The Architects' JOURNAL for December 25, 1958

THE ARCHITECTS' JOURNAL

standard contents

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

No. 3330] [Vol. 128

THE ARCHITECTURAL PRESS

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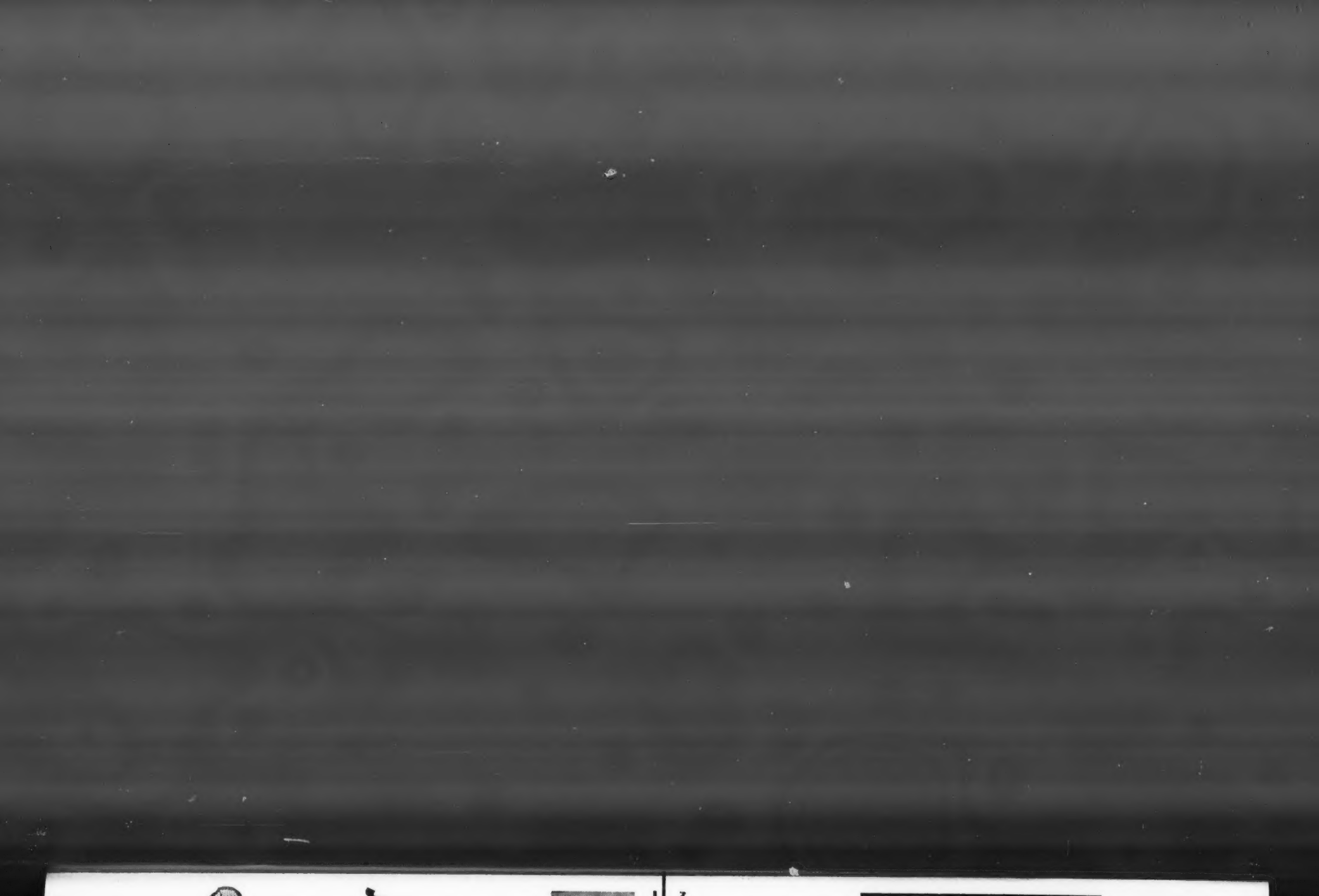
★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ii one week, Il to Z the next. In all cases where the town is not mentioned the word LONDON is implicit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

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. L. Stevenson, College of Art, Hope Street, Liverpool 1.	Royal 1826
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Langham 5533
ABT	Association of Building Technicians. 1, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James's Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Langham 5861
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BC	Building Centre. 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 105, Uxbridge Road, Ealing, W.5.	Ealing 9621
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Docr Association. 10, The Boltons, S.W.10.	Fremantle 8494
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Whitehall Gardens, Horseguards Avenue, Whitehall, S.W.1.	Trafalgar 8855
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 4040
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. British Standards House, 2, Park St.,W.1.	Mayfair 9000
BTE	Building Trades Exhibition. 32, Millbank, S.W.1.	Tate Gallery 8134
CABAS	City and Borough Architects Society. C/o S. A. G. Cook, A.R.I.B.A., Borough Architect and Director of Housing, Town Hall, High Holborn, W.C.1.	Holborn 3411
CAS	County Architects' Society. C/o S. Vincent Goodman, F.R.I.B.A., Shire Hall, Bedford.	Bedford 67444
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Belgravia 6661
CDA	Copper Development Association. 55, South Audley Street, W.1.	Grosvenor 8811
COID	Council of Industrial Design. 28, Haymarket, S.W.1.	Trafalgar 8000
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.1.	Sloane 4280
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
CVE	Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1.	Reading 72255
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 68, Gloucester Place, W.1.	Welbeck 9966
FASS	Federation of Associations of Specialists and Sub-Contractors, 14, Bryanston Street, W.1.	Welbeck 1781
FBBDO	Fibre Building Board Development Organization Ltd. (Fidor), Stafford House, Norfolk Street, W.C.2.	Covent Garden 3008
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	Regent 0221
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders., 33, John Street, W.C.1. Tel.: Chancery 7583 (6 lines)	
FPC	The Federation of Painting Contractors, St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4341
GPDA	Gypsum Plasterboard Development Association. 11, Ironmonger Lane, E.C.2.	Monarch 8888
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
GG	Georgian Group. 2, Chester Street, S.W.1.	Belgravia 3081
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 29, Belgrave Square, S.W.1.	Belgravia 3755
ICA	Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. 1, Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, Victoria Embankment, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215
IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square.	Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers. 100, Park Street Grosvenor Square, W.1.	Mayfair 7086



"Is that noise disturbing you, Robert?"

"No, miss, not really, miss. I was just thinking that Boots will have finished in another week, miss."

"Boots, Robert?"

"Yes, miss, they're the people who're building over there, miss. Look—you can see their name on that board, miss. Actually, miss, they're building that new housing estate at the edge of the town, too, miss. I expect you've noticed how quickly they're getting on with it. It's the same with everything they build—aerodromes, railways, roads, bridges, reservoirs. They get them finished in absolutely no time at all, miss. My father says it's a pity there aren't more people like Boots, miss, then we shouldn't be in such a mess. Are we in a mess, miss?"

"With your permission, Robert, we'll ignore that red herring and return to our five-finger exercise."

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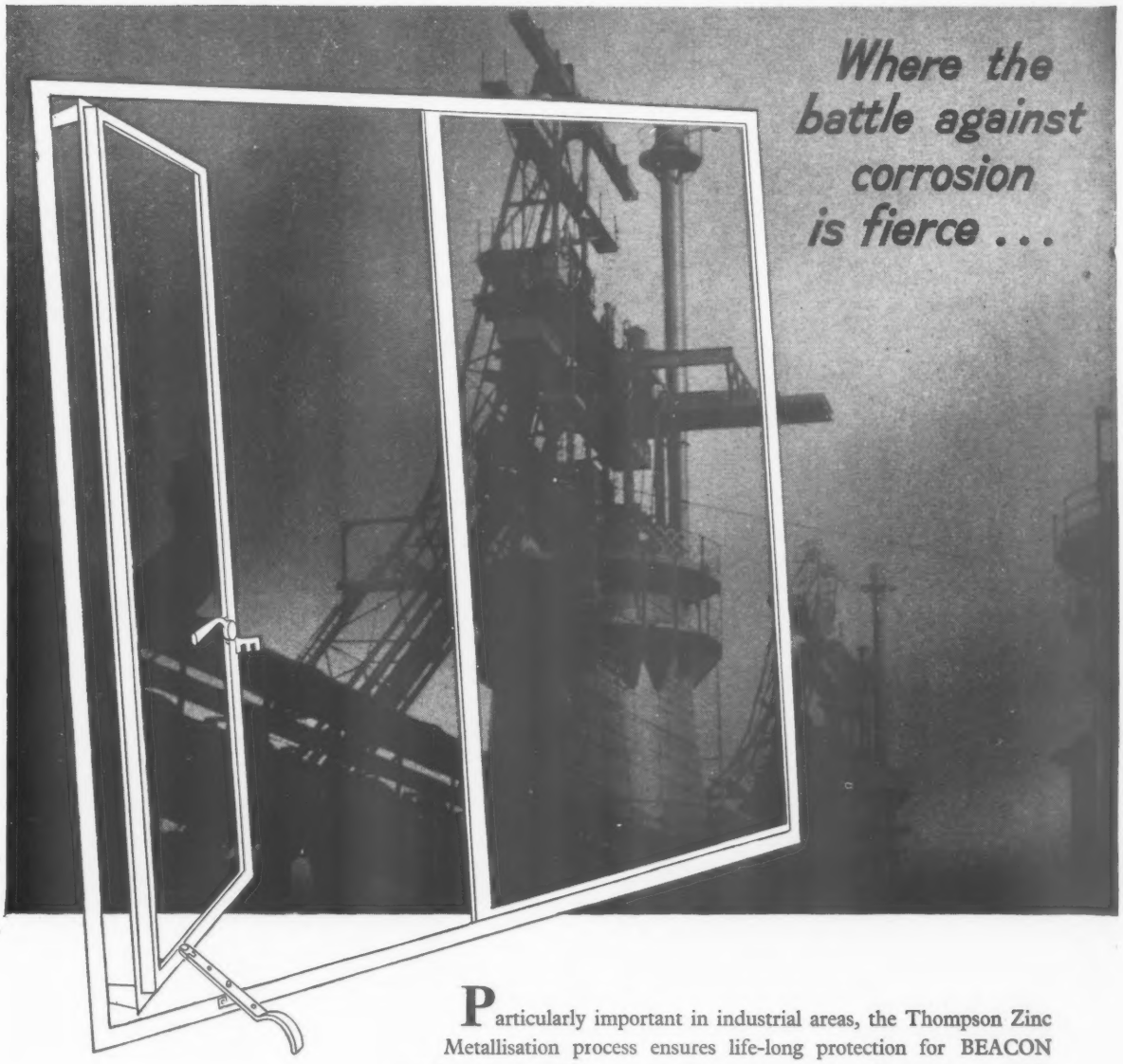
LIVERPOOL: Heysham Rd., Dunnings Bridge, Bootle, Liverpool 10.



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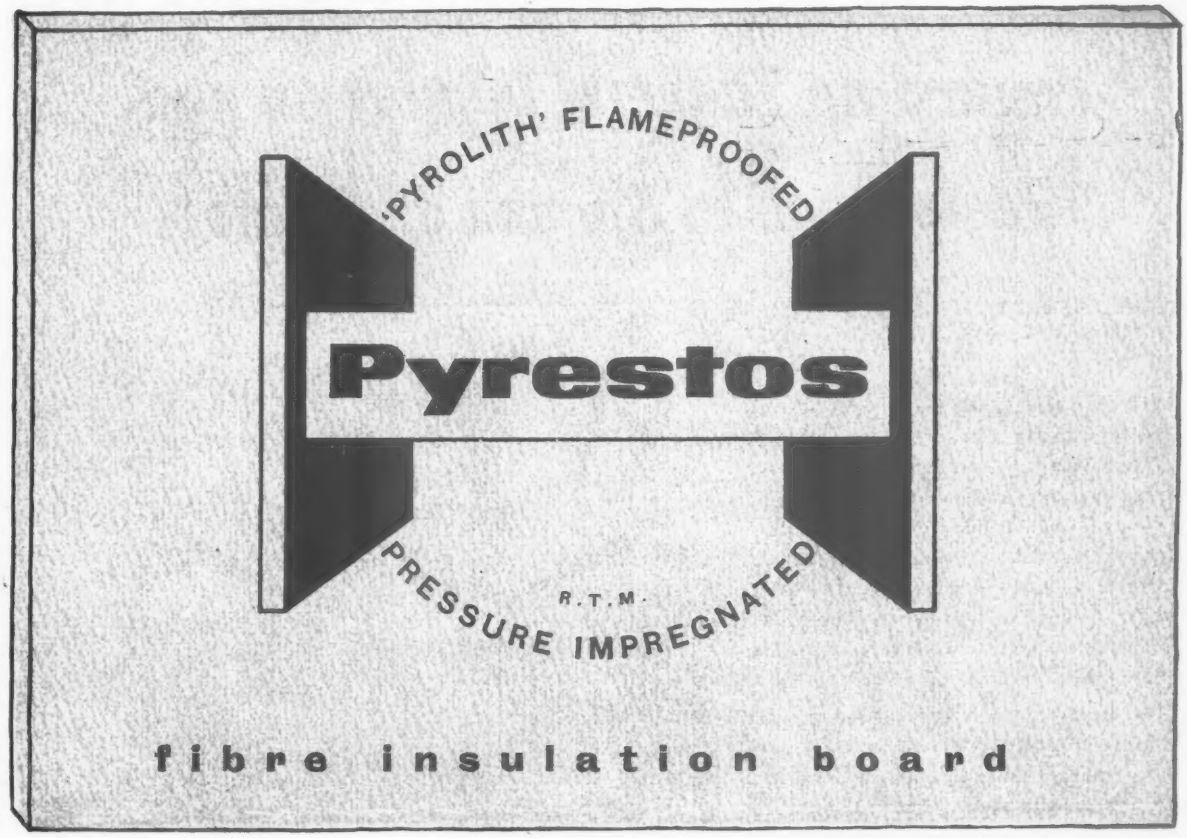

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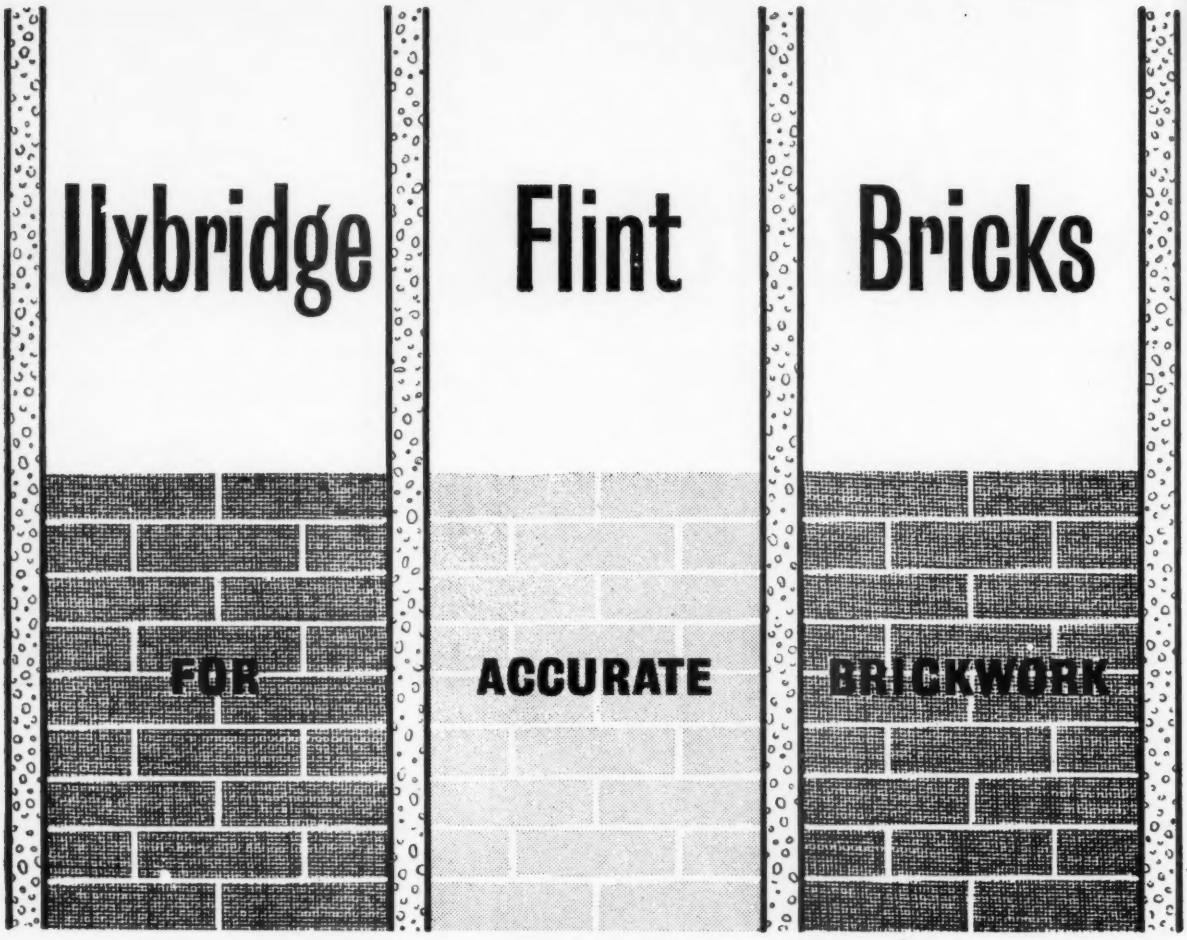

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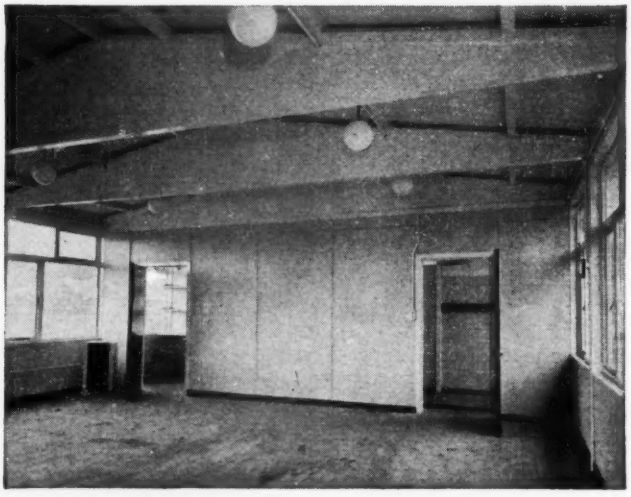
For further information on R.T.E. Glued Laminated and Bolted & Connectored timber, send for illustrated brochure.



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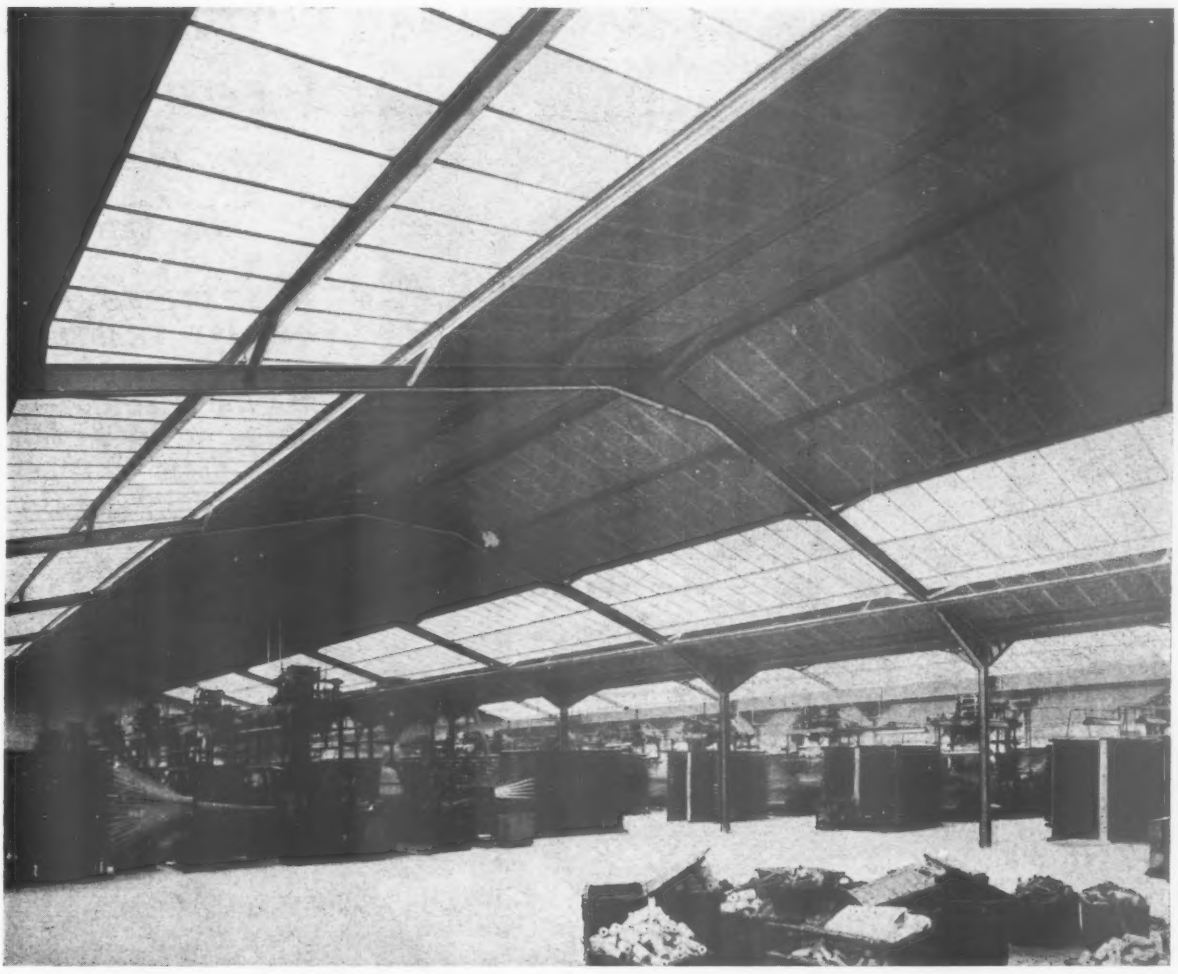

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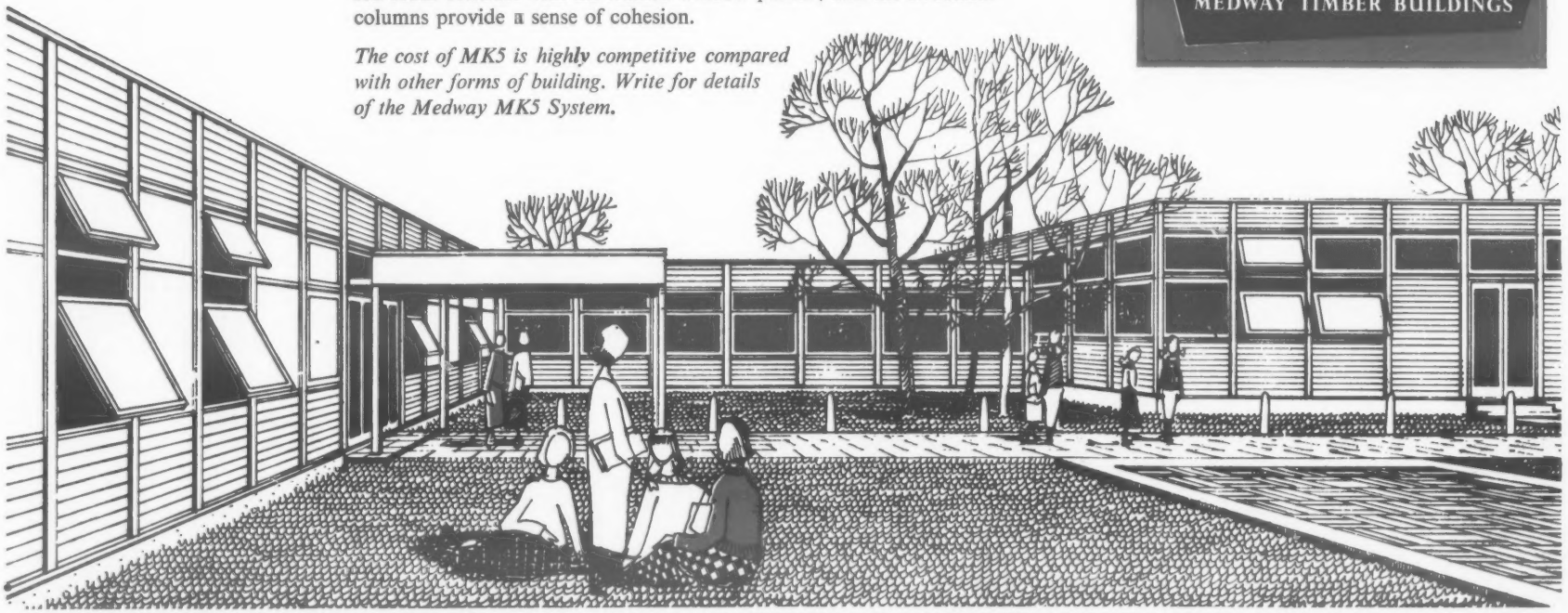

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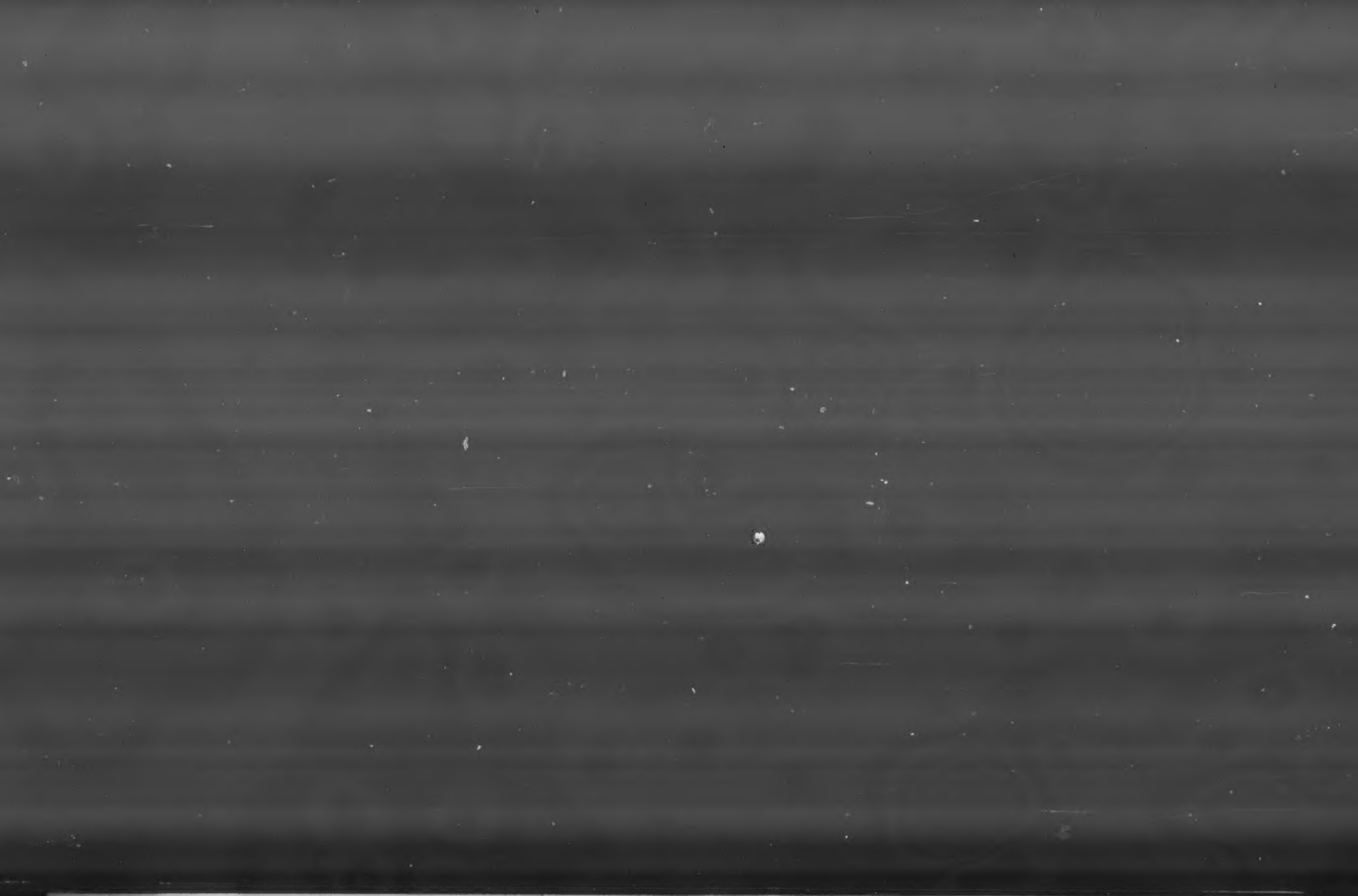

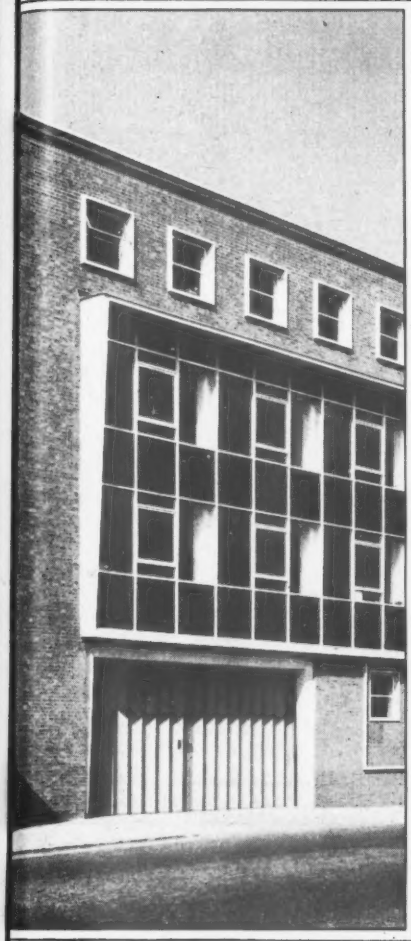

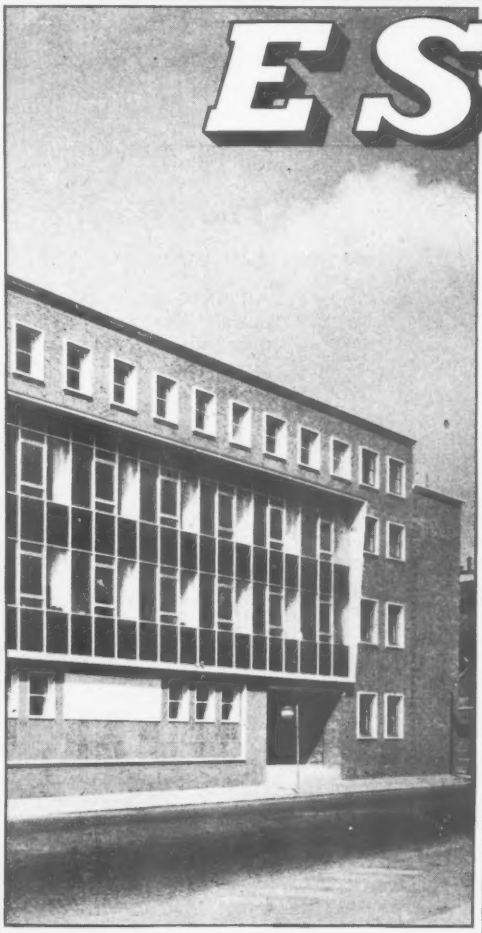

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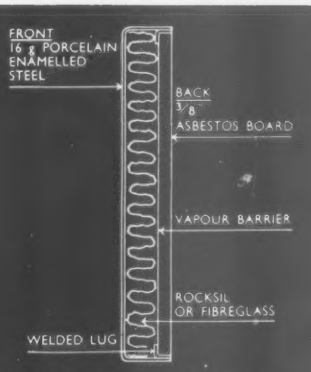

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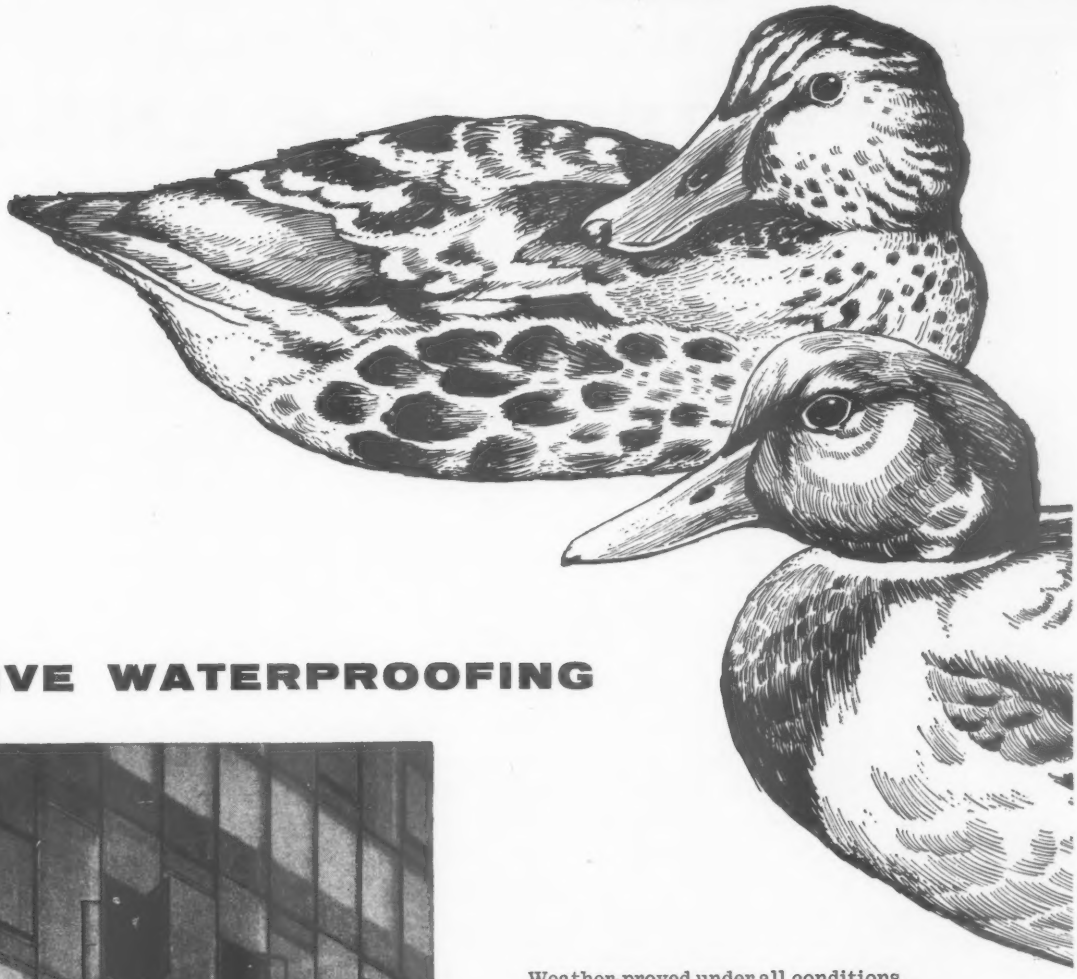

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+ COST OF HOLD-UPS

+ COST OF SITE DISRUPTIONS

+ COST OF MATERIALS

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NOT QUITE ARCHITECTURE

BANG GOES 2·68 KILONUFFIELDS

Required reading for those who think that architecture should keep up with the times (rather than *The Times*) is *Flight's* special issue of December 5, on rocketry. No Missiles Made Easy, this is real hairy griff straight from the equine intake.

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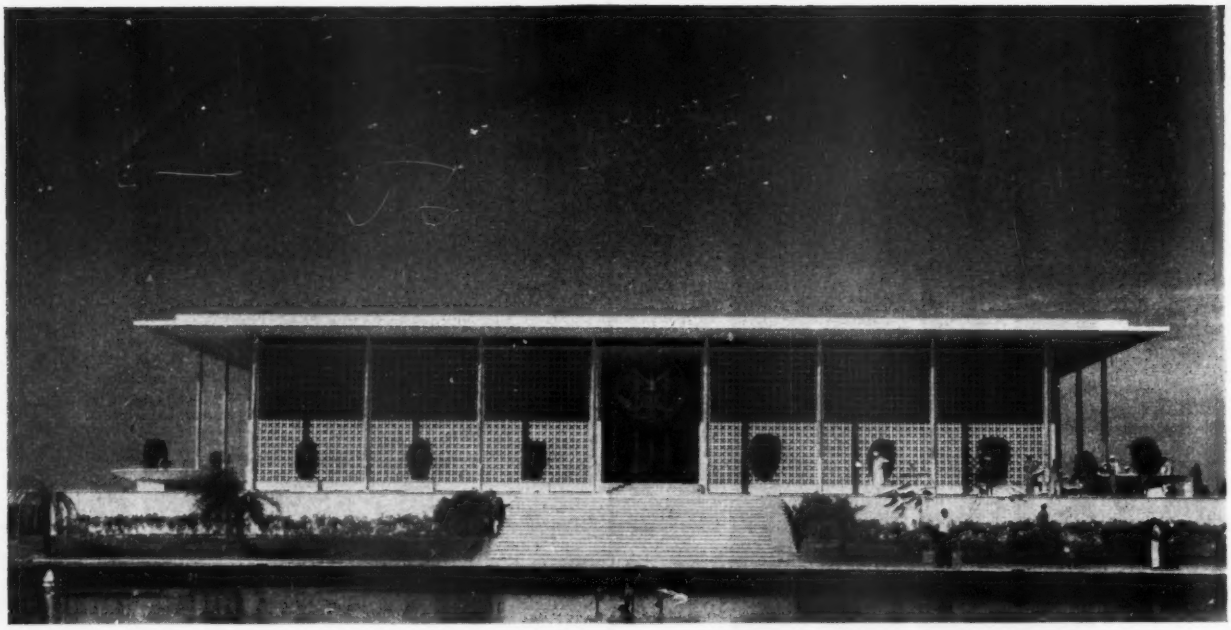
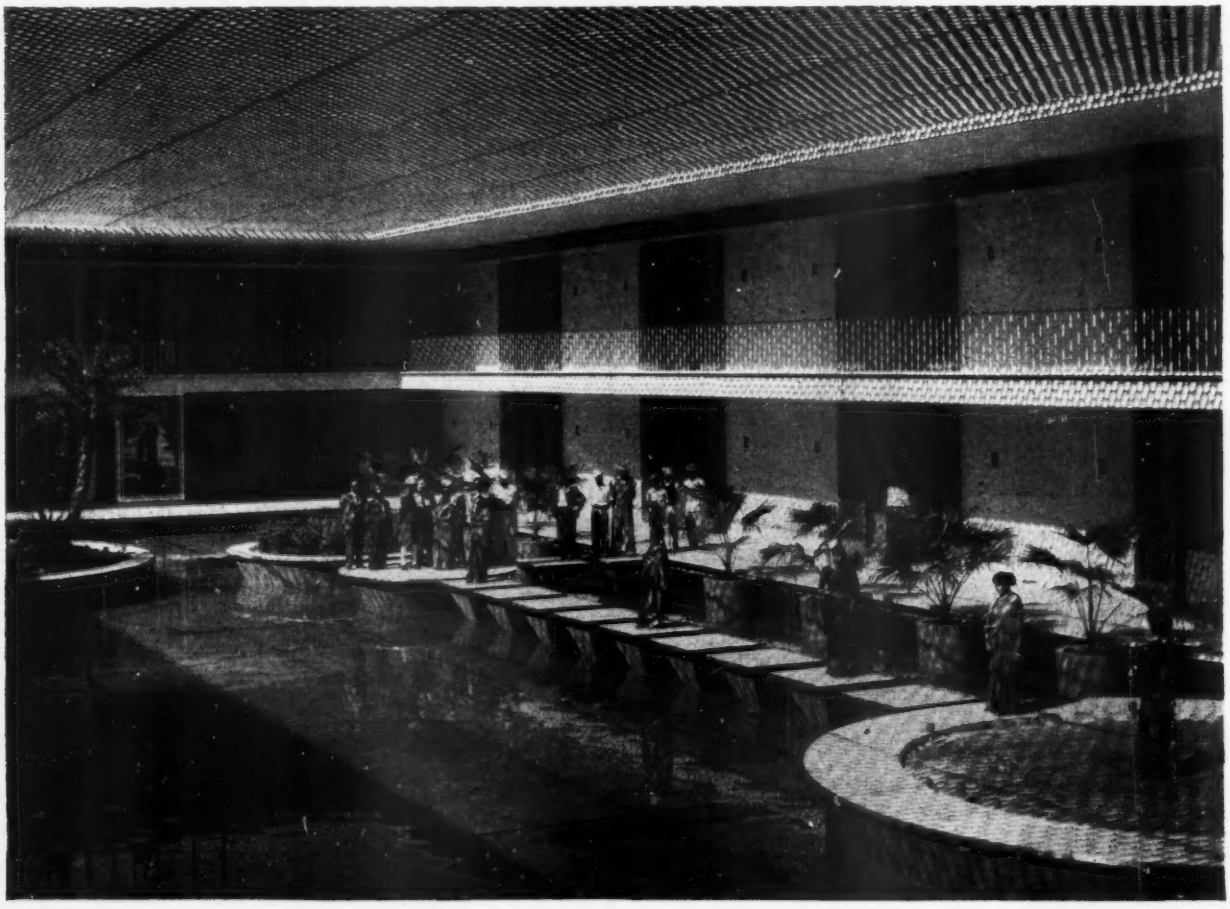
Exciting to look at, with photographs of things going whoosh, bang or fizz in the night, it also has a full set of Arthur Bowbeer's brilliantly deadpan drawings of shapely hardward called, *e.g.*, Snark, Bull Goose, Parca, Hound Dog, Sea-Slug, Malkara, Sidewinder and Matra. The text is in character; places and organizations are straight out of Jeff Hawke; for instance Raytheon, Neosho, Rocketdyne, Contraves, Thiokol, Norris-Thermador, and the Hercules Power Co. As one gets the hang of it, one begins to apply to missiles such epithets as *sophisticated* and the *emphatically second-generation,* to discriminate boosters from sustainers and to recognize "more representative vehicles," to measure the yield of thermonuclear warheads in Megatons and sneer at a mere 1·5 Kilotons as "sub-nominal."

*

Some of the reasoning may well elude the common reader, as: "Guidance, by AAA's Autonetics division undoubtedly involves inertial elements, though subsidiary monitoring systems (star-tracking, ·dar command, doppler or terrain-examination) would be logical." All right, never mind the logic, try this for pure tech-prose: "Each of the verniers is gimbal-mounted for roll-stabilization, and also controls precision thrust-adjustments and final cut-off. As the verniers are outrigged on pylons attached to the side of the body they are protected against





The Film-Set Embassy

There is a curious air of unreality about these photographs of Edward Stone's new American Embassy at New Delhi. The front view of the building in the top picture looks suspiciously like a model; while the garden and pool inside, in the lower picture, look more like a setting for a Cecil B. de Mille biblical epic than an embassy.

aerodynamic heating by Phenolic-resin fairings."

*

By the time you are far enough in to savour these niceties of style (which won't take long, the stuff is compulsive even where you can't understand it) you will be humiliatingly aware that it is a question of a technology several technologies in advance of the sort of technology that building-business thinks of as advanced. At one extreme, the whole way of squaring up to a problem, seeing the hardware itself as only a small part of a total system that also involves everything from the logistics of supply to strategic assumptions. Plenty of architectural egg-heads like to think that is how *they* think too, but Brother, CIAM was never like this. At the other extreme, the stabilized platform that regulates an inertial guidance system, a wonderpiece of electronics and watchmaker-skill that, however the rocket may orbit about a spinning earth orbiting about a spinning sun, remains always the same way up—not just the same way up relative to terrestrial gravity, but the same way up relative to the universe. Its the first man-made absolute that is a physical thing, not just a mental concept, and in company like this, you have to wonder what a friendly old horse-drawn word like *modular* means to these boys, as applied to the components of a guidance package.

*

But by the time you have got to wondering that (which won't take long, the stuff soon lifts the lid off your brain and lets the outer space in) you will also have thought of a very good reason why no architect in his senses can be an enthusiast for missile-thermonuclear war. These high peaks of inventiveness, research and technique have cost a bomb, a much bigger bomb than any that might be lobbed by Atlas, Titan or Mr. K's new big birds. In the summer just past, appropriations for Nike Hercules, a mere toy that goes 70 miles and isn't ever sub-nominal, ran to $268 million, and when you multiply that by the sums that must have been spent on bigger and smaller hardware by Major and Minor League missile countries, you realize that the potential for human progress that has already been swallowed up with the Megatons of fuel and oxidants, is now far greater than the damage to human life which might be caused in the projected three-salvo war that could be touched off if some clot accidentally got beyond minus five on a hot count-down.

*

For all that kind of dough you could have set up any number of integrated groups of families of related configurations of Nuffield Research Trusts and AJ Fellowships, and vaporized practically every outstanding problem in building and town-planning. What's that? Dismiss those ungenerous thoughts in this season of goodwill. Merry Christmas Rocketeers and Rocketees!

REYNER BANHAM

The Editors

WHAT'S WRONG WITH DEMOCRACY?

ANYBODY reading the editorial "A Weakened Constitution?" in *The Builder* might well suppose that the proposals of the RIBA Constitutional Committee were of a revolutionary, even a subversive, character. A new Charter would be unlikely to be granted, we are told, to a Council reorganized on the lines proposed, because it "would hardly be concerned with 'the advancement of architecture.'" *The Builder* foresees that a reorganized Council "truly representative of the majority consisting of younger employed members" can no longer effectively represent "the architect who has the responsibility for the design of buildings, the administration of a contract, the supervision of work and certification." To whom, it asks, will the Minister of Works turn for advice? To whom will public authorities make requests for nominations of suitable architects for major projects? If the Charter goes, it asks lugubriously, will such consultations be with the Royal Institute?

All this seems to us highly exaggerated. A couple of aspirins, a good night's sleep, and a second reading of the report should put *The Builder's* nightmares to flight. Amendment of the Charter is only needed to make Associates and Licentiates eligible for election as Honorary Officers. Unless *The Builder* can show that Fellows have some exceptional gifts of administration and leadership not possessed by Associates or Licentiates, it is hard to see why this amendment to the Charter should be refused if the Royal Institute asks for it.

The Builder's real objection is to the principle that the Council should be democratically elected so as to represent its members fairly. It seems to hanker after a second class membership for assistants, a term which includes a large number of architects who carry very heavy responsibilities, and are just as much concerned with "the advancement of architecture" as are principals in private practice.

The merits of a democratic system of election are that it enables the members of the RIBA to elect the best men to the Council, and to the honorary officers' posts, without regard to their class of membership. It should help to unite the Institute round its elected Council, and strengthen both the composition and authority of the Council. This should make both Ministers and public authorities more, not less, willing to consult it and accept its advice.

It is rather a silly fantasy to suppose that democratic elections are likely to result in the Council being captured by irresponsibles. It is essential, however, that no important section of the membership should feel itself unrepresented. While assistants in local government, who will in future be organized, may be able to secure some representation, assistants in private practice are unlikely to secure any representation at all. A system of proportional representation, that would secure the fair representation of all interests, would remove this weakness from proposals which, taken as a whole, deserve the full backing of the membership.

MARCHING WITH SNOOKS COCKED

If you don't like that new block by Smith, Jones and Partners, remember the example set by Anti-Ugly. This organization is a group of strong-willed students from the Royal College of Art, who are fed up with most of the existing new buildings in London—and who isn't?—and have enough guts and life to go down into the streets to say so. Their first march, last week, took them from Caltex House on Tattersall's site (bad modern) to Bowater House (fair modern) and then to the NFU building in Knightsbridge (bad Neo-Georgian). The demonstration, about fifty strong, was done with a lot of panache (three cheers outside Bowater House, one minute's silence for lost opportunity outside the NFU) and seems to have caught just the right blend of serious purpose and good humour. Last week it followed this up with a preliminary assault against the Bank of England's new offices and the *Financial Times* building.

Anti-Ugly is planning larger operations in the city for the New Year: good luck to it. It might do more than all the worthy speeches and passionate writings to shatter the monstrous complacency of some clients and some architects. On this march the "general public" as usual was much less apathetic than it is usually made out to be. ASTRAGAL has found when lecturing that most people are very interested indeed in architecture and town planning, but that they are not being given any unpretentious lead as to what architecture and planning is about.

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All these Anti-Ugly students, incidentally, are painters and designers, not architects. The *Architectural Review* said some years ago that the ideal type of lay architectural critic was a painter. Perhaps it was right.

ROUNDABOUT METHODS

Road improvements that are out of date in conception before they start are often spread over many years. Consider, for instance, an improvement (in the 1960-61 programme) to Gardiner's Corner, one of the East End's worst bottlenecks. Here, needless to say, the road engineers intend to build another roundabout—to link with yet another roundabout to be built by the City at Aldersgate High Street. But this is what is said about it in a summary of an LCC agenda paper: "There is a substantial block of property lying across the western arm of the roundabout which will prevent the full realization of the scheme for many years but, in the meantime, a workable scheme will be possible as a temporary measure by using Houndsditch as the western arm of the roundabout. This limited scheme is not expected to be undertaken before, at the earliest, 1963. Consideration will be given at a later stage to an ancillary system of pedestrian underpasses. . . ."

*

Why this slow-motion advance? Is it due to the niggardliness of the Ministry of Transport, and the inordinate cost of acquiring land? The LCC has already decided to spend £1,715,000 on 3½ acres of land at Gardiner's Corner. Local authorities can't afford much in the way of road improvements if they have to bear non-productive costs of this size.

FUEL FOR ARGUMENT

The Coal Utilisation Council is to spend an extra £200,000 on advertising the virtues of coal and the modern open fire. It is clear from this that we have no national fuel policy. The expensive advertising campaigns of the oil companies have committed us to large continuing expenditure on imported oil, which may not be so easy to get and to pay for in the future. Meanwhile, vast stocks of unsaleable coal have accumulated, and the National Coal Board is showing heavy losses (mainly the result of importing high-cost dollar coal). Both gas and electricity are supplied to every new home, a concession to freedom of choice which many other countries would consider absurd extravagance. Power stations are being converted to burn oil, and the heat generated at our thermal stations is used to heat the atmosphere.

*

Competition is certainly making the solid-fuel appliance manufacturers pull up their socks. Only two years ago ASTRAGAL was told, at the showrooms of one of Britain's largest boiler firms, that there was no point in improving one of their popular models which had neither a dust-free riddling device nor an ashpan because they could sell all they made. That is no longer so, and designs have improved. But must efficiency in one place always be purchased at the expense of so much waste in others?

20TH CENTURY LANDSCAPING

Sylvia Crowe's latest book, *The Landscape of Power*,* takes the fighting principles of *Tomorrow's Landscape* into greater detail and, in at least one important case, into the landscape as well. At Bradwell atomic power station, an enlightened County Council called her in to advise on landscaping: a collaboration which produced such refreshingly new ideas as sinking the protective fence and regenerating woodland well away from the site to screen the station from one specific route—the track to St. Peter's Chapel on the edge of the North Sea.

The book deals with every kind of mechanical and civil engineering work, and for the first time some sort of Beaufort Scale classification is attempted for the psychological effect of industrial installations in the landscape. Strictly, I suppose, this is directed at architects and engineers; in fact it makes fascinating reading for any layman worried about what is happening to the landscape. Apart from anything else, it will tell him or her *why* a bit of engineering is good or bad in the countryside.

DAM CLEVER

The commonest photograph of Hadrian's Wall is the view near Housesteads, and the only view the westerner gets of China's Great Wall is from some easily accessible point near Pekin. Last week, Eugene Rosenberg described his recent visit to China at the AA, and, sure enough, the old familiar view, only this time in colour, instead of line-engraving or half-tone, was flashed on to the screen. Each time it appeared, beautifully photographed. Mr. Rosenberg pointed out how well it followed the contours.

* Architectural Press. 16s.

With the wall plunging up and down like a switchback side, this reference to contour-following was made and meekly accepted by those shrewd, sensitive, plumb-ascertaining eyes of an audience of architects. To ASTRAGAL, at least, the wall seemed to compromise between following ridges and taking a straight course, which seems fair enough for a fortification.

*

Mr. Rosenberg had little to say about the tradition behind the old temples, parks and palaces. Nor, apparently, had he been shown any worthwhile contemporary building in the new China, though he noticed that they were using thousands of yards of prestressed concrete planks as combined shuttering and reinforcement.

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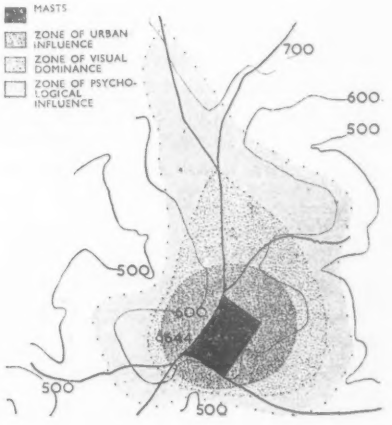
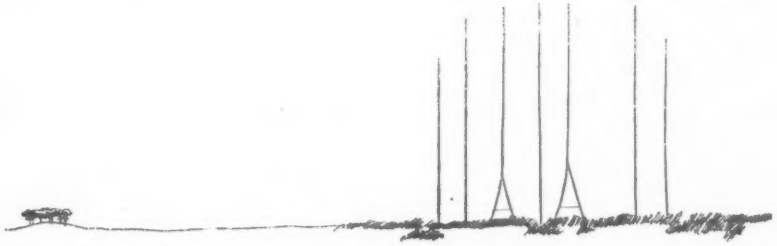
It was interesting to hear about a dam constructed, at least in part, by

The "Anti-Ugly" group of RCA students demonstrating at Knightsbridge (top) and decorating the new Caltex building with their slogans (above). See "Marching With Snooks Cocked".

(Right) this diagram from Sylvia Crowe's The Landscape of Power *shows how radio masts and the "industrial area" at their base have zones of influence in the surrounding country, while pine clumps (below) are reduced to the stature of shrubs.*





voluntary labour. How salutary if everyone in this country, whether university professors or civil servants or carping journalists, had to spend three weeks a year doing some physical work of this kind. That would be one way of curing slums, traffic problems and subtopia. Are we too effete and bored?

WON'T POSTERITY GET US TAPED?

The other day Nikolaus Pevsner gave a brilliant talk, at the German Institute, on Gothic Architecture in England and Germany. This fascinating ninety minutes of illustration and erudition reminded ASTRAGAL of what he said last week—that the best architectural talks should be recorded by film strip and tape-recorder for posterity. Here was one of the great architectural historians of the day telling laymen how French Gothic evolved in England and Germany. He spoke in a way they could surely never forget—a way which would make the dullest listener eager for more knowledge.

PLEASED TO MEET WHO?

A young colleague of ASTRAGAL will never live down the ghastly mistake he made (in Jane Drew's eyes) when he introduced Jane Drew to Frank Lloyd Wright as Mrs. Maxwell Fry. But he was relieved to find that other people err in the same way. The following is a comedy of errors which was circulating in various forms in Liverpool during the first days of the Corb exhibition:

Time: the first day of the exhibition. Place, a civic occasion.

Scene 1.

A flunkey: Mr. and Mrs. E. Maxwell Fry! (aside) Eh? Oh! I *beg* your pardon! Er . . . Mr. E. Maxwell Fry and *Miss Jane Drew*!

Scene 2.

The Leader of the Council: . . . " and we are honoured to have with us Mr. E. Maxwell Fry. Unfortunately Mrs. Fry was unable to come, but Miss Jane Drew is here instead, and I am sure she will prove a worthy substitute! "

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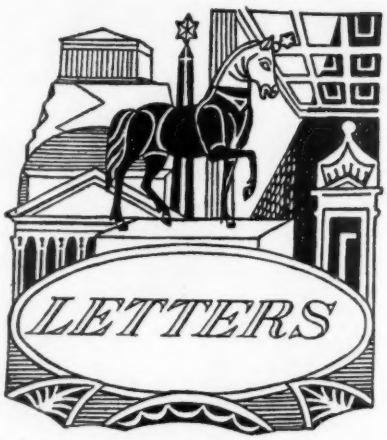
To the credit of the architects' wives generally, and Jane Drew in particular, she kept her end up very well by referring to the Leader of the City Council as " Mrs. Braddock's husband."

ASTRAGAL



Allan Hodgkinson,
M. Eng., A.M.I.C.E., M.I. Struct. E.

H. H. Bruce
Invisible Panel Warming Association

G. M. Hobbs, A.R.I.B.A.

W. C. Moss,
Technical Manager Coal Utilisation Council

T. S. Masters,
Director, Smeaton & Sons Ltd.

Transair Hangar

SIR,—Clive Pascall's letter (AJ, December 4) answers the point on fire resistance which I raised. I trust that there is more concrete cover to the tendons than was apparent in the illustration. Apart from this, a series of red herrings are drawn conveniently to cloud the general point of my letter that the Transair hangar had not provided either accommodation or services comparable with maintenance bases within my knowledge and in consequence, the " half the cost " claim was meaningless.

Clive Pascall has developed the idea of trend in aircraft and aircraft hangar design and I cannot agree with his approach to the problem. The trend in aircraft design is already apparent; as speeds increase the large wing span is giving way to the deeper swept back wing; engines in the fuselage nearer to the tail causing higher tail planes but smaller tail fins; generally the aircraft is getting longer. This trend outdates the wing hangar. Consequently, depending on whether one is catering for a medium-range operator or a long-range operator one can decide with that operator a hangar size which will deal with the appropriate number of aircraft related to an estimated wing span, having allowed special break through panels in the rear wall of the hangar so that an even longer aircraft could push its nose through into the workshop area.

I do agree with Clive Pascall that there is a place for the medium sized aircraft. I would go a little further and say that the Vickers Vanguard may make all other short haul aircraft obsolete by 1970. If the Transair Hangar had been made 20 ft. deeper and 8 ft. higher it could have accommodated the Vanguard, Comet 4, short Britannia and D.H.121 all of which are either flying or in final stages of design.

ALLAN HODGKINSON.

London.

Heating Floors

SIR,—Two important factors must be considered in connection with the relative merits of floor heating and ceiling heating.

Even in those cases where carpets, underfelts and down-to-floor furniture do not complicate the issue and the whole of the floor is fully heated, the surface temperature limit of 75 deg. F. often means that the floor can provide only " background heating " which will need topping up in very cold weather.

The hazards of carpets and furniture hardly arise with ceiling heating, and the higher surface temperature limit allows full heating, often using only part of the ceiling, preferably as a perimeter strip in rooms with low ceilings. For these and other reasons ceiling heating is used to a far greater extent than floor heating in the experience of this Association.

H. H. BRUCE,

Alexander Hardy replies: In my article (AJ, November 20) I was not comparing ceiling and floor heating installations as such; I was stating the effect of the heating of floors and ceilings on conditions of thermal comfort. I agree that it is often not possible to provide all the heat required in an enclosure from the floor alone and also that floor heating restricts the choice of floor finishes. Whereas with a heated floor a high degree of thermal comfort can be attained, as the feet will be warmer than the head, also discomfort due to too high a surface temperature is almost unknown. With a heated ceiling there is no such fixed temperature limit and therefore there is a risk of excessive radiation to the head causing discomfort, which would be more apparent if the feet were cold. This is not a criticism of the use of ceiling heating, but of the risks of thermal discomfort if floor temperatures or thermal characteristics of flooring materials are not considered at the same time, and if the maximum temperatures of ceiling panels are not carefully controlled.

Sub-standard Living

SIR,—So ASTRAGAL has joined the " Conformists "? Of caravan-dwellers he writes, " It is nonsense that people with enough money should *be permitted* (my italics) to live in this sub-standard way." Dear Uncle Astragal, why the devil shouldn't they? Quite apart from people like young engineers, who can be expected to be shot off to the ends of the country (or the Earth) and like to take their family with them, I maintain that if someone wants to live in a cave (or a tree *vide* television) I fail to see why they should be tidied into a pixie-house in Subtopia. When it comes to standards, I'd choose a caravan against a spec. house any day, and at the rate things are going, there soon won't be all that much to choose in the way of space either. If you stop to think about it, a well-insulated caravan plus one decent-sized Dutch-type greenhouse represents a more logical and healthier way of living than a cottage disguised as a scaled down gentleman's villa (or a scruffy pseudo-conversion), just as a Heinkel or an Isetta has it over a scaled down horseless carriage or an earth-bound spaceship.

Solve the housing problem (which basically means the problem of the price and distribution of land) and you would stop wasting time browbeating people who have the courage to find their own solution.

G. M. HOBBS.

London.

ASTRAGAL replies: Why the devil shouldn't people be permitted to live in a sub-standard way? Because the establishment by law of minimum conditions for health and amenity should not be evaded merely by putting wheels on sub-standard houses and calling them caravans.

Out Of The Draught

SIR,—On several occasions within the last few weeks the BBC have broadcast talks dealing with problems of keeping the home warm. At least two of these excellent talks

(one of them reported in the *Listener*) have been spoiled by an assertion that draughts in a room could be eliminated by the use of a fire with an underfloor air supply. It should be made quite clear that whilst many such fires are recommended and have a number of other advantages, the amount of primary air drawn from outside is so small (200-300 cu. ft. per hour) that they cannot be claimed to make any real impression on the airflow through the room, if there is an ordinary chimney "throat," for this can be as much as 6,000-10,000 cu. ft. per hour. Unfortunately such claims have led many people to seal their doors and windows in the belief that all the necessary air now comes from under the floor, with the result that the fire smokes.

Out of 924 cases of "smoky fires" on which my Technical Officers throughout the country gave advice during the first nine months of this year, 181, *i.e.* about 20 per cent., were due to "air starvation" or over-sealing of the room, and of these, 123 (two-thirds) were using under-floor fires.

By far the best way to prevent draughts and reduce the air flow through the room to the level necessary for health (2,500-3,000 cu. ft. per hour) whilst retaining an open fire, is to fit a free-standing convector fire incorporating a restricted throat. These fires not only have about double the efficiency of the old-fashioned grate, but effectively prevent draughts without giving rise to smoke, by restricting the air flow at the proper place, as it leaves the room by the chimney. In many cases the fitting of these fires has even cured smokiness which was primarily due to some other cause.

I should perhaps make it clear that the underfloor air fires I have referred to are those providing combustion air only—those which also draw *convection* air from outside the room and pass it, warmed, into the room (at about 2,000 cu. ft. per hour) might well stand the door being sealed without smoking.

W. C. MOSS.
Technical Manager, CUC.

London.

A Firm's History

SIR,—We are about to produce a history of our firm which, as you possibly know, was founded in 1872 as general plumbing, sanitary, heating and ventilating engineers. This history will, we hope, be of interest not only to ourselves and our customers past and present, but also to many other people engaged in our trade and in association with it.

Unfortunately most of our old records were destroyed by enemy action during the war. We should therefore be very grateful for the loan of any material—correspondence, catalogues, etc., which would assist us in our task. All material loaned to us would be treated with the greatest care and returned after copying.

We should be obliged also if you could give publicity to our request in your columns, as some of your readers may be able to help us by contributions from their own records.

T. S. MASTERS.
Director, Smeaton & Sons, Limited.

London.

A Bad Miss

The Editors write: A good joke by John M. P. Price, in a letter (AJ, December 11) under the title "An Intriguing Miss," was spoiled by an excess of zeal by our proofreaders, whose zealousness so often saves our blushes. His statement that one of the glossies had referred to "Miss van der Rohe" was "corrected" to "Mies van der Rohe."

RIBA

Discussion on 'In-situ' Concrete Finishes

The Technical Editor writes:
In starting off the "discussion" on *in-situ* concrete finishes which took place at the RIBA on December 17, William Allen explained that the programme of the evening was a new venture on the part of the Science Committee of the RIBA which had been designed to elicit an exchange of experience on matters of technical detail; and that the Committee wanted originally to call it a "Workshop Evening," a phrase which in his view better described its purpose than the one chosen.

What is "fair face concrete"?
The discussion was started by J. G. Wilson, an architect with CCA, who began by inviting the audience to help in defining what is meant by "fair face" concrete. The phrase has come into use as a counterpart for fair face brickwork, meaning concrete designed to be seen. But in itself it is insufficiently explicit as it can be taken to mean equally concrete cast against wrought boards (*i.e.*, to give a patterned finish) or concrete cast against plywood or hardboard and ground to a smooth surface. In his view the phrase ought to be dropped. Speakers taking up this point subsequently, suggested that "exposed face" should be used when the finished surface was to be left as shuttered with no making good, "fair face" when the surface was to be made good; also that when an architect specified "fair face" it was for him to describe how exactly it was to be achieved.

Categories of in-situ finish
Mr. Wilson then went on to describe the main categories of *in-situ* finish, illustrating each with slides. Of board mark finishes, he said that architects do not take enough trouble in specifying the timber which is to be used. On sheeting finishes he noted that when thermoplastic sheet is used there is no need for mould oil and, therefore, one source of possible trouble is eliminated. On exposed aggregate he pointed out the better weathering obtained and the greater opportunity for using self colour, but warned against the difficulty of concealing day work joints and the importance of leaving an arris unexposed to avoid spalling at the edges. His last category was "aggregate transfer" in which aggregate is placed in a tray with glue and sand and then transferred to the concrete surface. This has the advantage that the aggregate can be controlled and that more expensive aggregates can be used economically, but (as subsequent speakers pointed out) tends to be indistinguishable from pebble dash and similar renderings. As a tail piece he showed a building in Oslo where a patterned surface had been obtained by sandblasting through a stencil.

James Gowan who followed showed some slides of his flats at Ham Common where unwrought softwood had been used for shuttering. He complained of staining through the rusting of binding wires and differential weathering due to lean patches in the concrete; and was of the opinion that any form of "finishing" after the removal of shuttering tends to detract from the inherent characterisics of the material.

China clay sand
T. B. Harper-Ellis of Lyons and Israel who spoke next, pointed out that in this country most buildings are seen for a large part of the time in damp conditions and that concrete when damp has a disagreeable "Burberry" appearance. He illustrated two new buildings where this had been prevented by the use of china clay sand. This has a high mica content and tends to go whiter with age and to remain white when damp. Another speaker, Mr. Holt of the Cement Marketing Board, corroborated this use of china clay sand for this purpose and instanced the Glasgow Exhibition Buildings in Bellahouston Park, and Croydon Airport.

Another defect of concrete in wet weather is the patchy effect caused by differential absorption. One architect in the audience suggested that this could be avoided by the use of silicones. Felix Samuely pointed out that the basic cause is the use of too much water in the mix. This leaves large holes when the water dries out and these permit a deeper penetration of water when it rains.

Staining
The discussion next turned to staining. A speaker from the CCA admitted that this was an unsolved problem. The main cause of staining is mould oil and for this reason it is better to use a shuttering such as wood which will absorb the mould oil than an impervious shuttering like steel which will not. On unsightly day work joints, he questioned the current practice of always working in lifts of 4 ft. and suggested that if the mix and the rate of placing is properly controlled, lifts can be increased up to 19 ft.

Costs
At this point the Chairman wisely drew attention to the cost problem and Hugh Morris, an LCC architect, quoted some comparative costs per ft. run which his department had obtained for the finishing of 9-in. deep concrete edgebeams between cross walls. These were expressed as extras on a basic minimum treatment and were as follows: for cast finishes: sawn timber shuttering 5d., rubber linings 1s. 4d., aggregate transfer 4s. 7d. (this figure was subsequently challenged by CCA and it appeared that the QS was unfamiliar with the process). For tooled finishes: bush hammering (Cornish granite) 1s. 7d., (normal aggregate) 1s., wire brushing 1s. For coverings: brick tiles 2s. 6d., paint 1s. 6d., ¼-in. rendering 1s. 1d., Mineralite rendering 3s. 7d., asbestos cement 2s. 6d., precast concrete with exposed aggregate 5s. 9d. The discussion then turned on what proportion of the cost of concrete work is attributable to shuttering and there was general agreement that this was about two thirds.

Design of shuttering
A number of points were next made on the design of shuttering. Mr. Holland, an engineer, suggested that wire ties should be banned, that large areas of wall be avoided, that board lengths and bolt holes must be carefully designed and raw edges must be planed to make the boards sit snugly. There was much discussion on air entrainment on the surface of shuttering. Felix Samuely said that if steel or glass or some other impermeable material were used, air bubbles were held against the surfaces; but that the use of timber avoided this. Mr. MacIntosh

of CCA said that if formwork was allowed to vibrate, air was drawn to the face, but that if the vibration was done internally and if the formwork was sufficiently heavy to be unaffected, then this was prevented.

Lastly an architect (Mr. Samuels) pointed to the key to all our concrete finishing problems when he said that we are all trying to get good finishes on the cheap. Concrete is used when cost is tight and the labourers employed to make it are traditionally the least skilled: until we pay more and get a better labour team we cannot expect great improvement.

The meeting was well attended (perhaps too well attended for easy communication) and was evidently successful: the Science Committee are to be much congratulated and it is to be hoped that there will be others like it soon.

Tite Prize

Intending competitors are reminded that the closing date for the submission of forms for the Tite Prize and the Soane Medallion is January 16, 1959. The *en loge* competitions will take place on March 17. Forms may be obtained from the RIBA.

R. S. Reynolds Award

The RIBA has a limited number of nomination forms for the R. S. Reynolds Award of the American Institute of Architects. It is open to architects, who may nominate themselves or be nominated by others, in respect of buildings anywhere in the world. The Award is $25,000 and an emblem. Nomination forms must be submitted to the AIA by February 2, 1959, and data on the entry must be submitted by May 4, 1959.

Small House Competition

Intending competitors are reminded that the reply-paid card indicating that a competitor wishes to enter for this competition (which was issued with the conditions) much reach the promoters not later than first post on Thursday, January 15, 1959. The last date for the submission of entries is 12 noon on Friday, January 30, 1959.

PRESTON SYMPOSIUM

"Consultants and Specialists"

From December 5 to 7, the winter's gloom enshrouding the tranquility of the country retreat of Alston Hall was pierced by the harsh ring of axes being ground as some sixty architects, builders, consultants, quantity surveyors, specialists and sub-contractors (order strictly alphabetical) congregated for their third annual meeting organized by the Preston, Blackburn and District Society of Architects. These meetings are convened as a result of a highly successful and imaginative idea—to get the industry together to talk about its problems.

From the two previous symposiums in which technical problems were discussed, it was apparent that many misunderstandings among delegates were patently the result of non-comprehension of each other's status; particular prominence being given to the position in the building team of consultants and specialist sub-contractors. The 1958 symposium was therefore specifically "planned to focus attention firstly on this relationship and secondly on the lessons which the building industry may learn from past experience."

A casual eavesdropper on this conference could be excused the conclusion that nobody had learnt anything from the past, save that the other members of the building "team" were either a band of rogues, nitwits or philanderers. The builder's representative obviously thought many architects were a combination of all three since he said that 50 per cent. of his architect acquaintances "defied description." This sort of attitude pervaded much of the conference. In his brilliantly witty summing up of the debates, Gontran Goulden roundly rebuked the entire conference for its "destructive" slant and suggested that speakers to future symposiums should be carefully briefed towards a much more constructive approach to the very real gulf which exists between the various bodies of the building trade.

It is difficult to see, for instance, how a genuinely helpful atmosphere can be engendered when one speaker refers to a man's past statements on building problems as emanating from "an ignorant man"—well knowing when he wrote his paper that the man himself might possibly be there; he was there, and he said so with some heat. When another speaker reasons that by virtue of his training the architect is ill fitted to be a leader of the building team, and opines that the engineer, category undefined, is the natural choice (while in the next breath bewailing the fact that engineers are just mathematicians when they come from University !) one fervently hopes for more lucid thinking from those intimately concerned with these problems.

Again, the conference occasionally got bogged down with some fruitless discussions on the disparity of remuneration (everybody thought everybody else earned their money jolly easily) and each session brought forth a disagreement on who should be the leader of the building team. It was very chastening, though, for architects to realize that they are quite alone in thinking that they are the logical leader. Not one of the non-architect speakers conceded this right, although one builder readily admitted that an architect's training gives him a head start. A polite murmur of approval rippled round the room when Nigel Hannen, author of a thoughtful paper on the "all-in service," settled the issue with a quiet authority by saying that the best leader was the man most fitted to lead.

Allport Williams, President of the Preston, Blackburn and District Society of Architects, the mentor and instigator of these symposiums, was rewarded in his choice of specialist sub-contractor speakers, with a spirited defence of their function by W. R. Howard. With bland tolerance he weathered the familiar contractor's accusation that nominated sub-contractors are nothing but a thorn in their side and a constant source of delay on the job. He pointed out that long established organisations such as certain ferro-concrete specialists were largely responsible for the development of the medium, and in view of the ever increasing demand on the specialist subcontractor's services their continued existence was "beneficial, inevitable and bound to continue." Certain builders clearly thought that the blame for this melancholy truth lay at the door of the architect who had too readily succumbed to this method of earning his fee more easily.

Mr. Howarth was ably supported by E. T. Roberts, who sobered the conference with some staggering productivity figures culled from his recent visit to the USA. He deplored the architects' inadequate knowledge of building and said, for instance, that "any plastering sub-contractor could drive a horse and cart through the average plastering specification."

Two interesting opposing views on the all-in service were presented by H. C. Husband, a consultant engineer, and Nigel Hannen. The first was very conservative, an advocate of the *status quo* and of the benefits of an independent, unbiased consultant to a bewildered client. The second progressive, markedly tolerant, freely admitting that this method is not the panacea for all ills and convinced that the competitive system is still, and should be, the basic life blood of the industry.

Architects' dutifully rose with the accusation that to enter such a system would be moral death, and asked why the all-in system produced no decent architecture. This delighted Mr. Hannen for it gave him the opportunity of pointing out that since the professional code does not allow architects to become directors of such firms they found it very difficult to employ and keep first class men. He received wide support for his contention that this is an archaic structure, comparing it unfavourably with the motor car industry which has its top designers on its boards, and with medical research laboratories which include doctors on their boards.

The conference papers were rounded off on a rather melancholy note by Robert McGuire, L. N. R. Davies and Kenneth Taylor, who gave harrowing descriptions of "What Went Wrong" on their jobs. From these papers rose two of the unanimous decisions of the conference. That the team members must get together early enough; that complete drawings are essential to a smooth running job. Both are incredibly difficult conditions to meet, and as Gontran Goulden pointed out, the sooner people stop arguing about whose fault it is that they are not met, and ask "How can I help?" the better it will be. Now that everybody has "blown his top" next year's delegates can get down to this.

N. KEITH SCOTT.

LIVERPOOL SOCIETY

Four-day Symposium

A symposium has been arranged by the Liverpool Society of Architects to direct the attention of the public, building committees, insurance companies, building societies and chartered surveyors to the contribution of the architect to the better design of private housing. It will take place, at 5 p.m. each day, from Tuesday February 10 until Friday, February 13.

The programme is as follows: Tuesday: town planning control; U. Aylmer Coates (Lancashire County Planning Officer), Frank Barnes (Clerk to Hoylake UDC) and Tom Mellor. Wednesday: design of houses and housing estates; Eric Lyons. Thursday: services and equipment; Duncan Stewart and J. K. Page. Friday: three typical houses discussed by the architects.

During the symposium a permanent exhibition of well designed houses in the area of the Society will be on view from 11 a.m. to 8 p.m. together with the RIBA Exhibition "Design Pays." Further information from Philip Dod, c/o Willink & Dod, Cunard Buildings, Liverpool 3 (envelope should be marked MH 59).

RFAC

Deputy Secretary

B. W. Watkin, M.A., A.M.T.P.I., has been appointed Deputy Secretary of the Royal Fine Art Commission and will take up his duties early in January. Mr. Watkin has been working for the past seven years as a Field Officer with the National Parks Commission.

YORK INSTITUTE

1959 Courses

The following courses are to be held in the early part of next year: April 9-14, Urban Renewal; April 16-20, Modern Techniques in Concrete Construction; April 28-May 8, Protection and Repair of Historic Buildings; May 8-13, Care of Churches.

IEE SYMPOSIUM

The Provision of Adequate Electrical Installations

The publication in 1944 of Post War Building Study No. 11, on Electrical Installations, was a landmark in the design of domestic and commercial wiring. The ring circuit and the Consumer's Supply Control Unit were both officially recommended for the first time, and the study also proposed minimum numbers of socket outlets to be provided in various kinds of room. Nearly everything which has been written or said since then can be regarded as a series of footnotes to the study.

The symposium, held at the Institution of Electrical Engineers on Thursday, November 27, was an attempt to consider and assess developments subsequent to 1944, and, perhaps, to chart future trends.

In his introduction the Chairman, R. A. Marryat, pointed out that the improvement of electrical wiring in buildings has proceeded far less rapidly than the development of electrical applications. Consequently the wiring of new buildings today may actually be less adequate, in view of the demands which may be made upon it, than it was before the war.

Mr. Marryat could hardly mention one of the chief reasons for this state of affairs, which is that the most talented young engineers are not likely to devote their lives to designing electrical installations, but instead will prefer the more exciting and rapidly expanding fields, such as electronics or high voltage distribution. The men who are left to design installations often lack the authority and force of personality necessary to resist pressure to cut the electrical work by thirty per cent. and everything else by five per cent., when overall building costs have to be reduced by ten per cent.

Mr. Marryat did, however, condemn the common practice of inviting tenders from electrical contractors on the basis of marked drawings and a reference to the IEE Regulations, in place of the written specification which these regulations were never intended to replace.

We applaud Mr. Marryat's remarks, but again, he is a contractor, and could hardly admit that many contractors make a special point of offering to design installations without charge. Nothing will be done to rectify this situation until the IEE puts strong pressure on the Electrical Contractors' Association to forbid its members to tender for any job over about £2,000 without a written specification. The industry cannot have it both ways.

How many sockets?

The first paper was presented by Mr. Belcher, of the LCC. This was a thoroughly sound, workmanlike paper, describing what the LCC actually does in its flats. The point of particular interest is the number of lighting and socket outlets provided in a typical flat. We publish below in Table 1 the LCC provision as given by Mr. Belcher, adding to it (in the right hand column) the minimum provision of 13 amp. sockets recommended in the Post War Building Study. It will be seen by comparing this last with the figures in the next column that the LCC still falls short.

These figures, together with the results of a rather restricted survey, which seemed to show that most of the LCC's tenants are fairly well satisfied with this provision, formed the core of Mr. Belcher's paper.

Later on he suggested that the meters, especially where off-peak floor heating has been installed, should be mounted in a steel cupboard accessible from outside the flat, so that they can be read more easily. This is to encourage the electricity boards to render accounts at monthly intervals, and so assist household budgeting. The alternative, and, I should have thought, cheaper system of grouping all meters on each floor adjacent to the rising main, is thought to be undesirable because it affords the tenants too little privacy, and discourages them from keeping a check on their own consumption.

Most of the discussion was devoted to this paper, and Mr. Belcher was heavily criticised for the small number of socket outlets provided. We would all like to see more outlets, more even than Mr. Belcher's "more generous" provision, but we could only wish that other housing authorities did half as well. In the circumstances, the energies of the speakers would have been better directed towards bringing the backward authorities, and private building owners, up to the standard of the LCC. This applies with equal force to the problems of many so-called "luxury" flats in which the electrical installation has been no more lavish.

Mr. Belcher was followed by Mr. Hyams, who read a paper on the wiring of private houses. He too called for the installation of more socket outlets, but it is doubtful whether anyone not already predisposed to agree would have been convinced by his arguments.

Wiring costs of office blocks

After this Mr. Jacobi gave a paper on wiring in commercial buildings, and devoted himself chiefly to large office blocks. This was an excellent account of good modern practice, and he described the various systems of ducting and trunking which give maximum flexibility, and the custom of installing lighting outlets to a grid based on the building module, bringing switchdrops back to the internal columns, in blocks with movable partitions.

He also gave some rules of thumb for estimating the total load likely to be required in blocks of this kind, which are worth reproducing. They are:

Lighting for the working areas: 4 watts/sq. ft., plus special lighting as required.

Socket outlets: 0·85 watt/cu. ft., plus special equipment, lifts, ventilation, etc., as required.

Mr. Jacobi admitted that these figures are vague, and so they are, but they are very much better than nothing. He also gave some information about costs, which is reproduced in Table 2, based upon an overall building cost, completed and ready to let, of 8s. per cu. ft.

It is reasonable to take a floor to floor height of 10 ft., which makes the electrical installation cost 3s. 9d. per sq. ft. Anyone who spends less than this, and many do, is providing too little. As Mr. Jacobi pointed out, it costs much more to add something later than to instal it while the building is going up.

The final speaker was Mr. Sharp, who dealt with factories. This is a very difficult subject to cover in a general paper, but Mr. Sharp did as well as could be expected.

The discussion which followed was of rather poor standard. The best contribution came from Forbes Jackson, a member of the drafting committee of the Post War Building Study. He suggested that boxes for socket outlets be provided with insulated terminals at the back, so that wiring can be completed at the carcase stage and the outlet be connected later by means of short tails. This would avoid the necessity for a bight of cable left hanging from the box, and is an excellent idea that manufacturers should take up.

A representative of the MOHLG spoke in the discussion, and endeavoured to explain why the 1949 Housing Manual recommended fewer socket outlets than the Post-war Building Study. Although he pointed out that they had to save money, it would have been more convincing had he told us how much money, and what other things would have had to be left out in order to increase the number of sockets.

Although it produced two good papers and one good idea, the Symposium was not well conceived. Nearly all speakers took it for granted that the amount of money made available for electric wiring is dependent solely on the whim of the architect. This is not entirely true; but even if it were, it is not the slightest use engineers, most of them contractors, lecturing each other about it, with a handful of architects looking on. More than this, the practice of speakers joining in the discussion on behalf of some manufacturing or publicity organisation is utterly deplorable, and robs their words of any force they might otherwise carry.

We would like to see a joint meeting of the RIBA and the IEE to discuss this matter, for then the architects might have some chance of putting their side of the case.

Table 1: wiring in dwellings (LCC Provision)

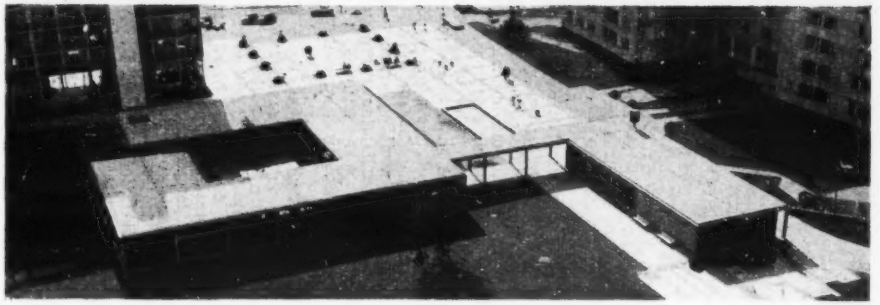
Location	*Switches*	*Pendants*	*Battenholders*	*13 amp sockets*	*P.W.B.S. 13 amp. sockets*
Bathroom	1 (ceiling)		1		
W.c.	1		1		
Kitchen	1		1	1 switched 1 cooker unit (1 unswitched)	3
Lobby	1	1			
Staircase	2 ways	1			
Living room	1	1		3 (1 twin)	3
Bedroom 1	1	1		2 (1 twin)	3
Bedroom 2	1	1		2 (1 twin)	2
Bedroom 3	1	1		1 (twin)	2
Linen cupboard				1 tubular heater 1 immersion heater	

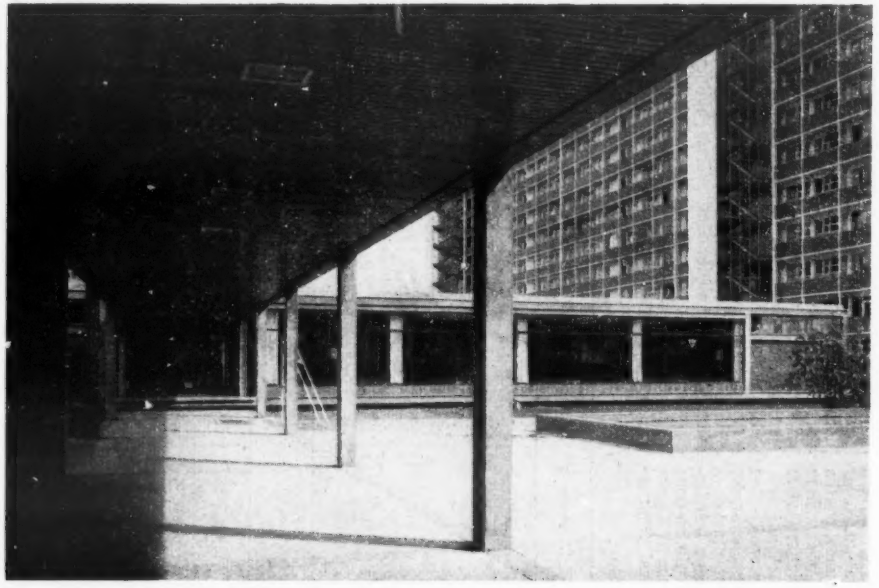
Table 2: wiring costs in offices

	Cost/ft².	*Percentage of total*
Building complete	8s	100
Electrical installation:		
(*a*) Landlord's area—wiring system for lighting, lighting fittings, socket outlets, wiring for mechanical services	1d	1
(*b*) Tenants' areas—installation including grid system of lighting and sockets and provision for future switching, not including lighting fittings or tenants' special services	2½d	2½
(*c*) Underfloor or other duct systems	1d	1
	4½d	4½

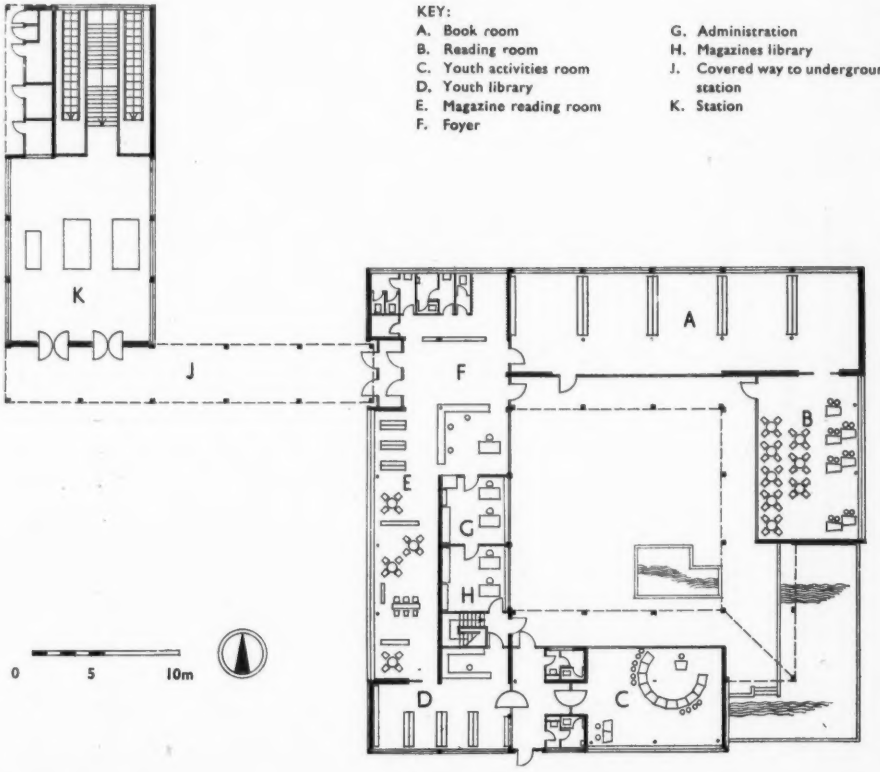
PUBLIC LIBRARY IN THE HANSA DISTRICT OF BERLIN

Amongst the great tower blocks of the new Hansa District of Berlin is this little library. By giving it horizontal lines and small scale, the architect, Werner Düttman, has endeavoured to provide a relief from the tall buildings of the rest of the district. The plan is a square with about 110-ft. sides enclosing an open air courtyard for reading, designed by Frau Professor Hammerbacher and M. Jacobson, on the principle of the cloister although not so strictly inward looking as a cloister. Intended as one community institution for the new district, it will probably also draw many people from the surrounding areas. It is sited near one of the exits of the Hansaplatz underground railway station to which it is joined by a covered way. Roofs of the station entrance,





the covered way and the library are all continuous. The design of the roofs, above right, is particularly important in a building seen so often from above. The soffit of the covered way is panelled in polished wood strips (above), and this is carried through into the library itself round the inner cloister part. The plaster ceiling of the outer part of the square is at a slightly higher level. By the entrance, opposite page, is the librarians' desk, and on the right is the magazine reading room with a fully glazed west wall overlooking a paved area. From there passers-by can look into the building and this becomes a kind of shop window for the library. On the north



Ground floor plan

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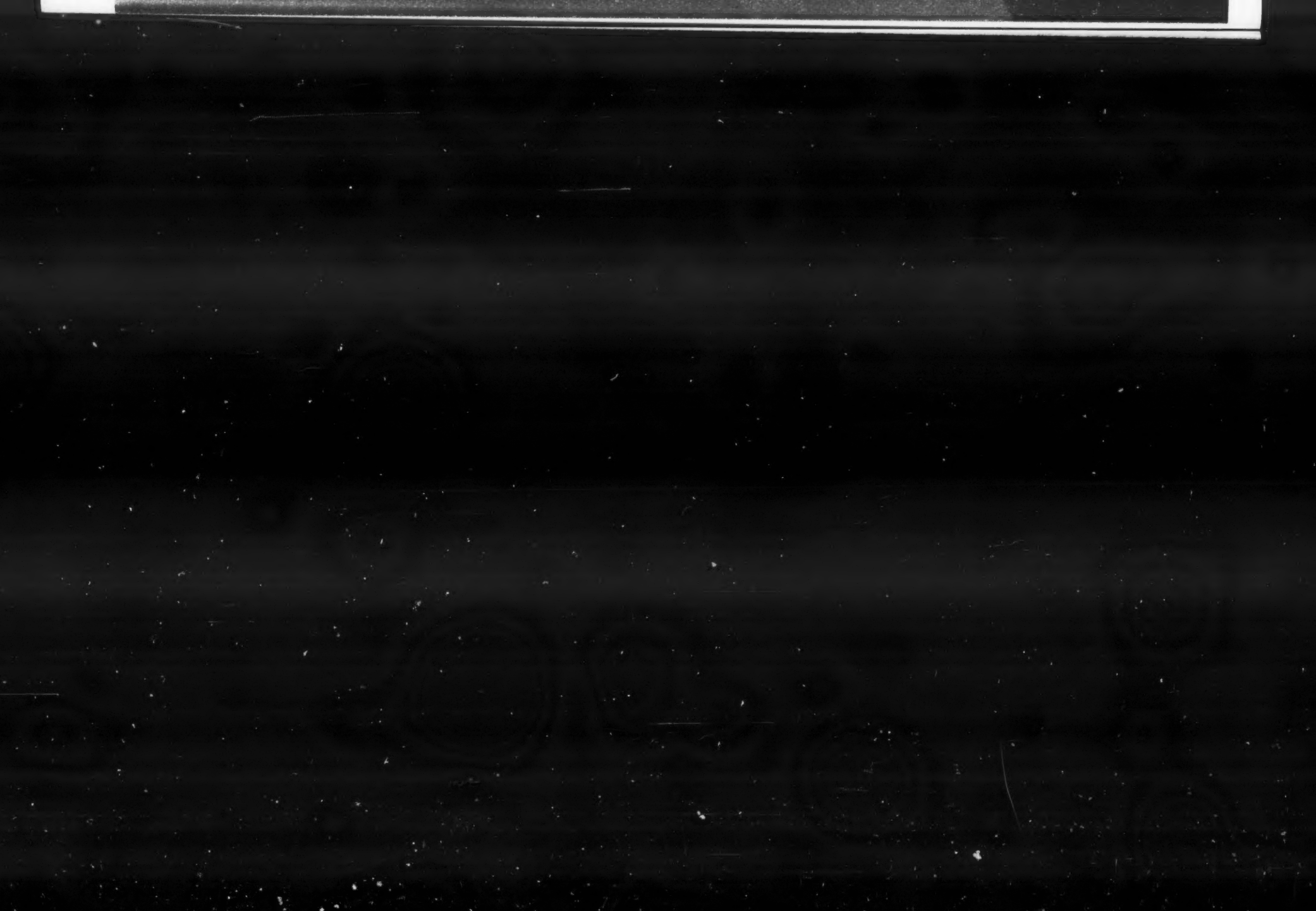
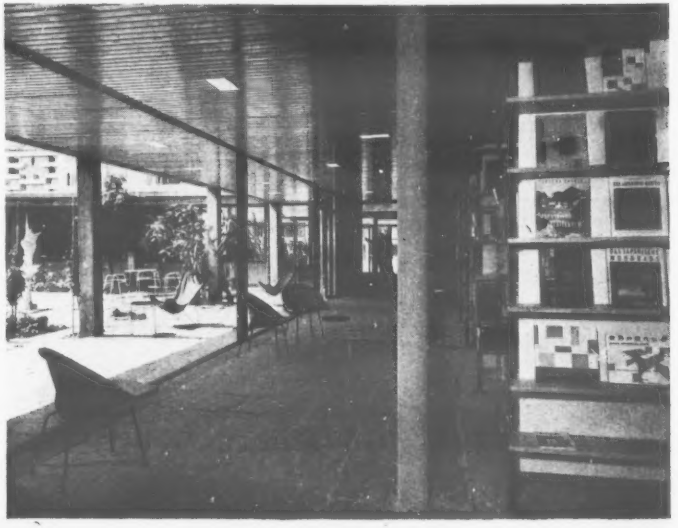
Ground floor plan

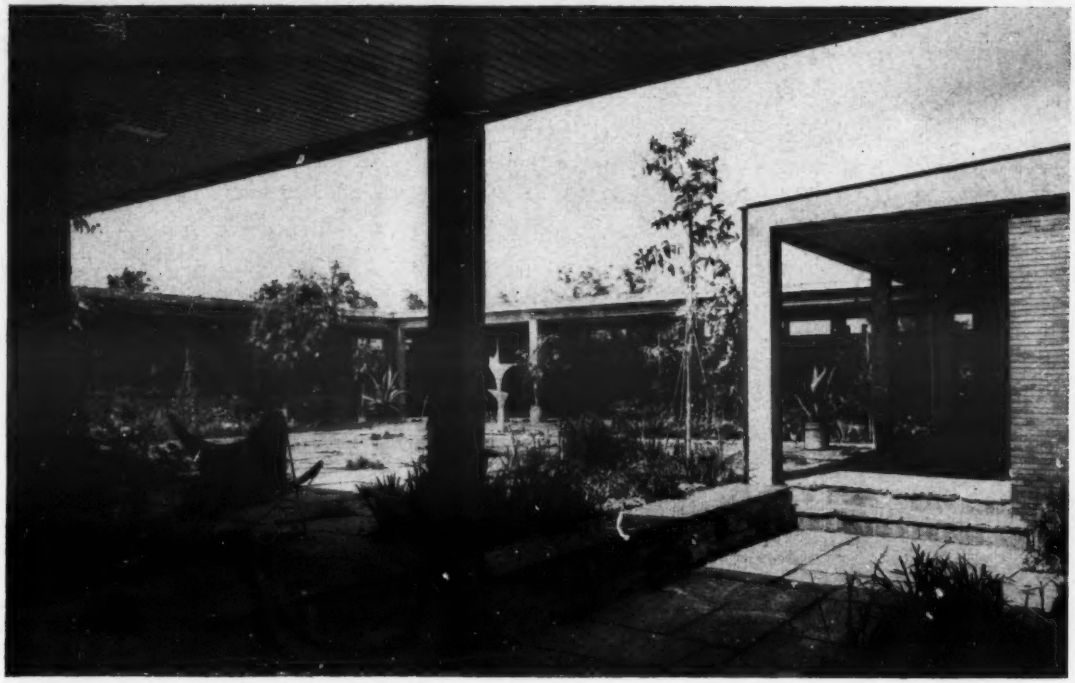


side of the square, is the "self-service library," seen above. Apparently, in

side of the square is the "self service library," seen above. Apparently in Germany our custom of browsing round and selecting books from the shelves ourselves is something of an innovation. Usually books are handed to readers through a little window after they have asked for them. Here the books are kept on free-standing fittings supported on metal uprights through which brackets are slotted carrying polished wood shelves. The brackets, which project on either side of the fitting, can be adjusted to suitable heights. The northern wall of this room has strip windows near the

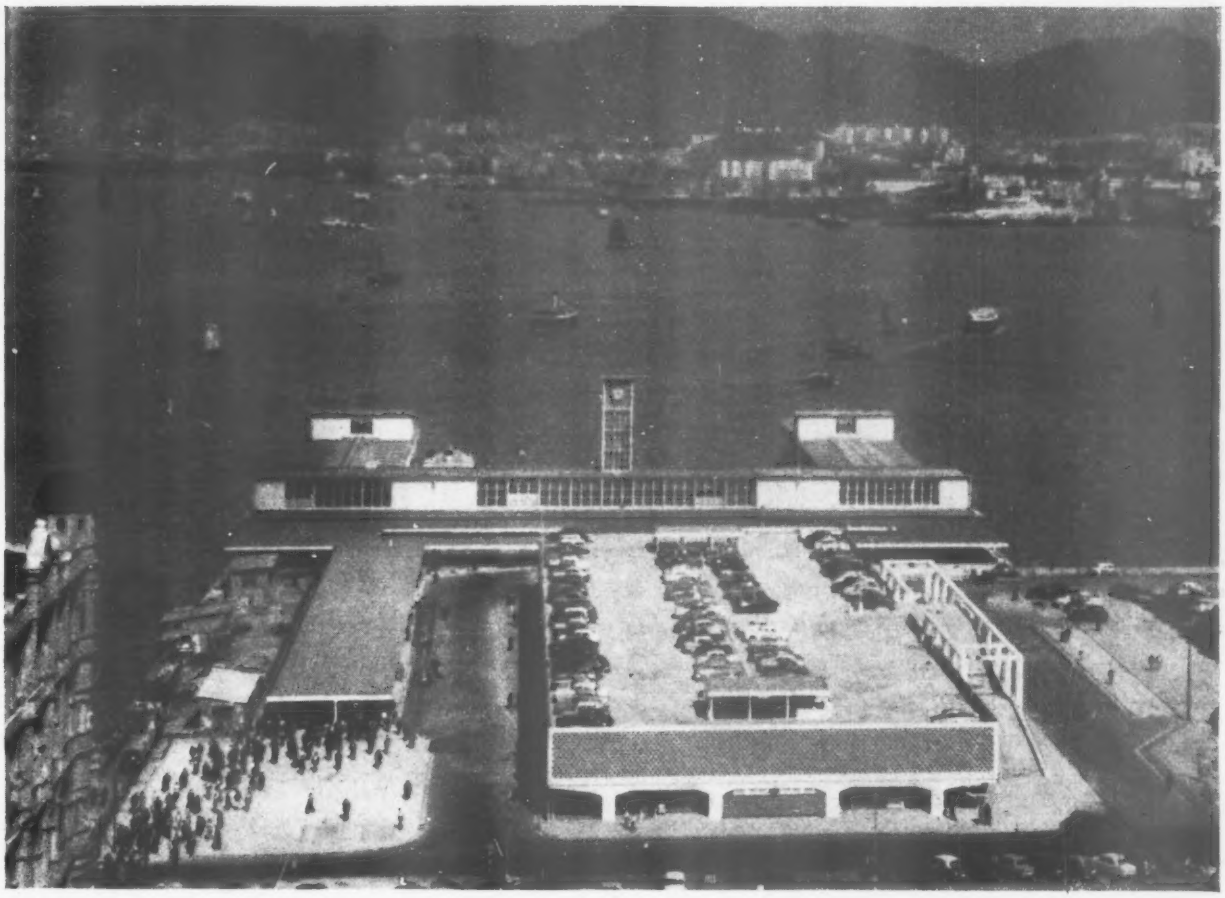


ceiling and small square windows to look out of at a lower level. The south side is as open as possible to the garden courtyard, and the large windows can be sunk right into the ground, level with the slate paving as in the picture above. Along the east side of the courtyard leading from the self service library is a reading room, shown top left. The walls are fully glazed on both the garden side and the outside. As elsewhere the lighting is from recessed fittings or is concealed in the junction between the two levels. There are also pendant fittings over the tables and something of the effect of all this illumination can be seen on the left, which shows the courtyard by night. The south-east corner of the square is open so that it



is possible to get a view of the park from the reading courtyard. Here people are discouraged from wandering in and out of the building by a shallow fish pond (not yet filled, in the picture, above left) and a low wall, which completes the square without interrupting the view. The south side of the building houses a small library specially for young people. It has its own separate entrance with a lobby leading on the left to the bookshelves and on the right to a reading room which can also be used for a variety of youth club activities (above right). The tables here are wedge-shaped so that they can be arranged easily in different ways to suit other activities, an idea which has been used in classrooms in this country. The administrative offices overlooking the courtyard are strategically placed between the control desk at the main entrance and the youth library. There is a basement book store. The structure is a reinforced concrete frame. The walls are hollow concrete blocks faced with narrow red bricks. Most of the floor inside the building is, like the courtyard, paved with slate slabs. The floor finish in the reading rooms, offices and young people's library is plain linoleum in Chinese blue or light grey. Apart from some accents in the furniture and the books themselves the colour scheme is dictated by the natural materials, brick, concrete, glass, steel and polished wood. It is a very attractive, carefully detailed little building but can be criticised for having a bit too much window and for not quite making up its mind whether to be inward or outward looking. Also it seems a pity not to complete the square of the roof at the south east corner. The courtyard idea is very pleasant and the direct access to books from the open air is excellent. Berlin has similar average rainfall to London but it is not so insidiously damp as this country and the books will probably not suffer too much. However, it does not seem likely that they will keep the pristine dust covers shown in the photographs.

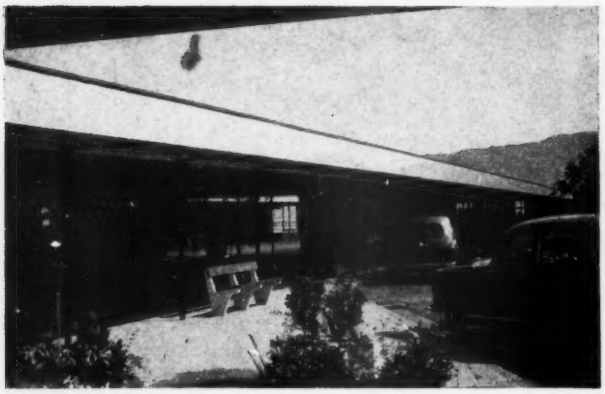
FERRY CONCOURSE AND MULTI-STOREY CAR PARK AT VICTORIA, HONG KONG



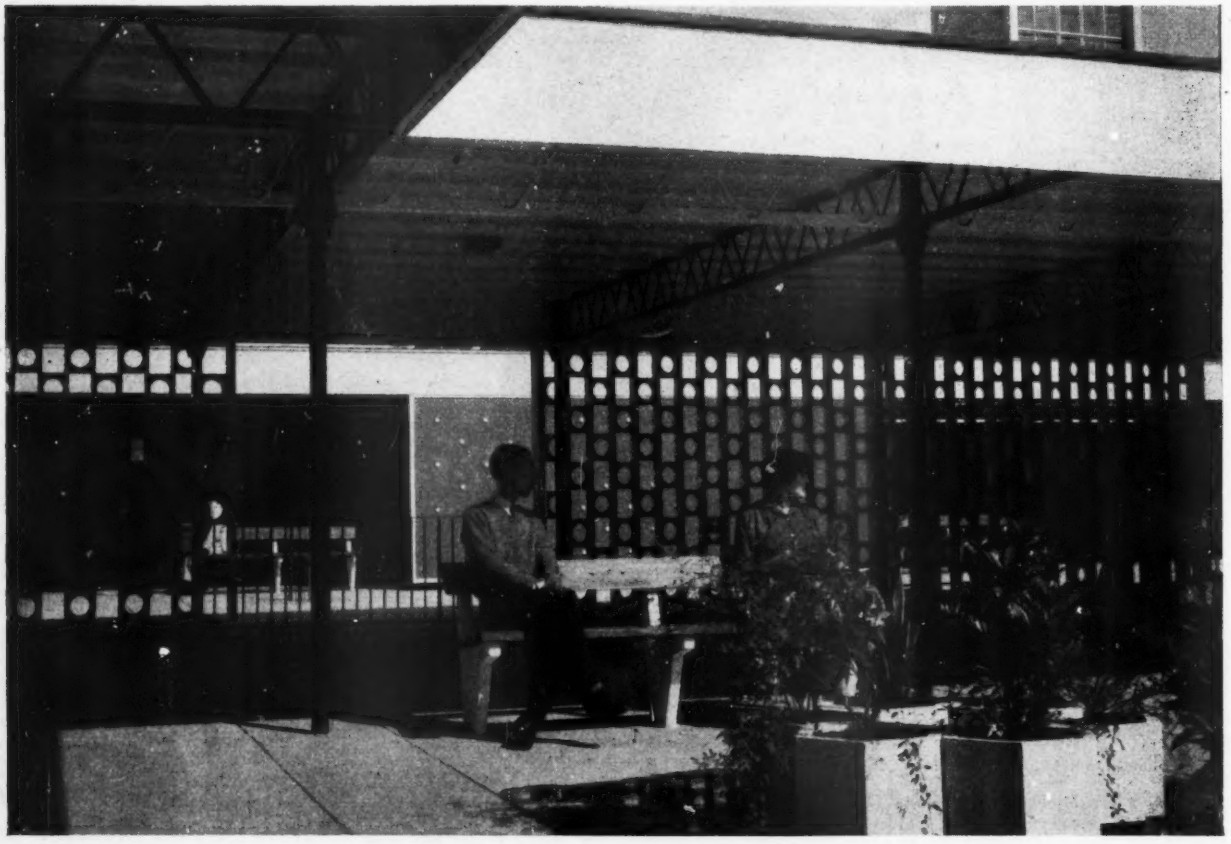
Too frequently in the current official building acres o patent glazing sitting on false piloti *hides an internal structure and plan which might just as well have been designed* 20 *or in some cases even* 50 *years ago. In the face of this widespread comparative failure of central government architecture, and its apparent inability to understand and absorb the big lessons of the post-war years, it is most encouraging to see that in the colonial service more enlightened buildings are being produced. This ferry concourse and multi-storey car-park have been designed in the architectural office of the Public Works Department, Hong Kong, which deals not only with this class of building, but also with housing, hospitals, post offices and so on. In a wider sense the concourse and car park are a small element of the big boom in building which has come about as a result of the enormous increase in population of the colony, with the mass immigration a few years ago from the mainland of China. One major problem with such large scale development is the acute shortage of suitable building sites in the capital town of Victoria, which is perched on a narrow coastal shelf between the steeply sloping hills of the island and the magnificent natural harbour of the colony. In order to overcome this problem, a series of reclamation schemes have been undertaken in recent years, surplus soil for fill being readily available from hillside building sites. The buildings illustrated are in fact the first stage to be completed of the Central Reclamation Scheme, which, when fully developed, will include a new City Hall and a further multi-storey car park, together with access roads, paths and landscaping. The Star Ferry is the principal link between the island of Hong Kong and the mainland peninsula of Kowloon on the north side of the harbour, and is used by roughly* 100,000 *people daily. On arrival, most of these passengers make their way on foot to the nearby centre of the city to the south-west. The concourse runs in front of the full width of the ferry building (which was not designed by the architects) and from it projects a generous covered way in the direction taken by most of the passengers. This planning has the advantage of leaving the rest of the site free for the multi-storey car park, and for vehicles to*

frame. The walls are hollow concrete blocks faced with narrow red bricks. Most of the floor photographs,

FERRY CONCOURSE AND MULTI-STOREY CAR PARK

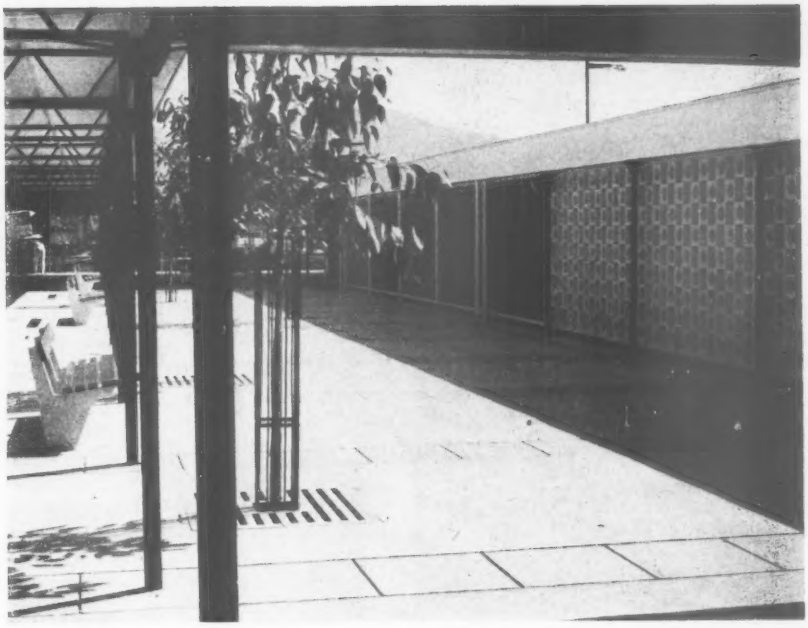


have direct access to the concourse proper, where passengers can alight under cover (above left). The canopy, with 7 ft. 9 in. clear headroom, is cantilevered over the car draw-in for this purpose, whilst the remainder is aligned with the curb to form suitable cover for bus stops. The nature of the site, and the extensiveness of the area covered by the concourse, demanded as light a structure as would be consistent with typhoon conditions if the use of deep piling were to be avoided. A lightweight steel frame has therefore been adopted, with 3-in. diameter galvanised steel columns resting on slab foundations, and carrying open web welded beams 1 ft. 3 in. deep. These in turn support wood wool slabs on steel angle purlins, the roof finish being bituminous felt on cement screed. The fascia is timber framed and faced on both sides with asbestos cement sheeting painted gloss white. Colouring elsewhere is generally black and white, with panels in dark green and strong red. The pavement is a pattern of light grey and orange in-situ *concrete, defined by joints in white cement and black quarry tiles, and set out to relate to the structural grid. Seating has been placed at suitable vantage points, and closely associated with the planting (see below), and grilles have been formed by 9-in. square precast hollow concrete pots finished with white cement paint. Under the covered way are light screens formed of vertical hardwood slats, and solid hardboard*



AT VICTORIA HONG KONG: continued

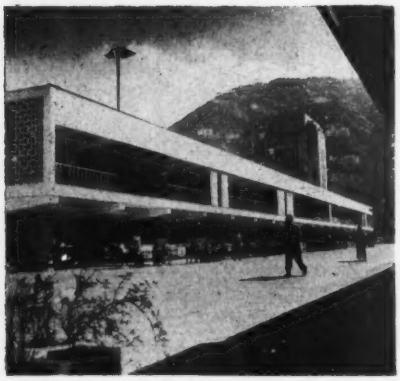
panels for advertising (opposite, top right). These are deliberately inserted to help control the flow of pedestrian traffic, whilst breaking up the covered area, and thereby creating a more intimate character. In the centre of the concourse are two small courtyards (right) which admit daylight, whilst helping further to define circulation, and creating suitable waiting space away from the main flow. They have been screened from the road access and planted, so as to create a small-scale and enclosed atmosphere. The total effect of these various elements is that an exciting and sophisticated interplay has been created from the simplest of elements, of solid and pierced screens of covered way and open

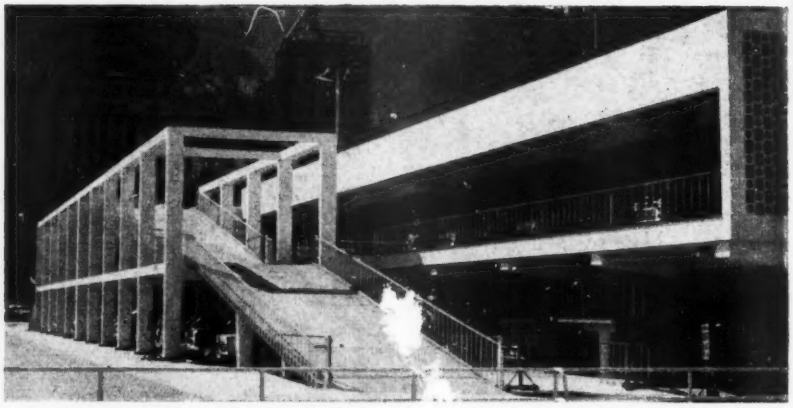


courtyard. This is heightened by the strong and vivid contrasts between the white concrete grilles sparkling in the bright sunshine, and the dark solid panels. At the same time, however, movement has remained the dominant essay of the concourse, the architects having created a whole series of different spatial effects as one approaches or leaves the ferry. In an indirect way, much of the success of this essay would seem to be due to the skilful handling of the scale of the building, partly by the low height of the canopy, and partly by the use of the right type of patterning. In contrast with the concourse the multi-storey car park (above) is a much more static and factual structural statement. This in some ways is inevitable, because of the heavy super-imposed load that it must support. Nevertheless, the architects have achieved a fairly satisfactory continuity between the two buildings. However, the car park had also to be considered most carefully in relation to the Central Reclamation Scheme as a whole, in particular to the new City Hall, which will shortly be under construction. For this reason, at sketch design stage, schemes and models were prepared of two, three- and five-level car parks. From these the conclusion was reached that a three-tiered car park was the most suitable from the point of view of its mass and scale in juxtaposition to the City Hall design. Since the building is on filled ground, and because of the superimposed loads, the structure is supported on concrete piles, which have been carried down to an average depth

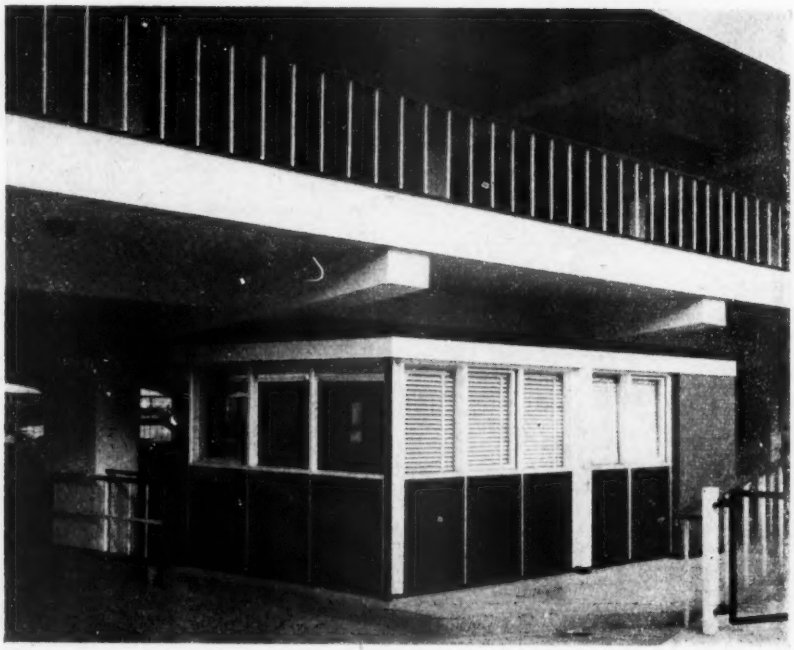
FERRY CONCOURSE AND MULTI-STOREY CAR PARK

of about 50 ft. It was decided to cantilever out the first and second floor, because it allowed clear vision at the entrance and exits. Equally, the architects felt that this lightened the whole appearance of the building. The result is perhaps most clearly

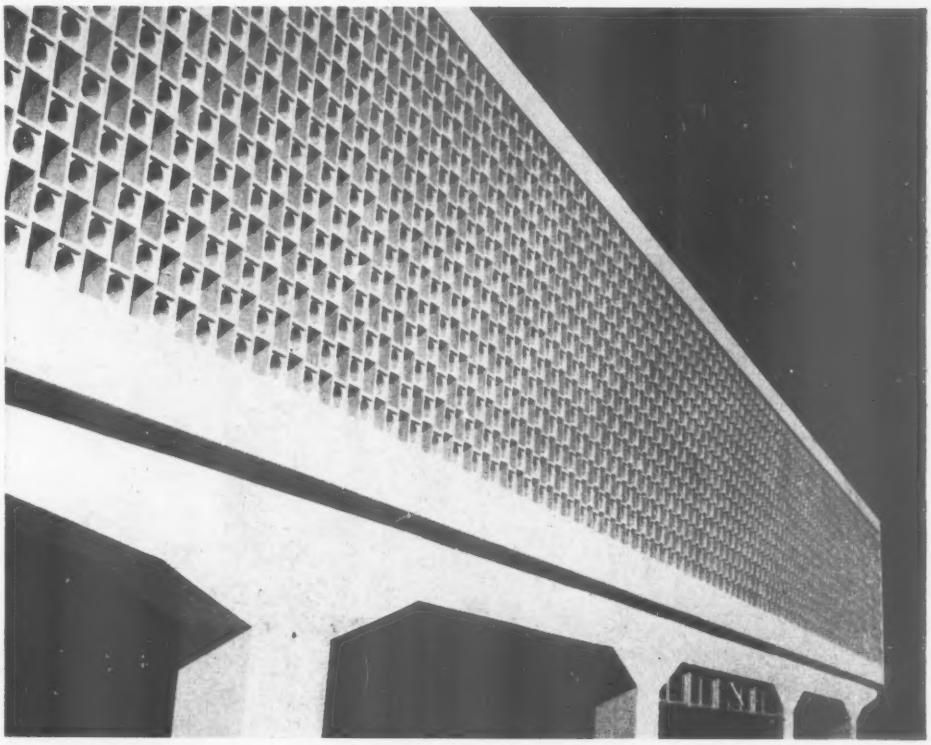




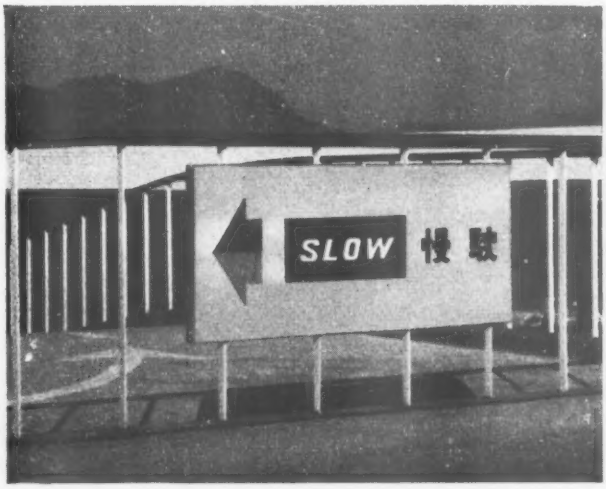
seen on the west side of the building (above). Here an abstract pattern has been created by fixing asbestos cement panels between the first and second floors, and these are painted in bright red, dark green and grey. The three levels provide parking space for just over 400 cars. Entry to and exit from the upper floors is by means of two separate ramps so as to permit one-way circulation, each ramp having a gradient of about one in five. A column grid of 28 ft. × 17 ft. was adopted, with a cantilever of 16 ft., the upper floors being 5-in. r.c. finished with trowelled granolithic. The ground floor in-situ *slabs are separate from the main structure to allow for differential settlement. The framing for the ramps (top right) has also been built as an independent unit, the braced box form chosen giving lateral stability without the necessity for ugly haunches or cross braces. Staircases are also provided for access to the upper floors (centre right), being r.c. treads cantilevered from a central spine beam. An attendants' control room and pay office (bottom right) is provided at the*

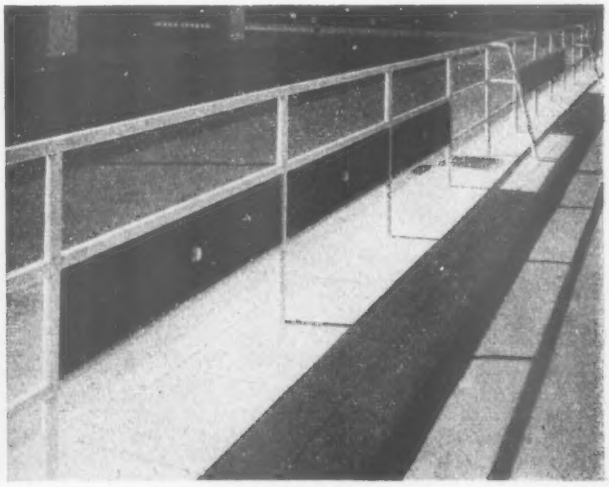


AT VICTORIA, HONG KONG: continued



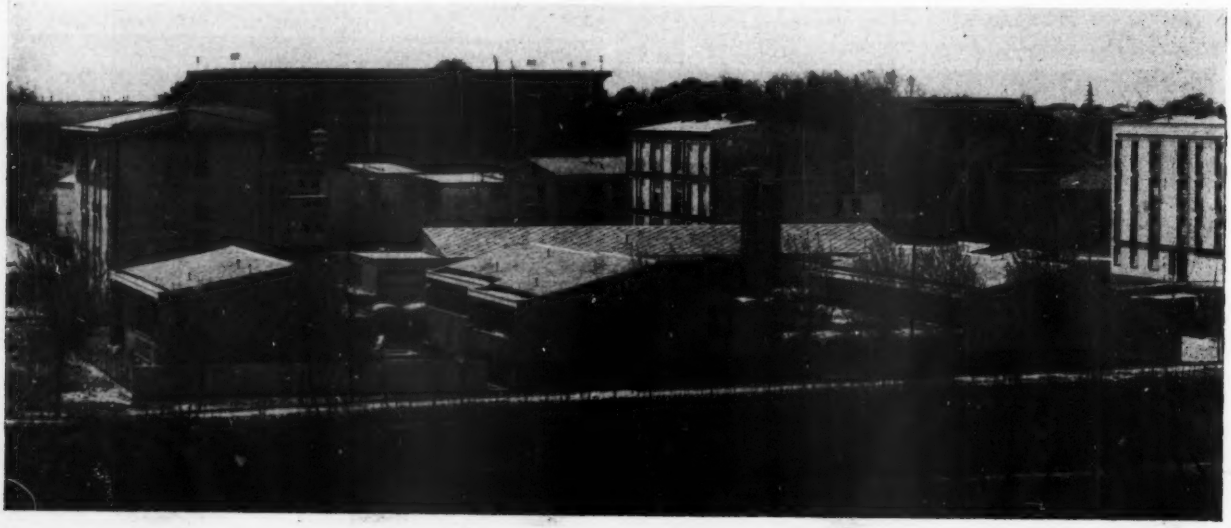
entrance to the ground floor and at the foot of the access ramp, which has been built off the ground floor slab as a small independent building. The concrete generally has been finished with white cement paint, but the north and south end walls (right) have been faced with black mosaic tiles in front of which have been placed 9-in. square hollow precast concrete pots, painted white, being identical with those used in the concourse. Throughout the scheme for both buildings, the architects have attempted to achieve a consistently high standard of design for furniture, fittings, display (such as the notice below left) and barriers (below right). These two buildings raise one or two rather interesting questions. Perhaps the most important one is to demand why this example of colonial architecture is such an advance on the bulk of current MOW work in this country. One might consider it was possible that the environment of Hong Kong was acting as the catalyst. It seems, however, that the staff of the office are almost all recruited in this country, and that there is no link with students passing out of the Hong Kong School of architecture. Without further knowledge one can only guess, but the designs suggest, through their vitality and assertiveness, that they are almost from start to finish the work of young architects, who have been given a wide degree of freedom and initiative. This sort of thing can only, of course, be achieved in relatively small offices where there is personal contact between the man at the top and the job architect, so that the two can establish a satisfactory working rapport. These buildings then, appear to be evidence in favour of the proposal that the MOW as we now know it should be dissolved, and replaced by a series of smaller offices, each serving a different department of central government.





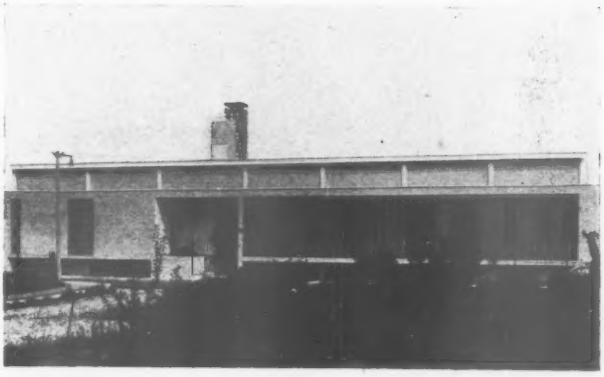
VILLAGE OF MOTHER AND CHILD IN VIA GOYA,

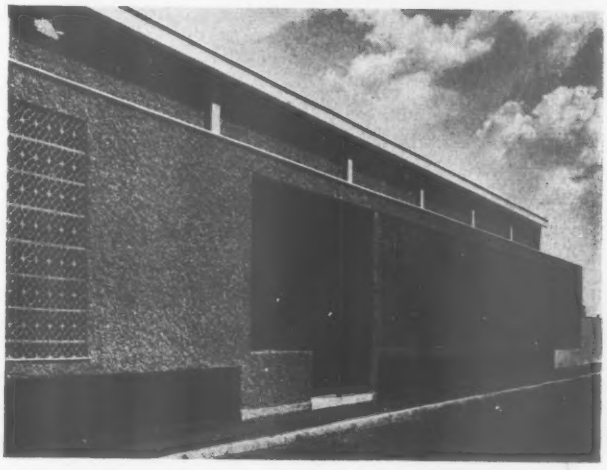
The village first came into being in 1945 *to provide homes for young mothers returning from concentration camps who, not surprisingly, refused to enter foundling hospitals where the environment was all too similar to that from which they had come. The original accommodation consisted of prefabricated cottages given by the Municipality of Milan and sited in the garden of an old Milanese palace. The design (by Fabio Mello and Alberto Scarzella Mazzochi) and erection of this first permanent home, the pilot scheme for others in different parts of the country, represents a social revolution in Italy in the care of unmarried mothers, pregnant girls and mothers of young children in need of care and attention. Whereas previously these children were either adopted*

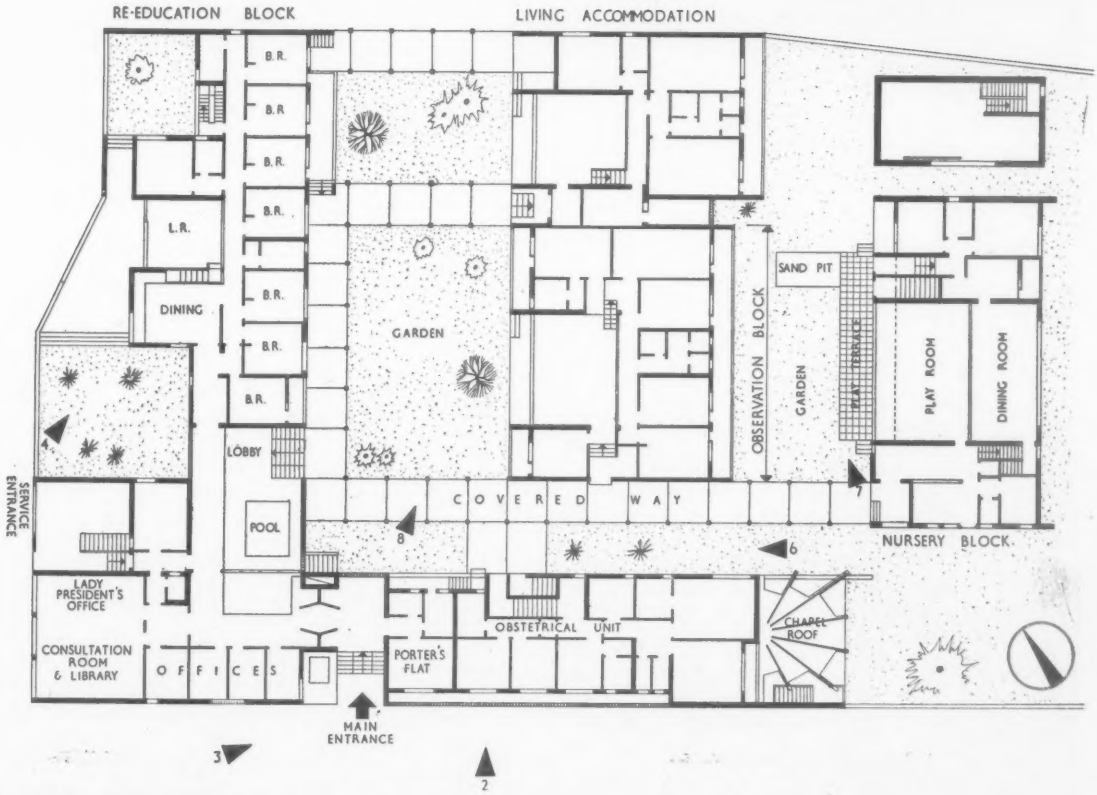


MILAN

or placed in foundling homes, everything here is done to keep the mother and child together, since it is felt that the child deprived of its mother during the first few years of its life is likely to develop anti-social tendencies. The village is sited on the edge of a working class housing estate (opposite page bottom), so that it forms part of the community and it is hoped that it will become so well accepted that there will be no social stigma attached to living there. To the left of the main entrance (viewpoint 2 top right) are the offices for the secretary, social workers and matron; to the right the porter's apartments, and the obstetrical unit (viewpoint 3 bottom right). On first entering the village the women are accommodated in the observation block. This has four rooms with two or three beds in each, together with living and dining rooms and kitchen to make it a self-contained unit. The women are discreetly observed while living here so that the staff may form a judgment of their personality and the way in which they may best be helped to re-establish themselves in society with their babies. This block is connected by a covered link to the obstetrical unit with consulting rooms, lying-in and birth room. After the birth the mother and child are transferred to the re-education block (opposite) where each woman has a room in which to live with her baby in an atmosphere as near as possible to that of normal life. While living here she goes out each day to learn a trade or complete interrupted studies which will enable

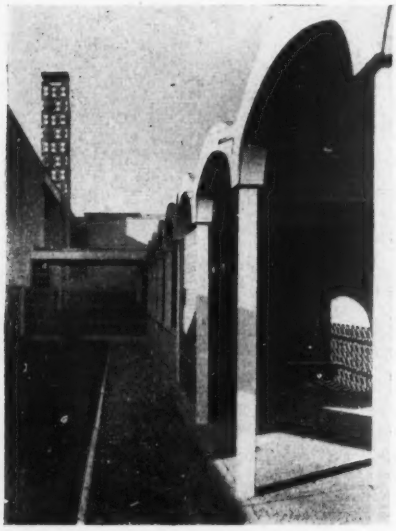




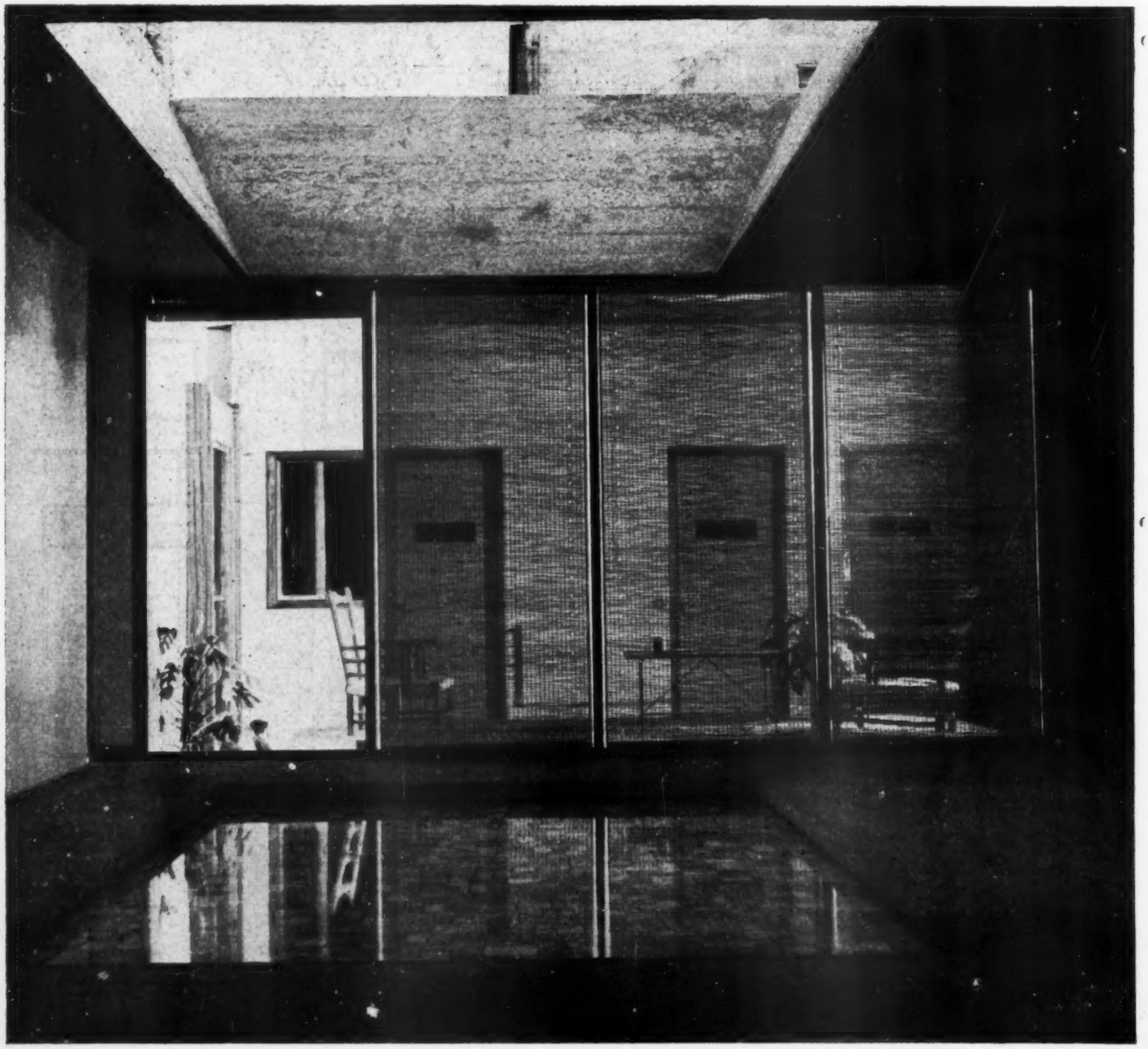


Ground floor plan showing photographic viewpoints [Scale: $\frac{1}{16}$" = 1' 0"]

VILLAGE OF MOTHER AND CHILD IN VIA GOYA,

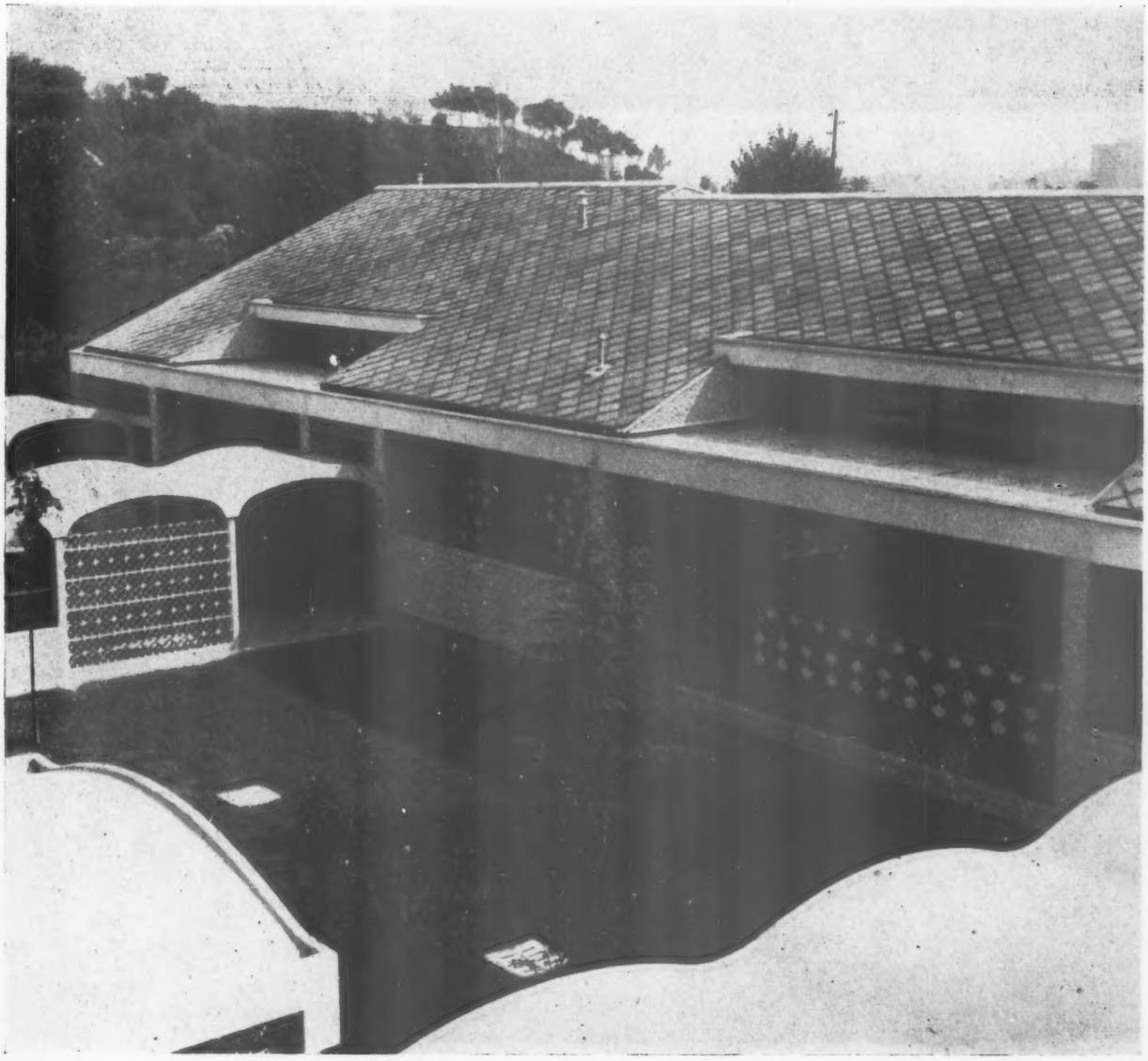


her to support herself and the child. While the mother is out at work the child is cared for in the day nursery, which also accepts children of mothers not in the village but going out to work and needing day nursery accommodation for their babies. No distinction is made between legitimate and illegitimate children. No limit is placed on how long a mother stays in the village; she may leave whenever she is capable of looking after and supporting her child. This building is an institution in that it has control over those within, and protects them from interference from without, but none of this must be done in an obvious way, since its success depends upon providing a home-like environment. The division of the building into small, separate, autonomous communities and the domestic scale in which these are expressed largely achieves this intention, but some of the necessary "control" buildings (shown on previous page) may still be too institutional in their visual associations. The photograph left (viewpoint 6) shows the arcaded covered way which links the nursery block, the pre-natal "observation" block and the post-natal "re-education" block on the right with the obstetrical unit and chapel on the left. The screens, of



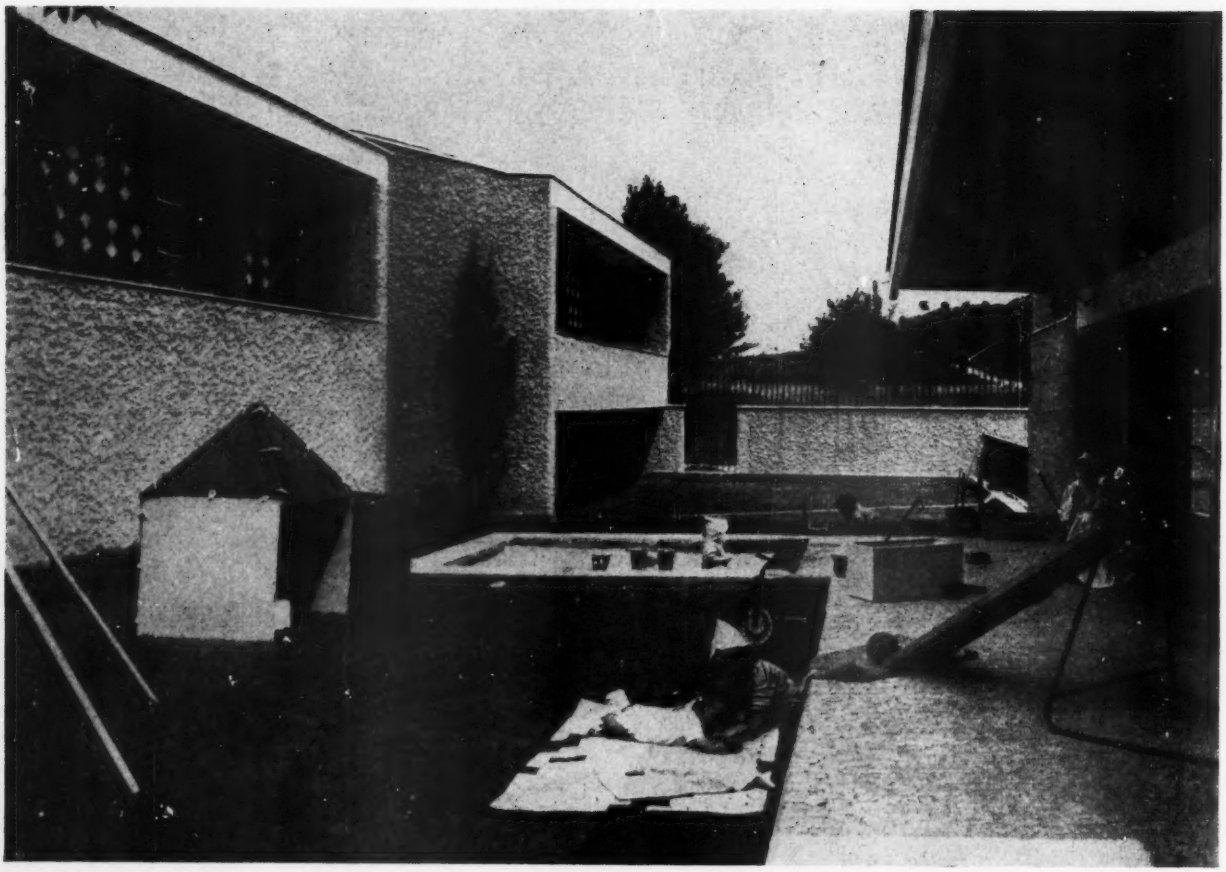
MILAN: continued

extruded clay units, make a lively pattern of sun and shade on the path, besides being decorative in a slightly flamboyant way. The tall chimney at the back adds colour to the building, being tiled in a pattern of black and white tiles on a pink ground. Right is a corner of the garden of the "re-education" block (viewpoint 4). Generally the building is rather highly decorated, but occasionally it surprises with a sudden simple interior, as in the entrance lobby between the administration block and the re-education block (opposite page, bottom), with a rectangular pool beneath an open roof and simple, glazed screen. Below, view of the observation block (viewpoint 8): the walls are rough textured, pale grey rendering, eaves painted white, roof of grey-blue slates and the glazed tiles under the window, like those on the chimney, make a black, white and pink pattern. Another courtyard contains the play terrace of



VILLAGE OF MOTHER AND CHILD IN VIA GOYA, MILAN: continued

the day nursery (viewpoint 7, below), where the children spend most of their day. Left, again a simple interior, the dining room of the day nursery. Here walls and ceilings are painted pale grey; door pale blue, floor, dark blue linoleum, and the sliding door fitment, yellow. All the internal doors have observation slots in them, which however, the children do not seem to mind. In this country we may regard observation slots as a rather old-fashioned method of keeping people under supervision, and even in mental hospitals they are being abandoned; but in Italy this evidence that unmarried mothers are being treated as psychological cases rather than as criminals is obviously a big advance, reflected also in this light, bright and in general non-penal building.



technical section

THE INDUSTRY

Brian Grant describes a new all-nylon cloth, a fluorescent tube, an air-conditioning unit and synthetic rubber sheeting.

Nylon upholstery
Simpson & Godlee are now producing an all nylon cloth incorporating bulked yarn to provide greater strength than the usual furnishing fabrics. The nylon also gives excellent elastic recovery, so that there should be no unsightly permanent wrinkles in the seats and backs of chairs. Loose covers can be washed and drip dried. The material seems particularly suitable for hotels and public buildings. (*Simpson & Godlee, Manchester.*)

Fluorescent tubes
The GEC last month introduced a single type of 5-ft. fluorescent tube to replace the three previous types of plain, siliconed or metal striped tubes for switch or instant start circuits. The tubes will be sold at the standard price of 13s. and should simplify storekeeping. The introduction of this universal tube is due to a low cost process in which a conducting stripe of finely divided metallic silver in vitreous enamel is applied to the tube and fused in during subsequent processing. (*The General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.*2.)

Synthetic rubber sheathing
Tretol have just announced their recently developed Tretoprene 2C system of applying a corrosion resistant film of neoprene synthetic rubber to metals or concrete. The material is applied in two coats, with a total thickness of up to 0·020 in. or about the same as 15 coats of paint. The system will withstand attack from a wide range of the chemicals used nowadays in industry, and is also resistant to mineral oils and fats. There would seem to be advantage in a system of this kind which can be used on *in-situ* work, and which can be applied by site labour. (*Tretol Ltd., Tretol House, The Hyde, Hendon, London, N.W.*9.)

Air conditioning
The Westair unit will dehumidify and cool rooms up to a volume of 3,500 cu. ft. Installation is normally underneath the window, the incoming air passing through a fibreglass filter. The room temperature can be set by thermostat, and the unit can also be used as a heat pump, the reverse cycle of operation being obtained by a valve in the refrigeration circuit. A heat input of 7,800 B.Th.U. per hour is obtainable from an electrical input of only 960 watts, a performance coefficient of 2·8. (*Westool Ltd., St. Helen's, Auckland, Co. Durham.*)

8 ESTIMATING

current wage rates, market prices and measured rates

Materials prices remain steady this quarter and there is still no noticeable effect of 1d. an hour wage increase of June 23. One event which has affected prices in several trades is the fall of 1s. per yard in the price of shingle, sand and ballast. This has led to welcome reductions in the price of concrete which in some cases are up to 2s. per yard. In contracts in which concrete work predominates this can make quite a difference. The prices are prepared by Davis, Belfield and Everest, Chartered Quantity Surveyors.

Wage rates
Rates of wages rose on June 23, 1958, and are now as follows:

	Craftsmen	*Labourers*
London District	*s d*	*s d*
Within 12 miles radius	4 9½	4 3
From 12 to 15 miles radius	4 9	4 2½
Liverpool and District	4 9½	4 3
Grade classifications		
A	4 8	4 1½
A1	4 7½	4 1

Market prices
Prices are given for the major items in each trade, they are intended as average prices and include delivery in the outer London area. They do not include overhead charges and profit.

Measured rates
Prices are for work carried out in the Outer London area and include 10% to cover overhead charges and profit except in the case of work which would be carried out by specialists when 5% has been allowed.
The prices given in italic represent the total value of the materials included in the measured rates, including an allowance for waste and 10% for overhead charges and profit. The cost of labour included in the measured rates (including its proportion of overhead charges and profit) can be ascertained by subtracting the prices in italics from the prices in heavier type.

Abbreviations
Inches: in. Feet: ft. Yards: Y. Yards cube: YC. Yards super YS. Feet cube: FC. Feet super: FS. Ton: T. Feet run: FR. Thousand: M. Square: Sq. Number: No. Hundredweight: C. Pound: lb. Gallon: Gal.

Preliminaries
To all estimates based on prices for measured rates add, if required, for Preliminaries, water, insurances, etc., depending on the nature of the job.

Price changes
* Shows changes in market prices and measured rates since the last issue (October 2, 1958).

D

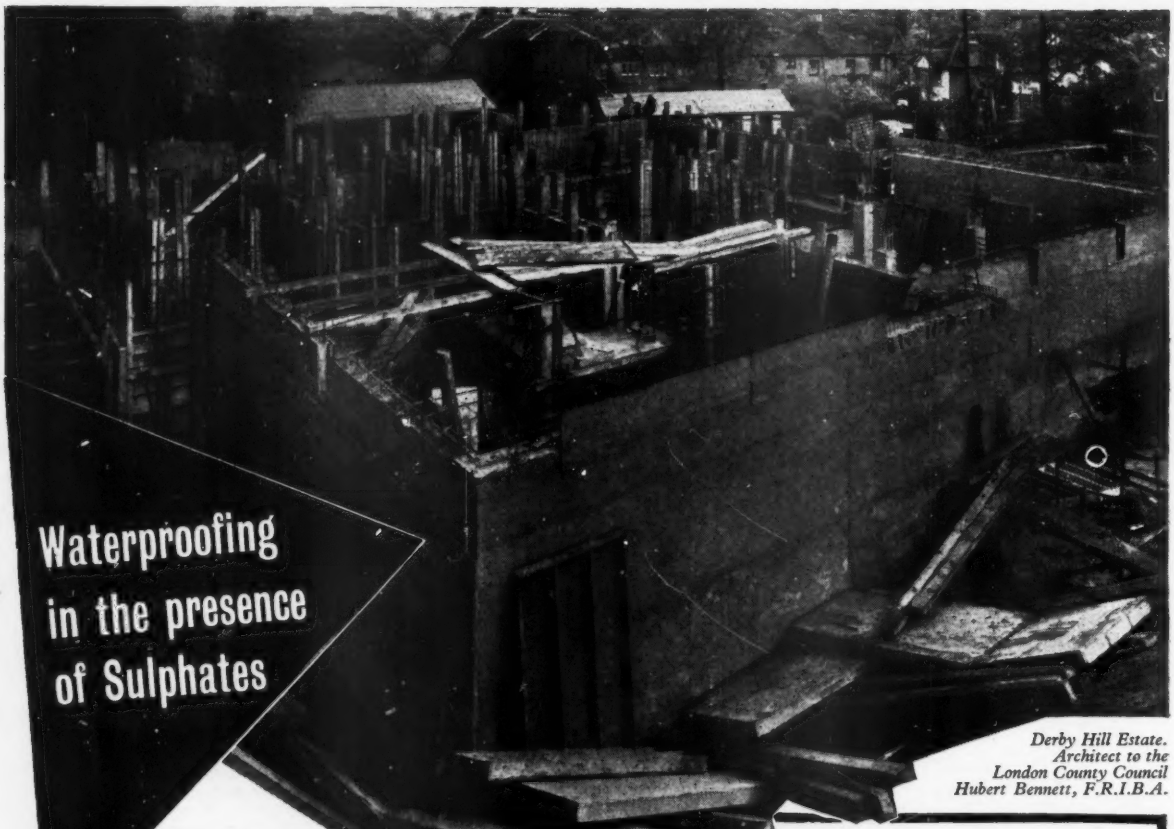
technical section

EXCAVATOR

		s	d
Market prices			
Carting away, up to 8 miles	YC		
Hand loaded		7	0
Machine loaded		6	0
Hardcore	YC	10	0
Ashes	YC	11	6
Measured rates			
Hand excavation and disposal			
NB: the following are applicable to excavation in heavy soil.			
Excavating over site to remove top soil and vegetable matter, 6 in. deep	YS	1	3½
As above, 12 in. deep	YS	2	6½
Excavating over site to reduce levels and getting out	YC	10	2
Excavating for basement and getting out	YC		
Depth up to 5 ft.		11	5
Depth between 5 & 10 ft.		16	6
Depth between 10 & 15 ft.		21	7
Excavating surface trenches and ditto	YC		
Depth up to 5 ft.		14	0
Depth between 5 & 10 ft.		19	1
Depth between 10 & 15 ft.		24	2
Excavating basement trenches and ditto	YC		
Commencing 5 ft. below existing ground level		19	1
Commencing 10 ft. below existing ground level		24	2
Commencing 15 ft. below existing ground level		29	3
Wheeling surplus excavated material not exceeding 100 yards and depositing	YC	5	1
Add to last for:			
Roughly spreading and levelling	YC	1	6½
Spreading, levelling and consolidating to make up levels	YC	3	3½
Returning, filling-in and well ramming excavated material around foundations	YC	4	6
Loading surplus material into lorries and carting to tip, not exceeding 8 miles	YC	14	9
Excavating from spoil heaps selected top soil, wheeling not exceeding 100 yards, and spreading, levelling and consolidating, not exceeding 6 in. to receive turf	YS	2	
Mechanical excavation and disposal			
Excavating for shallow surface excavation and loading into lorries or dumpers (using ⅜ yd. cube excavator)	YC	3	0
Excavating for surface excavation and removing, spreading and levelling not exceeding 200 yds. (using 6 yd. cube scraper)	YC	2	11
Removing excavated material and depositing, not exceeding 200 yds. (using 3 yd. cube dumper)	YC	2	2
Planking and strutting			
Planking and strutting to sides of surface or basement excavation	FS		
Depth up to 5 ft.			8
Depth up to 10 ft.			10
Depth up to 15 ft.		1	0
Planking and strutting to sides of surface and basement trenches	FS		
Depth up to 5 ft.			2
Depth up to 10 ft.			3½
Depth up to 15 ft.			4
Hardcore, etc.			
Hardcore filled-in in layers, each layer well rammed	YC	20	6
		13	*9*
Bed of ditto, 4-in. thick	YS	3	5
		1	*6½*
Ash filled-in in layers, each layer well rammed	YC	21	4
		15	*10*

CONCRETOR

Market prices			
Portland cement, 6 tons and over	T	113	6
Rapid hardening, 6 tons and over	T	124	0
¾-in. down, washed, crushed and graded shingle	YC	*16	0
1½-in. ditto	YC	*15	0
Sharp sand	YC	*19	6
⅝-in. diam. mild steel rods to BS 785 delivered station	T	859	0
⅜-in. ditto	T	921	6
Measured rates			
Portland cement mass concrete in foundations etc.	YC		
1 : 12, 1½-in. "all-in" aggregate		*56	8
		35	*9*
1 : 3 : 6, 1½-in. aggregate		*66	3
		45	*9*
1 : 2 : 4, ¾-in. aggregate		*74	0
		53	*0*
1 : 1½ : 3, ½-in. aggregate		*76	8
		55	*9*
Add for:			
Working around rod or mesh reinforcement	YC	5	1
Walls not over 6-in. thick	YC	25	5
Walls 6-in. to 12-in. thick	YC	17	10
Walls over 12-in. thick	YC	12	9
Columns not over 72 sq. inches	YC	48	3
Columns 72 to 144 sq. inches	YC	38	2
Columns over 144 sq. inches	YC	30	6
Suspended floors and roofs not over 4½-in. thick	YC	20	4
Suspended floors over 4½-in to 6-in. thick	YC	17	10
Suspended floors over 6-in. to 12-in. thick	YC	15	3
Beds not over 4½-in. thick	YC	10	2
Beds 4½-in. to 6-in. thick	YC	7	7
Beds 6-in. to 12-in. thick	YC	2	6½
Hollow tile floor of clay tiles 4-in. thick at 15-in. centres laid on formwork (measured separately), nibs filled in with concrete (1 · 2 : 4) and finishing top of tiles with bed of concrete 1½-in. thick including tamping around reinforcement (measured separately)	YS	*17	6
		10	*2*
Ditto, but tiles 8-in. thick	YS	*27	0
		17	*9*
Sundries			
Finishing concrete with trowelled face to receive linoleum	YS	1	3½
Applying horizontal damp-proof membrane of Synthaprufe in three coats to surface of concrete and blinding with sand to form key	YS	5	9
		4	*1*
Supplying floor clips (p.c. 6d. each) and fixing	No.	1	1
Formwork			
Formwork including strutting easing and striking:			
Vertical faces of foundation	YS	18	8
		9	*8*
Vertical faces of wall	YS	19	2
		7	*0*
Soffite of floors not over 12-ft. high	YS	19	1
		8	*8*
Sloping soffite of stairs	YS	23	0
		9	*5*
Sides of columns	FS	2	5½
			10½
Sides and soffites of lintols and beams	FS	2	7½
		1	*0*
Add to the above for wrot formwork including rubbing down concrete	YS	2	6½
Reinforcement			
⅝-in. diameter mild steel rods, hooked, bent and tied and fixing	C	68	7
		52	*2*
½-in.	C	73	11
		54	*1*
⅜-in.	C	80	6
		55	*10*



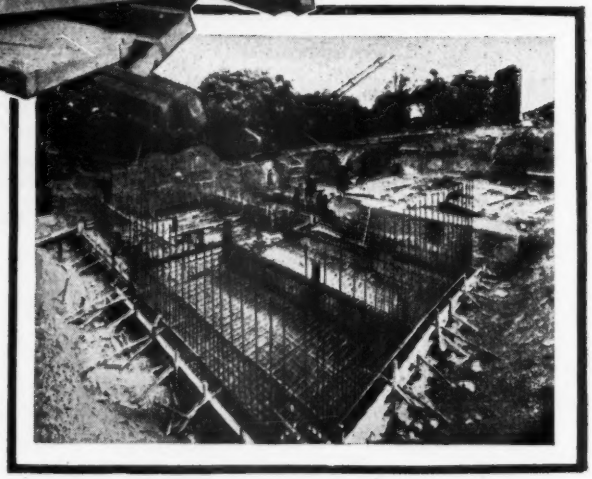
Waterproofing in the presence of Sulphates

Derby Hill Estate.
Architect to the
London County Council
Hubert Bennett, F.R.I.B.A.

Published by permission of the London County Council.
Contractors:
Gee, Walker & Slater Ltd.

When soluble salts of sufficient concentration to cause disintegration of ordinary concrete are present in a damp site, there is the dual problem of preventing sulphate attack and of protecting the concrete in contact with the ground from penetration of dampness. These conditions have been met and overcome on numerous sites by the use of 'PUDLO' Brand Waterproofer in combination with sulphate resisting Portland cement.

A typical instance is in the construction of blocks of flats for the London County Council at Derby Hill, Sydenham, London, S.E., where the reinforced concrete forming the cellular raft foundation and basement walls is composed: 1 part sulphate resisting Portland cement, 2 parts coarse washed sand, 4 parts non-porous aggregate $\frac{3}{4}$" down, with the inclusion of 3 lbs. 'PUDLO' Brand Waterproofer per 100 lbs. of cement. Illustrations are of work in progress to 2 blocks.



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H.P. 6309

technical section

		s	d
Concretor continued			
¼-in.	C	94	3
		60	*7*
Steel wire mesh fabric weighing 4·32 lb. per yd. super and laying in concrete	YS	4	1
		3	*5*
Ditto weighing 6·57 lb. per yd. super	YS	6	0
		5	*3*
Ditto weighing 9·32 lb. per yd. super	YS	8	5
		7	4
Precast concrete			
Precast concrete (1 : 2 : 4) finished fair on exposed faces and hoisting setting and jointing:			
4½-in. × 6-in. lintols reinforced with one ½-in. rod	FR	2	9½
		2	3½
4½-in. × 9-in. ditto with two ½-in. rods	FR	4	3
		3	5½
Piling			
Reinforced pre-cast concrete piles, approximate prices for supplying, unloading, pitching and driving			
12-in. × 12-in. up to 30 ft. long	FR	35	0
14-in. × 14-in. up to 50 ft. long	FR	41	0
Sheet steel piling, ditto	T	1165	0
		to	
		1230	0

BRICKLAYER

Market prices

Soft sand	YC	17	6
Hydrated lime	T	*102*	6
Plain Flettons	M	118	0
Second hard stocks	M	300	0
Lingfield Engineering wire cuts Grade B	M	*260*	0
Partitions			
Clinker concrete, solid	YS		
2-in.		3	11
2½-in.		4	4
3-in.		5	6
4½-in.		7	0
Thermalite-Ytong	YS		
2½-in.		7	0
3-in.		8	5
4-in.		11	0
Hollow clay	YS		
2-in.		4	5
2½-in.		4	8
3-in.		5	5
(6 cavity) 4-in.		6	10
Normal quality wood wool slabs	YS		
2-in.		8	10
2½-in.		10	2
3-in.		11	5

Measured rates

Reduced brickwork in cement lime mortar.

		s	d
Lingfields in cement mortar	YS		
Flettons		*33	3
		17	*3*
Second stocks		*52	10
		36	*10*
Lingfield Grade B		*51	8
		33	*3*
Half brick wall ditto	YS		
Flettons		*18	4
		8	*2*
Second stocks		*28	2
		18	*0*
Lingfield Grade B		*28	1
		16	*1*
11-in. hollow wall with 2-in. cavity and wall ties	YS		
Flettons		*37	9
		16	*9*
Second stocks		*57	5
		36	*5*
One brick wall built fair and pointed both sides	YS		
Flettons		*39	10
		17	*3*
Second stocks		*59	6
		36	*10*
Lingfield Grade B		*57	2
		33	*3*
Sundries			
Extra over common brickwork for internal fair face and flush pointing	YS	1	5
Horizontal damp proof course of two courses of slates and bedding and pointing	FS	4	6
		2	8
Horizontal damp proof course of hessian base bitumen	FS		11
			9
Facings			
Extra over ordinary brickwork with bricks P.C. 118s. per 1,000 for facings as described			
To solid wall in Flemish bond	YS		
Facings P.C. 250s per M		15	10
		9	*7*
Facings P.C. 350s per M		23	1
		16	*11*
Facings P.C. 450s per M		30	5
		24	*2*
To cavity wall in stretcher bond	YS		
Facings P.C. 250s per M		13	1
		7	*4*
Facings P.C. 350s per M		18	7
		12	*11*
Facings P.C. 450s per M		24	2
		18	*5*
Half brick wall in facings built fair and pointed on one side	YS		
Facings P.C. 250s per M		30	3
		16	*0*
Facings P.C. 350s per M		35	10
		21	*6*
Facings P.C. 450s per M		41	4
		27	*1*
Partitions			
Clinker concrete solid partition blocks and setting in cement lime mortar	YS		
2-in.		9	4
		4	*10*
2½-in.		10	7
		5	*5*
3-in.		12	10
		6	*10*
4½-in.		15	11
		8	*9*
Thermalite-Ytong ditto	YS		
2½-in.		12	8
		8	*6*
3-in.		15	0
		10	*3*
4-in.		19	1
		13	*4*
Hollow clay ditto	YS		
2-in.		9	11
		5	*5*
2½-in.		11	0
		5	*10*
3-in.		12	9
		6	*10*
(6 cavity) 4-in.		15	9
		8	*6*
Wood wool slabs ditto	YS		
2-in.		14	1
		10	*6*
2½-in.		16	4
		12	*2*
3-in.		18	6
		13	*9*

DRAINLAYER

Market prices

Salt glazed stoneware pipes and fittings, "Best" quality:

Ordinary pipes	FR		
4-in.		1	7½
6-in.		2	5¼
9-in.		4	4½
Bends	No.		
4-in.		4	10½
6-in.		7	3¾
9-in.		19	9

The above are Standard List prices less 2½%.

Pitch fibre pipe	FR		
3-in.		1	10¾
4-in.		2	6
6-in.		5	0¾
Cast iron s. and s. pipe to BS 437	YR		
4-in.		28	2
6-in.		41	3
9-in.		77	3
Spun iron s. and s. pipe to BS 1211, Class B	YR		
4-in.		13	3
6-in.		21	3
9-in.		35	8

Measured rates

Trenches and beds

Excavate trenches by hand in heavy soil, including planking and strutting, part returning, filling and ramming and wheeling and spreading surplus, for pipes 4-in., 6-in. and 9 in. dia.	YR		
Average depth of trench	3-ft.	17	0
	4-ft.	22	8
	6-ft.	39	3
	9-ft.	72	5
Excavate trench as last but by mechanical trencher	YR		
Average depth of trench	3-ft.	12	11
	4-ft.	17	9
	6-ft.	32	3
	9-ft.	53	3

For satisfaction year after year — specify the

BILSTON ATLANTA

No matter how many homes are involved, standard specification of the Bilston Atlanta ensures constant satisfaction. Its brilliant enamel finish remains unimpaired year after year! The Bilston range includes the exact colour required for any decorative scheme. Specify the Atlanta — it costs no more than an ordinary bath.

THE VERSATILE ATLANTA

The Atlanta can be specified for any bathroom, large or small! As well as the 66", the Atlanta comes in 54", 60", 61" (available in two widths), and 72" lengths.

The Atlanta 54, 60 and 61 must be preferred to any other baths of these sizes because they are exact replicas of the full size bath, scaled down to small proportions.

Atlanta flat bottom helps to prevent slipping . . . ensures comfort.

Atlanta shallow step is safe for young and old. The Atlanta can be fitted to give an overall height of only 16".

With the Atlanta, taps can be fitted in three different positions to meet all possible requirements.

Corner tap mounting facilitates installation and maintenance.

The Atlanta is supplied with or without overflow . . . with or without handgrip.

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Bilston

— the bath *SPECIALISTS*

- **Atlanta**
- **Magna**
- **Cresta**
- **Marina**
- **Mermaid**
- **Bermuda**

A BILSTON BATH

BILSTON FOUNDRIES LTD · BILSTON · STAFFORDSHIRE · *Illustrated literature is available on request.*

technical section

Drainlayer continued

		s	d
6-in. concrete bed and benching for 4-in. pipes	YR	*9	2
		5	5
As above, for 6-in. pipes	YR	*10	8
		6	4
6-in. concrete bed and surround for 4-in. pipes	YR	*14	11
		8	10
As above, for 6-in. pipes	YR	*17	11
		10	8

Stoneware drains

" Seconds " quality salt glazed stoneware drain pipes and laying and jointing in trench

	FR		
4-in.		2	5
		1	8
6-in.		3	6
		2	6
9-in.		5	9
		4	7

" Best " quality salt glazed stoneware drain pipes and laying and jointing in trench

	FR		
4-in.		2	9
		2	0
6-in.		3	11
		2	11
9-in.		6	6
		5	4

Extra over " Seconds " quality pipes for:

Bend	No.		
4-in.		3	9
		3	3
6-in.		5	6
		4	11
9-in.		16	0
		15	4
Single junction	No.		
4-in.		6	6
		5	0
6-in.		9	4
		7	6
9-in.		20	1
		18	0
Double junction	No.		
4-in.		10	10
		8	4
6-in.		15	7
		12	6
9-in.		30	7
		27	1

Stoneware gullies

Salt glazed trapped gully with galvanized grating including setting gully on and surrounding with concrete and jointing to drain No.

6 in. × 6 in. grating 4 in. outlet	*26	4
	22	2
9 in. × 9 in. grating 6 in. outlet	*48	10
	43	6

Grease and mud gully 9-in. diameter with 4-in. outlet galvanized bucket and grating and setting gully on and surrounding with concrete and jointing to drain No. *91 10

80 10

Road gully with 6-in. outlet including setting on and surrounding with concrete and jointing to drain No.

15-in. dia. 30-in. deep	*108	3
	85	8
18-in. dia. 48-in. deep	*215	10
	178	7

	s	d
Pitch fibre drains		
Pitch fibre drain pipes and laying and jointing in trench FR		
3-in.	2	3
	2	1½
4-in.	2	11½
	2	9½
6-in.	5	10
	5	8
Extra over pitch fibre pipe for 45° bend No		
3-in.	16	3
	15	4
4-in.	22	8
	21	10
6-in.	44	3
	43	3
Cast iron drains		
Cast iron spigot and socket drain pipes and laying and jointing in trench FR		
4-in.	13	1
	11	0
6-in.	19	1
	16	4
9-in.	36	4
	30	7
Extra over cast iron pipes for bend No.		
4-in.	30	9
	24	7
6-in.	72	1
	62	10
9-in.	184	5
	168	6
Spun cast iron spigot and socket drain pipes and laying and jointing in trench FR		
4-in.	7	6
	5	4
6-in.	11	6
	8	9
9-in.	20	7
	14	9
Cast iron gullies		
Cast iron gully trap with high invert and setting on and surrounding with concrete and jointing to drain No.		
4-in.	*45	1
	36	6
6 in.	*110	5
	97	8
9 in.	*245	5
	228	3

ASPHALTER

Measured rates

Damp proof course and tanking

		s	d
½-in. vertical damp proof course in two thicknesses on brick or concrete	YS		
	BS1097	17	10
	BS1418	24	2
½-in. horizontal damp proof course in one thickness on brick or concrete	YS		
	BS1097	11	7
	BS1418	15	9
Vertical tanking in three thicknesses	YS		
	BS1097	26	3
	BS1418	33	7
Horizontal tanking in three thicknesses	YS		
	BS1097	19	5
	BS1418	29	5

Roofing

¾-in. flat laid to falls in two thicknesses on and including felt underlay	YS		
	BS988	13	8
	BS1162	22	1
6-in. skirting with angle fillet at bottom and rounded edge at top turned into groove	FR		
	BS988	2	4
	BS1162	2	11
6-in. fascia with solid water check roll at top and undercut drip at bottom	FR		
	BS988	4	6
	BS1162	5	3

PAVIOR

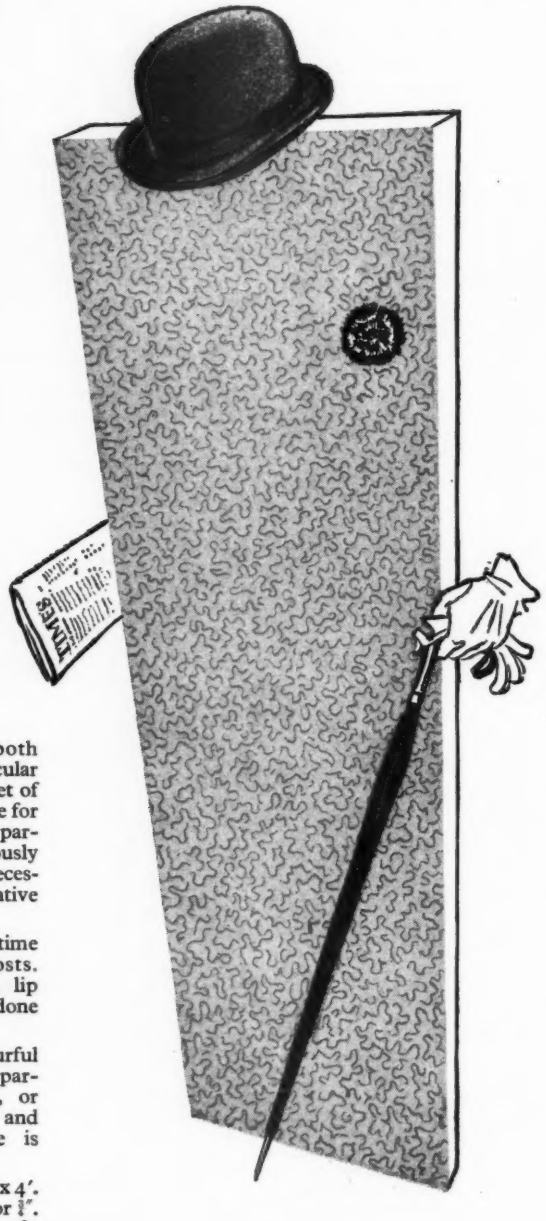
Market prices

Granite chippings, ¼-in. to dust	T	49	8
Buff quarry tiles, 6 in. × 6 in. × ⅞ in.	YS	21	11
2-in. Noelite paving	YS	13	11

Measured rates

Cement and sand floated screed to receive pavings	YS		
¾-in.		*4	0
		2	3
1-in.		*4	11
		2	11
1¼-in.		*5	6
		3	5
Cement and sand paving trowelled hard and smooth	YS		
¾-in.		*4	6
		2	3
1-in.		*5	5
		2	11
1¼-in.		*6	0
		3	5
Granolithic paving laid on concrete	YS		
1-in.		7	5
		5	4
1½-in.		9	6
		7	0
⅛-in. red composition paving laid on prepared screed	YS	16	6
⅜-in. terrazzo paving laid on prepared screed	YS	38	4
⅛-in. rubber flooring and laying in rolls	YS	39	5
¼-in. rubber flooring and laying in rolls	YS	63	0
$\frac{5}{16}$-in. cork tile flooring, 12 in. × 12 in. and fixing with mastic and including polishing	YS	*39	5
⅛-in. thermoplastic tile flooring and laying-on screed	YS	12	0
		to	
		21	0
⅛-in. coloured linoleum and fixing with mastic to cement screed or boards	YS	25	6

Melamine Faced Bartrev Particle Board



Avtrev is the newest factory-made board embodying Melamine plastic surfaces on a core of Bartrev particle board, providing a constructionally stable and rigid sheet material that is hard wearing, stain, heat and moisture resistant—colourful and attractive too—all at low cost. Avtrev is supplied either with one decorative Melamine face balanced by plain brown plastic, or with both sides faced with Melamine in any combination of the wide range of colours and patterns available..... earning for Avtrev the description "The Best Dressed Board."

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Sheet Sizes 6′ x 4′, 8′ x 4′.
Thicknesses ⅜″, ½″, ⅝″ or ¾″.
Price from 4/8d. per sq. ft.

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THE BEST DRESSED BOARD

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technical section

Pavior continued		s	d
½-in. coloured linoleum and fixing with mastic to cement screed or boards	YS	20	3
⅞-in. buff quarry tiles laid on prepared screed	YS	37	2
⅞-in. blue black quarry tiles laid on prepared screed	YS	35	4
2-in. Noelite paving laid on prepared bed, in random sizes and mixed colours	YS	20	2
		16	*1*
12 in. × 12 in. anchor steel plates laid complete	YS	59	6

MASON

Market prices

Stone in blocks in truckloads at stations in the London area:			
Beer	FC	*9	0
Portland	FC	*9	2
Woodkirk Blue building quality	FC	17	11
Broughton Moor slate in blocks at stations in the London area	FC	65	0
Marble in blocks at works: Dove	FC	70	0
Roman stone	FC	70	0

Measured rates

Stone and all labours in pilasters and quoins	FC		
Portland		53	10
Beer		51	3
Jambs	FC		
Portland		56	2
Beer		53	6
Lintels	FC		
Portland		57	3
Beer		54	6
Arches	FC		
Portland		*66	2
Beer		*63	0
Ashlar average 7-in. on bed with plain dressed face	FS		
Portland		*31	0
Beer		*29	6
Extra for each additional 1-in. thickness	FS		
Portland		*3	5
Beer		*3	3
4½ in. × 4 in. sill sunk, weathered, throated and grooved for water bar, set and jointed in cement mortar	FR		
Portland		*10	0
Beer		* 9	6
Artificial		4	10
4 in. × 12 in. coping, weathered and twice throated	FR		
Portland		*19	11
Beer		*19	0
Artificial		11	9
Marble and slate			
¾-in. Dove marble lining and fixing on brick backings	FS	38	10
¾-in. Roman stone lining	FS	38	10
¾-in. Broughton Moor slate lining	FS	*35	9

SLATER TILER AND ROOFER

Market prices

Welsh slates, best quality	M		
16-in. × 10-in.		1085	0
20-in. × 10-in.		2003	0
Best hand made sand faced plain tiles, 10½-in. × 6½ in.	M	*320	0
Grey corrugaged asbestos cement sheets	YS	7	0

Measured rates

16-in. × 10-in. best Welsh slates laid 3-in. lap	Sq.	310	0
20-in. × 10-in. best Welsh slates 3-in. lap	Sq.	412	0
Westmorland green slates in random sizes laid 3-in. lap	Sq.	632	9
Best hand made sand faced plain tiles, 10½in. × 6½in. laid to a 4-in. gauge	Sq.	215	0
Best hand made sand faced plain tiles, 10½-in. × 6½-in. hung vertically to 4½-inch gauge	Sq.	240	0
Berkshire hand made sand faced red pantiles, 14½-in. × 10-in. laid 2½-in. head and 1½-in. side lap	Sq.	206	0
Grey corrugated asbestos cement sheets fixed to wood roofs	Sq.	123	0
Grey corrugated asbestos cement sheets fixed vertically	Sq.	133	0
Cedarwood shingles laid 5-in. gauge	Sq.	280	0
Metal roof decking and fixing with hook bolts, finished with ½-in. insulation board and three layers self finish felt roofing	YS		
18 gauge for spans up to 10 ft.		62	0
20 gauge for spans up to 8 ft. 6 in.		54	6
Two layer one ply bitumen felt and fixing with bitumen to concrete or boarding	YS	10	2
Three layer bitumen felt	YS	13	8
Patent ribbed aluminium roofing and fixing to purlins	Sq.	*297	6

CARPENTER

Market prices

Softwood, carcassing quality	Std.	1800	0
Softwood, joinery quality	Std.	2200	0
½-in. fibre board	Sq.	46	6
¼-in. standard hardboard	Sq.	41	0
⅜-in. insulating gypsum wallboard	YS	3	3

Measured rates

Softwood and fixing in plates, sleeper joists and lintols	FC	14	11
		13	*1*
In floor and ceiling joists	FC	17	4
		13	*1*
In stud partitions, purlins and struts	FC	19	6
		13	*1*
In hip and valley rafters	FC	22	1
		13	*1*
Battening and boarding			
Slate or tile battens 1½ in. × ¾-in. and nailing to fixing for	Sq.		
16-in. × 10-in. slating to 6½-in. gauge		39	3
20-in. × 10-in. slating to 8½-in. gauge		32	0
10½-in. × 6½-in. plain tiling to 4-in. gauge		58	9
14½-in. × 10-in. pantiles to 12-in. gauge		22	0
S.E. boarding in batten widths close jointed and fixing to flat or sloping roofs	Sq.		
¾-in.		116	3
		82	*9*
1-in.		142	6
		109	*0*
T. & g. boarding in batten widths close jointed and fixing to flat or sloping roofs	Sq.		
¾-in.		147	0
		105	*3*
1-in.		180	6
		138	*9*
¾-in. wrot and cross tongued eaves soffit	FS	2	3
		1	*0*
¾-in. × 6-in. wrot and grooved eaves fascia p.o.	FS		10
			6
Wall and ceiling boards fixed to softwood	YS		
¼-in. fibre board		6	9
		5	*0*
⅛-in. hardboard		5	10
		4	*5*
⅜-in. insulating gypsum wallboard		5	9
		4	*0*
5/16-in. asbestos cement flat sheeting		8	8
		4	*11*
¼-in. asbestos cement flat sheeting		10	5
		6	*8*
2-in. Stramit, showerproof quality fixed to joists with butt joints		15	9
		11	*6*

JOINER

Measured rates

Floors and skirtings			
Tongued and grooved softwood flooring and nailing to joists	Sq.		
⅞-in.		165	6
		126	*6*
1-in.		183	0
		144	*0*
1-in. nominal double grooved t. and g. Swedish softwood			

On the one hand...

where time is the essence of the contract and labour costs must be kept to a minimum—the paint to select for thoroughly satisfactory results for interior walls and ceilings is

'Murisan'

LATEX EMULSION WALL PAINT

- *Can be speedily applied with large wall brushes.*
- *Can be second-coated within one hour*
- *No objectionable odour.*

Conforms to the requirements of the Factories (Cleanliness of Walls and Ceilings) Order—5 years exemption from re-painting permitted if *Murisan* is used.

With a finish equal to that of conventional flat oil paints Murisan *is resistant to alkalis, oil, bitumen and creosote—odourless, durable, washable. Interior and Exterior Grades.*

On the other hand...

when a supremely high standard of gloss finish is to be achieved by craftsmen who take pride in the results the specification will, without doubt, be "Superlative," the paint of high-gloss perfection that does not 'bloom'. When great projects are planned, where long-life protection is essential, whether for exterior or interior use.

'Superlative'

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PAINTING ADVISORY SERVICE:

For expert advice on correct coatings for surfaces and conditions involved, do not hesitate to consult our Painting Advisory Service

technical section

Joiner continued		s	d
block flooring set in mastic and polished	YS	29	5
European beech	YS	32	7
African Muhuhu	YS	36	9
Burma teak	YS	*38	10
Moulded skirtings, 3-in. to 6-in. sectional area planted on (per inch in sectional area)	FR		
Softwood			3½
			2½
Oak			9
			7½
Extra for grounds plugged to brickwork	FR		
Softwood			9
			2
Windows			
2-in. rebated and moulded sashes divided into squares	FS		
Softwood		3	9
Oak		11	3
Extra for side hanging	Each		
Softwood		2	10
Oak		4	3
Doors			
2-in. framed, ledged and braced doors, filled in with 1-in. T and G and V jointed boarding and hanging	FS		
Softwood		6	4
		5	7
Four panelled door square both sides and hanging	FS		
Softwood		6	7
		5	10
Oak		20	0
		19	0
1¼-in. Standard flush door, hardboard faced size 2-ft. 6-in. × 6-ft. 6-in. and hanging	No.	42	5
		31	1
Linings and frames			
Window and door linings, 6-in. to 12-in. sectional area (per inch sectional area)	FR		
Softwood			4
			3
Oak			9
			8
Frames wrot all round and framed (per inch sectional area)	FR		
Softwood			3½
Oak			8
Mullions, transomes and cills (per inch sectional area)	FR		
Softwood			4
Oak			9
Mouldings, architraves, etc. 4-in. to 6-in. sectional area (per inch sectional area)	FR		
Softwood			4
			3
Oak			10½
			9½
6-in. window boards, 1-in. thick with rounded nosing tongued at back and including bearers	FR		
Softwood		3	2
		1	9
Oak		5	8
		3	8
Shelving and fittings			
¾-in. shelving of 2-in. slats spaced 1-in. apart on bearers (measured separately)	FS		
Softwood		2	6
		1	11
¾-in. solid shelving on bearers	FS		
Softwood		2	4
		1	11
Oak		4	8½
		4	1½
2-in. shelf bearers plugged to wall	FR		
Softwood			7½
			5½
Oak		1	2½
		1	0
Staircases			
1-in. treads and ¾-in. risers tongued together on and including framed carriages	FS		
Softwood		4	9
		3	8
Oak		14	0
		12	5
1¼-in. × 11-in. wall string plugged to brickwork	FR		
Softwood		4	7
		3	7
Oak		11	11
		10	5
1¼-in. × 9-in. outer string	FR		
Softwood		3	6
		2	11
Oak		7	4
		6	6
Ends of treads and risers housed to strings	No.		
Softwood		1	4½
Oak		6	6
2½-in. × 3-in. moulded handrail	FR		
Softwood		3	2
		2	7
Oak		6	8
		5	9
1¼-in. × 1¼-in. square balusters	FR		
Softwood			8½
			6½
Oak		1	4
		1	1
Framed ends to balusters	No.		
Softwood			7
Oak			9½

IRONMONGER

Market prices

As prices for ironmongery vary so greatly depending upon the type and quality required no prices are quoted here

Measured rates

The rates which follow are for fixing only and are inclusive of profit

		s	d
3-in. steel butts	Pr.		
to softwood		4	6
to hardwood		6	0
Double action floor springs	No.		
to softwood		22	7
to hardwood		30	2
6-in. barrel bolts			
to softwood		2	1
to hardwood		2	9
Cupboard locks			
to softwood		4	3
to hardwood		5	8
Cylinder night latch			
to softwood		7	1
to hardwood		9	5
Mortice latch			
to softwood		5	8
to hardwood		7	6
Mortice lock			
to softwood		7	1
to hardwood		9	5
Casement fastener			
to softwood		1	8
to hardwood		2	3
Casement stays			
to softwood		1	8
to hardwood		2	3

STEEL & IRONWORKER

Market prices

Structural steel joist sections, basis sizes, ex mills	T	812	6
Extras for other than basis sizes vary between 10s. and 70s. per ton			

Measured rates

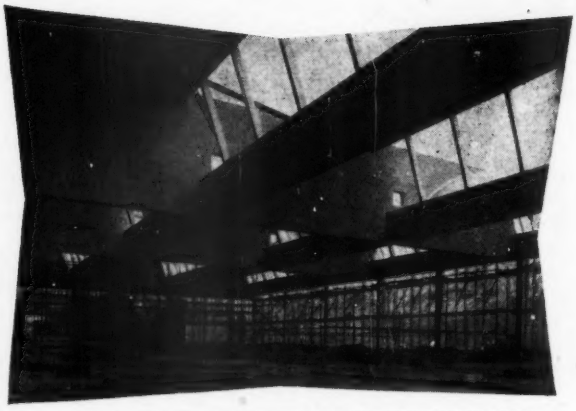
Rsj in steel framed structures hoisted and fixed complete	T	1610	0
Riveted compound girders including plates and rivets	T	1900	0
Rs stanchions including caps, bases, cleats etc.	T	1870	0
Metal windows including cutting and pinning lugs to brickwork and bedding frames in cement mortar	No.		
Domestic type 4 ft. high to BS 990			
Type ND2F 3 ft. 3¼ in. wide		91	3
		75	2
Type HD2F 3 ft. 3¼ in. wide		98	7
		82	6
Type ND11F 6 ft. 6¼ in. wide		156	9
		128	4
"Z" range, 4 ft. high			
Type ZND1 2 ft. 0¾ in. wide		62	1
		51	4
Type ZND4F 6 ft. 0¾ in. wide		158	3
		129	10

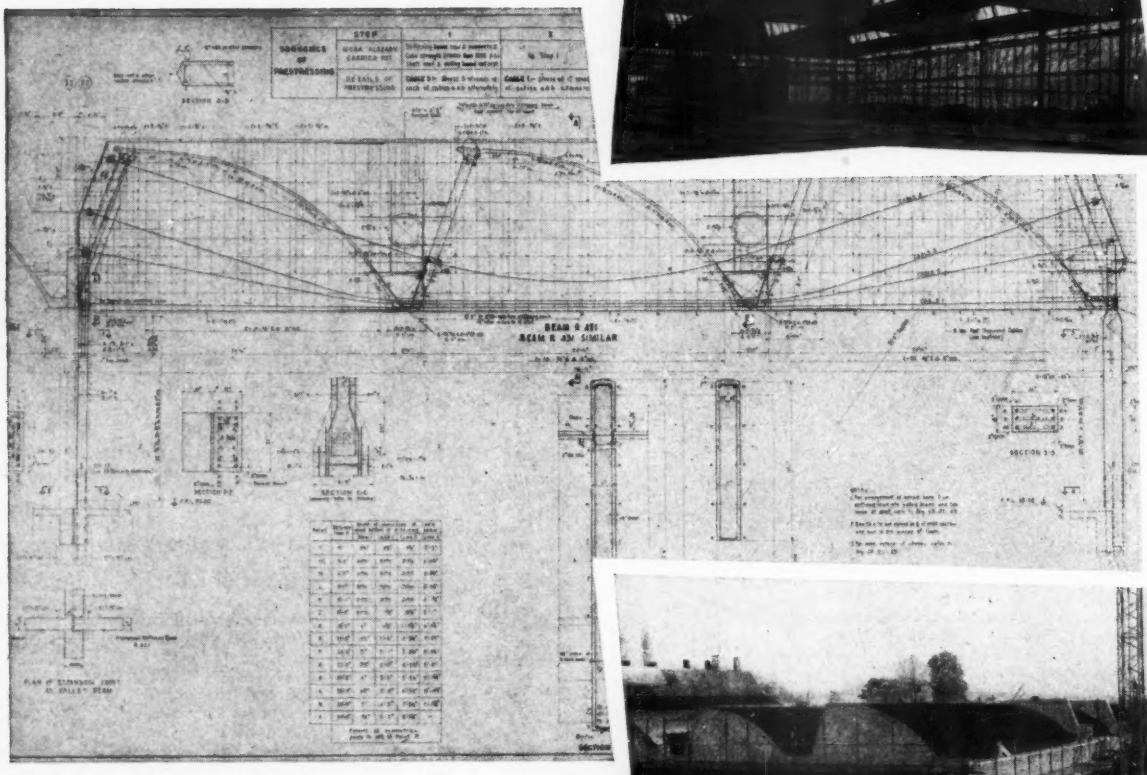
PLASTERER

Market prices

Plastering sand	YC	*19	6
Plaster to BS 1191			

CONCRETE DESIGN





In this new factory a roof system of north light shells covers a floor area of 57,600 square feet. The 24 shell panels are each 90′ 0″ × 26′ 6″ on plan, including a 20′ 0″ cantilever. Grouped in threes, the shells are carried on post-tensioned stiffening beams, intermediate columns having been eliminated. The structure was designed to carry heavy factory equipment on the undersides of all beams; the valley beams also accommodate air-conditioning ducts. The stiffening beams are post-tensioned by the P.S.C. system, using 12 wire cables.

New factory at Redditch for Herbert Terry and Sons Limited
Architects: Francis W. B. Yorke, Harper and Harvey, Birmingham
Reinforced Concrete Design and Construction: Truscon Limited

by Truscon

For fifty years The Trussed Concrete Steel Company Limited *now* Truscon Limited 35-41 Lower Marsh London SE.1. Telephone: Waterloo 6922

Also: Birmingham, Central 2345-6 · Bristol 21861 · Glasgow, Central 0157-8 · Liverpool, Central 5281-2 · Manchester, Trafford Park 2766 · York 24594

technical section

Plasterer continued

		s	d
Class B in loads of 4 tons to 5 tons 19 cwt.	T		
Browning	160	9	
Fibred browning	163	9	
Board finish	160	9	
⅜ in. plaster lath, over 600 yds.	YS	2	5
⅜ in. × 6 in. × 6 in. cream glazed wall tiles	YS	*27	8

Measured rates

Metal lathing

		s	d
No. 24 gauge expanded metal lathing and fixing	YS		
To softwood soffits		6	9
		4	3
To metal		7	6
		4	3

Lime plaster

		s	d
Render float and set on brick walls and partitions	YS	*7	1
		2	2
R.F. and S. on concrete including hacking	YS	*8	9
		2	2
R.F. and S. on expanded metal lathing	YS	*7	2
		2	3

Gypsum plaster

		s	d
Render in cement-lime-sand (1 : 1 : 6) and set in gypsum plaster on brick walls and partitions	YS	*5	8
		1	10
Render in gypsum fibred browning-sand (1 : 1½) and set in gypsum on concrete soffits including bonding coat	YS	*9	2
		3	5
Render and set on expanded metal lathing including pricking up coat	YS	*8	8
		3	9

Plaster board

		s	d
⅜-in. gypsum plaster lath fixed to softwood soffits finished to receive plaster	YS	4	11
		3	0
Gypsum board finish setting coat on last	YS	4	3
		1	1

Plain face

		s	d
½-in. Portland cement and sand (1 : 3) plain face trowelled smooth on brick walls	YS	6	7
		1	10

Tyrolean rendering

		s	d
Render in cement, lime sand (1 : 1 : 6) and finishing with three coats patent coloured mix preparations applied with hand operated machine	YS	*9	11
		2	4

Sprayed "Limpet" asbestos

Approximate prices for sprayed "Limpet" asbestos on the following surfaces to the thickness shown for quantities of 1,000 yds. super. Normal pressed finish.

		s	d
New concrete soffits and beams	YS		
½-in.		14	5
¾-in.		19	8
1-in.		21	9
New structural steelwork	YS		
½-in.		16	6
¾-in.		21	9
1-in.		23	10
Extra over the above prices for coloured texture finish	YS	3	5

Wall tiling

		s	d
6 in. × 6 in. × ⅜ in. standard quality white glazed wall tiles set and jointed on prepared screed	YS	*49	10
Egg shell matt or glossy glazed enamelled tiles	YS	*61	8

EXTERNAL PLUMBER

Market prices

		s	d
Sheet lead, 3½ lb. and upwards, in quantities of 5 cwt. to 1 ton	C	*115	3
Copper sheeting, 23 gauge, in 1-ton lots	C	*336	0
Zinc sheeting, 14 gauge, in 1-ton lots	C	*109	0
Aluminium sheeting 20 SWG	C		
Super purity		513	4
Commercial quality		326	8
Cast iron rainwater and soil goods			
Medium weight pipe to B.S. 416 and B.S. 460 in 6 ft. lengths	No.		
2½-in.		18	10
3-in.		21	0
4-in.		26	10
Half round gutter in 6 ft. lengths	No.		
3½-in.		7	11½
4-in.		10	4
6-in.		16	11

The above are Standard-List prices plus 22½%.

Measured rates

		s	d
Milled sheet lead	C		
Flat roofs		*198	0
Gutters and flashings		*198	0
24 SWG copper sheet	FS		
Flat roofs		*5	11
Gutters and flashings		*5	11
23 SWG copper sheet	FS		
Flat roofs		*6	8
Gutters and flashings		*6	8
14 gauge zinc	FS		
Flat roofs		*3	5
Gutters and flashings		*3	5
20 SWG super purity aluminium	FS		
Flat roofs		5	3
Gutters and flashings		5	3
20 SWG commercial quality aluminium	FS		
Flat roofs		4	0
Gutters and flashings		4	0

Rainwater gutters and pipes

		s	d
½-in. cast iron half round eaves gutter jointed and fixed to fascia with brackets	FR		
4-in.		3	6
		2	3
6-in.		5	2
		3	7
18 gauge pressed steel half round eaves gutter	FR		
4-in.		3	2
		1	11
6-in.		4	3
		2	8
Asbestos cement half round eaves gutter	FR		
4-in.		2	11
		1	7
6-in.		4	2
		2	7
Aluminium half round eaves gutter	FR		
4-in.		3	9
		2	6
Cast iron medium section rain water pipes jointed and fixed to walls with pipe nails	FR		
3-in.		5	10
		4	5
4-in.		7	4
		5	7
Pressed steel	FR		
3-in.		4	5
		3	0
4-in.		6	3
		4	7
Asbestos cement	FR		
3-in.		3	9
		2	3
4-in.		4	10
		3	1
Aluminium	FR		
3-in.		5	2
		3	8
4-in.		6	11
		5	2

Soil and ventilating pipes

		s	d
Lead soil, waste and ventilating pipes (15 lb. per yd. for 3-in. and 19 lb. per yd. for 4-in. diameter) fixed to walls with lead tacks	FR		
3-in.		*11	7
		8	6
4-in.		*15	6
		10	5
Cast iron soil, waste and ventilating pipes with caulked joints fixed to walls with pipe nails	FR		
3-in. heavy		7	1
		5	2
4-in. heavy		8	8
		6	5
Asbestos cement soil and ventilating pipe fixed to walls with holder bats	FR		
3-in.		3	10
		2	4
4-in.		4	11
		3	2½
Gutters and flashings		5	3

ALL-GLASS CONSTRUCTION

for Shop and Office Entrances

by the

CLARK-EATON

'BLACKFRIARS'

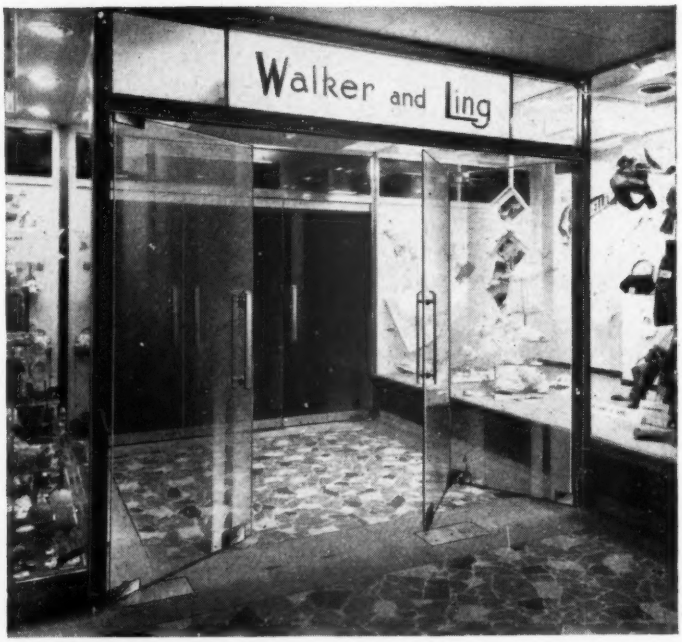
SYSTEM

This important development offers exceptional opportunities for the design of SHOP ENTRANCES, including DOORS and SURROUNDS, PORCHES, PARTITIONS SCREENS, etc. The use of Armourplate or Toughened Glass, in conjunction with specially designed neat metal fittings, allows ALL-GLASS DOORS to be installed singly, in pairs or series, with or without an ALL-GLASS SURROUND; alternatively, doors may be designed to SLIDE OR FOLD AWAY, providing a completely unobstructed entrance.

Double set of 'Blackfriars' System doors and surround for office block entrance, Crosswall Street, E.C.3.

Architects: Knapton & Deane, F.R.I.B.A., A.M.T.P.I.
Shopfitters: F. Sage & Co. Ltd.

Come and see the numerous installations in our Showrooms or ask for literature and design sheets.



Entrance doors with sidelights at Weston-super-Mare. Special spring and hinge unit with retractable pivot allows door and sidelight to be folded back.

Architects: Fry, Paterson & Jones, F.R.I.B.A. *Shopfitters:* Parnall & Sons Ltd.

JAMES CLARK & EATON LTD

SCORESBY HOUSE, GLASSHILL STREET, BLACKFRIARS, LONDON, S.E.1.

CLARK FOR GLASS

Telephone: WATerloo 8010 (20 lines)

Branches: Canterbury, Bournemouth, Eastbourne. Reading, Oxford (H. Hunter & Co.)

technical section

INTERNAL PLUMBER

Market prices

Lead pipe in quantities of 5 cwt. to 1 ton — C

	s	d
BS 602*	117	6
BS 1085*	124	6

Polythene tubing, heavy gauge, in quantities of 500 to 999 ft. — per 100 ft.

½-in.	112	6
¾-in.	152	0
1-in.	193	6

Steel tubes to B.S. 1387 medium weight galvanised — FR

¾-in.	0	9
1-in.	1	1
1¼-in.	1	5
1½-in.	1	8

The above are Standard List prices less 38½%.

Galvanised malleable fittings.

Bend — No.

1-in.	2	9½
1¼-in.	4	2½
1½-in.	6	0

Tee — No.

½-in.	1	0
¾-in.	1	4¾
1-in.	2	0
1¼-in.	2	9½
1½-in.	4	0

The above are Standard List prices less 23½%, less 6¼% plus 40%.

Copper tubes to B.S.659 — FR

½-in.	*0	11
¾-in.	*1	3¼
1-in.	*1	11½
1¼-in.	*2	4¼

The above are calculated on a basic price of 2s. 2¾d. per lb. plus C.T.A. extras.

Measured rates

Lead pipe to BS 602

Main supply and laying in trench (measured separately) at the following sizes and weights in lbs. — FR

		s	d
½-in.	7	*3	10
		2	9
¾-in.	11	*5	8
		4	6
1-in.	16	*8	0
		6	7
1¼-in.	28	*13	6
		11	4
1½-in.	35	*17	3
		14	1

Main supply fixed to walls and ceilings — FR

		s	d
½-in.	7	*4	5
		3	0
¾-in.	11	*6	4
		4	7
1-in.	16	*8	9
		6	8
1¼-in.	28	*14	3
		11	5
1½-in.	35	*18	7
		14	2

Distributing pipes fixed to walls and ceilings — FR

		s	d
½-in.	4	3	2
		1	9
¾-in.	5	*3	8
		2	3
1-in.	7	*4	10
		3	1
1¼-in.	9	*5	8
		4	0
1½-in.	12	*7	5
		5	4

Flushing and warning pipes fixed to softwood — FR

		s	d
¾-in.	4	3	7
		1	8
1-in.	5	*4	9
		2	1
1¼-in.	6	*5	8
		2	6
1½-in.	7	*6	1
		2	11

Waste pipes and fixing to softwood — FR

		s	d
1¼-in.	6	*5	8
		2	7
1½-in.	7	*6	1
		3	1

Joints to fittings — No.

	s	d
½-in.	6	3
	1	5
¾-in.	7	1
	2	2
1-in.	7	7
	2	11
1¼-in.	8	4
	3	8
1½-in.	9	1
	4	4

Extra for:

Bend — No.

1¼-in.	2	9
1½-in.	3	10

Branch joints — No.

	s	d
½-in.	7	11
	1	5
¾-in.	9	1
	2	2
1-in.	9	7
	2	11
1¼-in.	11	3
	3	8
1½-in.	12	10
	4	4

Polythene tubing to B.S. 1972

Heavy gauge as supply pipe laid in trench (measured separately) — FR

		s	d
½-in.		1	8
		1	4
¾-in.		2	1
		1	9
1-in.		2	7½
		2	3

Heavy gauge as supply or distributing pipe fixed to walls — FR

		s	d
½-in.		2	9
		1	7
¾-in.		3	4
		2	2
1-in.		3	11
		2	9

Galvanised steel tubing to BS 1387

Heavy weight with screwed red lead joints as supply pipe laid in trench (measured separately) — FR

		s	d
½-in.	2	9	
		10	
¾-in.	3	2	
	1	0	
1-in.	3	4	
	1	5	
1¼-in.	3	10	
	1	10	
1½-in.	5	0	
	2	2	

Medium weight tubing fixed to walls — FR

		s	d
½-in.	2	8	
		10	
¾-in.	3	1	
	1	0	
1-in.	3	3	
	1	3	
1¼-in.	3	9	
	1	8	
1½-in.	4	11	
	2	0	

Extra for malleable iron:

Bend — No.

1-in.	5	2
	3	1
1¼-in.	7	4
	4	6
1½-in.	9	6
	6	7

Tee — No.

½-in.	3	2
	1	1
¾-in.	3	6
	1	6½
1-in.	4	1
	2	2
1¼-in.	5	7
	3	1
1½-in.	7	0
	4	5

Copper tube

Copper tube to BS 1386 as supply pipe laid in trench (measured separately) to the following size and gauges — FR

		s	d
½-in.	18	*2	1
		1	5
¾-in.	17	*2	11
		2	2
1-in.	16	*3	11
		3	2
1¼-in.	16	*5	2
		4	3
1½-in.	15	*6	9
		5	7

Copper tube to BS 659 as distributing pipe fixed to walls — FR

		s	d
½-in.	19	*2	1½
		1	3½
¾-in.	19	*2	7
		1	9
1-in.	18	*3	6
		2	8
1¼-in.	18	*4	4
		3	3
1½-in.	18	*5	1
		3	11

Extra for brass compression fittings joining copper to copper — No.

		s	d
Coupling ½-in.		5	1
		3	3
¾-in.		6	4
		4	0
1-in.		8	11
		5	10
1¼-in.		11	1
		7	7
1½-in.		15	2
		11	0
Bend ½-in.		6	4
		4	6
¾-in.		7	11
		5	6

technical section

Internal plumber continued	s	d
1-in.	11	4
	8	*3*
1¼-in.	14	2
	10	*6*
1½-in.	23	1
	18	*11*
Tee ¼-in.	9	3
	6	*1*
¾-in.	10	9
	7	*0*
1-in.	15	9
	11	*4*
1¼-in.	21	5
	16	*5*
1½-in.	32	0
	26	*5*

GLAZIER

Market prices

		s	d
Sheet glass cut to size	FS		
24 oz.			10⅜
32 oz.		1	4½
¼-in. Polished plate glass, glazing quality in plates not exceeding:	FS		
2 ft. super		4	3
5 ft. super		5	3
45 ft. super		6	3
100 ft. super		6	9
Rolled plate glass	FS		
⅛-in. rolled plate			11¾
¼-in. Georgian wired		6	0

Attention is drawn to reduction in certain glass prices offered by manufacturers for acceptance of specified minimum quantities of one size and substance delivered to one address at one time

Measured rates

Glazing to wood

		s	d
Ordinary quality sheet glass and glazing with putty in squares	FS		
24 oz. O.Q.		1	5
32 oz. O.Q.		2	0
⅛-in. rolled plate glass		1	6½
¼-in. rough cast glass		1	11
Prismatic glass		2	9
¼-in. wired glass		2	2½
¼-in. Georgian wired plate glass		8	4
¼-in. Polished plate glass (glazing quality) in plates 5 to 45 ft. super		8	7

Glazing to metal

		s	d
Add to above rates 1d. per ft. super			

Sundries

		s	d
Hacking out broken sheet glass	FS	1	3
Black ribbon velvet and bedding to edge of glass	FR		8

Double glazing
Insulight units of two skins of glass with lead spacers and glazing with mastic for beads (supplied). In panels 15 to 20 ft. super

		s	d
	FS		
32 oz. sheet		10	1
¼-in. polished plate		21	4

Patent glazing

		s	d
Patent glazing with rolled steel lead capped bars for 8-ft. spans and glazing with ¼-in. Georgian wired cast	FS	4	8
Aluminium alloy patent glazing	FS	4	10½

PAINTER

Market prices

		s	d
Washable distemper	C.	120	0
Emulsion paint	Gal.	45	0
Hard gloss paint:	Gal.		
Undercoat		46	0
Finishing		46	0

Measured rates

On walls and ceilings

		s	d
	YS		
Twice whiten plastered ceilings		1	5
		3	
Two coats distemper on plastered walls or ceilings		2	3
		1	*1*
Two coats distemper on fair-faced brick or concrete walls		2	8
		1	*3*
Two coats emulsion paint on walls or ceilings		2	10
		1	*8*
Prepare, prime and apply one coat oil colour on plastered walls		3	10
		1	*9*
Add for each additional coat		1	8
			10

On metal

		s	d
Prepare, prime and apply one coat oil colour on general surfaces	YS		
Basis price		3	7
		1	*6*
Add for each additional coat		1	8
			10
On metal casements	YS		
Basis price		5	8
		1	*6*
Add for each additional coat		2	6
			10
On bars, angles etc., not exceeding 6-in. girth	YR		
Basis price			11½
			3
Add for each additional coat			5
			2
On small pipes	YR		
Basis price			11½
			3
Add for each additional coat			5
			2
On large pipes	YR		
Basis price		1	11
			6

		s	d
Add for each additional coat			10
			3½
Prepare, prime and apply one coat heat-resisting paint on heating surfaces of radiators	YS		
Basis price		4	2
		1	*4*
Add for each additional coat		1	10
			8

On wood

		s	d
Knot, prime, stop and apply one coat oil colour on general surfaces	YS		
Basis price		4	0
		1	7½
Add for each additional coat		1	8
			10
On work not exceeding 3-in. girth	YR		
Basis price			6
			1½
Add for each additional coat			2½
			1
For each additional 3-in. girth	YR		
Basis price			5½
			1½
Add for each additional coat			2½
			1

Stain and varnish

		s	d
Prepare, size, stain and twice varnish on general surfaces of woodwork	YS	4	4
		1	*8*
On work not exceeding 3-in. girth	YR		7
			1½
For each additional 3-in. girth	YR		6
			1½

Oiling and polishing

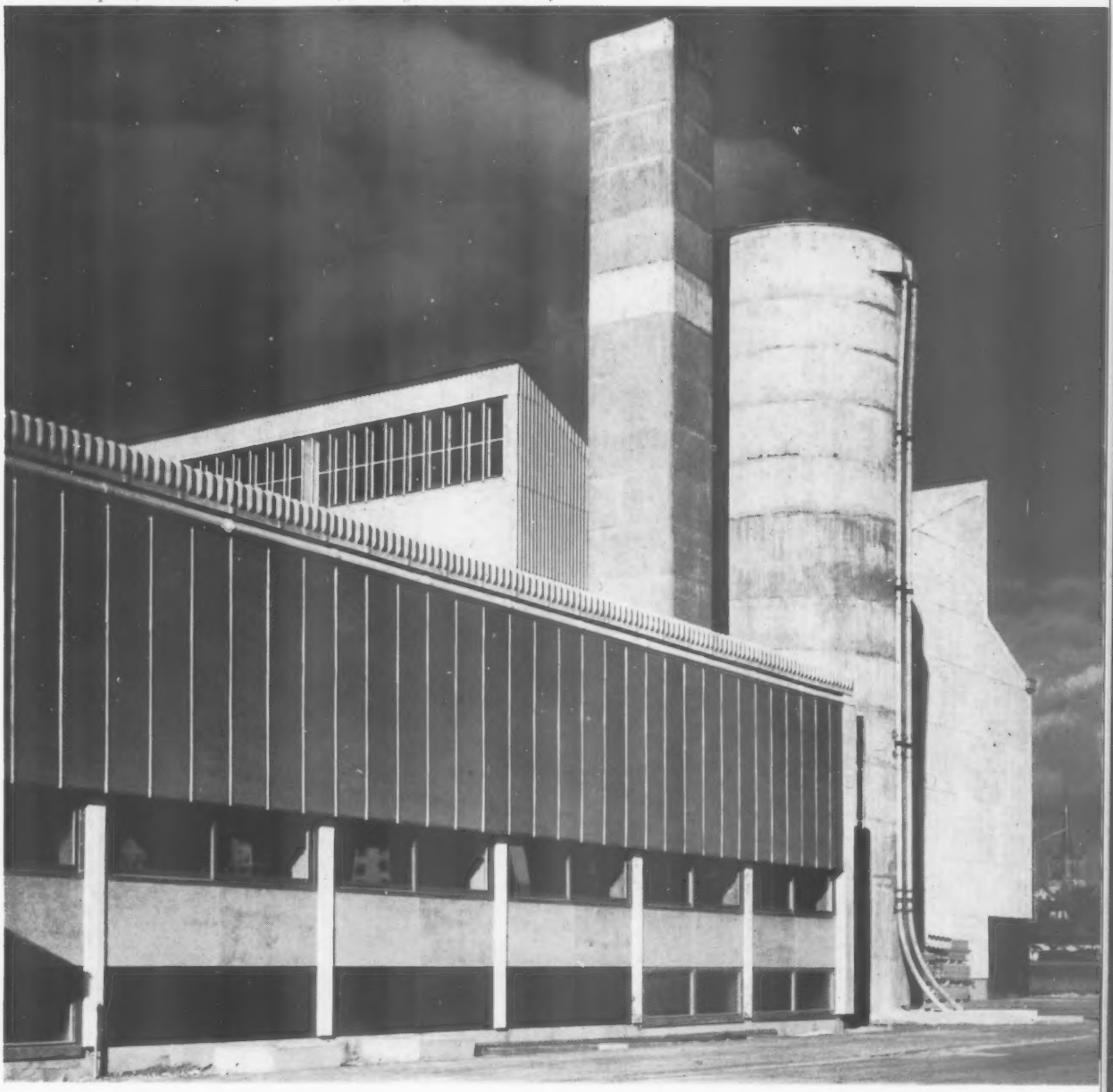
		s	d
Twice oiling general surfaces of hardwood with linseed oil	YS	2	8
		1	*2*
On work not exceeding 3-in. girth	YR		3
			1
For each additional 3-in. girth	YR		3
			1
Staining and wax polishing general surfaces of hardwood	FS	1	1
Staining bodying-in and fully French polishing on general surfaces of hardwood	FS	2	8

Papering

		s	d
Preparing and sizing walls and hanging plain lining paper	Piece	10	7
		3	*3*
Hanging wall paper, p.c. 10s. per piece	Piece	20	8
		12	*9*
Hanging border p.c. 1s. per yd.	YR	1	9
		1	*3*

GLAZED WALL: FACTORY IN PAYYERNE, SWITZERLAND

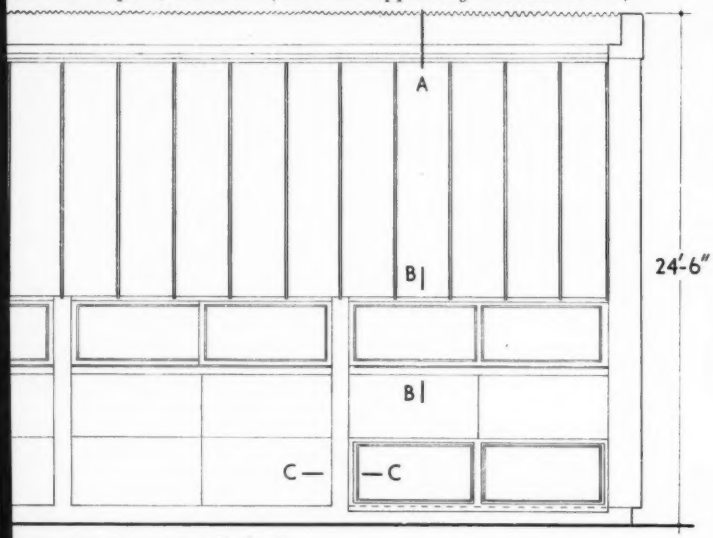
P. Waltenspuhl, architect. (*Material supplied by Dariush Borbor*)



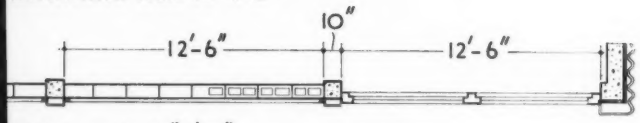
This detail, like the other published this week, is interesting for the application of typical continental industrial practice (precast concrete structure with asbestos-cement cladding) to a specialised use, the main concern being to preserve the high relative humidity necessary for the manufacture of asbestos cement.

GLAZED WALL: FACTORY IN PAYYERNE, SWITZERLAND

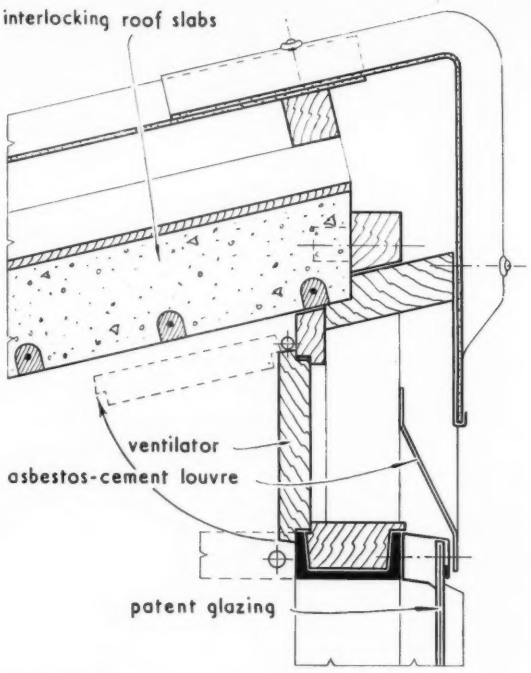
P. Waltenspuhl, architect. (Material supplied by Dariush Borbor)



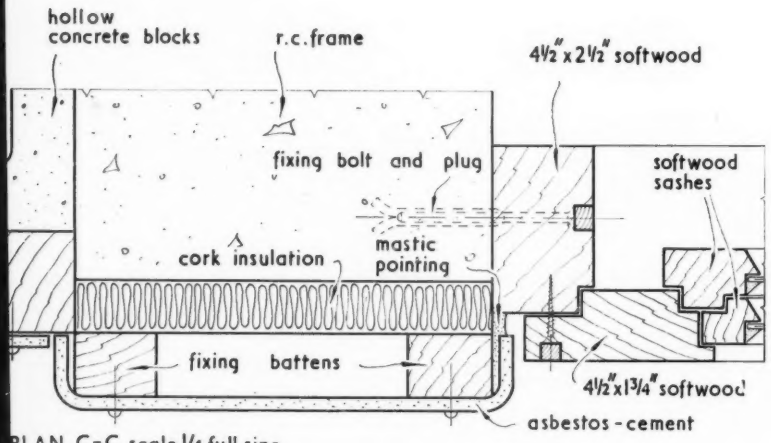
ELEVATION. scale 1/8"=1'-0"



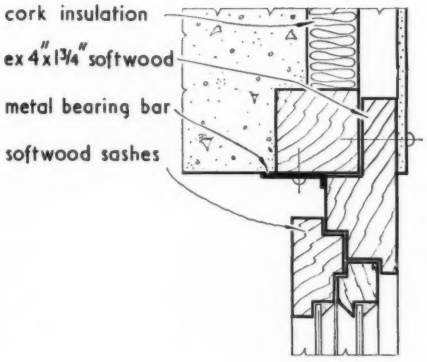
PLAN. scale 1/8"=1'-0"

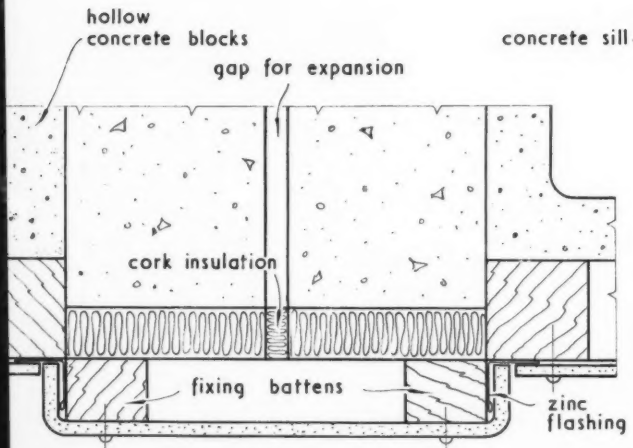


SECTION AT A. scale 1/8 full size

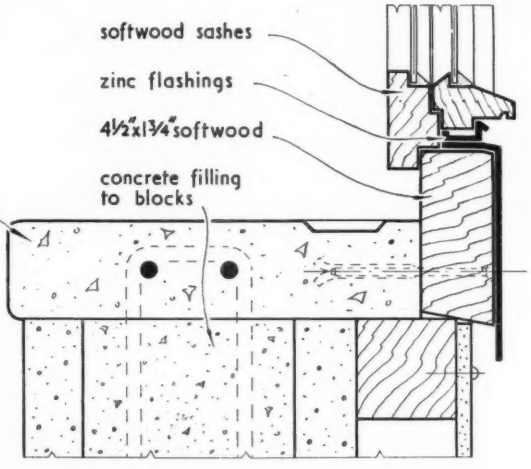


PLAN C-C. scale 1/4 full size





PLAN AT EXPANSION JOINT. scale 1/4 full size

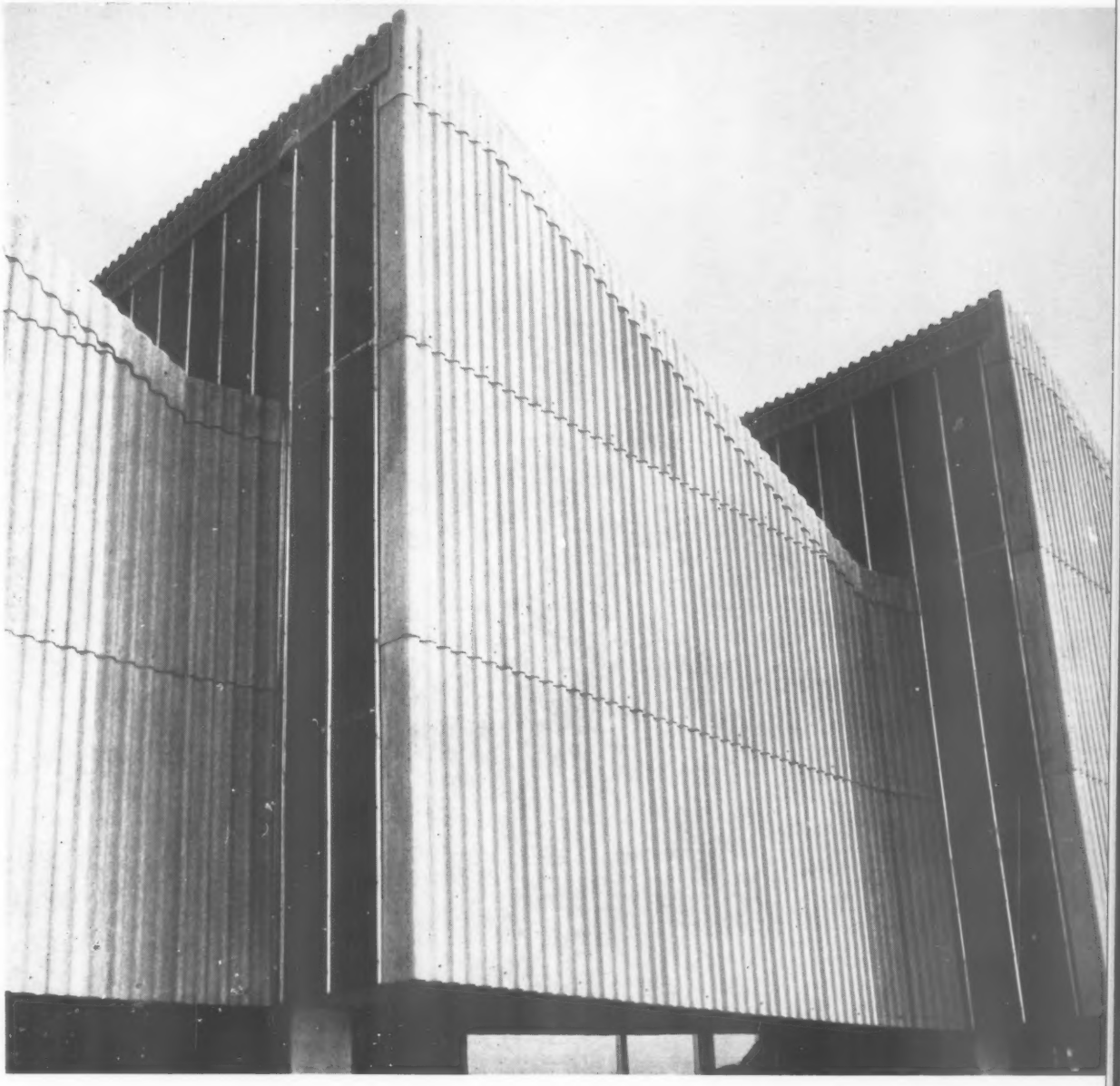


SECTION THROUGH B-B. scale 1/4 full size

note: figured dimensions in feet and inches are approximate

NORTHLIGHT ROOF: FACTORY IN PAYYERNE, SWITZERLAND

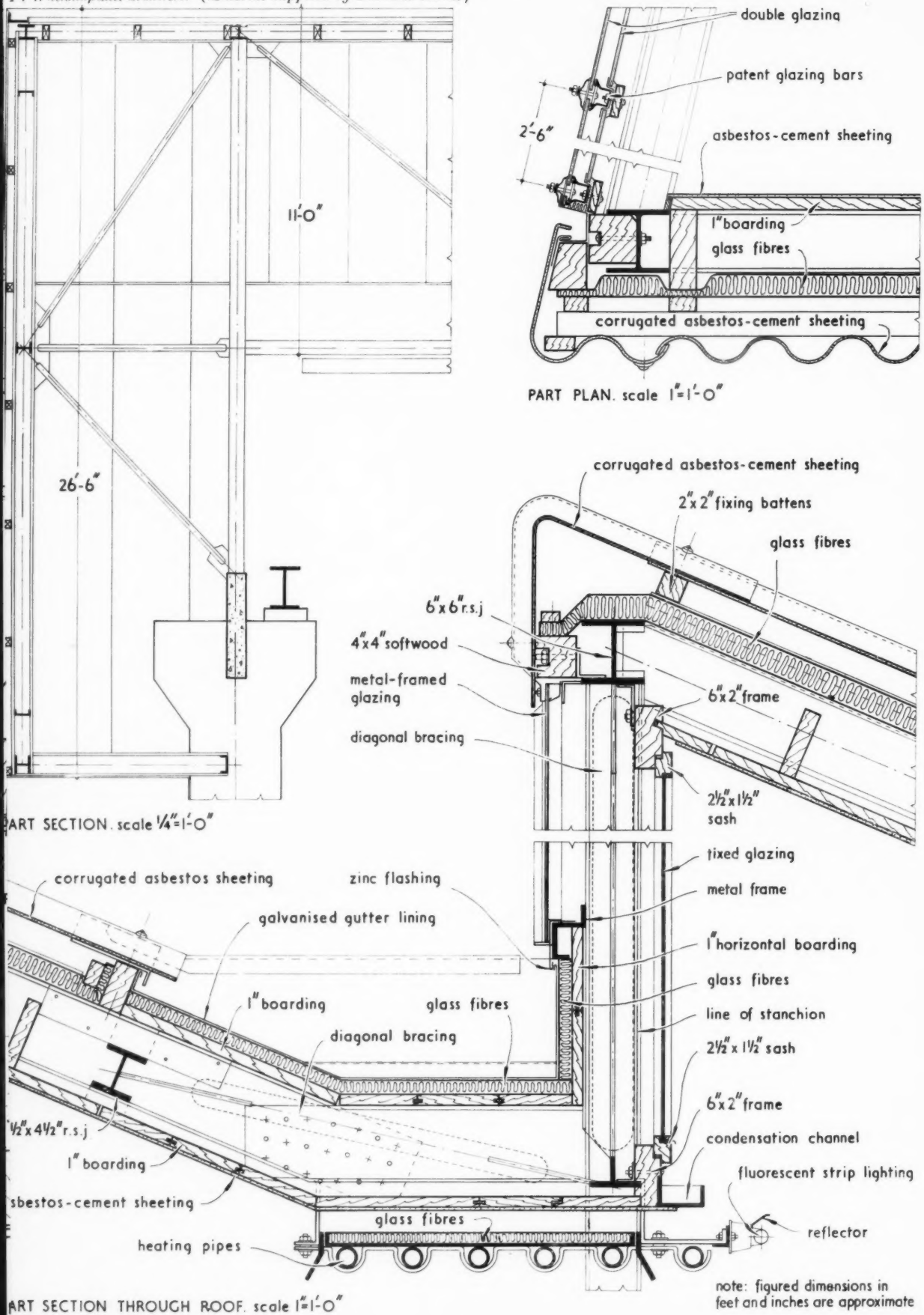
P. Waltenspuhl, architect. (Material supplied by Dariush Borbor)



This is a specialised roof, designed to preserve the high internal humidity required by the manufacturing process. This is the chief reason for the double glazing with timber frames on the inside and the high insulation. Though the detailing is not consistently elegant, the structure itself is of some interest, being composite steel and concrete of a type more common on the Continent than over here.

NORTHLIGHT ROOF: FACTORY IN PAYYERNE, SWITZERLAND

P. Waltenspuhl, architect. (*Material supplied by Dariush Borbor*)



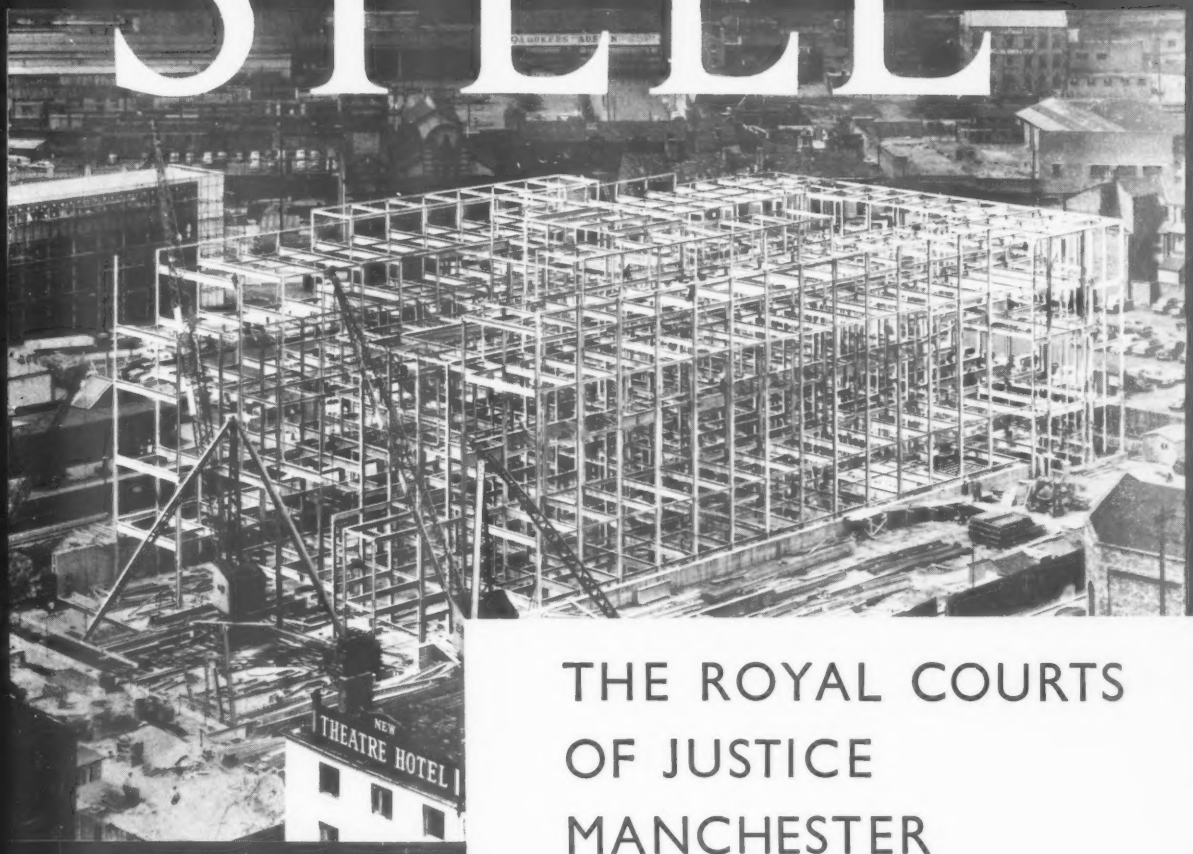
PART PLAN. scale 1"=1'-0"

PART SECTION. scale ¼"=1'-0"

PART SECTION THROUGH ROOF. scale 1"=1'-0"

note: figured dimensions in feet and inches are approximate

STEEL



THE ROYAL COURTS OF JUSTICE MANCHESTER

Architect:
Leonard C. Howitt,
M.Arch, DipT.P, D.P.A, F.R.I.B.A, M.T.P.I.
City Architect, Manchester

STEEL
STRENGTH
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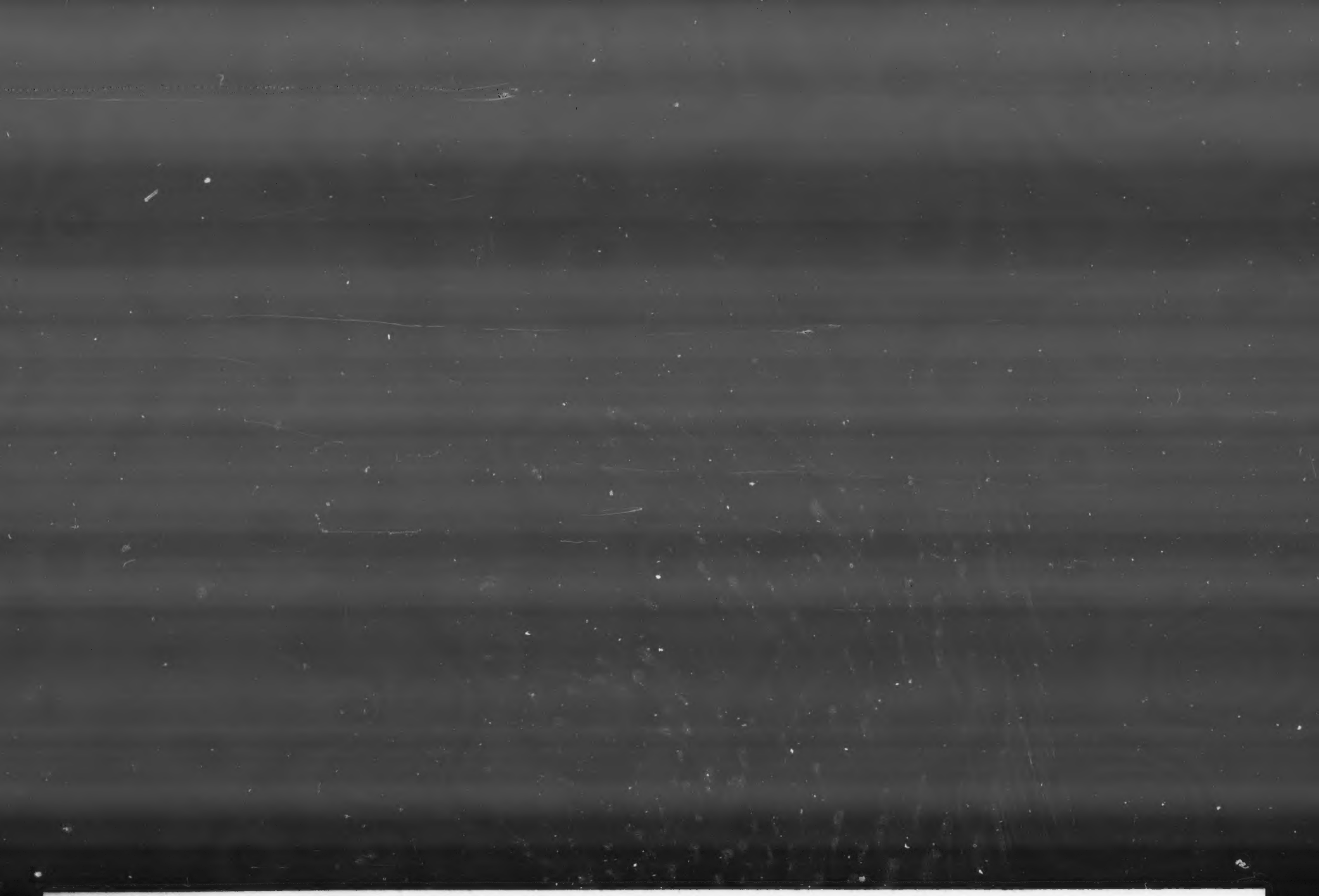
B·C·S·A **BRITISH CONSTRUCTIONAL STEELWORK ASSOCIATION**

Artillery House, Artillery Row, Westminster, S.W.1



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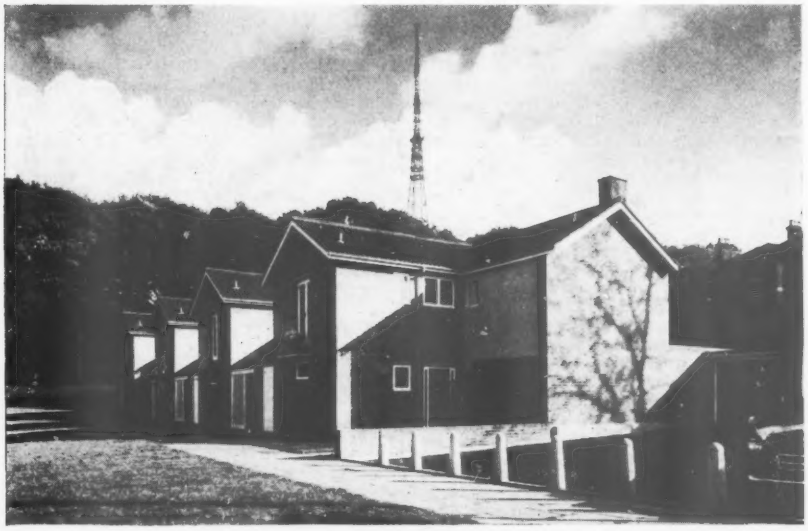
HOUSING AT DULWICH, LONDON, S.E.

A small housing development scheme, designed by Austin Vernon & Partners, and built on the Dulwich Estate by Wates Built Homes Ltd. has recently been completed, consisting of 44 three-bedroomed houses, laid out in three- or five-house terraces, with front and back gardens in common, landscaped by Richard Sudell. There is a garage for each house adjoining the terraces. The L-shaped houses (below) are linked together by a paved court-yard, and cars are kept in their proper place by stone bollards alongside the path. Right, the living room, which runs the full rear width of each house, with open staircase leading



to first floor. The houses are centrally heated by a convector hot air gas fired unit, but a fireplace is also provided in the living room, which is over 30 ft. long by nearly 14 ft. wide and very light, having both french windows, leading out to a paved area, and a second window with a 2 ft. 3 in. deep window seat. The floor is surfaced with hardwood blocks, and the room is entered from the hall through double-glazed doors. This room has been designed so that it can easily be divided into two if the purchaser prefers it.

'THE REAL OUTRAGE'

Is it Civilization?

Gordon Redfern had a tilt at the *Architectural Review* ("a leading glossy with something of a social conscience") in a paper entitled "The Real Outrage" given to the Universities and Left Review Club recently. He was clearly with the *Architectural Review* in its assault against the visual debasement of the towns and countryside, and conceded that "Outrage" and "Counter-Attack" were works of importance within the context of their own terms of reference. But he disagreed basically with the terms of reference. The AR, he considered, had exposed the manifestations and suggested ways of changing them, but had ignored the civilization that produced them, and ignored, too, the fundamentals of historical analysis. "The real Outrage" said Mr. Redfern "is civilization, and as such has produced the froth of visual debasement lashed at by the *Architectural Review*."

Mr. Redfern saw the architectural key to the problem of industrial capitalist society in its lack of any natural law or human regulating agency. It was purely material, in that considerations of environment in the beginning were totally unimportant and largely ignored: from these beginnings one could trace the journey of capitalist society by its expression of itself in its buildings —the pomp of the Victorian city centre, the squalor of factory and slum, the slag-heaps and broken landscape, the growth of the city office block and the fantastic rise in land values, the rash of jerry-built dwellings to house the army of white-collar workers—"Laburnum Groves ringing every city"—with occasional, inadequate and pathetic glimmerings of social conscience. The pattern of the 1958 City was ordered 200 years ago: then it served its purpose badly enough; now it was catastrophic.

Although Mr. Redfern took the *Architectural Review* to task for not going to the root causes of Outrage, he considered that something could be done about it today, on the immediate level, if planners and architects were given a reasonable brief and adequate support. He deplored the fact that even a great many Socialists seemed totally unaware of the possibilities of urban renewal, and criticized those sociologists who were paralyzing productive thought on the problem of social change by harping back to the days of the cosy old slum family, when the conditions that produced it were passing out of existence. He noted, too, a great decline in planning vision since the war, parallel with the rise in material standards, and criticized governmental attitudes to planning—on the one hand making a comprehensive solution largely impossible, and then studying one aspect of decay in isolation—for instance, axeing road programmes, and then setting up committees to study travel congestion.

From this he concluded: "it is this sort of approach that covers all aspects of planning; that makes it obvious that, as long as the future relies upon hand to mouth solutions of each particular aspect with no overall relation of the parts, the future of our cities is going to be precious little better than the present failure. The sort of approach we are rapidly going back to, the approach which has resulted in the grafting of new properties and different uses into the decayed and the useless, has resulted in a hopeless jumble of inefficiency and frustration."

The equation of the state of civilization with its cities presented, he said, a shattering exposure of how rotten our civilization had become. There were a few good buildings, but no effort apart from the New Towns to adapt, change or alter the environment. The new towns, in many ways an honest and splendid effort, were rapidly sinking to the level of politicians' election housing. They were timid plans, without boldness or imagination, without any of the joyous intimate quality that made for urbanity; everything was playing safe, and the results were dreary housing estates spread over miles of countryside and connected by statutory tarmac ribbons. Architecturally this approach had produced buildings which, except for a few factories, had absolutely no merit whatsoever. For the architects the new towns represented a promise completely denied: a shameful disappointment. "It is interesting" he said "to speculate as to what might have been the effect on the people of the town had the planning and architectural approach been different. I suspect that it could have been decisive."

The driving force of Socialism had been the annihilation of poverty: but this was a means to an end only. It was not the end product, only the beginning. The end product should be as William Morris stated in 1884: "in a properly ordered state of society every man willing to work should be ensured first, with honourable and fitting work, second, a healthy and beautiful house, and third, full leisure for rest of body and mind."

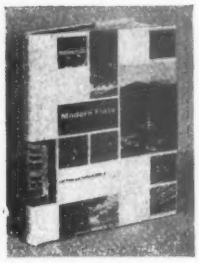
Announcements

Versatile Fittings (WHS) Ltd. have opened a new branch office in Bristol. C. J. Peters will be in charge, and the address is 54, Baldwin Street, Bristol, 1 (telephone Bristol 24656).

E. N. Mason & Sons Ltd. have opened new London offices, service departments and stockrooms at 28/31, Dallington Street, E.C.1 (telephone Clerkenwell 4064-8).

NEW BOOKS FOR CHRISTMAS

A selection from The Architectural Press



Modern Flats *by F. R. S. Yorke, F.R.I.B.A., and Frederick Gibberd, C.B.E., F.R.I.B.A.*

THIS IS A STRAIGHTFORWARD PICTURE BOOK recording some of the most interesting and distinguished flat buildings which have been built in recent years throughout the world. Examples have been taken from fifteen different countries and each is illustrated with photographs, plans and has an accompanying factual text. This book is in no way a new or revised edition of *The Modern Flat* which the same authors prepared in 1937; none of the schemes which were illustrated in that earlier volume are included here. 11¼ *by* 8¾ *in.* 212 *pages, including over* 270 *halftone and* 215 *line illustrations.* 63*s. net, postage* 2*s.*

The Functional Tradition in early industrial buildings *by J. M. Richards, A.R.I.B.A. Photographs by Eric de Maré, A.R.I.B.A.*

'FUNCTIONALISM' IS A TERM so closely associated with modern architecture that it is regarded as a new invention. Yet, in fact, a tradition of functional building has persisted throughout history, to emerge most clearly just after the Industrial Revolution when these buildings were mainly built. The author demonstrates this thesis with fascinating photographs, specially taken by Eric de Maré, of warehouses, docks, naval dockyards, textile mills, water mills, bridges, breweries, maltings (many not previously published): buildings, possessing architectural virtues never yet properly recognized, to be found all over Britain. 10 *by* 7⅞ *in.* 200 *pages with over* 260 *photographs.* 36*s. net, postage* 1*s.* 9*d.*

The Chapel at Ronchamp: les carnets de la recherche patiente *by Le Corbusier. Translated by Jacqueline Cullen*

THIS IS A BEAUTIFUL and significant book about one of the most controversial religious buildings of our time: by means of photographs, sketches, notes and characteristically vigorous text, the creator of the new Notre-Dame-du-Haut, Ronchamp, describes and analyses his own work. His illustrated progress report not only explains the ideas which influenced him in design and construction—thereby affording direct insight into the complex imagination and restless creativity of an architectural genius—but also embodies the religious impulse which animated the project and pays tribute to the co-operative spirit of all the participants. 8 *by* 7⅞ *in.* 136 *pages, over* 150 *illustrations, 4-colour jacket by Le Corbusier.* 25*s. net, postage* 1*s.* 2*d.*

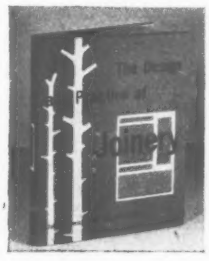
Architects' Working Details Volume 5 *edited by D. A. C. A. Boyne and Lance Wright, A.R.I.B.A.*

THE FIFTH VOLUME in this popular series which provides architects and assistants with easily accessible solutions to many everyday design problems. 11¾ *by* 8½ *in.* 160 *pages.* '*Wire-O*' *bound, to open flat.* 25*s. per volume. Postage:* 1 *vol.* 1*s.* 9*d.;* 2 *vols.* 2*s.* 3*d.;* 3 *vols.* 2*s.* 9*d;* 4 *vols.* 3*s.* 3*d.;* 5 *vols.* 3*s.* 6*d.*

The Landscape of Power *by Sylvia Crowe, P.I.L.A., author of 'Tomorrow's Landscape'*

A BOOK FOR EVERYONE who cares about Britain's landscape. Miss Crowe shows, with text, photographs and diagrams, that giant buildings and their accessories can be incorporated in the landscape without destroying it—indeed that, given skilful design and sensitive siting, they may even enhance the natural scene. 8¾ *by* 5½ *in.* 116 *pages, over* 70 *illustrations,* 16*s. net, postage* 10*d.*

The Design and Practice of Joinery *by John Eastwick-Field, B.A. Arch. (Hons.), A.R.I.B.A., and John Stillman, Dipl. London, A.R.I.B.A. Foreword by Robert H. Matthew, C.B.E., M.A., A.R.I.B.A. Drawings by Robert Maguire, A.R.I.B.A.*



THIS, THE ONLY AUTHORITATIVE, up-to-date book about joinery practice, published at the recommendation of the R.I.B.A.'s Text and Reference Books Committee, is intended primarily for architects, assistants and students of architecture. Broad in scope, and concerned with the basic principles of design and practice, it is also invaluable to members of kindred professions, such as quantity surveyors, and to joinery manufacturers and all woodworkers. 10 *by* 7⅛ *in.* 224 *pages, over* 290 *illustrations,* 42*s. net, postage* 1*s.* 9*d.*

OTHER RECENT BOOKS NEW EDITIONS

The Design of Structural Members Part I *by H. T. Jackson, F.R.I.B.A., A.M.I.Struct.E.* THE AUTHOR, an architect and teacher of Structure, here provides that much-needed work—a book specially designed to help students pass the paper on this subject in their examinations. Part I, for Intermediate Examination students, consists of typical R.I.B.A. examination questions with answers, explanations, diagrams. 8¾ *by* 5¾ *in. Part I,* 176 *pages, including* 160 *illustrations.* 25*s. net, postage* 11*d.*

Gardens of Japan *by Tetsuro Yoshida.* A FULL-SCALE STUDY of the Japanese Garden, considered from the viewpoint of design. He analyses the simple basic elements traditionally used—trees, shrubs, rocks, stone and water—and shows how Japanese designers achieve with them a perfect harmony of garden and house. 11 *by* 8¾ *in.* 196 *pages, including* 224 *illustrations;* 4 *plates in colour.* 63*s. net, postage* 2*s.*

The Works of Pier Luigi Nervi *Introduction by Ernesto N. Rogers.* A COMPLETE FULLY ILLUSTRATED SURVEY of all the completed works up to 1956 of the great Italian engineer-architect-contractor, whose buildings of the past 30 years take their place in the tradition of Europe's finest engineering architecture. 8¾ *by* 11 *in.* 156 *pages,* 280 *illustrations.* 56*s. net, postage* 1*s.* 9*d.*

Specification 1959 *edited by F. R. S. Yorke, F.R.I.B.A.* STANDARD ANNUAL REFERENCE WORK for architects, engineers, surveyors and all engaged in building and public works, now in its 60th year. Major changes in this edition include the thorough revision and rewriting of *Carpenter and Joiner* by a team of specialists; considerable additions to *Curtain Walling* and to *Plumber, Sanitary Engineer and Water Supply* and to ten other sections. 13 *by* 8¾ *in. over* 1,400 *pages.* 35*s. net, postage* 3*s.* 3*d.*

New Ways of Building *edited by Eric de Maré, A.R.I.B.A.* 10 *by* 7⅞ *in.* 264 *pages, over* 240 *illustrations. Third edition, revised and enlarged.* 45*s. net, postage* 1*s.* 9*d.*

Building Materials *by C. C. Handisyde, A.R.I.B.A. Foreword by A. H. Moberly.* First in the Trilogy on Building Construction. 9 *by* 6 *in.* 342 *pages,* 62 *illustrations. Third edition.* 30*s. net, postage* 1*s.* 5*d.*

Structure in Building *by W. Fisher Cassie, Ph.D., M.S., F.R.S.E. and J. H. Napper, M.A., F.R.I.B.A. Foreword by W. A. Allen.* Second in the Building Construction Trilogy. 9 *by* 6 *in.* 268 *pages,* 150 *illustrations. Second edition.* 30*s. net, postage* 1*s.* 4*d.*

London Night and Day: *a guide to where the other books don't take you* *edited by Sam Lambert, illustrated by Osbert Lancaster.* 5⅛ *by* 8½ *in.* 104 *pages, pocketable. Sixth edition, still only* 5*s. net, postage* 7*d.*

a complete illustrated catalogue will be sent on application:

THE ARCHITECTURAL PRESS, 9-13, *Queen Anne's Gate, London, SW1*

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.

AIR-MAIL SERVICE available on request: *In response to requests from a number of Overseas subscribers for air-mail delivery of Public and Official Appointment details and Other Appointments Vacant, we have been pleased to arrange that cuttings of all such classified advertisements appearing in the A.J., shall be despatched by air-mail on Wednesday of each week (one day prior to A.J. publication date). The cost of this special service to Overseas subscribers will be 5s. for four weeks (1s. 3d. for each additional week) and prepayment should be sent by subscribers wishing to take advantage of this service. The charge we are making represents only the actual cost of the postage involved.*

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30s. per inch; each additional line, 2s. 6d.

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

Vacancies for (1).—ARCHITECT/PLANNERS. Tasks include three-dimensional planning within London's eight major comprehensive development areas (including Stepney/Poplar, the South Bank and Elephant and Castle) and other redevelopment areas. Work includes preparation of comprehensive lay-outs for all important areas of new development throughout County, including areas to be redeveloped in connection with road improvements.

(2).—TOWN PLANNING ASSISTANTS. Duties include investigation of development proposals, surveys, report writing, preparation of data for Public Inquiries.

Starting salaries in each case up to £860 according to experience and qualifications. Application forms and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/51/58), County Hall, London, S.E.1. (2167.) 1950

EBBW VALE URBAN DISTRICT COUNCIL
ARCHITECT'S DEPARTMENT
PROPOSED CIVIC CENTRE

Applications are invited for the Appointment of ASSISTANT ARCHITECT on the Temporary Staff of the Architect's Department—Salary Special Grade (£750 × £40 to £1,030). The point of entry in the Grade will be fixed in accordance with the experience of the successful applicant.

Applicants for Appointment should be A.R.I.B.A.

The appointment will be made in connection with the preparation of a Scheme for a Proposed New Civic Centre.

The appointment will be subject to the provisions of the Local Government Superannuation Acts and National Conditions of Service.

The successful applicant will be required to pass a Medical Examination and the Appointment will be subject to one month's notice in writing on either side.

Applications stating age, qualifications, and experience together with the names of two referees should be sent to the undersigned not later than the 31st December, 1958.

Applicants must state in their applications whether, to their knowledge, they are related to any Member of the Council or Senior Officer under the Council.

Housing accommodation will be provided if required.

Canvassing disqualifies.

HOWARD J. WILLIAMS,
Clerk of the Council.

Council Offices,
The Walk,
Ebbw Vale, Mon. 2297

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT

Vacancies for ARCHITECTURAL ASSISTANTS, starting salary up to £860. Full and interesting programmes of houses, flats, schools and general buildings.

Application form and particulars from Hubert Bennett, F.R.I.B.A., Architect to Council (EK/52/58), County Hall, S.E.1. (2168.) 1949

THURROCK U.D.C. (Engineer & Surveyor's Department) require ARCHITECTURAL ASSISTANT. Salary A.P.T. I/II: £575—£845 p.a. Good architectural experience is necessary. Applicants must be capable of preparing working drawings in all categories and should have passed the Intermediate Examination of the R.I.B.A. The Council have interesting projects in hand, including an Indoor Swimming Bath. Appointment pensionable. Applications, stating age, qualifications, and experience, and quoting three referees, to the Clerk of the Council, Council Offices, Grays, Essex, by 29th December, 1958. Canvassing disqualifies. Relationship with Members or Senior Officers of the Council must be disclosed. 2318

SURREY COUNTY COUNCIL

Applications invited for appointment of ASSISTANT ARCHITECTS, Special Grade, £750—£1,030 p.a., plus £30 p.a. London allowance. Must be A.R.I.B.A.

Full details, present salary and three copy testimonials to County Architect, County Hall, Kingston, as soon as possible. 2310

UNIVERSITY COLLEGE OF SWANSEA
MAINTENANCE SURVEYOR

Applications are invited for the above position in the College Registry at a salary on the scale £725 to £985. Commencing salary according to age, qualifications and experience. Membership of the F.S.S.U., and the Children's allowance scheme.

Candidates should have a good knowledge of the building trade and be experienced in surveys, specifications and estimating for building maintenance and small new works. Some experience is desirable in the checking of interim and final accounts for major capital works.

Preference will be given to candidates who have reached Final Examination standard of the R.I.C.S. (building), or who possess the H.N.C. (building), but applications from candidates with equivalent qualifications will be considered.

Further particulars may be obtained from the Registrar, University College, Singleton Park, Swansea, to whom applications (3 copies) must be sent by January 3rd, 1959. 2348

COUNTY BOROUGH OF SOUTH SHIELDS
PRINCIPAL ASSISTANT QUANTITY SURVEYOR

Applications are invited from suitably qualified persons for the above appointment in the Borough Engineer's Department, salary in accordance with Grade A.P.T. IV (£1,025 × £50—£1,175).

Housing accommodation will be made available to successful applicants if necessary.

The selected applicants will be required to pass a medical examination for the purposes of the Superannuation Scheme.

Application forms are obtainable from the Borough Engineer, Town Hall, South Shields, and should be returned to him not later than 10 a.m. on Thursday, 8th January, 1959.

R. S. YOUNG,
Town Clerk.
2343

EAST SUFFOLK COUNTY COUNCIL
ASSISTANT ARCHITECTS

Applications are invited in connection with two vacancies on the Grade for Special Classes (£750 × £40 to £1,030)—starting salary according to qualifications and experience.

Applicants must be Associate Members of the R.I.B.A., with good general experience in design and construction; they should be capable of producing accurate working drawings, of specification writing, and of surveying and levelling.

The appointments will be subject to one month's notice on either side and to the provisions of the Superannuation Acts; the selected candidates will be required to pass a medical examination.

Applications, stating age, qualifications, experience and present employment, together with copies of two recent testimonials, must be delivered to the County Architect, Mr. E. J. Symcox, F.R.I.B.A., County Hall, Ipswich, not later than first post on Thursday, 8th January, 1959.

Canvassing will disqualify. 2381

THE UNIVERSITY OF LIVERPOOL
DEPARTMENT OF BUILDING SCIENCE

Applications are invited from suitably qualified ARCHITECTS to lead a small research group investigating problems connected with FACTORY DESIGN and CONSTRUCTION, with special reference to the economics of daylighting. The appointment will be in the Department of Building Science and applicants should preferably have had previous professional experience either (*a*) in the design and/or construction of industrial buildings, or (*b*) in architectural research of a scientific nature. The successful candidate is expected to carry the investigation through to completion and the total duration of the appointment is expected to be two years three months. The salary, which will depend on qualifications and experience, will be in the range £1,000—£1,300. Further details and conditions of employment may be obtained from the Registrar, to whom final applications should be submitted not later than January 29th, 1959. 2373

STAFFORDSHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
APPOINTMENT OF ASSISTANT ARCHITECTS

Special Grade (£750 × £40—£1,030), or A.P.T. IV (£1,025 × £50—£1,175), or A.P.T. V (£1,175 × £50—£1,325)

Applications are invited for the above posts from qualified and suitably experienced Architects; candidates for Grade A.P.T. V should have had extensive experience. The Department has an extensive programme of varied and interesting work.

The appointments will be subject to: (*a*) The National Scheme of Conditions of Service. (*b*) The Local Government Superannuation Acts and the passing of a medical examination.

The County Council are prepared to grant a lodging allowance of 35s. per week to married applicants maintaining a home outside the geographical County for a period of six months; also 2nd Class rail travel home every second month during the initial six months. The Council are also prepared to give consideration to the granting of financial assistance in appropriate cases towards removal expenses.

Housing for married applicants may be made available in special circumstances.

Forms of application, which must be returned by the 14th January, 1959, may be obtained from the County Architect, Green Hall, Lichfield Road, Stafford.

T. H. EVANS,
Clerk of the County Council.
2369

STEVENAGE DEVELOPMENT CORPORATION
CHIEF ARCHITECT'S DEPARTMENT

Applications are invited for appointment to posts as ASSISTANT ARCHITECTS or ARCHITECTURAL DRAUGHTSMEN.

Applicants should have experience of planning and construction of modern buildings.

Work is of a varied and interesting nature, relating to the building of a New Town and includes Shopping Centres, Housing and Multi-storey Flats, Commercial and Industrial Buildings and Offices.

Salary according to experience within range £753 rising to £1,029 p.a.

Housing accommodation will be available in due course in an appropriate case.

Applications, giving full details and names of two referees, to be sent to the Chief Administrative Officer, Aston House, Stevenage, Herts, not later than 5th January, 1959. 2376

COUNTY BOROUGH OF DUDLEY
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the following appointments:—

(*a*) ASSISTANT ARCHITECT, who will be mainly engaged on Education projects. Salary £750 to £1,030. (Applicants for this post must be Associates of the R.I.B.A.)

(*b*) ARCHITECTURAL ASSISTANT, Grade II, £725—£845.

Starting salaries according to qualifications and experience.

Applications, stating age, qualifications and experience, present appointment and salary, together with the names and addresses of two referees, should be sent to me as soon as possible.

P. D. WADSWORTH,
Town Clerk.

The Council House,
Dudley,
Worcs.
10th December, 1958. 2372

BOROUGH OF RICHMOND (SURREY)
APPOINTMENT OF SENIOR ASSISTANT ARCHITECT

Applications are invited from qualified Architects for the appointment of Senior Assistant Architect at a salary in accordance with the Special Grade (£750—£1,030) plus London weighting.

Applications should be delivered to the Borough Engineer and Surveyor, Hotham House, Heron Court, Richmond, Surrey, not later than 3rd January, 1959, giving the names of three referees and stating relationship if any to Members of the Council or Senior Officers.

Canvassing prohibited. No assistance can be given with housing.

CLIFFORD HEYWORTH,
Town Clerk.

Town Hall,
Richmond,
Surrey. 2329

CITY OF SHEFFIELD
CITY ENGINEER & SURVEYOR'S DEPARTMENT
ASSISTANT STRUCTURAL ENGINEER
Special Classes Grade

Applications are invited from qualified Structural Engineers, for the position of Assistant Structural Engineer, on the Staff of the City Engineer and Surveyor and Town Planning Officer (H. Foster, M.A., M.I.C.E., M.I.Mun.E.). The post is established in the Special Classes Grade (£750—£1,030 p.a.).

Candidates will be required to work in the Building Surveyor's Section of the Department, and should be capable of dealing with all kinds of structural proposals under the various codes of practice.

Superannuable post. N.J.C. conditions of service, medical examination.

Applications, stating age, education and training, qualifications, experience, present and past appointments (with dates and salaries), and quoting the names of two referees should be submitted to the undersigned by the 5th January, 1959.

JOHN HEYS,
Town Clerk.

Town Hall,
Sheffield, 1. 2375

BOROUGH OF EALING
Erection of 110 Flats and 12 Maisonettes in 15 Blocks, Northolt Park Estate

Tender Documents obtainable from Borough Surveyor, Town Hall, Ealing, W.5, upon payment of £5, returnable on receipt of a *bona fide* Tender.

Closing date noon, 22nd January 1959.

E. J. COPE-BROWN,
Town Clerk.

Town Hall,
Ealing, W.5. 2305

HAMPSHIRE COUNTY COUNCIL

SENIOR PLANNING ASSISTANT. Special Grade (£750—£1,030), required for pensionable post in County Planning Department Headquarters. Candidates should preferably have a Degree of a British University in addition to membership of the Town Planning Institute or other related professional body. Ability in statistical analysis and graphic representation of Survey material will be an advantage as well as some experience in preparation of Development Plans. Travelling allowance payable. Assistance with removal and other expenses in approved cases. Five-day week.

Applications, stating age, education, qualifications and experience, together with a copy of one testimonial and the names of two referees, should reach the Clerk of the County Council, The Castle, Winchester, by 3rd January. 2371

COUNTY BOROUGH OF SOUTH SHIELDS
PRINCIPAL ASSISTANT ARCHITECTS

Applications are invited from suitably qualified persons for the above appointments in the Borough Engineer's Department, salary in accordance with Grade A.P.T. IV (£1,025 × £50—£1,175).

Housing accommodation will be made available to successful applicants if necessary.

The selected applicants will be required to pass a medical examination for the purposes of the Superannuation Scheme.

Application forms are obtainable from the Borough Engineer, Town Hall, South Shields, and should be returned to him not later than 10 a.m. on Thursday, 8th January, 1959.

R. S. YOUNG,
Town Clerk.
2342

LEEDS REGIONAL HOSPITAL BOARD

Applications are invited for the following appointments:—

(*a*) ASSISTANT ARCHITECTS (three posts). Salary scale £700—£1,015 per annum. Commencing salary dependent upon relevant practical experience, but the additional increments granted will not be more than the number of years by which the officer's age exceeds 23.

Applicants must be Associate Members of the R.I.B.A. The above appointments offer excellent opportunities to young Architects to gain experience of a wide range of new buildings such as: Nurses' Homes, Houses, Flats, Kitchens, Laundries and Boiler Houses.

The Service is an expanding one and many new Hospital Projects are to be built in the future.

(*b*) ARCHITECTURAL ASSISTANT. Salary scale £525—£730 per annum.

Applicants must have passed the Intermediate Examination of the R.I.B.A., and have had a sound architectural training and some practical experience in a practising architect's office is essential.

Applications, giving age, experience and the names of two referees, to the Secretary, Park Parade, Harrogate, by not later than 3rd January, 1959. 2383

SURVEYING ASSISTANT required in Architect's Department. Salary within scale £525 to £730 plus £20—£30 London weighting. Candidates should have passed the Intermediate examination of the R.I.C.S. (Part 1).

The work is varied and interesting and entails preparation of surveys, working drawings and specifications under supervision, of works of a minor character. The Board operates a scheme of financial assistance to students studying for professional examinations.

Applications, stating age, qualifications and experience, and giving names of two referees, to Secretary, North West Metropolitan Regional Hospital Board, 40, Eastbourne Terrace, W.2, by 5th January, 1959, quoting ref. 688. 2397

EAST KILBRIDE DEVELOPMENT CORPORATION

The Corporation invite applications for the following posts:—

ARCHITECTS. Salary scale £844—£1,146 per annum. Applicants must be A.R.I.B.A. with at least two years' qualified experience.

ASSISTANT ARCHITECTS. Salary scale £679—£811 per annum. Applicants should at least have passed the Intermediate examination of the R.I.B.A.

JUNIOR ASSISTANT ARCHITECTS. Salary scale £562—£716 per annum. Applicants should be probationer members of the R.I.B.A.

The commencing salary in each case will be in accordance with qualifications, experience, etc. The appointments are subject to the Corporation's conditions of service and superannuation agreement. Selected candidates will require to pass a medical examination. A house or flat will be made available as required. Application forms may be obtained from the General Manager, Torrance House, East Kilbride, to whom completed forms should be returned not later than 10th January, 1959. Canvassing, directly or indirectly, of the members of the Corporation will constitute an absolute disqualification. 2395

ESSEX COUNTY COUNCIL
ILFORD COMMITTEE FOR EDUCATION

Applications are invited for the appointment in the Education Architects' Section of the Borough Engineer's Office of (*a*) One ASSISTANT ARCHITECT, A.P.T. Special Grade (£750 × £40—£1,030 per annum plus appropriate London weighting) and (*b*) One ASSISTANT ARCHITECT, A.P.T. I (£575 × £30—£725 per annum plus appropriate London weighting).

The posts are superannuable and subject to medical examination.

Commencing salaries will be fixed within the grade according to experience.

Applicants for post (*a*) must be Associates of the R.I.B.A. Experience in the design and development of school buildings will be an advantage.

Applicants for post (*b*) must have passed the Intermediate R.I.B.A. Examination or its equivalent at a recognised School of Architecture.

Applications should be made on a form to be obtained from and returned to the Borough Engineer & Surveyor, Town Hall, Ilford, together with copies of not more than three recent testimonials, within 14 days of the appearance of this advertisement. 2387

CITY OF PORTSMOUTH
CITY ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of an ARCHITECTURAL ASSISTANT, Grade I (£575—£725), commencing salary according to experience.

Applicants must have passed the Intermediate R.I.B.A. Examination or its equivalent, at one of the recognised Schools of Architecture.

Applications, with full details, and names of two referees, must be delivered to the City Architect, 1, Western Parade, Portsmouth, not later than Thursday, 1st January, 1959.

Canvassing will disqualify.

V. BLANCHARD,
Town Clerk.
2382

BOROUGH OF ILFORD
BOROUGH ENGINEER'S DEPARTMENT
ARCHITECTURAL STAFF

(*a*) SENIOR ASSISTANT ARCHITECT, Grade A.P.T. IV.—Salary £1,025 × £50—£1,175 p.a., plus London weighting.

Candidates must be Associate Members of the R.I.B.A. and have suitable experience in the development of Council housing, multi-storey flats and public buildings.

(*b*) ARCHITECTURAL ASSISTANT, Grade A.P.T. II.—Salary £725 × £30—£845 p.a., plus London weighting.

Applicants should have passed the Intermediate Examination of the R.I.B.A. and have some Drawing Office experience.

The commencing salaries in each case will be fixed having regard to qualifications and experience.

Appointments are permanent, superannuable and subject to medical examination.

The Council is prepared to consider, if necessary, the provision of housing accommodation in connection with both these appointments.

Forms of application, obtainable from Borough Engineer, Town Hall, Ilford, Essex, should be returnable by Saturday, 17th January, 1959. 2396

PADDINGTON BOROUGH COUNCIL

Require BUILDING SURVEYING ASSISTANT (A.P.T. I—£605 to £755 per annum). Candidates should have practical knowledge of building construction, experience in surveying and levelling, the repair, adaptation and conversion of civic and residential properties, and be capable of preparing plans, specifications and estimates of costs in respect of those works and their supervision. Candidates preferred at advanced stage of preparation for R.I.C.S. Intermediate or equivalent examination. Written applications, stating age, qualifications, experience, and names and addresses of three referees, should reach the undersigned (quoting A.398) by 12th January, 1959.

W. H. BENTLEY,
Town Clerk.

Town Hall,
Paddington Green, W.2. 2402

MANCHESTER CORPORATION HOUSING DEPARTMENT

Applications invited from suitably qualified persons for the position of ASSISTANT ARCHITECT, "Basic" Grade, £750 × £40—£1,030 per annum.

Particulars of age, qualifications and experience to the Director of Housing, Town Hall, Manchester, 2, to be received not later than 2nd January, 1959. 2392

THE UNIVERSITY OF MANCHESTER

Applications are invited for two posts of LECTURER in ARCHITECTURE from candidates with professional membership of the Royal Institute of British Architects and not less than three years of practical experience. Salary on a scale from £900 to £1,650 per annum; initial salary according to qualifications and experience. Membership of the F.S.S.U. and Children's Allowance Scheme. Applications should be sent not later than January 31st, 1959, to the Registrar, the University, Manchester 13, from whom further particulars and forms of application may be obtained. 2401

BANFF COUNTY COUNCIL requires PLANNING ASSISTANT. Salary scale £945—£1,085, according to experience. Applicants must be A.M.T.P.I., with experience in dealing with applications for planning permission and in the preparation of and legislation relating to development plans. Appointment superannuable. House available. Applications, stating age, experience, and whether married, together with copies of three recent testimonials, to be sent to County Architect, 13, Cluny Square, Buckie, by 1st January, 1959. 2405

BASILDON DEVELOPMENT CORPORATION
DEPARTMENT OF ARCHITECTURE AND PLANNING

Applications are invited for the post of ASSISTANT ARCHITECT/PLANNER to work in a team now engaged on the implementation of the Master Plan for a New Town of 100,000.

Work includes all aspects of progressive planning for development of residential, commercial and industrial areas and requires considerable skill and experience.

Candidates to be A.M.T.P.I. and A.R.I.B.A.

Grade A.P.T. VI (New Town Scales), salary range £934—£1,146, with point of entry depending on experience and ability.

Houses for renting provided by the Corporation.

Application on the special form (obtainable from the Chief Architect/Planner) to the General Manager, Basildon Development Corporation, Gifford House, Basildon, Essex, endorsed "Architect/Planner," by 23rd January, 1959. 2406

Architectural Appointments Vacant

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

A COMPETENT ASSISTANT, with several years' experience and capable of working with little supervision, required in Branch Office, Birmingham, engaged on a varied and interesting programme of commercial projects. Applications, giving full particulars and salary required, to: G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 1874

ARCHITECTURAL ASSISTANT required in the Chief Architect's office of a large Multiple retail firm with offices in London. Five-day week, pension scheme, dining room. Applicants should state age, qualifications, experience and salary required. Box 2309.

ARCHITECTURAL ASSISTANT, Intermediate standard, required for Architect's Practice in St. Albans. Salary by arrangement. Write giving particulars to Box 2327.

ARCHITECTURAL ASSISTANT, Intermediate standard, required for private practice in Rochester. Salary range £450 to £650, according to experience. Apply, stating age and experience, to George E. Clay & Partners, A/A.R.I.B.A., 10, New Road, Rochester, Kent. 2303

ASSISTANT required in busy West End Office. About Intermediate level. Write stating age, experience and salary desired. Box 2081.

EXPERIENCED SENIOR ASSISTANT required early in 1959 in busy general practice in Western Home Counties. Must be fully capable of handling a variety of types of job throughout under Partners' direction. Good design sense essential. Post is permanent with good prospects. Salary £800 p.a. upward depending on ability. Bonus scheme in operation. Own car an advantage. Write Box 2263.

ARCHITECT required on the permanent staff of a rapidly expanding organisation in the East Midlands which is embarking on a development scheme. The successful applicant will be expected to accept full responsibility for the design of all types of industrial building. This is a key appointment offering considerable scope for rapid advancement to a man with initiative, drive, and ability. Send full particulars of training, experience, and present salary to Box 2302.

ARCHITECTURAL ASSISTANTS, Intermediate standard, required in Cirencester and Swindon. Applications, stating experience and salary required, to: Eric Cole & Partners, Dyer Street House, Cirencester. 2312

ASSISTANT required, Intermediate or Final standard. Send full details to D. Garth Pepperell, A.R.I.B.A., Chartered Architect, 25, Clare Street, Bristol, 1. 2300

CHIEF ASSISTANT required for Architect's Practice in St. Albans. Possibility of working partnership subject to satisfactory service. Write giving particulars to Box 2326.

ARCHITECTURAL ASSISTANTS, preferably with office experience, required immediately for work on large and interesting projects. Vacancies occur in the following salary scales:—Intermediate standard, £450—£650; Final standard, £700—£850. Five-day week, pension scheme, good prospects. Head office of firm: Southsea, Hants. Box 2304.

LIVERPOOL—SENIOR and JUNIOR ASSISTANT required for small, busy practice with varied work on hand, especially hospitals and industrial. Excellent prospects and good opportunities for taking responsibility. Congenial working conditions. Salary by arrangement, depending upon age and experience. Please write, giving full particulars, Box 2361.

YORK—ARCHITECTURAL ASSISTANTS required for busy general practice. Commencing salary commensurate with experience. Applicants should apply, stating age, training, qualifications and experience, to Needham, Thorp & White, 5, High Petergate, York. 2335

ARCHITECTURAL ASSISTANT required by small, modern firm. Intermediate to Final standard. Salary according to competence. Apply Godsmark & Miller-Williams, 37a, Tubwell Row, Darlington, Co. Durham. 2321

ASSISTANT required for preparation of perspectives and model making with a high standard of drawing and craftsmanship. Apply Ronald Fielding, A.R.I.B.A., Aldwych House, W.C.2. CHAncery 8201. 2332

ARCHITECTURAL ASSISTANTS required by Sir William Halcrow & Partners for Architect's Department. Final standard. Salary arranged according to age and experience. Apply, giving particulars of age, qualifications and experience, to E. J. D. Mansfield, A.R.I.B.A., Sir William Halcrow & Partners, 47, Park Lane, London, W.1. 2338

COUNTRY Office (Surrey) requires ARCHITECTURAL ASSISTANT, Intermediate, for expanding practice. Salary according to experience. Car allowance. Five-day week. Box 2345.

ARCHITECTURAL ASSISTANT required for varied work on housing and industrial building. Applicant should be in early twenties with at least two years' experience in an Architect's Office and capable of undertaking projects with a minimum of supervision. Write, giving full particulars of experience and salary required, to Shepperdson & Dixon, 2, Museum Street, Ipswich. 2355

YOUNG, progressive Baker Street firm require ASSISTANTS with Intermediate and three years' experience, for varied work particularly on private housing and estate layout. Write with details of age, experience and salary required, to Box 2359.

ARCHITECT'S ASSISTANT required. A.R.I.B.A. or equivalent standard. Good salary and prospects for experienced man. Williams, Sleight & Co., 6, Wright Street, Hull. 2394

RONALD WARD & PARTNERS require ARCHITECTURAL ASSISTANTS with contemporary outlook and willing to use own initiative. Salary range £600 to £900. Congenial working conditions. Five-day week. Apply 29, Chesham Place, Belgrave Square, S.W.1. Telephone Belgravia 3361. 2398

ARCHITECT'S JUNIOR ASSISTANT required in busy Salisbury Office. Must be able to carry out measured surveys and prepare working drawings. Apply, stating age and experience, to Bothams & Brown, Chartered Architects, 32, Chipper Lane, Salisbury. 2407

INTERMEDIATE ASSISTANTS required for Architect's Office, London. Salary £600 to £800. Industrial and commercial projects. Scope for initiative and responsibility. Box 2340.

ARCHITECT'S ASSISTANT (Junior) required, Intermediate R.I.B.A. or equivalent standard. Williams, Sleight & Co., 6, Wright Street, Hull. 2395

MONRO & PARTNERS require Senior and Junior ARCHITECTURAL ASSISTANTS for their Watford and London Offices. Salary by arrangement. Five-day week. Apply 32, Clarendon Road, Watford. 2404

ARCHITECTURAL ASSISTANT, about Intermediate standard or approaching Final. Varied work at Grimsby Office. State experience, availability and salary to: Saunders & Partners, Architects, 18, Queens Parade, Grimsby, Lincs. 2403

GOLLINS, MELVIN, WARD & PARTNERS have vacancies for JUNIOR STAFF interested in the contemporary design of hospitals and educational buildings. Five-day week. Pension scheme. Quarterly bonuses. Telephone WEL 9991. 2400

SENIOR ARCHITECTURAL ASSISTANT

MAJOR petroleum distribution company require for their Birmingham office a fully qualified and experienced SENIOR ARCHITECTURAL ASSISTANT for work on varied commercial projects, including service stations. Salary according to experience. Position will be pensionable, excellent working conditions. Apply in writing giving full details of age, qualifications and experience to Box 2384. Replies can only be sent to those selected for interview.

ARCHITECTURAL ASSISTANTS, Intermediate standard, must be experienced and good draughtsmen for varied programme in Ruislip area. Salary range £650—£850. Five-day week. Pension scheme. Bonus. Please write stating full details to Box 2391.

J. M. AUSTIN-SMITH & PARTNERS, 29 Sackville Street, London, W.1, have a vacancy in the New Year for a qualified ARCHITECTURAL ASSISTANT with office experience. Opportunities for designing and taking responsibility for running and supervising contracts. Salary according to age and experience, but in the region of £850—£900. Telephone REGent 6183 for interview. 2390

ASSISTANTS required for small contemporary practice. Salary up to £1,000 dependent on ability. Write giving concise details, age, experience, qualifications and present salary. Noel J. Dore, "Buttsmead," Eastcote High Road, Pinner, Middx. 2368

J. M. AUSTIN-SMITH & PARTNERS, 29 Sackville Street, London, W.1, have a vacancy in the New Year for an ARCHITECTURAL ASSISTANT experienced in surveys, conversions, alterations and handling medium sized contracts. Ample opportunity for obtaining experience in taking full responsibility under the supervision of a partner. Salary according to experience, but in the region of £800. Telephone REGent 6183 for interview. 2389

ARCHITECT requires ASSISTANT. Salary £400—£600 according to qualifications and experience. Nottingham office. Box 2388.

THE Architect in Industry. An opportunity occurs immediately for a near or recently qualified ARCHITECT in a young and expanding Company specialising in designed acoustics. Good salary and prospects. Superannuation scheme in operation. Apply in writing to Sound Control Limited, Colneside Works, West Drayton, Middlesex. 2385

SENIOR ASSISTANT required mainly for design and detail work on contemporary store fitting programme. Must be good draughtsman. Write Michael Brashier, F.R.I.B.A., 11, Gayfere Street, S.W.1. 2379

SENIOR ASSISTANT required for small office in Westminster engaged on a variety of contemporary work. Must be a quick and able draughtsman. Apply Box 2380.

GLASGOW ARCHITECTS, young firm expanding to new offices early 1959, now seek (i) experienced ASSISTANT, (ii) keen JUNIOR. Five-day week. Pension Scheme. Busy but congenial atmosphere. Write basic particulars in confidence, to S. Lothian Barclay, A.R.I.B.A., 79, West Regent Street, Glasgow C.2, or telephone Douglas 3069 for appointment. 2378

EXPERIENCED ARCHITECT required to take charge Branch Office, West Africa. Minimum three-year appointment. Excellent prospects for person with all-round qualifications. Write Box 2374.

NORFOLK Office requires Single ARCHITECTURAL ASSISTANT of about Intermediate standard. Experience in Local Authority Housing an advantage. Reply with details of age and salary required to Box 2370.

ARCHITECTURAL ASSISTANT for extensive re-building work. Apply stating experience and salary required to The Establishments Officer, Zoological Society of London, Regent's Park, N.W.1. 2377

ASSISTANT required in Reading Office. working Drawings and details for commercial and industrial buildings, etc. Salary and particulars to Box 2367.

ARCHITECTURAL ASSISTANT, Intermediate to Final standard, required in Eastbourne Office. Five-day week, good salary and prospects. Apply with full particulars and stating salary required to H. Hubbard Ford, F.R.I.B.A., 24, Cornfield Road, Eastbourne. 2366

FREDERICK GIBBERD's London office requires ARCHITECTURAL ASSISTANTS of both Intermediate and Final standard, for varied and interesting work. Salary £600—£800 according to experience. Apply in writing giving full particulars, to 8, Percy Street, London, W.1. 2365

Architectural Appointments Wanted

4 lines or under, 9s. 6d.; each additional line, 2s. 6d. Box Number, including forwarding replies, 2s. extra

SENIOR ASSISTANT, B.Arch., A.R.I.B.A., aged 40, desires change, preferably Merseyside Area. Varied experience large and small contracts. Box 2364.

Other Appointments Vacant

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REPRESENTATIVE, already calling on Architects and Builders, to carry line of Terrazzo and Allied Products. Write giving full particulars and terms required. Box 2307.

The Metal Box Co. Ltd., require a TECHNICAL ASSISTANT for their Buildings and Services Division. Applicants must have knowledge of building quantities, technical terms and good grounding in building construction. Write, stating age and experience, to: TA/2, Personnel Services Divs., 37, Baker Street, W.1. 2393

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EXPERIENCED ARCHITECTURAL DRAUGHTSMEN required by Bank Premises Department in central Birmingham. Non-contributory pensions, permanent appointments. Box 2363.

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