in. gauge ..	—	1.2	"
at $8\frac{1}{2}$ in. gauge ..	—	1.1	"
at $10\frac{1}{2}$ in. gauge ..	—	1.0	"
Tiling, wall (weight excludes backing)	$\frac{1}{2}$ in.	4	"
Timber, seasoned			
hardwoods (teak, oak, maple)	—	45	cu. ft.
pitchpine, longleaf dense	—	42	"
softwoods (pine, spruce, Douglas fir)	—	30	"
Weather boarding	$\frac{3}{4}$ in. 1 in.	1.5 1.75	sq. ft.
Wood wool, building slabs	per in.	3.0	"
Wrought iron	—	480	cu. ft.
Zinc	—	446	"
Zinc sheet (add 33½ per cent. for laps, drips, turn-ups, etc., as laid) No. 14 zinc gauge ..	0.031 in.	1.19	sq. ft.



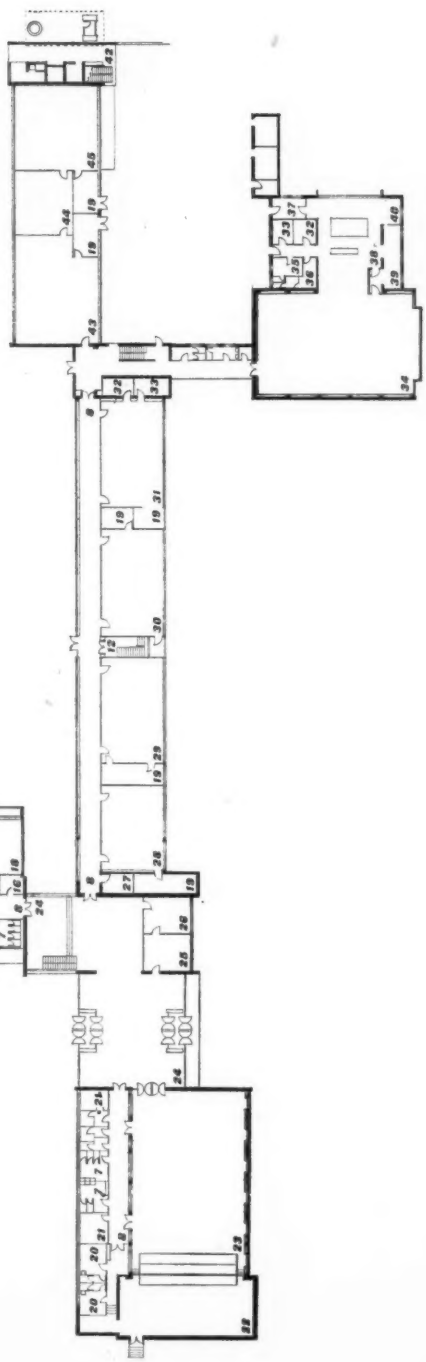
Above, the assembly hall looking towards the stage. The acoustic panel suspended from the ceiling beams runs the whole length of the hall.

- 35. Kitchen staff
- 36. Office
- 37. Vegetable store
- 38. Wash-up
- 39. Pot wash
- 40. Garden store and bins
- 41. Fuel and dustbins
- 42. Metalwork
- 43. Landing
- 44. Drawing office
- 45. Woodwork
- 46. Boiler house and fuel
- 47. Stage—upper part
- 48. Assembly Hall—upper part
- 49. Corridor and coats
- 50. History room
- 51. Music store
- 52. Staff room
- 53. Staff room
- 54. Divisions
- 55. Corridor and gallery
- 56. Book store
- 57. Library
- 58. Art room
- 59. Light crafts

Ground floor plan

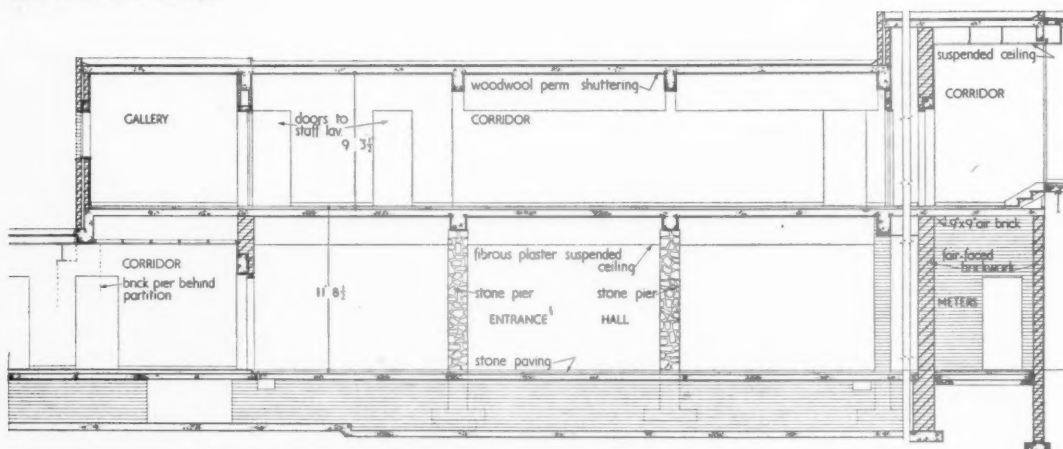


Basement plan

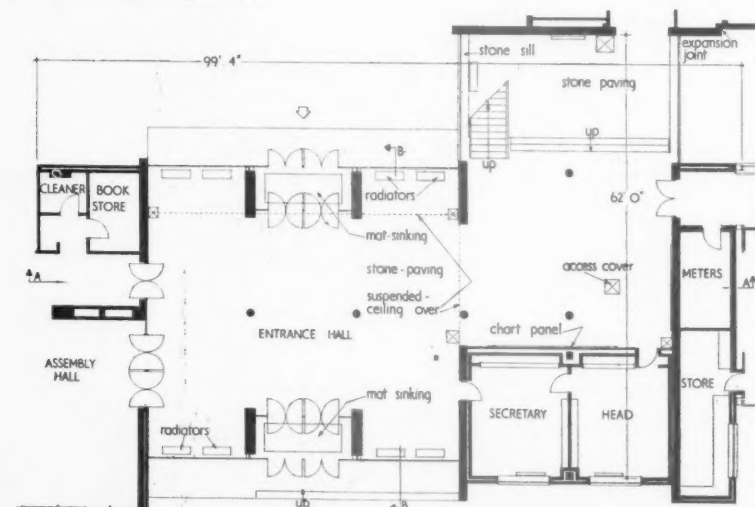




The west facade, with the main entrance on the left.



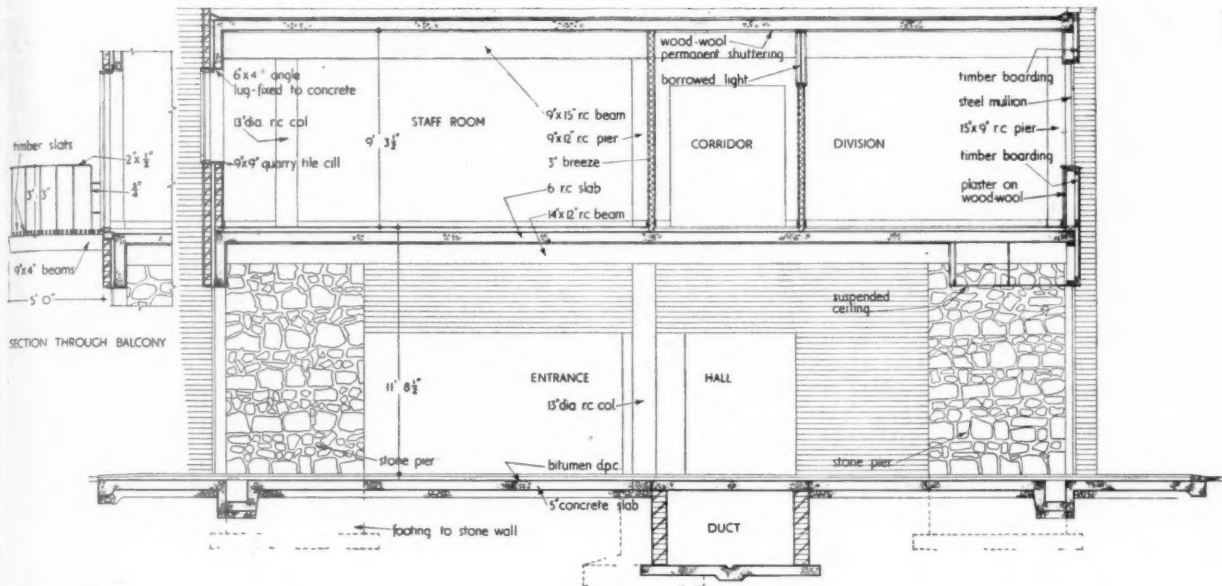
Section A-A [Scale: $\frac{1}{4}" = 1'0"$]



Plan of entrance hall [Scale: $\frac{1}{8}" = 1'0"$]

of precast units. Foundations generally are concrete pads with ground beams where necessary.

FINISHES.—The external cladding is in precast slabs with a white spar finish, clipped direct to stanchions, stock bricks, rendering or vertical red cedar boarding. Piers flanking the main entrance doors are of Kentish ragstone. Rendering on entrance hall and gym. walls is white pebble dash, with occasional ink pebbles. Internally, walls are fair faced stock or flint lime bricks and three coats of lime plaster in classrooms. The assembly hall end wall is covered with acoustic tiles. Floors are laid with West African mahogany wood blocks in classrooms, seraya strips in the gymnasium, tiles in changing rooms, lavatories, kitchen and corridors



Section B-B through entrance hall (Scale: $\frac{1}{4}" = 1' 0"$)

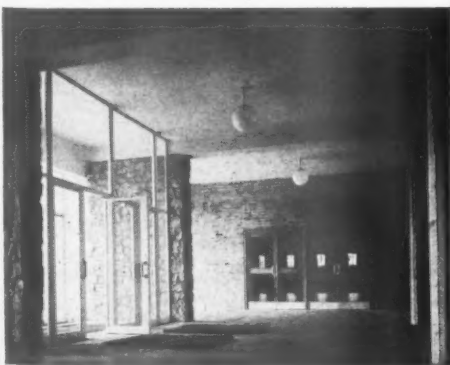
SECONDARY SCHOOL

at WHITSTABLE, KENT

designed by YORKE, ROSENBERG and MARDALL

and beech strips in the assembly hall. Ceilings are generally of wood wool suspended on T's in steel framed blocks and were used as *in situ* shuttering. The assembly hall has a fibrous plaster suspended sounding board and a plywood reflector over the

(Continued on page 292)

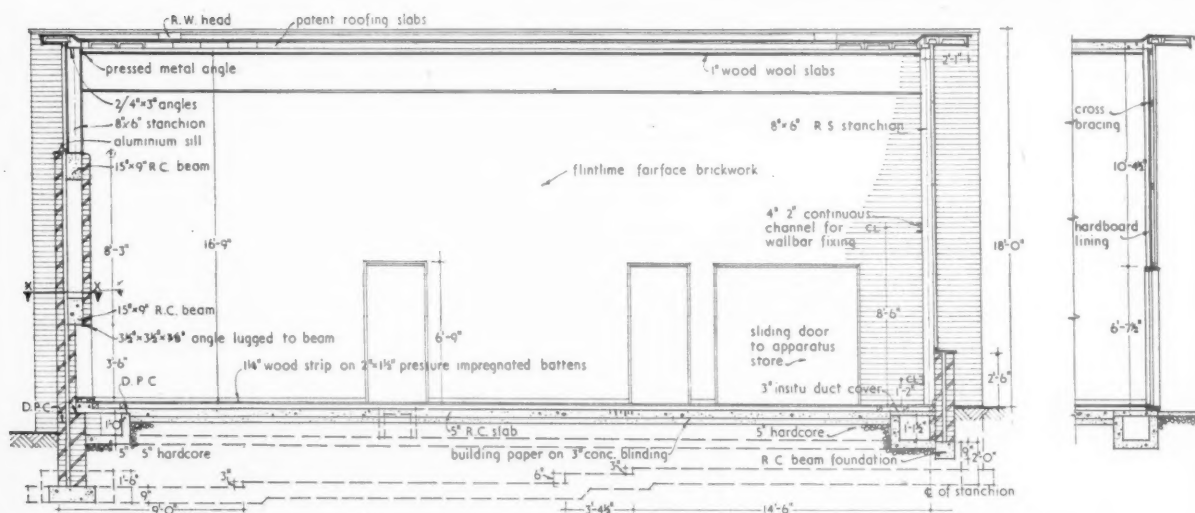
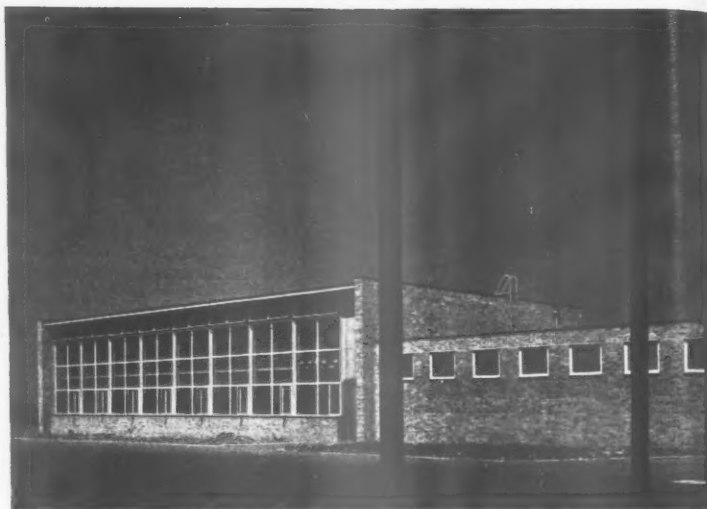


Right, the main entrance on the west facade. Above the doors is a cantilevered balcony to the staff room. Above the entrance hall, with doors to the assembly hall on the right.





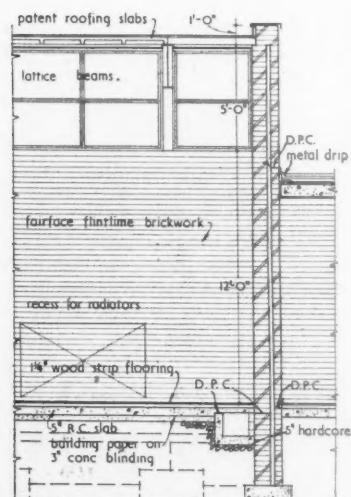
Above, interior of the gymnasium, looking south. Right, looking north-east from the corridor of the eastern classroom block towards the gymnasium.



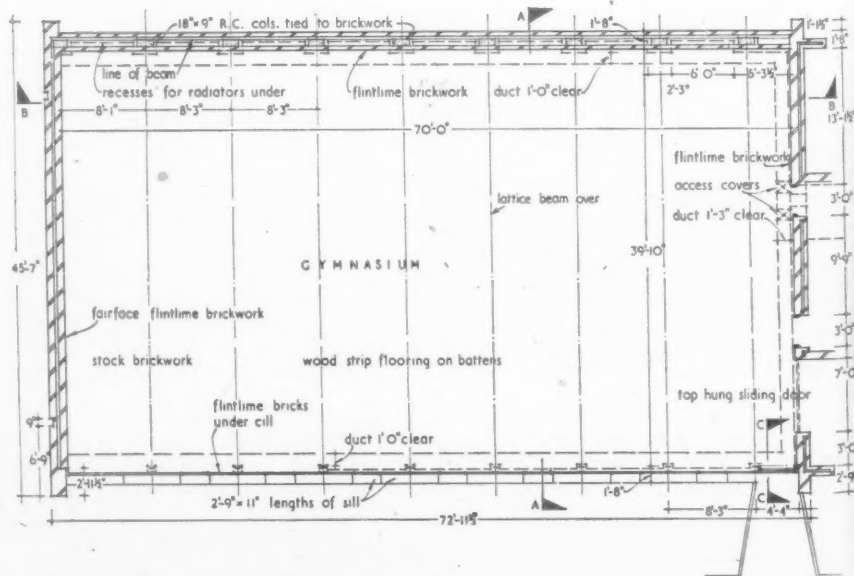
SECONDARY SCHOOL

at WHITSTABLE, KENT

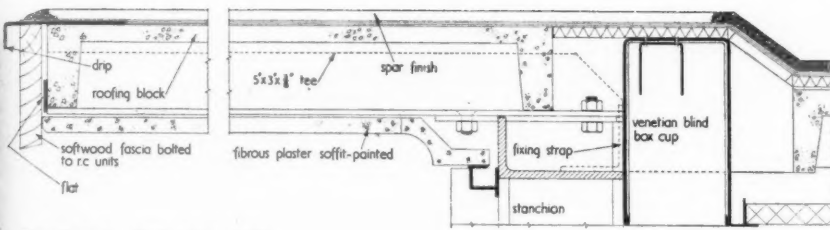
designed by YORKE, ROSENBERG and MARDALL



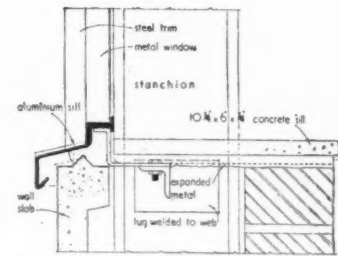
Section B-B [Scale: $\frac{1}{2}'' = 1' 0''$]



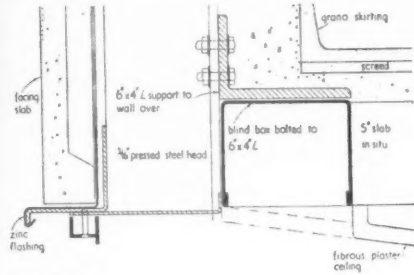
Plan of Gymnasium at level X-X [Scale: $\frac{1}{8}'' = 1' 0''$]



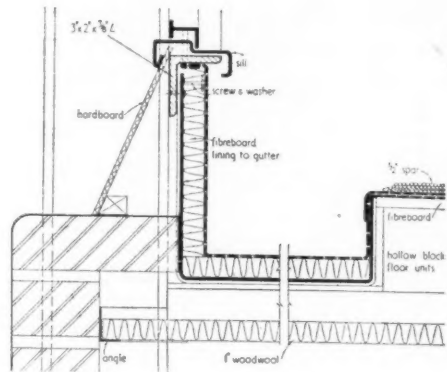
Detail at A [Scale: 1 1/4" = 1' 0"]



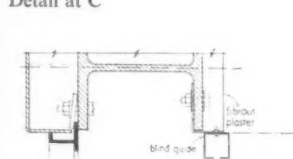
Detail at B



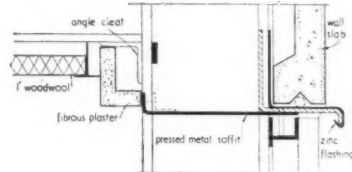
Detail at C



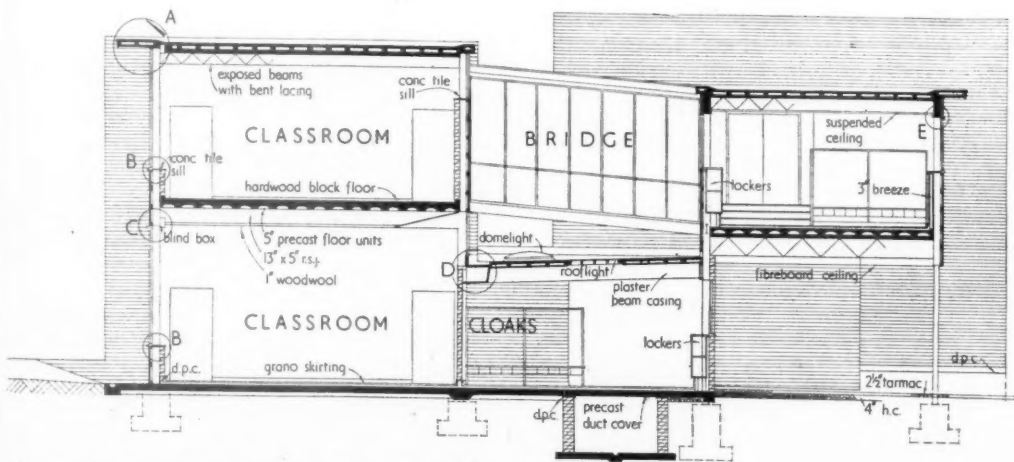
Detail at D



Plan at C

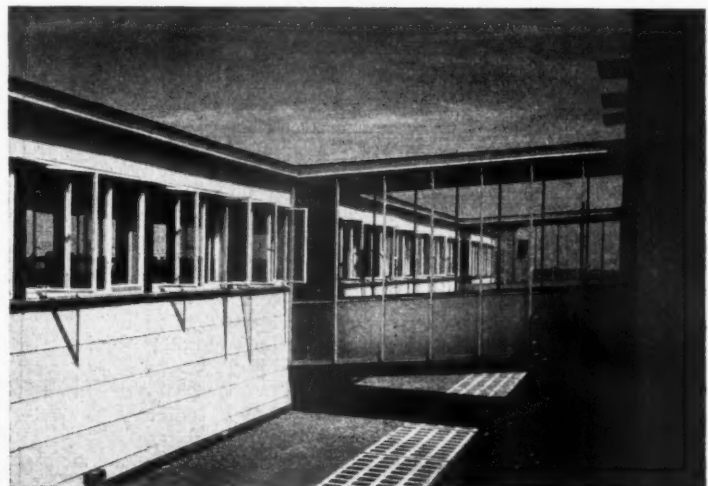


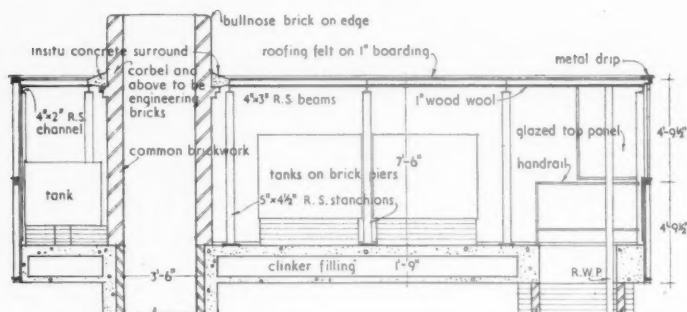
Detail at E



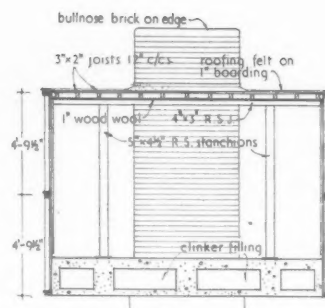
Cross section through main classroom block [Scale: 1/8" = 1' 0"]

Below, left, first floor corridor of western classroom block showing clerestorey lighting. Below, one of the link bridges from the first floor classrooms to the corridor in the western classroom block.

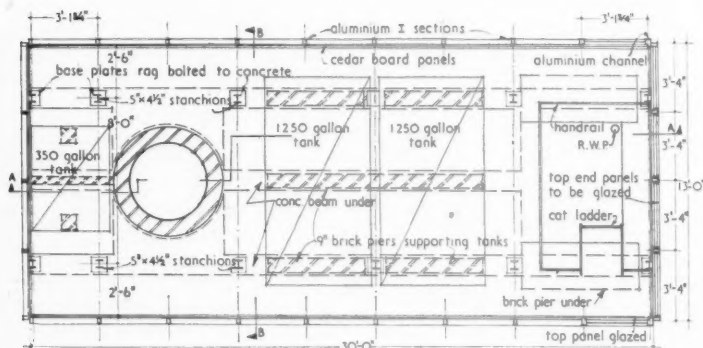




Section A-A



Section B-B



Plan of tank tower [Scale: 1/4" = 1' 0"]

Below, the tank tower and boiler house chimney, which lies at the south end of the science block.

SECONDARY SCHOOL

at WHITSTABLE, KENT

designed by YORKE, ROSENBERG and

MARDALL

(Continued from page 289)

stage. Roofs are of three-ply felt with protected metal drips and timber eaves fascias. Shower partitions are of cellular plastic units and w.c. partitions are of terrazzo. Classroom walls are finished with matt grey or brown paint, door and blackboard frames are white and doors painted red, blue or yellow. Lockers are painted red and grey or yellow and grey. All window framing is painted white.

SERVICES.—Heating is by hot water radiators. The boiler house, which is excavated and tanked, lies below the drawing office and woodwork room and the flue is combined with the tank tower.

The school was planned in 1948 and built as part of the 1949 building programme. Although the final accounts are not yet settled, the total cost on tender of building and site works is £167,822. The school was planned for three-form entry, but now accommodates 600 pupils and worked out on this basis the cost per place is £277. The number of square feet per place is 105.

The general contractors were Rice & Son, Ltd. For sub-contractors see page 300.



TECHNICAL SECTION

"It may not be generally realised that the weight of a multi-storey building is about five times greater than the live load for which it is designed. It is apparent, therefore, that any marked savings in dead load will have a worthwhile effect on cost." Once again (see this page, last week) we quote from Ian Langlands's retiring address to the Melbourne Division of the Institute of Engineers.

At a time when every reasonable economy in building costs should be made we still find multi-storey framed buildings (particularly office blocks) going up in London with non-load-bearing external walls of brick and, very often, faced with stone. "Such walls," said Mr. Langlands, "are weather-proof, durable, fire-resistant and more than amply strong, *but they . . . add considerably to the cost of the building . . . by increasing the dead load and by taking up floor space.*"

In the USA, where economy is by no means as vital as it is here, considerable attention is being given to the development of thin, lightweight "curtain" walls, such as those used at General Motors' new technical centre at Detroit (see JOURNAL for January 24). Thin, lightweight wall panels are being used in our new Hertfordshire schools (see JOURNAL for August 7); it would be even more valuable if their use could be extended to multi-storey framed buildings. Considerable economies might thereby be effected and, if the aesthetic results were as successful as the Hertfordshire schools, the appearance of London's office blocks might be vastly improved.

This week's
special article

1 SOCIOLOGY housing need

The number preceding the week's special article or survey indicates the appropriate subject heading of the Information Centre to which the article or survey belongs. The complete list of these headings is printed from time-to-time. To each survey is appended a list of recently-published and relevant Information Centre items. Further and earlier information can be found by referring to the index published free each year.

Professor Bowen in his article below continues his analysis of the housing section of the one per cent. tables of the 1951 Census. In particular he deals with the under-occupation of houses and suggests that this problem cannot be solved unless attention is paid not only to the housing needs of small families, but also to the questions of income tax, rating valuation and financial credit for house purchase and conversions.

The vast increase in the number of single-person households revealed by the recently published one per cent. sample analysis of the 1951 census took place in spite of the fact that very little new accommodation is being provided in post-war housing schemes for single persons wishing to live alone. Many of these people are, however, relatively well off financially, since

they often have no family responsibilities. Of the 14½ million households in Great Britain, 1½ million are single-person households, and their density of occupation of dwelling space is only 0.31 persons per room. Nearly half of these single-person households are even better off, having four or more rooms per head. If the standard of occupancy of this highly

fortunate group of people were reduced to the generous standard of three rooms per person there would be, as *The Economist* has pointed out, at least one million rooms to spare (*The Economist's* figure was 1,188,000, but it would probably be at least 1,390,000). A similar calculation for two-person families, again allowing them three rooms per person, reveals the existence of at least another 482,000 "spare" rooms. This is, of course, merely an arithmetical result; these rooms may not all be in places where they could be let, or where they could easily be made into suitable separate accommodation. Nevertheless, the excess of living space due to under-occupation is very great, and we know by direct observation that there are many families, both small and medium-sized, that live at a standard of occupancy of more than three rooms per person, not because they wish to do so, but because economic factors have driven them to invest in an unduly large house. How much of the purely statistical excess measured by the census represents this kind of undesired under-occupation of dwelling-space cannot yet be measured.

It is clear, however, that side by side with a shortage of housing, and desperate overcrowding of dwellings, there is a substantial amount of under-occupancy of houses. This is the result of thirty-five years of well-meaning, but always partial and incomplete, housing policy by the State—some of which has been successful, but much of which is now revealed as self-frustrating.

THE ORIGINS OF HOUSING POLICY

Housing policy has vacillated much in recent years, as the many variations in housing subsidies show very well. Similarly the variations in rent restriction provisions (there are at least 13 Acts on the statute book on this subject) have followed the general economic vicissitudes of the country. There are, however, two broad principles on which most of our housing policy is based. Firstly, that people who cannot afford decent housing must be assisted. Secondly, that poor tenants must not be exploited by ("monopolistic") landlords.

The first principle was recognized in 1917 when an enquiry was made into the high cost of working-class houses in Scotland; the second, when, also during world war I, rent restrictions were introduced to mitigate the effects of war-time inflation.

These two principles have been interpreted since in many different ways, and their realization has never been complete. Some of the consequences of attempts to implement them have, in fact, been contrary to the spirit of the principles themselves. For example, families other than working-class families have benefited from housing

subsidies, while the lower paid workers have had to put up with inferior dwellings in badly built areas, and many people have been forced to buy houses at exorbitant prices as houses to let have not been available.

It must be admitted, however, that the housing subsidy policy has helped to provide Britain with thousands of small modern houses during the last thirty years, and that rent restrictions, however imperfect and unfair in some cases, have often removed hardship and have given security of tenure to many deserving tenants.

Unfortunately, the two principles are no longer being realized. In any case, these principles are by no means up to date. The problem is now a different one—a more general one, since other classes than the working-class are now affected. Moreover, each district now has its special peculiarities—exaggerated by the events of the last thirty years.

RENT RESTRICTIONS AND SUBSIDIES

The growing recognition that the problem is largely an economic one is causing the expression of some impatience at the unforeseen effects of rent restrictions. The "spare rooms" phenomenon revealed by the census is interpreted as evidence of the failure of the country, under present legislation, to make the best use of its present housing resources. This view is, in some measure, just. Undoubtedly, the phenomenon of "under-crowding" is due not merely to inherent selfishness, or personal taste, but to the fact that an adequate number of new dwellings for single persons has not been built (emphasis of public housing has always tended to be on the working-class family), and to a rent restriction policy that does not encourage the conversion of old houses into small modern dwellings. The only landlords that can now afford the luxury of improving their property are those who can sell flats (e.g., in Scotland), those whose property is uncontrolled but in demand (some old property in good districts), builders who have bought old houses cheaply, and mortmain owners—colleges and charitable institutions. Such landlords can divide up their property without much fear of bankruptcy.

INCOME TAX AND RATES

But specific housing legislation is not the only statutory and fiscal cause of the anomalies of our chaotic housing situation. At least three other major forces affect the maldistribution of occupants among dwellings, with the consequent exaggerated "need" for new building. These three forces are the income tax regulations, the rating system, and the provision of credit.

Income tax and other taxes (such as death duties) fall heavily on property owners. Alone this heavy direct taxation might only have the effect of more fairly distributing wealth, but, in conjunction with rent restriction, severe handicaps are imposed on landlords who wish to improve their property or maintain it in good condition. The system of allowances for repairs is extremely complex and, in many cases, results in inadequate repairs being done.

Rates are supposed to be based on the value of property. In fact, as anyone who studies auction sales of houses knows, the value of property is substantially affected by rating valuations. A low valuation raises the selling price, and a high one lowers it. The tail thus wags the dog. This differentiates heavily against the maintenance of old houses in central areas which might otherwise be reconstructed and modernized. Any reform of rents will be useless unless the rating system is overhauled simultaneously.

Credit facilities are heavily biased towards helping purchasers of new houses, and are difficult to obtain, especially in recent months, by those who might otherwise be content to purchase old property and renovate it or divide it into flats. Clauses in the housing acts that have been aimed at remedying this position have remained a dead letter.

MORE HOUSES FOR SINGLE PERSONS

It seems paradoxical to suggest that the section of the community which is at present best housed should now be especially catered for. But this may well be the correct conclusion to draw from the Census results. The single- and two-person families are under-occupying considerable areas of housing space because they can find no suitable smaller dwellings. It may well be much cheaper to find them smaller dwellings, and to infiltrate the larger families into the space that the smaller ones vacate, than to provide new dwellings directly for the larger families (three or more persons). But, of course, this policy would not succeed unless financial measures of all kinds were made more favourable towards the double transfers required.

There is increasing public awareness that our housing policy needs revising, but the complexity of the issues raised suggests that no simple solution can be found. The time has certainly come for a full investigation of the basis of housing policy, but the terms of reference of any commission or committee set up to look into the question should be widely framed, and the possibility of it recommending radical departures in fiscal as well as building policy should be fully considered.



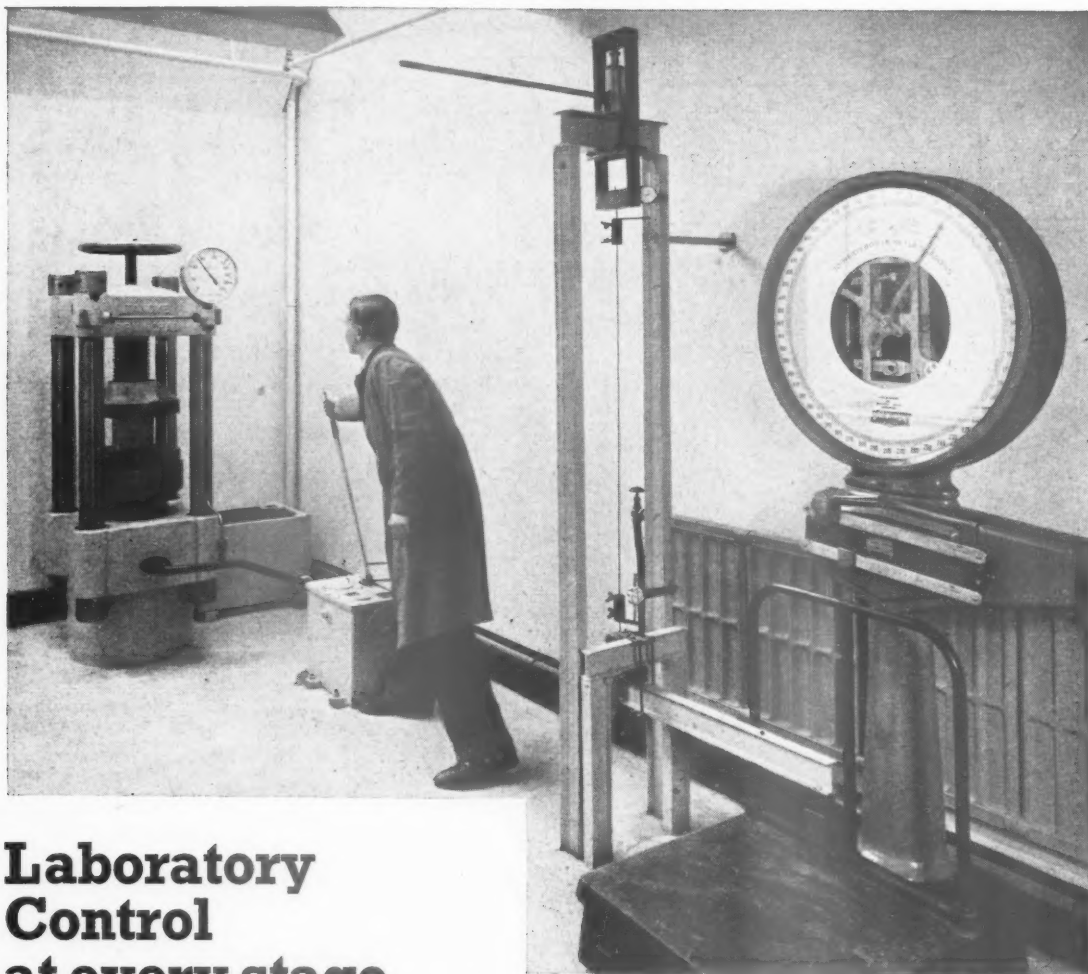
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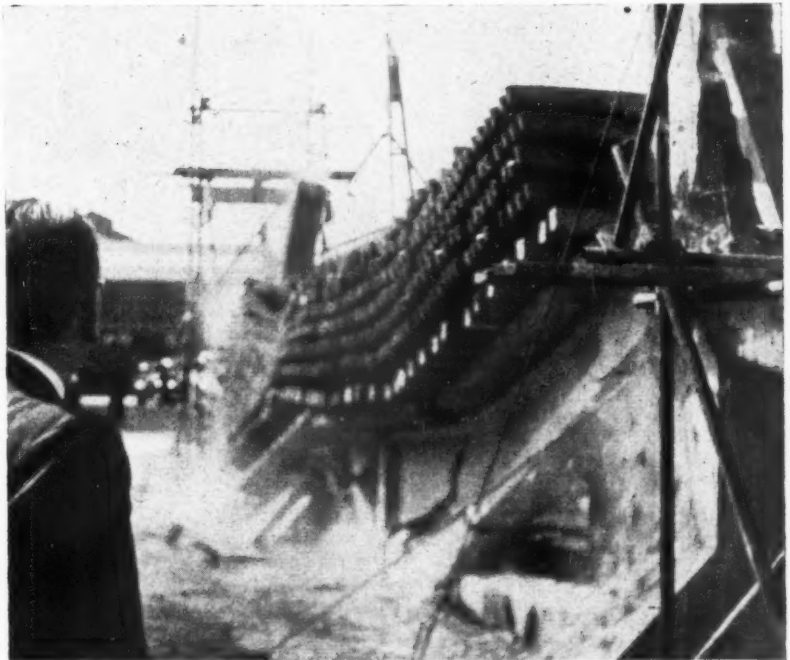
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In the JOURNAL for July 17, we described tests carried out by BRS on the prestressed footbridge at the South Bank. Another prestressed concrete structure has now been tested to destruction. We describe below tests carried out on a prototype frame designed for the new medical school of Liverpool University.

TEST ON PRESTRESSED CONCRETE PROTOTYPE FRAME

Extensive tests on a frame consisting of reinforced concrete columns and a prestressed concrete beam took place a few weeks ago and were attended by observers from MOW, CCA and various municipal authorities. The beam was a prototype of about 100 prestressed members which will be incorporated into the framework of the new medical school for Liverpool University. Each beam, 37 ft. long, 15 in. deep at the ends and 36 in. deep at the centre, will be cast *in situ* and post-tensioned and will have mild steel reinforcement incorporated in the ends for connection to and continuity with the columns in order to obtain a rigid monolithic structure.

It was to establish the effectiveness of this composite structure that the test was undertaken, every effort being made to create the conditions which would exist in the actual frame. In the test, the beam was cast *in situ*, post-tensioned by the Freyssinet method and rigidly connected to the columns. These had been designed to give the correct value of theoretical restraint and to achieve this the columns above the beam were guyed to heavy mass-concrete blocks. An instrument loaned by Manchester University enabled



The prestressed prototype beam collapsing under a load of 60 ton, i.e., dead weight plus $3\frac{1}{4}$ times the live load.

the guy rods to be maintained at the correct tension throughout the tests.

The site conditions were simulated as far as possible during the construction of the framework, which was erected under the supervision of the foreman, who will be in charge of the actual work at Liverpool. The design loads are 60 lb./sq. ft. dead weight (floors and finishes) and 80 lb./sq. ft. live, which, with columns at 10-ft. centres in the longitudinal direction, will result in a uniformly distributed load of 23.6 tons per beam. Copper ingots each weighing approximately

250 lb. were used for loading the frame, and it was not until the load applied equalled the dead weight plus twice the live load that the first hair crack appeared.

The beam was not destroyed until 60 tons was applied, which represents the dead weight plus $3\frac{1}{4}$ times the live load. This was considered a satisfactory result. (Architects for the new medical school are Messrs. Weightman & Bullen. The framework of the building is being designed, and will be constructed, by the Trussed Concrete Steel Co. Ltd., who built and tested the prototype.)

INFORMATION CENTRE

A digest of current information prepared by independent specialists; printed so that readers may cut out items for filing and paste them up in classified order.

7.35 practice SITE RECORDS

Site Records for Builders. 1. Programming and Progressing for Traditional House Building. MOW. (HMSO. 1952. 3s.)

Five alternative methods of programming and progressing. Also methods where heavy mechanical plant is to be used. Operations and units of work suitable for programming and costing for housing. Of importance to architects when agreeing site programme schedules, as well as very helpful to contractors. Useful example charts.

13.92 materials: timber DRY ROT

A New Treatment for Walls Infected with Dry Rot. G. W. Mack and J. G. Savory. (The Builder. June 27, 1952.)

Important new treatment for walls where dry rot has penetrated deeply.

The serious increase in the number of cases of dry rot makes any advances in method of treatment a matter of importance. BRS and the Forest Products Research Laboratories have jointly studied a method of treating walls to kill deep-seated infection. As an addition to, or possibly as an alternative to, the normal method they have been trying various paint or plaster treatments. One, using a zinc oxychloride mixture, appears very promising. The paper describes the experiments and explains the new method in sufficient detail for complete understanding. An important contribution to the subject.

13.93 materials: timber TIMBER NAMING

1952 Addendum to the British Sawmilling Classification of Timbers. (The National Sawmilling Association. 1952. 2s. 6d.)

Original publication in 1951 covered 2,600 commercial names and a complete botanical index. This addendum adds 122 timbers with 210 trade names.

15.104 materials: applied finishes and treatments PORCELAIN ENAMEL

Porcelain Enamel. Time-saver Standards Nos. 2-5. (Architectural Record [USA] July, 1952.)

Four sheets of information on porcelain enamel. American data, may not apply elsewhere but certain general information of interest.

15.105 materials: applied finishes and treatments RENDERING

Rendering Outside Walls. MOW Advisory Leaflet No. 27. (HMSO, 1952. 3d.)

Brief leaflet giving all essential information. Emphasis is laid on the value of pebble dash and roughcast as the best finishes for very exposed conditions and on the need to avoid

1 Sociology. 2 Planning: General. 3 Planning: Regional and National. 4 Planning: Urban and Rural. 5 Planning: Public Utilities. 6 Planning: Social and Recreational. 7 Practice. 8 Surveying. Specification. 9 Design: General. 10 Design: Building Types. 11 Materials: General. 12 Materials: Metal. 13 Materials: Timber. 14 Materials: Concrete. 15 Materials: Applied Finishes. Treatments. 16 Materials: Miscellaneous. 17 Construction: General. 18 Construction: Theory. 19 Construction: Details. 20 Construction: Complete Structures. 21 Construction: Miscellaneous. 22 Sound Insulation-Acoustics. 23 Heating, Ventilation. 24 Lighting. 25 Water Supply, Sanitation. 26 Services Equipment: Miscellaneous. 27 Furniture, Fittings, Miscellaneous.



P

rominent on the London scene are the new Whitehall offices being constructed by Richard Costain Ltd., the first stage of which is now approaching an advanced state of completion as can be seen by the illustration adjoining. The drawing reproduced below shows how this fine Government building will look when fully completed.

Architect:

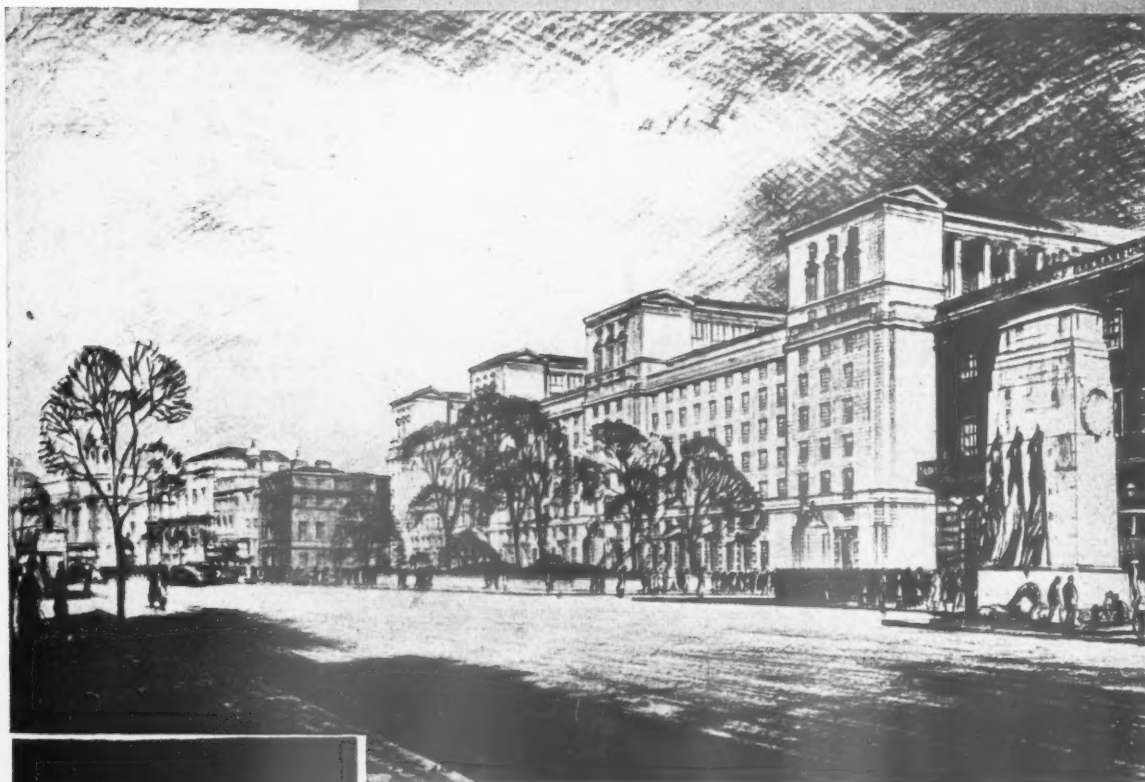
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plain cement and sand renderings. Where the back wall is dense and has poor suction the use of a spatterdash coat of cement and sand is recommended. There is nothing very new in this leaflet but if everyone followed the advice contained in it there would be far fewer failures.

16.90 materials: miscellaneous BRICKWORK

Modern Research on Load Bearing Brickwork. Norman Davey. (The Brick Bulletin, Vol. 2, No. 3, 1952.)

General article on research carried out at BRS. To be continued in further issues.

The value of calculating brickwork where high strength is required is now well recognised and approval was given in the model byelaws issued by MOH in 1937. More recently there has been a BS C of P dealing with structural recommendations for load-bearing walls (CP111: 1948). This article, the first of a series, describes the research work on which the code of practice is largely based. It deals with the relation of strength of bricks and strength of mortar to strength of brickwork, the effect of eccentric loading, the effect of workmanship and the subject of piers and walls acting in combination.

18.103 construction: theory

TIMBER TRUSSES

TDA Standard Industrial Truss Type A, and Knee-braced Truss Type C. (TDA Design Sheets 13, 14, 21, 22 & 23). (Timber Development Association, Ltd.)

Continuation of series of designs for timber roof trusses suitable for industrial and commercial buildings.

Sheets 13 and 14 show "Type A" trusses for clear spans of 47 ft. 6 in. and 57 ft. 6 in. respectively, where no suspended ceiling is required. Design sheets for "Type B" trusses, for use with suspended ceilings, will be issued later. The pitch of the trusses is 22½°.

Sheets 21, 22 and 23 show knee-braced trusses and columns for single-storey buildings with sheeted roofs and either timber cladding or sheeted walls.

In each case the dead weight of the roof is taken as 3.15 lb./sq. ft. on the slope, snow load at 10 lb./sq. ft. on plan and unit wind pressure at 12 lb./sq. ft. The overall dimensions of height, span and spacing should not be exceeded. A table gives variations in purlin size and spacing, for use when the spacing of the frames is reduced.

A series of construction notes is given to indicate the type of timber which may be used in order to comply with the 800-lb. grade in BS 940, Parts 1 and 2, and to give guidance on the manufacture and assembly of the trusses.

18.104 construction: theory CASED STEELWORK

The Encasement of Rolled Steel Joists in Concrete. G. A. Jones. (Magazine of Concrete Research. Cement & Concrete Association. No. 8.)

Experiments with simple beams, consisting of steel joists encased or partially encased in varying quantities of concrete.

The Code of Practice allows only for the stiffening effect of concrete on the compression flange of an R.S.J. However, these tests show that the concrete undoubtedly increases the effective moment of inertia of the section and the author concludes that the behaviour of this type of beam under load may be predicted accurately by the equivalent

moment of inertia elastic theory (i.e., as applied to reinforced concrete).

Bond stresses were found to be low compared with those met in ordinary reinforced concrete and are unlikely to govern the strength of the beam; hence, no mechanical aids to bond are required, provided the proportion of concrete is small.

The casing effectively reduces stresses and deflections, the amount depending on the amount and position of the concrete, as long as the bond remains.

Under existing allowable stresses it is not possible to calculate by elastic methods a greater working load for the encased section, since the concrete stresses are too high. It is suggested that this might be overcome by allowing higher concrete stresses or by partially loading the joist before it is encased.

18.105 construction: theory STEELWORK DESIGN

Examples of Structural Steel Design. V. H. Lawton. (British Construction Steelwork Association Publication No. 4.)

Continuation of the design of typical factory buildings considered in Publications 1 and 2 (1950), covering design of stanchion bases.

Publications 1 and 2 dealt with roof trusses and columns for 50-ft. span bays of a single-storey factory designed to the recommendations of BS449. Publication 4 submits suggestions for the practical design of the steel bases, considering two stanchions with single R.S.J.'s and one stanchion with two channels battened together. An example of the design of a single angle rafter for a roof truss is also included.

As in previous publications the subject is presented in a clear and easily readable manner and all the steps in the design are ade-

quately described. The arguments in favour of the chosen design method for holding down bolts is reasonable where the bearing pressures on the concrete base are low, but for higher pressures it would be more correct to use the concrete column analogy with the holding down bolt designed as the tensile reinforcement of a concrete section of the size of the steel base plate subjected to bending and direct stresses.

22.56 sound insulation and acoustics SOUND RE-INFORCEMENT

Sound Re-inforcement in St. Paul's Cathedral. P. H. Parkin and J. H. Taylor. (Wireless World. Feb. 1952.)

This article describes the solution of a particularly intractable acoustic problem; namely, the satisfactory amplification of speech in very reverberant and echoing buildings. The solution relies on the use of the Haas effect to improve intelligibility by the introduction of time delays in the electrical system and the provision of special directional loudspeakers. The latter consist of long groups of loudspeaker units designed to form a "line source" of sound.

22.57 sound insulation and acoustics GEOMETRICAL ACOUSTICS

Bemerkungen zur Geometrischen Raumakustik. Von E. Meyer and W. Kuhl. (Acustica. [Switzerland] Vol. 2, No. 2.)

This article describes recent work in Germany where considerable improvement in speech intelligibility in auditoria has been achieved by the use of special "sound mirrors" disposed on the side walls of the stage area. These mirrors, which consist of flat



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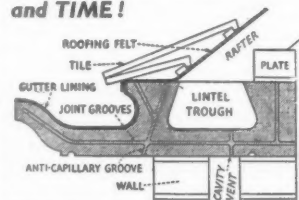
On the illustration below "a" shows the trough in which lintels can be cast in situ if required, "b"

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ELECTRIC HEATING IN PARISH CHURCH

The thirteenth-century parish church of Tilsforth, near Leighton Buzzard, right, has recently been equipped with electric heating apparatus. During services a temperature of 55-60° F. is needed for the congregation in the main nave, in addition to certain localities in the chancel and at the altar. The installation was carried out by the Eastern Electricity Board in collaboration with the General Electric Co. Ltd. It consists of three GEC 10-kW. unit heaters, with 128 ft. of single-way tubes, equipped with low-speed fans. The units were placed under gratings, right and bottom right. The ducts were lined with "Bitulac" bonded fibre-glass, supplied in semi-rigid slabs measuring 2 ft. by 3 ft. by 2 in., and covered with 1-in. mesh galvanized wire-netting. This provides insulation against the cold concrete and helps to suppress the slight hum of the fans. Two heaters were placed at the east and west ends of the aisle. The third is near the south door. Their outlets are designed to distribute heat over a wide area and the convectional air streams circulate in an easterly direction to warm the chancel. In addition, 15 tubular heaters of varying lengths have been used in the church. When completely chilled the church takes about 2 hours to warm up. During a service an average of 60 units of electricity are consumed.



areas of plywood each about 20 sq. ft. in area, were carefully positioned so as to direct sound on to the rear seats of the auditorium. An acoustically transparent screen is arranged to cover the mirrors "to the satisfaction of the architect."

24.156 lighting:
DAIRY LIGHTING

The Loning Herds. (Lighting Service. No. 1, 1952, Vol. 3.)

Artificial lighting for the milk industry. Recommendations based on a draft BS C of P now in preparation. High illumination levels (6-10 L/sq. ft.) at udder level and light-coloured surroundings to reduce shadows and promote cleanliness. Light floors important to reflect light on to the udders. Fittings and layouts suggested for single- and double-range cowhouses and milking parlours. Fluorescent lighting is recommended for good distribution and to eliminate dark shadows. Vapour-proof fittings in moist or ammonia-laden atmospheres. Lighting for bottle washing, inspection, filling and capping. Illustrated with photographs and plans. Recommendations for fittings are arbitrary but generally sound and economical.

25.84 water supply and sanitation
MANHOLE COVERS

Cast Manhole Covers, Road Gully Gratings and Frames. BS 497: 1952. (British Standards Institution. 5s.)

Revised edition in which care is taken to specify size and performance, with less suggestion for standardisation of design than in previous BS. Criterion for strength is the strength test, not the weight of the casting.

Readers requiring up-to-date information on building products and services may complete and post this form to the Architects Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1

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THE INDUSTRY

From the Industry this week Brian Grant reports on a new type of air filter, the use of rigid P.V.C. for lighting fittings and a new method of making provision for foundation bolts for machinery.

AIR FILTERS

Easy maintenance is, perhaps, the main feature of the new E.V. type multi-brush air filter, manufactured by Heather Filters Ltd. This, as can be seen from the illustration, uses as the filtering element a series of brushes, which present a screen of finely graded intermingling hairs to trap dust in its passage through the filter.

The material of the filter brushes has been chosen to ensure maximum durability and efficiency, and to withstand the varying humidity and other conditions of the dust-laden air. If the dust is impregnated with oil it will in no way impair the efficiency of the filter. Furthermore, the initial filtering efficiency of the brushes is still retained after cleaning, and this, after a suitable service period, is carried out simply with a vacuum cleaner when the dusts are dry, or when the dust is oily by washing the brushes in warm, soapy water, or one of the many detergents.

As will be seen from the illustration, the brushes can be quickly removed for cleaning. The procedure is to remove the panel (A) from frame (B), in which it is retained against felt packing to ensure air-tightness, by the catches (C). These catches are released, and the panel is removed from the frames by means of handles (D) and the brushes exposed by withdrawing slide (E). The brushes (F) can then be removed from the compartment in which they are housed.

Each filter unit is designed for low resistance to the flow of air, and the recommended duty is 1,000 c.f.m. at 0.25 in. w.g., although, where necessary, higher or lower duties may be handled with a corresponding increase or decrease in the resistance to air flow. Frames may be designed and manufactured to accommodate any number of filter units, for erection and assembly on the site. These may be incorporated in a system designed to present a flat face to the flow of air or, where space is limited, for arrangement in cabinet or "V" formation, thereby providing a larger filtering area and lower air velocity through the filter.

Although designed for dry operation, with the main emphasis on efficiency plus simplicity of maintenance, and therefore not needing special oil or other viscous fluid, all of these filters can be impregnated with oil, without loss of efficiency, for use where conditions demand a "wet" or viscous type filter. (Heather Filters Ltd., 28, St. James's Place, London, S.W.1.)

NEW MATERIAL FOR LIGHTING

Several manufacturers in Great Britain are now using white rigid polyvinyl chloride (P.V.C.) sheet for interior lighting fittings of various designs. Used for this purpose, the material has many advantages, including high reflectivity, good mechanical strength and excellent resistance to chemical attack, making it particularly suitable for use in factories with corrosive atmospheres.

Polyvinyl chloride has hitherto been more widely known in its flexible, plasticized forms, one of its many important uses being for the insulation of cable. The more recently developed rigid, unplasticized, form is available in sheets of various thicknesses and colour, including white. Rigid P.V.C. has excellent chemical resistance and high impact strength; a thickness of only $\frac{1}{16}$ in. has been found suitable for the manufacture of robust lighting fittings.

Although opaque and, therefore, lacking the upward light component of opal "Perspex" reflectors, the optical properties of white rigid P.V.C. fittings compare favourably with those of stove-enamelled and vitreous-enamelled steel. They have a reflection factor of approximately 85 per cent., with very little variation between batches. As there is no risk of chipping, with consequent corrosion of the base metal, and the material does not deteriorate with age, the fittings maintain their optical performance for a long time.

Rigid P.V.C. sheet is worked in a similar way to "Perspex." It can be cut with normal power-driven woodworking tools and machined on standard lathes. Special cements are available for jointing, and the material can be welded. Being thermoplastic it softens on being raised to a sufficiently high temperature and can then be shaped by pressing or blowing. Many of the fittings made so far are similar in design to those made from "Perspex," although certain modifications have been necessary to allow for the greater flexibility of P.V.C.

The material's thermoplasticity imposes a limit on the working temperature of the fittings. They must be so designed that no part operates at a temperature higher than 55°C. This means that the material will be used mainly for fittings for fluorescent lamps, where this temperature limitation is not important. (Imperial Chemical Industries Ltd., Imperial House, Millbank, London, S.W.1.)

FIXING FOUNDATION BOLTS

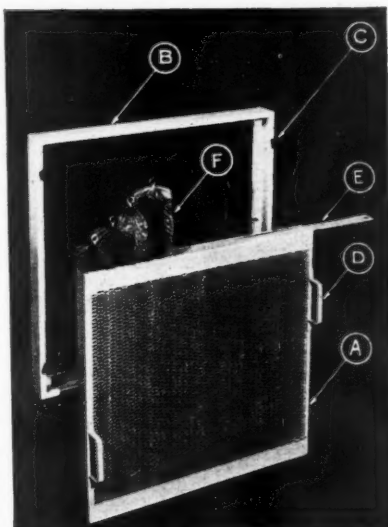
When factory floors and machinery foundations are being poured it is the usual practice to make provision for the foundation bolts of future machinery by casting into the concrete rectangular wooden boxes which can be stripped after the concrete has set, allowing space for foundation bolts, which are grouted in when the machinery is installed. This is a comparatively simple process, but the timber boxes are nearly always split and destroyed when they are lifted out with crowbars, and timber is now so short that an alternative method should be well worth consideration. The illustration on the right shows the "Leeson" cast concrete box, which is available in units of any length and is left in position in the concrete. The grooves outside the box form a key with the site concrete so that there is little likelihood of the bolt and box pulling out, while the final grout is also given a good key since a series of spiral grooves run round the inside of the bolt box. (Leeson Ltd., 2 Park Row, Leeds, 1.)

BRIAN GRANT

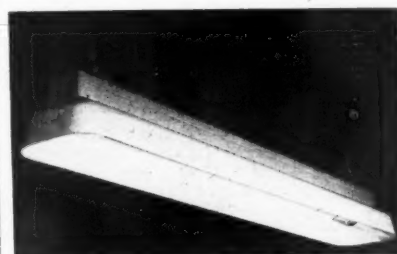
Announcements

The work hitherto carried on at the London office of The Hopton-Wood Stone Firms Ltd., at 25, Whitehall, S.W.1, has now been transferred to the head office at Bank House, The Bridge, Matlock, Derbyshire. (Tel.: Matlock 741.)

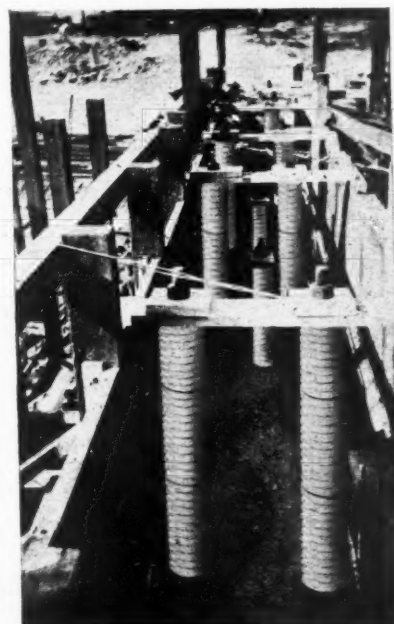
Mr. Alwyne Tutton, A.R.I.B.A., of Gainsford House, Cowden, Kent, has moved to Melbury Down House, Shaftesbury, Dorset. (Tel.: Shaftesbury 2518.)



The new E.V. Type multi-brush air filter, showing the filter brushes. (Heather Filters Ltd.)



Fluorescent light fitting made of rigid P.V.C., with high resistance to chemical attack. (I.C.I.)



"Leeson" precast bolt box system for providing fixing bolts for machinery in factory floors.

Mr. John D. Blacklock, A.R.I.B.A., previously chief assistant architect for the county borough of Tynemouth, has taken up the position of borough architect to Bridgewater Borough Council. Mr. Edward C. Dowty, previously junior architectural assistant at Tynemouth, is now architectural assistant on the architectural staff of the University College of North Staffordshire.

Mr. James H. Weatherall, quantity surveyor, of 10, Yukon Road, Balham, S.W.12, has opened further offices at 116, Horseferry Road, Westminster, London, S.W.1, where he will be pleased to receive the usual trade publications and catalogues.

Mr. A. G. H. Pritchett has been appointed general sales manager of Chamberlain Industries Ltd., Leyton, E.10. He has, as his deputy, Mr. D. S. Jordan.

Messrs. Locke & Soares Ltd., electrical engineers and contractors, of 6, New Cavendish Street, W.1, announce that the controlling interest in the company has been acquired by Y. J. Lovell & Son Ltd., building contractors, of Gerrards Cross, who have branches in London, Bucks and Sussex. The technical and advisory personnel has been retained under Mr. F. B. Walbery, who has been a director and general manager since 1914.

Buildings Illustrated

Coal Utilisation Council Showrooms, 341, Bath Street, Glasgow, C.2, for the Scottish Committee, Coal Utilisation Council (Page 277). Architect: A. Buchanan Campbell, D.A.(GLAS.), A.R.I.B.A. General contractor: Archibald Hamilton (Shopfitters) Ltd. Sub-contractors: structural steel, Redpath Brown & Co. Ltd.; tiles Cauldon Tile Co. Ltd.; glass, James McPhee & Co.; gas fixtures and plumbing, central heating, James Miller & Co. Ltd.; electric wiring, James Scott & Co.; electric

light fixtures, Troughton & Young Ltd., The Merchant Adventurers of London Ltd.; door furniture, shopfittings, metalwork, joinery, Archibald Hamilton (Shopfitters) Ltd.; plaster, Matthew Jackson & Co.; wallpapers, Arthur Sanderson & Co. (Scotland) Ltd.; clocks, Smiths (Electric) Ltd.; signs, Archibald Hamilton (Shopfitters) Ltd.; painter, Guthrie & Wells Ltd.

Shoe Shop in Commercial Road, Portsmouth, Hants., for the Dolcis Shoe Co. (Pages 282-283).

Architect: Ellis E. Somake, F.R.I.B.A. (Staff architect to the Dolcis Shoe Co.); Assistant architects: Geoffrey Uffindell, A.R.I.B.A., and Donald Goldie; Consulting engineers, Malcolm Glover & Partners; Quantity surveyor: Robert G. Barclay, A.R.I.C.S.; General contractors: Jno. Croad, Ltd.; Sub-contractors: shopfitting and interiors, electrical installation (shopfitting), Courtney Pope, Ltd.; electrical installation (general), G. Hamilton Cole, Ltd.; metal windows, Mellows & Co.; heating and ventilation, G. N. Haden & Sons; goods lift, Waygood Otis, Ltd.; sanitary ware, William Dibben & Sons; ironmongery, Comyn Ching, Ltd.; paints, Thos. Parsons & Sons, Ltd.; false ceilings, Tomei & Sons, Ltd.; pneumatic cash tubes, Lamson Engineering Co., Ltd.; steel reinforcement, Constel Structures, Ltd.; terrazzo pavings, Marriot & Price, Ltd.; canopy glazing, J. A. King & Co., Ltd.; blinds, Adam, Ltd.; asphalt roofing and floors, Rock Asphalt Co., Ltd.; quartzite tiling, John Stubbs, Ltd.; marble, J. Whitehead & Sons, Ltd.; metal escape staircase, Haywoods, Ltd.; carpets and drapes, F. G. Minter (Decorations), Ltd.; chairs and footstools, Geo. Hammer & Co., Ltd.

Sir William Nottidge County Secondary School, Church Street, Whitstable, Kent (Pages 284-292), for the Kent County Council. Architects: F. R. S. Yorke, E.

Rosenberg and C. S. Mardall, F.F./A.R.I.B.A., in collaboration with S. H. Loweth, F.S.A., F.R.I.B.A., County Architect; Consulting structural engineers: Clarke, Nicholls & Marcel; Consultants: Services, Stinton Jones & Partners; assembly hall acoustics, Hope Bagenal, D.C.M., F.R.I.B.A.; Quantity surveyors: Davis, Belfield & Everest; General contractors: Rice & Son, Ltd.; Sub-contractors: Heating, G. N. Haden & Sons, Ltd.; electrical, Pinching & Walton, Ltd.; structural steel and cladding, Hills (West Bromwich), Ltd.; metal windows, Williams & Williams, Ltd.; flue and tankroom, Chimneys, Ltd.; roofing, William Briggs & Sons, Ltd.; metal work, Clark Hunt & Co., Ltd.; floor and duct units, Connallcrete, Ltd.; shower partitions, Compactom, Ltd.; door, Gliksten Doors, Ltd.; roller shutters, Haskins; concrete roof lights, J. A. King & Co., Ltd.; sprayed ceilings, Meta Mica, Ltd.; concrete tile floors, Moordon Tile Products, Ltd.; terrazzo, Mosaic & Terrazzo Precast Co. (Staines), Ltd.; dome lights, Pilkington Bros., Ltd.; fibrous plaster, C. E. Pinn & Co.; ironmongery, Renniss, Ltd.; metal door frames, K. J. & A. Sommerfeld, Ltd.; suspended ceilings, Sundeala Board Co., Ltd.; sanitary fittings, Stitson's Sanitary Fittings, Ltd.; steel reinforcement, Twiststeel Reinforcement, Ltd.; wood floors, Hollis Bros., Ltd.; Carda windows, Holcon, Ltd.; Acetile flooring, Neuchatel Asphalt Co., Ltd.; joinery fittings, Rice & Son, Ltd.; tar paving, W. H. Bensted & Son, Ltd.; proscenium curtain tracks, Hunter & Hyland, Ltd.; curtains, Mason's (Canterbury), Ltd.; wallpaper, John Line & Sons, Ltd.

Correction

On August 21 we should have announced that Bovis, Ltd., were general contractors for the Marks and Spencer building in Exeter.

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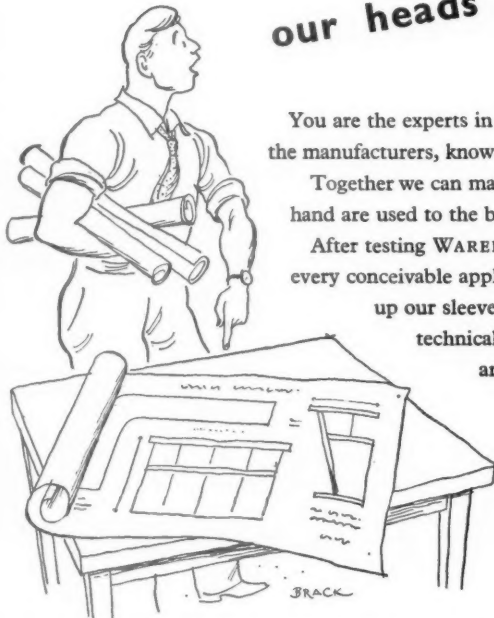
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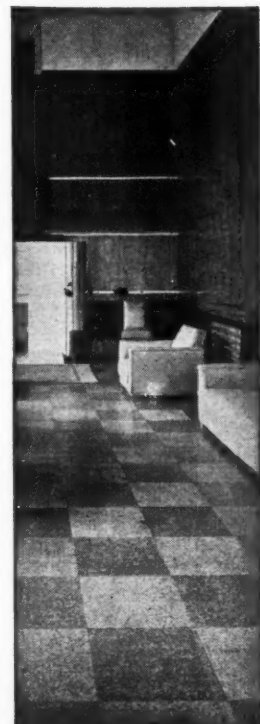
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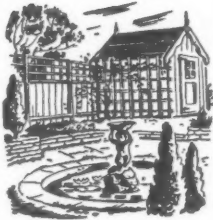
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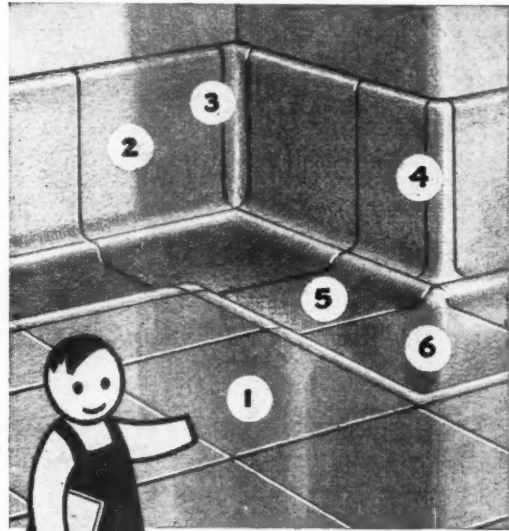
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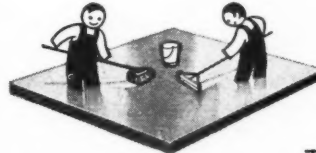
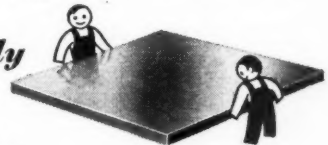
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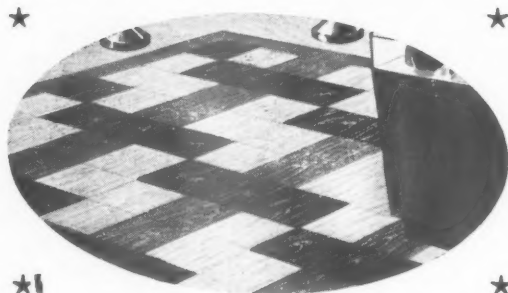
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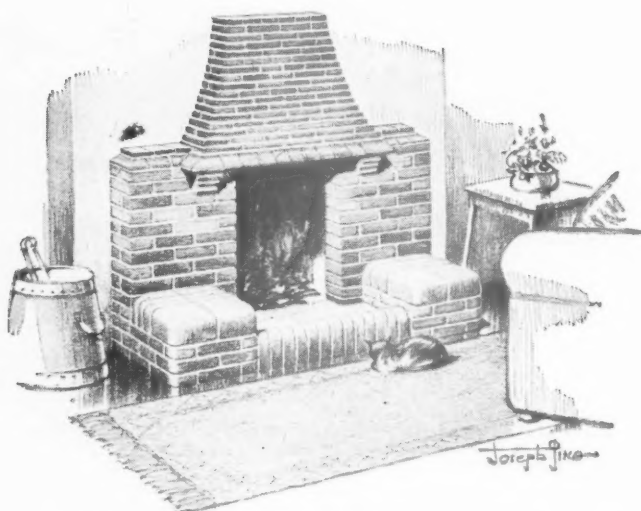
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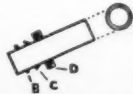
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M.G.T. FITTING		COMPRESSION FITTING 
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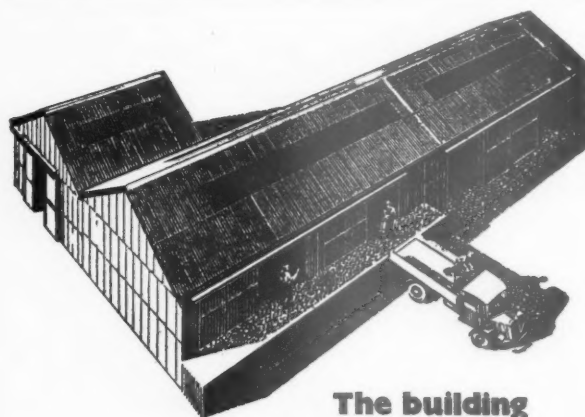
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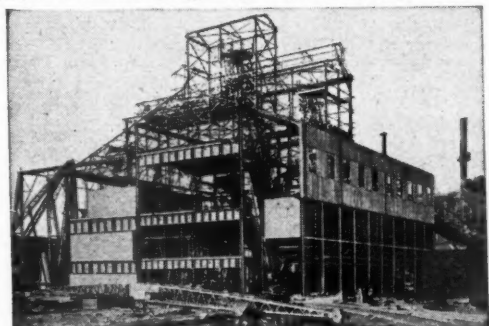
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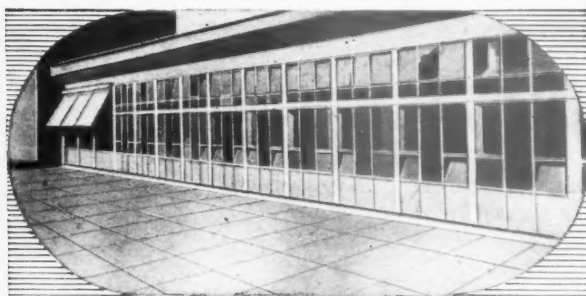
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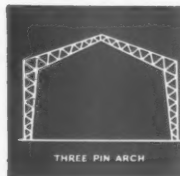


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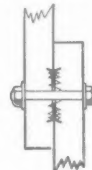
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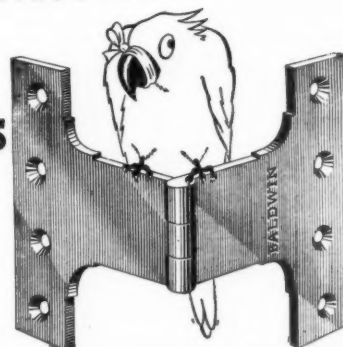
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Day and Evening Courses for the following Examinations:—
University of London Degree of B.Sc. (Estate Management) commence in October. (Day courses only. Completed application forms must be submitted by May 31st.)
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Postal Courses
B.Sc. (Estate Management), commence in January and July.
The Royal Institution of Chartered Surveyors,
Institution of Municipal Engineers,
Royal Sanitary Institute, commence in April and October.

Town Planning Institute, commence in May and October.
Applicants for Postal Courses should submit their forms two complete calendar months before the date on which the course begins.

Applications to: The Secretary. **Telephone:** Western 1546

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PART-TIME DAY COURSES.—Enrolment 1st to 5th September, 1952; commence 8th September, 1952.

EVENING COURSES.—Enrolment 15th to 19th September, 1952; commence 22nd September, 1952.

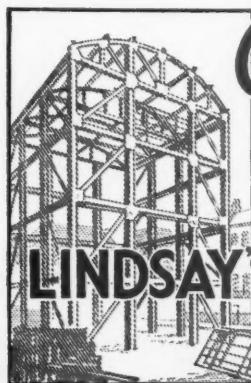
National Certificate Courses (day or evening) in Building, Surveying and Civil and Structural Engineering.

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Further particulars may be obtained from the Secretary at the School. (473.)

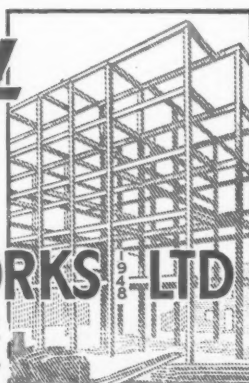


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CLASSIFIED ADVERTISEMENTS

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.

LIVERPOOL REGIONAL HOSPITAL BOARD.
ERECTION OF NEW MENTAL DEFICIENCY HOSPITAL.

Applications are invited from suitably qualified persons for the following appointments to assist in the design and supervise the erection of a new hospital near Southport, to accommodate 1,000 mental deficiency patients. The persons appointed will be employed solely on the new scheme and will be responsible to the Regional Architect (T. N. Mitchell, B.Arch., A.R.I.B.A.):—

(a) SENIOR ASSISTANT ARCHITECT (£900 × 225-£1,000 per annum). To supervise the preparation of drawings and the carrying out of the scheme. Applicants must be Associates of the R.I.B.A., and preferably with a University qualification, and must have had considerable experience in the planning and execution of large projects.

(b) ASSISTANT ARCHITECT (£530 × £15 (2) × £20-£370 per annum). Applicants must have passed the Intermediate Examination of the R.I.B.A. and have a good general experience in design and construction.

Some experience in Hospital work for both appointments would be an advantage, but is not essential.

The appointments will be of limited duration, extending to probably 4-6 years, and will be terminable at any time within the period stated by three calendar months' notice on either side in the case of appointment (a) and one calendar month in the case of appointment (b).

Applications, stating age, technical experience and qualifications, present and previous appointments with present salary, and clearly indicating the post in respect of which the application is submitted, together with the names and addresses of three referees, two of which must be technical, should be forwarded to reach the undersigned at 19, James Street, Liverpool, 2, not later than 19th September, 1952.

VINCENT COLLINGS.

Secretary to the Board.
7253

NEWMARKET RURAL DISTRICT COUNCIL.
APPOINTMENT OF ARCHITECT.

Applications from suitably qualified persons are invited for the above appointment.

The salary, which, with the conditions of service, is in accordance with the recommendations of the Joint Negotiating Committee for Chief Officers and will commence within the range £800-£1,100 per annum, depending on qualifications and experience.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to one month's notice on either side. The person appointed will be requested to carry out all architectural duties in connection with the Council's housing schemes, and all other similar duties that may be assigned to him by the Council. He will also be required to provide and maintain a car for the purposes of his duties, for which a travelling allowance will be paid in accordance with the National Scale.

Applications, stating age, qualifications and experience, together with names of three referees, must be submitted to the undersigned not later than 15th September, 1952.

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Council Offices, Park Lane, Newmarket. 7298

IRAQ DEVELOPMENT BOARD (Chairman, Prime Minister of Iraq) require TWO SENIOR ARCHITECTS AND ONE QUANTITY SURVEYOR. Salaries for all these posts will be 150-250 Iraq Dinars per month (1 Iraq Dinar=£1 sterling).

Duties: design and construction of state buildings, summer resorts, hospitals, schools, etc. Candidates for the posts of Senior Architect should possess a degree in architecture or A.R.I.B.A. or equivalent, with seven years' appropriate experience, and for the post of Quantity Surveyor, Associate Members of the Institute of Chartered Surveyors or equivalent with appropriate experience. Appointments are for two years, renewable. Free passages for appointees and dependants; home and local leave; free medical attention; high cost of living allowance.

Write to A.S.12 (Iraq Development Board), Almack House, King Street, St. James's Square, S.W.1, for application forms and further information, stating which post. 7331

COUNCIL OF THE COUNTY OF ABERDEEN.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the post of ARCHITECTURAL ASSISTANT, from persons holding the qualification A.R.I.B.A., and who have had considerable architectural experience, preferably with a local authority. The salary scale for the appointment is £675 to £740 per annum.

The appointment is subject to the Local Government Superannuation (Scotland) Act, 1937, and the successful candidate will require to pass a medical examination.

Conditions of appointment and forms of application are obtainable from the undersigned, and should be returned not later than 19th September, 1952.

Canvassing of members of the Council, directly or indirectly, in connection with this appointment shall disqualify the candidate.

CHAS. HORNAL,

County Clerk.

22, Union Terrace, Aberdeen.

7330

FIFE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for appointment as ARCHITECTURAL ASSISTANT, at the County Offices, Cupar. Candidates should be qualified Architects holding A.R.I.B.A. and Registered Architects. Previous local authority experience an advantage, also a knowledge of work on new schools. Salary grade £530, rising by six annual increments of £20 to a maximum of £650 per annum. Consideration may be given to meeting the housing needs of the successful candidate, but no guarantee is given that housing accommodation will be immediately available. The successful candidate, if under 45 years of age, will be considered for admission to the Council's superannuation scheme, subject to a satisfactory medical report being received. Applications, stating age, experience, qualifications, etc., and accompanied by copies of recent testimonials, to be lodged with the undersigned not later than 15th September, 1952.

J. M. MITCHELL,

County Clerk.

County Buildings, Cupar-Fife.

26th August, 1952.

7328

LONDON COUNTY COUNCIL.
Vacancies for ARCHITECTS (A.R.I.B.A.) for Housing Division. Starting salaries up to £696. Application forms from Architect, quote (EK/H/2), County Hall, S.E.1. (936) 7325

HARROW URBAN DISTRICT COUNCIL.
APPOINTMENT OF TEMPORARY CLERK OF WORKS.

Applications are invited from fully experienced Clerks of Works for one temporary appointment to supervise the erection of garages and workshops, in re-inforced concrete, Barrel Vault construction. The salary will be at the rate of £12 per week and it is anticipated that, subject to satisfactory service, the appointment will be for a period of approximately 12 months.

The Council is unable to assist in obtaining housing accommodation. Forms of application may be obtained from the undersigned, to whom they should be returned not later than Monday, 15th September, 1952.

D. H. PRITCHARD,

Deputy Clerk of the Council.

Council Offices, Harrow Weald Lodge, Harrow. 7322

COUNTY OF ESSEX.
ILFORD COMMITTEE FOR EDUCATION.

The Essex County Council invite applications for an ASSISTANT ARCHITECT in the office of the Borough Engineer of Ilford.

Applicants must be Members of the Royal Institute of British Architects and have had considerable experience in the planning, designing, construction and supervision of school buildings, and have had administrative experience.

The scale of salary will be in accordance with the National Joint Council, A.P.T. Division, Grade VII, £710 × £25 to £785, plus the appropriate London area allowance. There will also be paid such travelling and subsistence allowances as may from time to time be determined by the Council.

Applications should be made on a form to be obtained from, and returned to, the Borough Education Officer, Town Hall, Ilford, together with copies of not more than three recent testimonials, within 14 days of the appearance of this advertisement. 7321

COUNTY BOROUGH OF WEST HAM.

Applications are invited for appointment of DEPUTY BOROUGH ARCHITECT AND PLANNING OFFICER. Salary: £1,100 × £50 × £100 × £100-£1,350 per annum inclusive.

Appointment subject to three months' notice in writing on either side, to the Local Government Superannuation Acts, and to the Council's Conditions of Service.

Preference given to applicants with Local Government Service and those with experience in redevelopment of "blitzed" areas.

Details, together with application form, which should be returned not later than 15th September, 1952, obtainable from Borough Architect and Planning Officer, Thomas E. North, O.B.E., F.R.I.B.A., Dist.T.P., 70, West Ham Lane, Stratford, E.15.

G. E. SMITH,

Town Clerk.

West Ham Town Hall, Stratford, E.15.

7334

CITY OF CARDIFF.
CITY SURVEYOR'S DEPARTMENT.
APPOINTMENT OF BUILDING SURVEYOR AND ESTIMATOR-A.P.T. GRADE IX.

Applications are invited for the appointment of Building Surveyor and Estimator, to be responsible to the City Surveyor for the preparation of estimates and reports, and the maintenance of all types of Corporation Property, including the supervision of the Property Maintenance Depots.

Salary in accordance with A.P.T. Grade IX, commencing at £815, rising to £935 per annum.

Applicants must have extensive administrative experience in Building Surveying, Estimating and Supervision and Organisation of Maintenance of Buildings of all descriptions, including housing.

Details of Duties and General Conditions of Appointment may be obtained from the City Surveyor, City Hall, Cardiff.

Preference will be given to candidates qualified as A.R.I.C.S., and the Council will assist in finding housing accommodation for the successful applicant.

Applications, together with the names and addresses of three persons to whom reference may be made, should be delivered to the undersigned in a sealed envelope endorsed "Building Surveyor and Estimator," not later than 15th September, 1952.

S. TAPPER-JONES,

Town Clerk.

City Hall, Cardiff.

August, 1952.

7320

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:—

ONE PRINCIPAL ARCHITECTURAL ASSISTANT. Salary: £790-£910 (A.P.T. IX).

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

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

Forms of Application, 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 13th September, 1952.

VERNON LAWRENCE,

Clerk of the Council.

County Hall, Newport, Mon.

7329

THE SOUTH WALES ELECTRICITY BOARD.
Required an ASSISTANT CIVIL ENGINEER, responsible to the Board's Civil Engineer.

The successful candidate will be attached to the West Central Sub-Area of the Board ("Forestfach") and will be responsible for all Civil Engineering work in that Sub-Area, together with the Western Sub-Area.

The work will include the carrying out of contracts both by direct labour and outside contractors, preparation of Estimates and Specifications, Reports and Advice on land and property for sub-stations, offices and showrooms, and supervision of the preparation of working drawings.

Salary in accordance with A.P.T. Grade V (£629-£810), of the N.J.B. Schedule.

Applications, stating age, present position and salary, qualifications and experience, and giving three referees, to be addressed to the Secretary, to arrive by 13th September, 1952.

D. G. DODDS,

Secretary.

St. Mellons, Cardiff.

7335

LONDON COUNTY COUNCIL.—Temporary TECHNICAL ASSISTANT, to carry out ground surveys, prepare drawings, schedules and specifications for areas in parks, etc., to be reinstated under contract. Wages £6 to £10, according to qualifications and experience. Application forms from Chief Officer of Parks Dept., Spring Gardens, S.W.1. (904) 7337

PEMBROKESHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent staff of the County Architect's department:—

(a) ASSISTANT QUANTITY SURVEYOR.

Grade V. A.P. & T. Division.

(b) ASSISTANT LAND AND BUILDINGS SURVEYOR. Grade III. A.P. & T. Division.

The appointments will be subject to the National Scheme of Conditions of Service for Local Government Officers, to the Local Government Superannuation Act, 1937, and to the passing of a medical examination, and will be terminable by one month's notice on either side.

Applicants for post (a) should hold a recognised qualification and be experienced in taking off, under supervision, the measurement of all trades or works in progress, the preparation of interim certificates, and the checking of Sub-Contractors' accounts. Applicants for post (b) should possess a good working knowledge of drawing office routine, be capable of tracing working drawings, and be competent to undertake surveys and levels. A knowledge of routine and procedure in connection with Acquisition of Land, etc., will be an advantage.

Forms of application can be obtained from the County Architect, County Offices, Haverfordwest, and completed applications, together with copies of not more than two recent testimonials, should be returned to him not later than Monday, 15th September, 1952.

Canvassing, directly or indirectly, will be a disqualification.

H. LOUIS UNDERWOOD,

Clerk of the County Council.

County Offices, Haverfordwest.

29th August, 1952.

7336

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.

EAST AFRICA.—ASSISTANT ARCHITECTS required. Must be A.R.I.B.A. and single. Salary, £1,000 p.a. to £1,200 p.a., according to experience. Send full particulars and photograph to H. G. Radford, A.R.I.B.A., & Partners, 19, Derwent Avenue, Allestree, Derby, England, with stamped addressed envelope for reply. Selected applicants will be interviewed in England. 7253

ARCHITECT'S ASSISTANT required for East Dereham, Norfolk, office. Intermediate standard, able to drive car. Details, including salary required, to Box 7278.

ASSISTANT required of Intermediate R.I.B.A. standard in Eastbourne office. Must be first-class draughtsman and able to take control of small contracts. Box 7295.

ARCHITECTURAL ASSISTANT of Inter. standard wanted. Several years' office experience and neat and efficient draughtsman essential, in small office, W.C.2 district. State full particulars and salary required to Box 7281.

FAMOUS Mutual Life Assurance House needs a few men of drive and integrity to act as AGENTS. Architects and Surveyors have the right contacts, and can best serve their "Mutual" interests. Further details from Box 6894.

JUNIOR ASSISTANT required for private Architect's office. Mainly commercial and business premises practice. Good prospects. Box 7319.

ARCHITECT'S SENIOR ASSISTANT required for general practice in Dublin. Permanent and interesting position offered to suitable applicant. Reply, stating age, training, experience, and salary required, to Donald A. Tyndall, Chartered Architect, 43, Fitzwilliam Place, Dublin. 7326

SENIOR ASSISTANT urgently required for Nottingham practice; preferably School trained, but with good office experience and able to relieve the principal of some administrative work and supervision of staff. Must be a mature contemporary stylist and able to produce good presentation drawings. An interest in landscaping useful. Box 7338.

Architectural Appointments Wanted

A.R.I.B.A. (27) requires position as SENIOR ASSISTANT in central London area. 7 years' varied experience in private practice and L.A. schools, including administration and supervision of contracts. Box 539.

A.R.I.B.A., accustomed to being in charge of a drawing office, has had excellent experience in the office and on the site. Can take charge from sketch to final settlement; specifications, perspectives, layout. Can work in his own West End office if necessary. Box 7301.

DUBLIN OR DISTRICT.—A.R.I.B.A., Dip. Arch., and several years' experience of modern design and construction, including schools, would like to hear of appointment with design and executive responsibilities. Used to charge of staff. Box 546.

ASSOCIATE, R.I.B.A., 17 years' general experience, private practice and industrial, used to working on own initiative. Present salary £600. N.E. England preferred, or anywhere if accommodation available. Box 547.

ARCHITECTURAL ASSISTANT, experienced, seeks position in London. Box 7327.

REGISTERED ARCHITECT, A.R.I.B.A. (office trained) requires permanent position as SENIOR ASSISTANT in Guildford, Dorking, Horsham area. Age 28. 6 years' varied post-war experience in private practice and public utility. Married. Own car. Available November. Box 548.

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ARCHITECTURAL ASSISTANT, with 10 years' varied experience, seeks interesting position in London office. Used to taking complete responsibility, administration, office and site supervision. Box 528.

A.R.I.B.A. (28) requires responsible position. Good general experience, including private and L.A. housing. Surveys, lay-out, specifications. Prepared to take charge from sketch stage to final settlement. Box 550.

SCOTTISH ARCHITECT, A.R.I.B.A., with two years' experience in London office, requires progressive position in Edinburgh or Glasgow. Keen interest in all types of contemporary design. Box 549.

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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.

ARCHITECT'S SECRETARY AND SHORT-HAND TYPIST required, part-time (half days), in small office, W.C.2 district. Apply, state when free, salary required. Box 7282.

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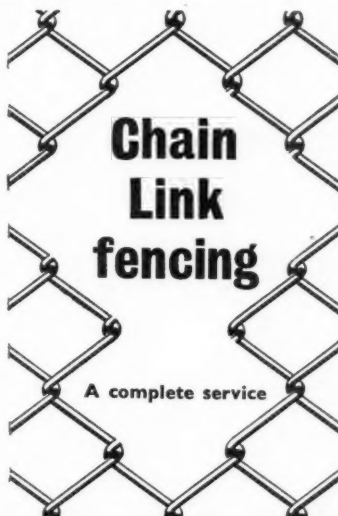
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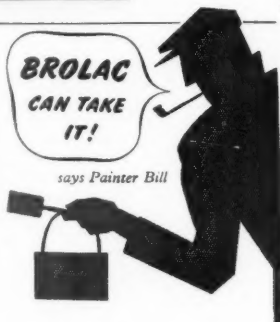
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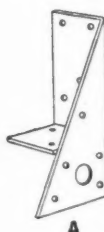
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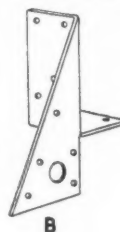
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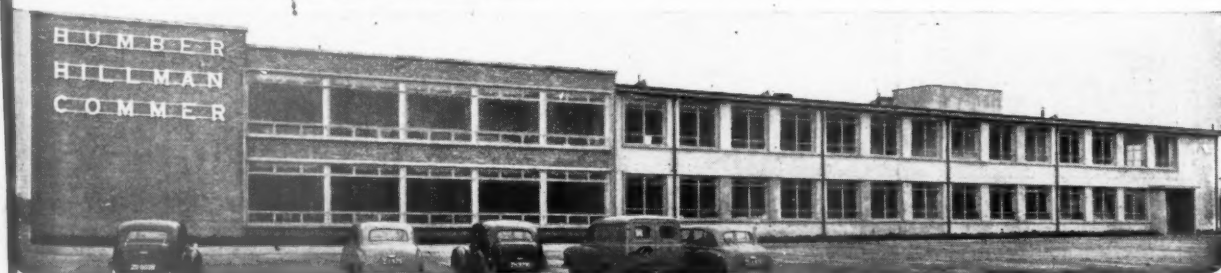
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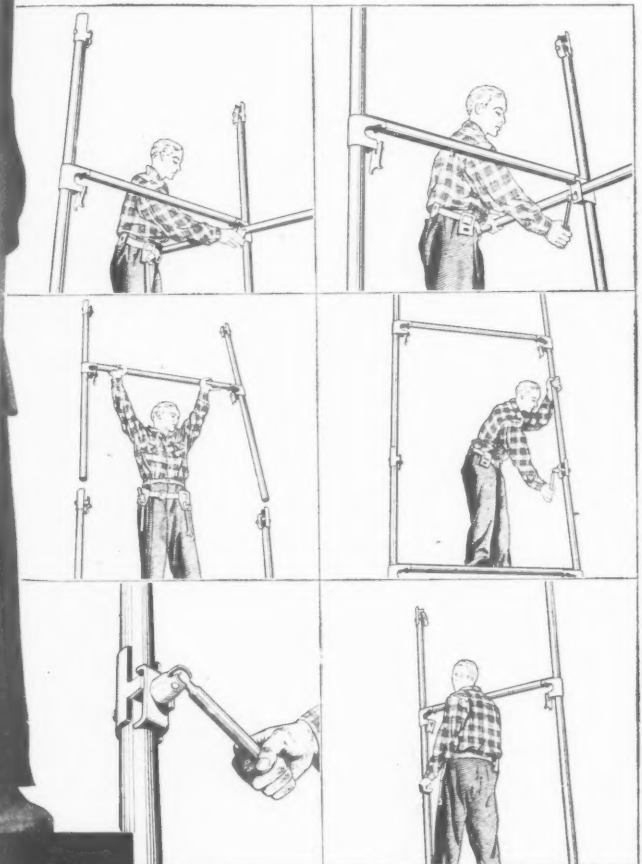
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