The Architects' JOURNAL for July 22, 1954

THE ARCHITECTS' JOURNAL

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THE ARCHITECTURAL PRESS

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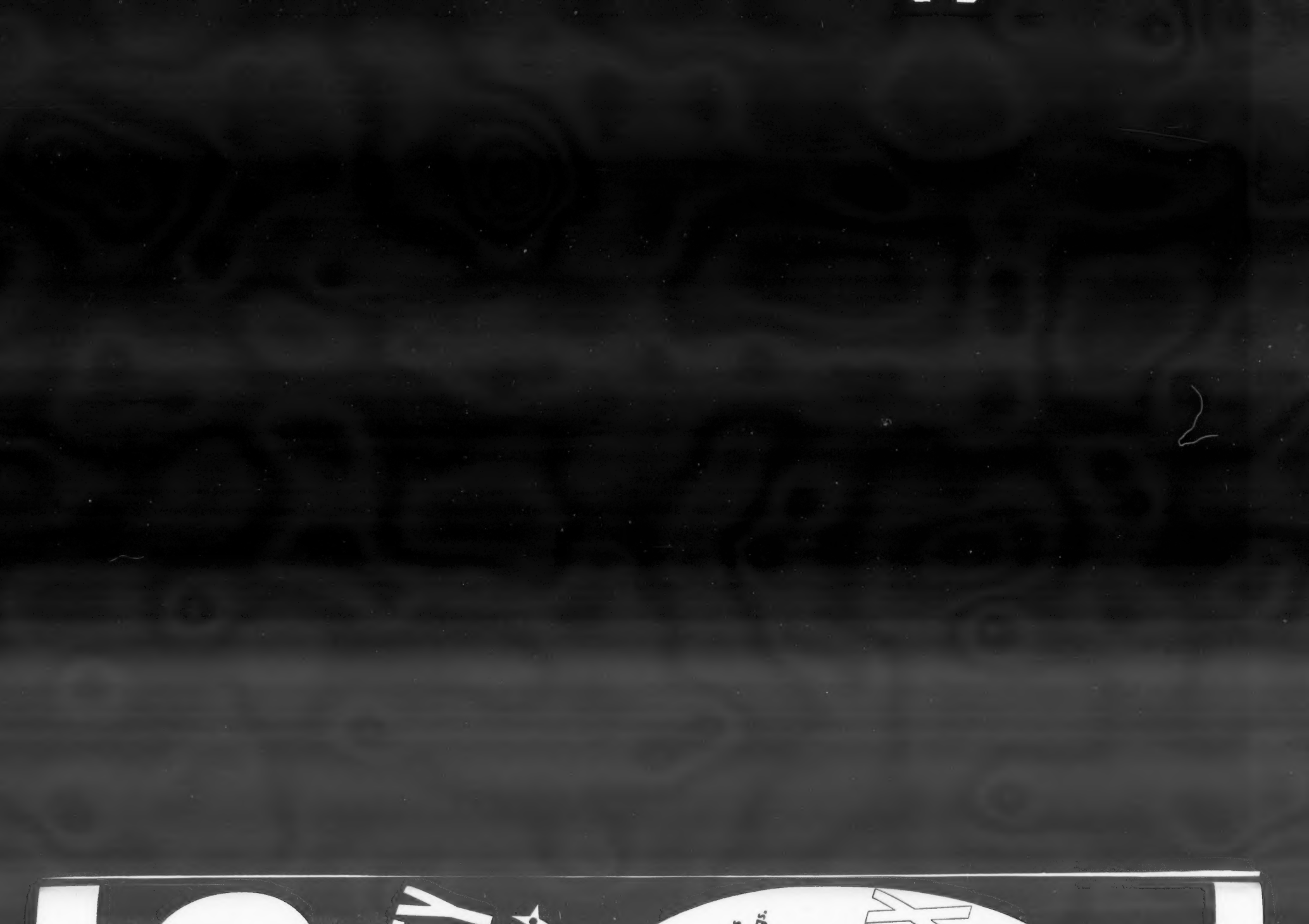
★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ig to Z the next. In all cases where the town is not mentioned the word LONDON is implicit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

IGE	Institution of Gas Engineers. 17, Grosvenor Crescent, S.W.1.	Sloane 8266
IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square.	Sloane 1601/3158
IIBD	Incorporated Institute of British Decorators. Drayton House, Gordon Street, W.C.1.	Euston 2450
ILA	Institute of Landscape Architects. 12, Gower Street, W.C.1.	Museum 1783
I of Arb	Institute of Arbitrators. 35/37, Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197/5176
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institution of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
IWA	Inland Waterways Association. 14, Great James' Street, W.C.2.	Chancery 7718
LDA	Lead Development Association. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
LSPC	Lead Sheet and Pipe Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
MARS	Modern Architectural Research Group (English Branch of CIAM). Secretary: Trevor Dannatt, 6, Fitzroy Square, W.1.	Euston 7171
MOA	Ministry of Agriculture and Fisheries. 55, Whitehall, S.W.1.	Whitehall 3400
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. 23, Savile Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service, 8, St. James' Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine-Owners and Manufacturers Council. 94-98, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 4813
NBR	National Buildings Record. 31, Chester Terrace, Regent's Park, N.W.1.	Welbeck 0619
NCBMP	National Council of Building Material Producers, 10, Princes Street, S.W.1.	Abbey5111
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives, Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4451
NFHS	National Federation of Housing Societies. 13, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4341
NPL	National Physical Laboratory. Head Office, Teddington	Molesey 1380
NSA	National Sawmilling Association. 14, New Bridge Street, E.C.4.	City 1476
NSAS	National Smoke Abatement Society. Chandos House, Buckingham Gate, S.W.1.	Abbey 1359
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Fountainbridge 7631
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George St., S.W.1.	Whitehall 5322/9242
RFAC	Royal Fine Art Commission. 22A, Queen Anne's Gate, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSI	Royal Sanitary Institute. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SCR	Society for Cultural Relations with the USSR. 14, Kensington Square, London, W.8.	Western 1571
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3.	Mansion House 3921
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1.	Langham 7616
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen.	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 75, Cannon Street, E.C.4.	City 5051
WDC	War Damage Commission. 6, Carlton House Terrace, S.W.1.	Whitehall 4341
ZDA	Zinc Development Association. Lincoln House, Turl Street, Oxford.	Oxford 47988



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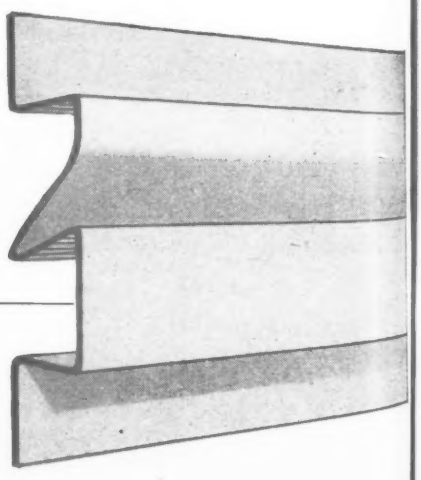

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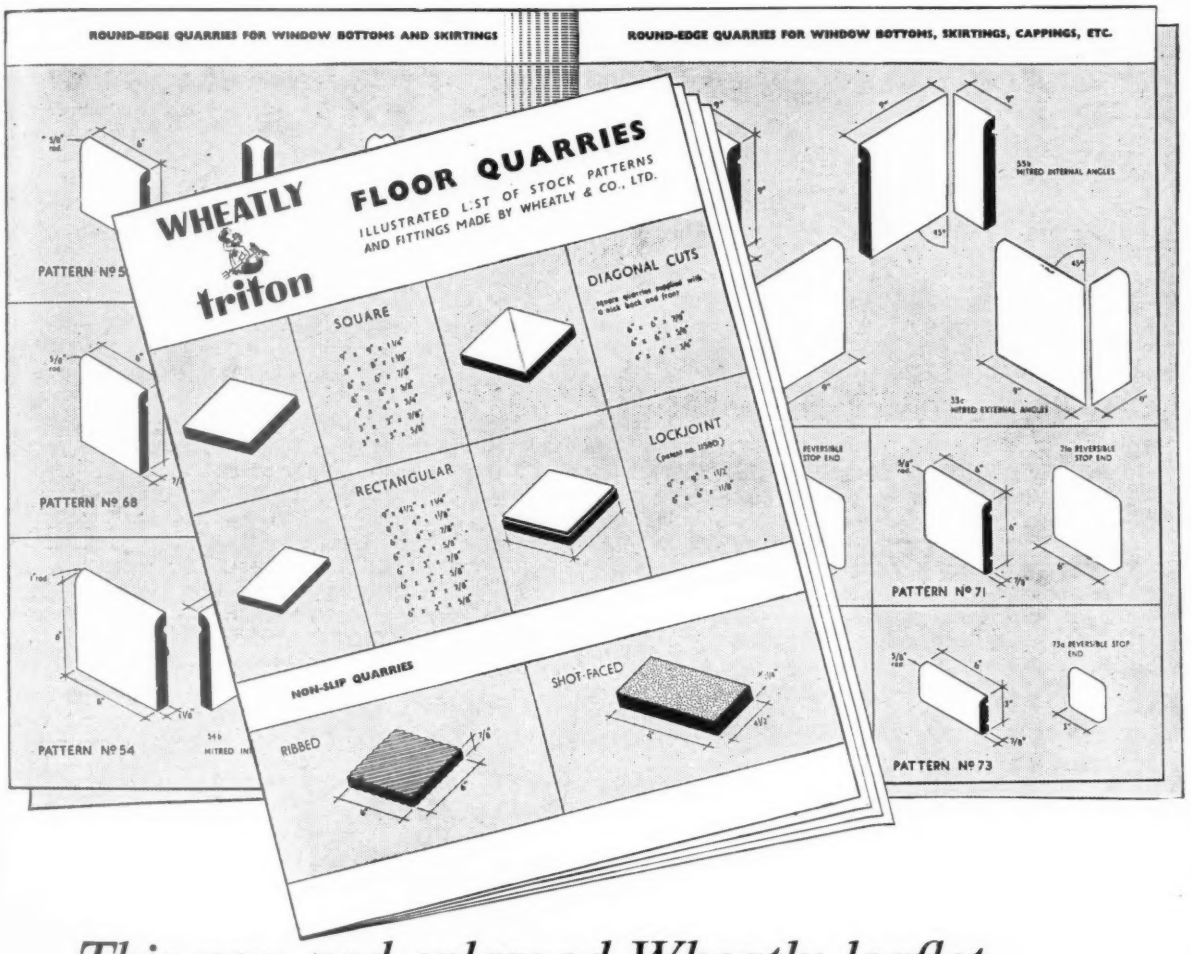

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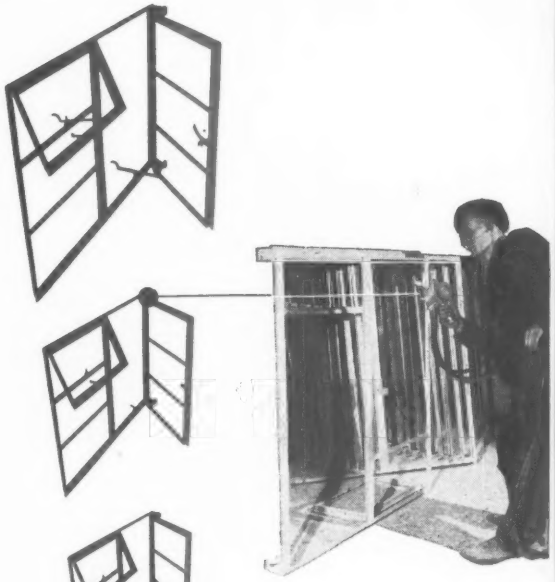

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ARCHITECTS: *Messrs. Denman & Son, F/A.R.I.B.A., Brighton.*
CONTRACTORS: *E. S. Gates Ltd., Builders and Contractors.*

'Expamet' Expanded Steel used in the reinforcement of the Royal Masonic Institute for Girls, Rickmansworth

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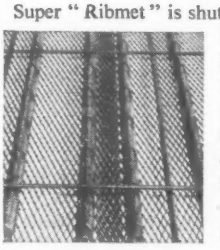

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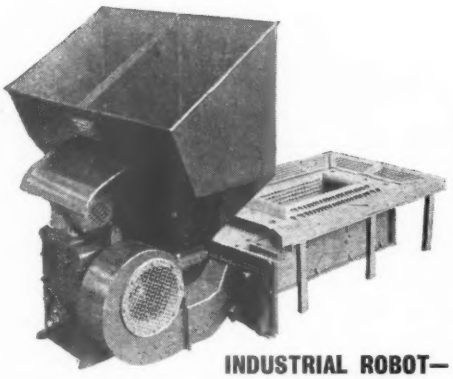
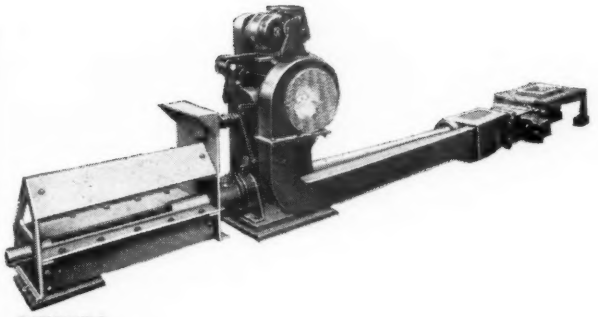


INDUSTRIAL ROBOT—

Hopper feed. For the larger vertical boilers, water tube and locomotive boilers, hot water and steam heating systems and steam processes.



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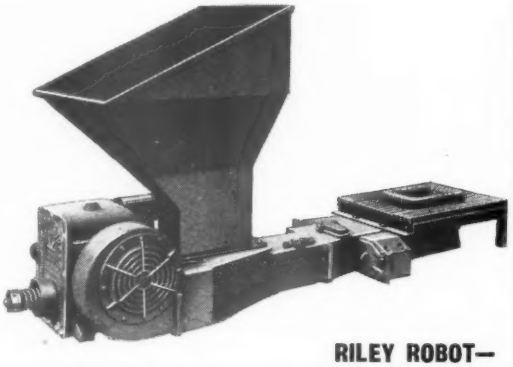

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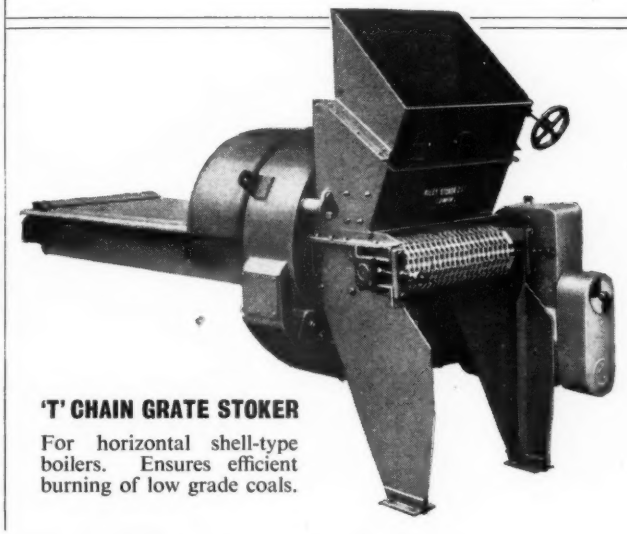

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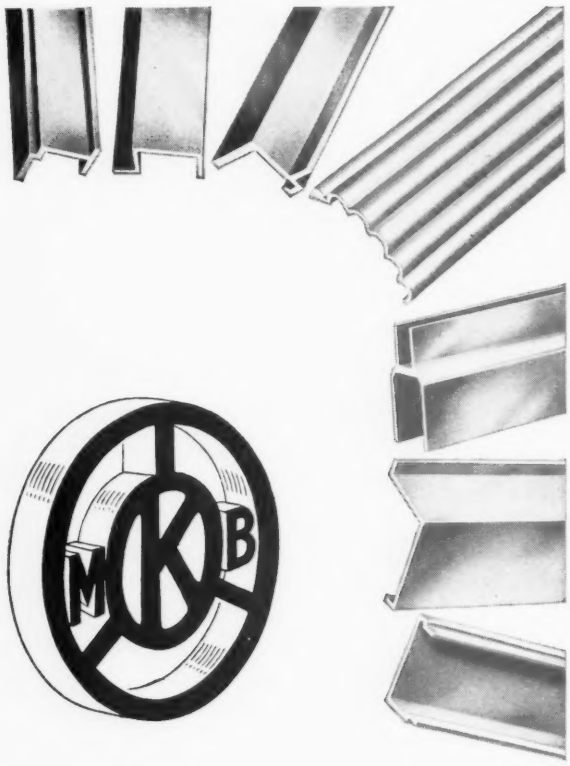

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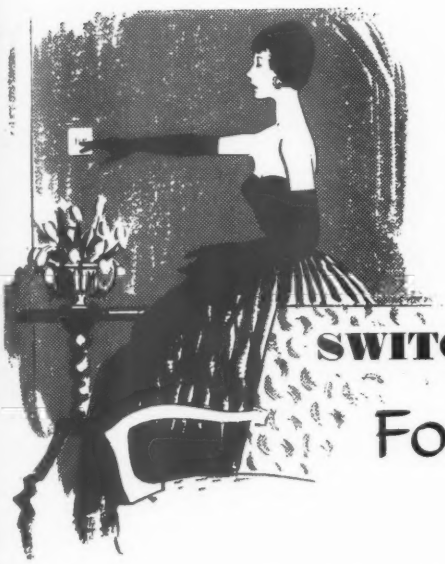

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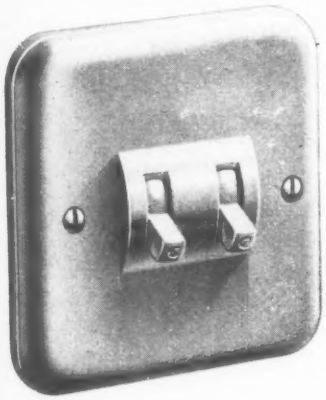

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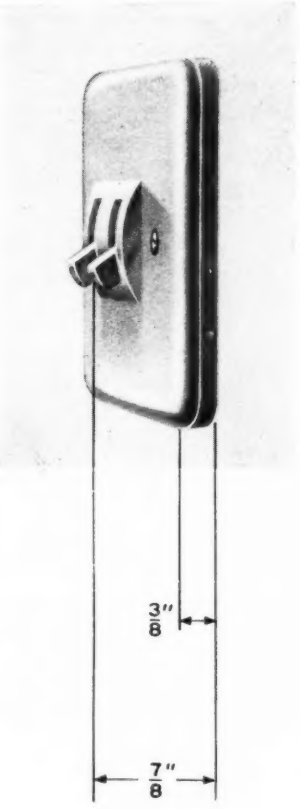

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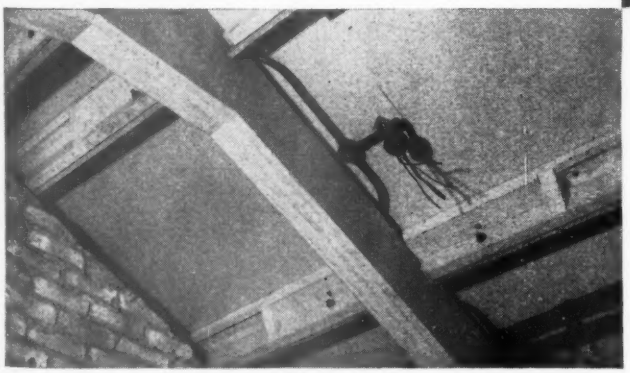

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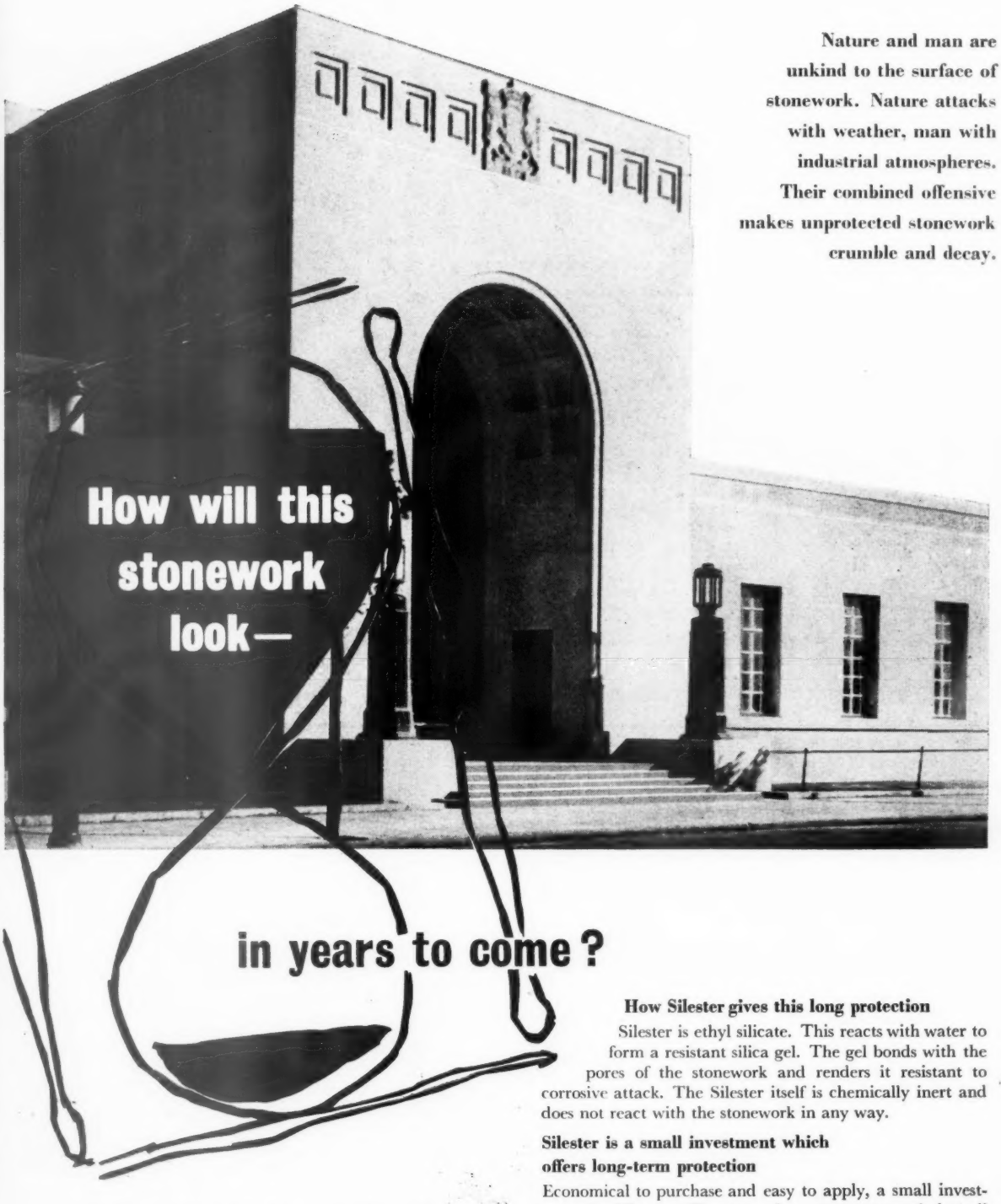

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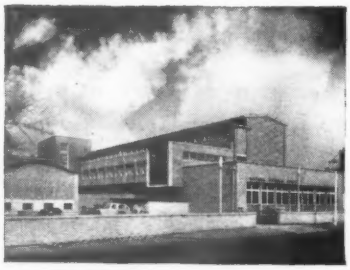

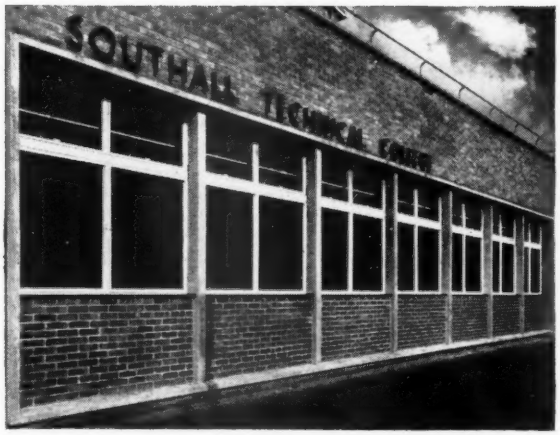

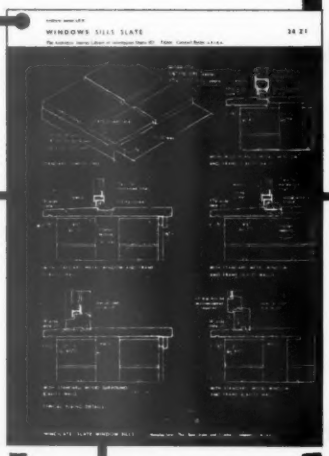

WINCILATE

Slate Cills at the Southall Technical College.
Architect: Alister MacDonald, F/F.R.I.B.A.

Architects

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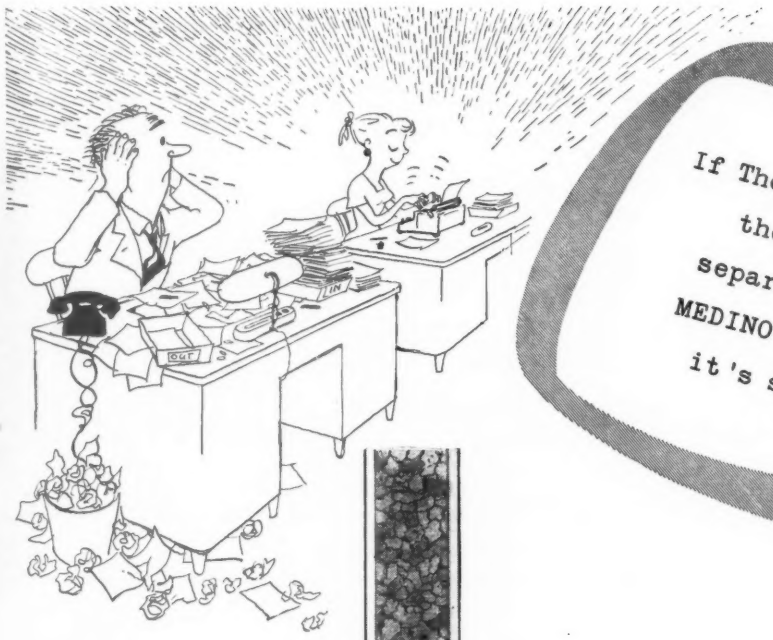

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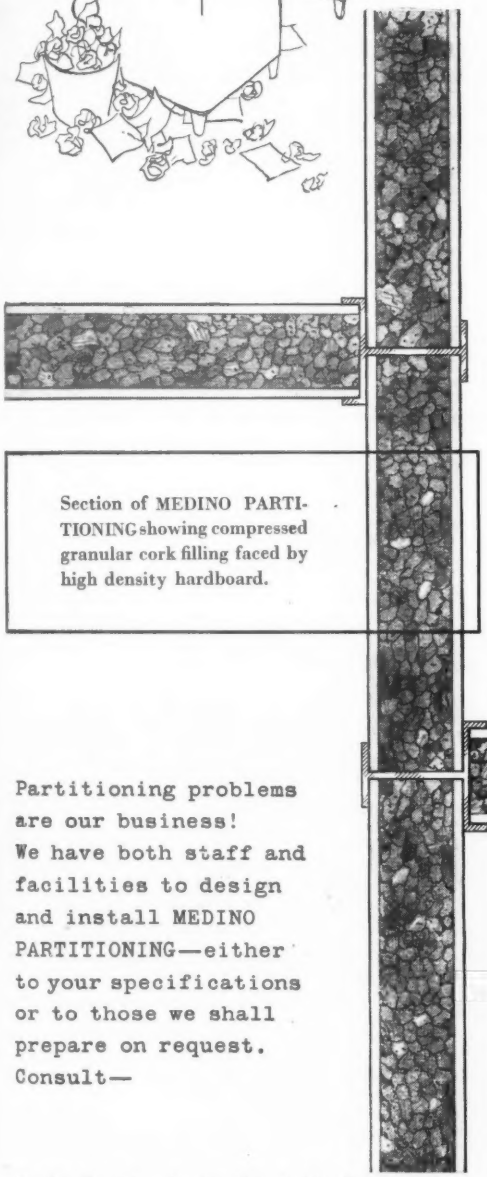

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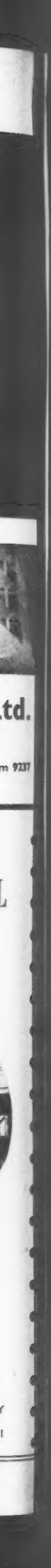

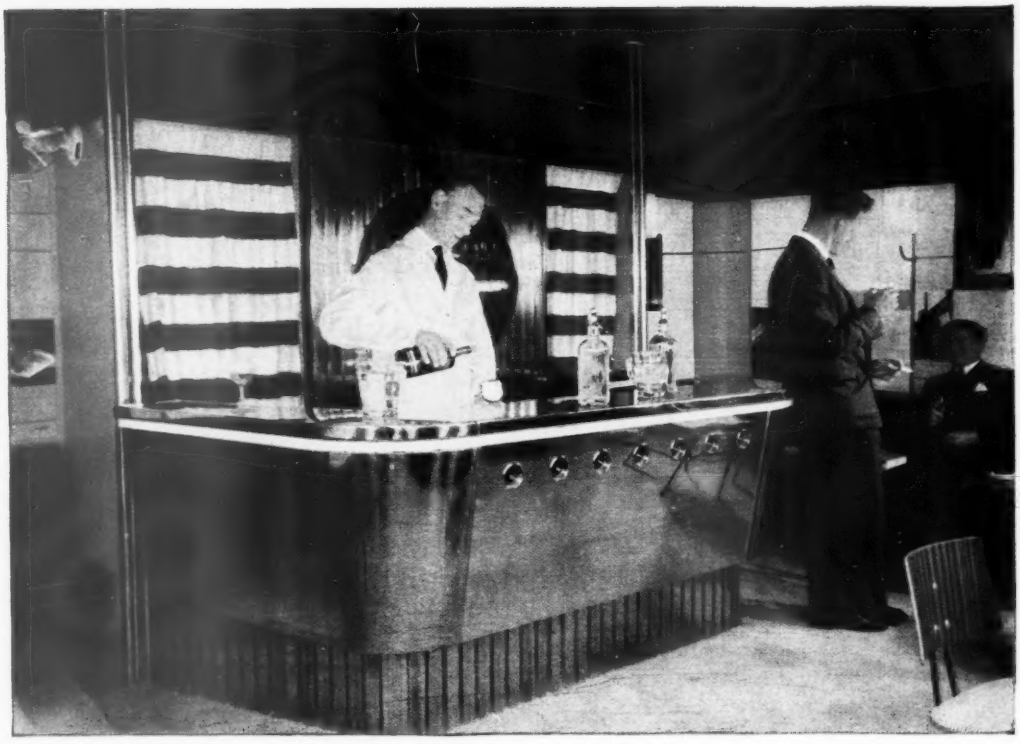

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THE ARCHITECTS' JOURNAL

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THE AA SHOW

Those who allow themselves to be unduly disturbed by the seasonal tides of rumour which batter the rocky shores of Bedford Square should make a point of visiting the annual exhibition of AA students' work. Being all things to all men some of its contents will doubtless please the prophets of doom. There is inevitably a sprinkling of "world plans" into which can be read the darkest political and professional import. Yet even Ronald Jones's ominously 1984 "Unit Region" is presented with such skill and elegance as to be wholly disarming. ASTRAGAL can't think why, but "world planning thesis" designers often display unexpected talent in poking into small houses and war damage!

The exhibition is of a generally high standard (the first year looks as promising a bunch as we have seen for years), and since what the AA does today the profession gets round to doing sooner or later ASTRAGAL was intrigued to note many well known faces inspecting the 4th year South Bank schemes, 3rd year villages and all those equitorial schemes which already reflect a growing interest which the AA is to canalize in its school of Tropical Architecture.

STRANGE EVENTS AT CORBY

The Minister of Works, Sir David Eccles, has lately had some enlightened things to say about the employment of artists to adorn public buildings. Presumably his colleague, Harold Macmillan, the Minister of Housing and Local Government, is interested in this too; if so, when he goes to Corby new town this week to open the new market square, he might ask what is concealed behind the boarding that covers the rear wall of the bus shelter, facing into the square.

*

The answer will be: the tiled mural decoration by Keith Vaughan, which I praised on this page a couple of months ago and which was also mentioned in *The Times*, in an article on the new Corby, as setting an enterprising example to other new towns. Apparently a number of members of the Development Corporation dislike it, so orders were given for it to be boarded up before Mr. Macmillan's visit.

*

What have the architects to say to this vote of no confidence in their design for the market-place? Were the residents of Corby asked for their opinion, before they were deprived of a work of art provided for their enjoyment?

PLUSH FORTE

You may have heard that the grill room of the Café Royal is to be redecorated by its new owners, Forté's. It is reassuring to learn that alterations will be confined to cutlery and tables. That sounds all right, provided the tables have cloths. Perhaps it is too much to ask that the Brasserie should be restored to its original happy splendour, but something should be done about the present off-white dimness. For generations the Café Royal has meant lots of red plush and gilding. More please.

LIVERPOOL CATHEDRAL

Liverpool's Anglican Cathedral had a celebration this week, for it is now fifty years since its foundation stone was laid and work has been non-stop (almost) ever since. Even during the last war work went on. Nobody has yet guessed at a finishing date, and work on the nave is barely starting, but there can be few architects who, like Sir Giles Gilbert Scott, have had a single job to last so many years of their lives. And how many other young unknowns have pulled off a job this size? Only Ictinus with his Parthenon competition, I think. And he, by the way, had a consultant wished on him just as young Mr. Scott had Bodley.

*

Since Liverpool I can only remember Powell and Moya, who were barely out of school when they won the Westminster Housing competition. One might congratulate Westminster's City Fathers on letting them get on with the job *without* an elderly expert.

WHAT, NO TV?

Having mentioned Japanese interiors the other week, ASTRAGAL now finds that he has raised a subject which will not lie down—not even on one of those mats. From the Museum of Modern Art (New York, needless to say) comes a hand-out about a Japanese house which has been shipped over from Nagoya in 736 crates and erected in the Museum's back garden. "Old Japan hands," says the hand-out, "sat crosslegged on the verandah and waxed sentimental" etc.

*

ASTRAGAL, sitting cross-threaded on his typing-stool, merely thinks it a pity that the parties concerned should have gone to all this trouble to send over a piece of period revival when contemporary Japanese work is so good—compare the two illustrations—and contrives, unlike everybody else's attempts at New-Traditionalism, to have the best of both worlds.

*

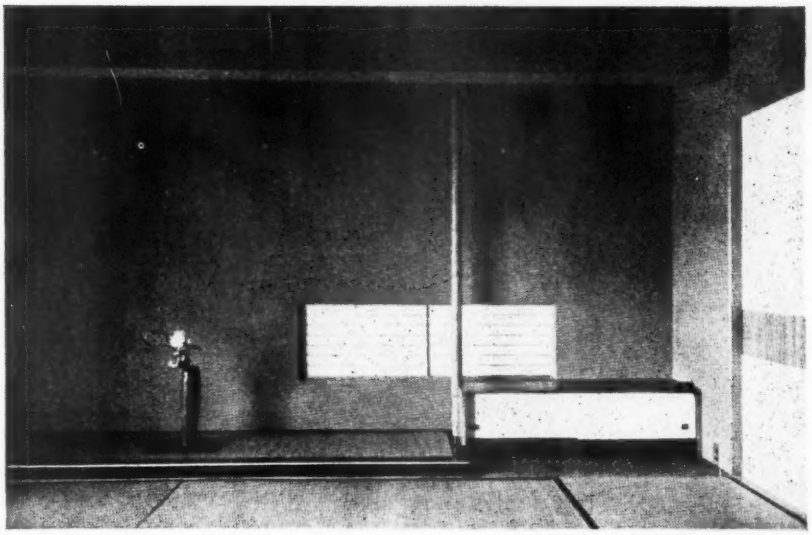
Where the Japanese interior seems to win out is in not having any furniture. Would this serene room—cool, timeless, brooding—look as exciting, or even as different, if it had to contain the impedimenta of Western domesticity—the mending basket and radio, the books, the chairs, the ashtrays and lampshades, yesterday's papers and tomorrow's shopping list, the dog's lead and the baby's rattle, and above all the *people?* Come to think of it, what would it look like with anybody in it who was not at the time reflecting on the Meaning of Life or Inscrutability of Fate? How long would you or I sit in this room without getting up to see what was cooking elsewhere?

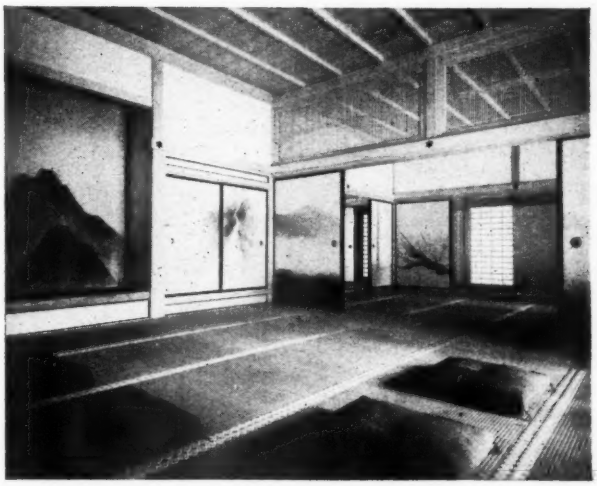
*

MAGNUM OPUS

Howard Colvin's long-awaited dictionary of architects* is out, and there will no longer be any excuse for not knowing about any architect who worked in the seventeenth, eighteenth or early nineteenth centuries. The dictionary contains over a thousand biographies (including a fully documented list of each architect's works), from Robert Abraham (1774-1850), who built the County Fire Office in Regent Street, which the present Blomfield building replaced, to John Young (died 1695), master mason who worked on St. Michael's, Cornhill, and other City churches.

*A Biographical Dictionary of English Architects, 1660-1840. By H. M. Colvin, John Murray. Price 70s.





Above, a contemporary Japanese interior, right, the period revival interior which has been shipped to the Museum of Modern Art, New York. ASTRAGAL *comments on the left.*

*

The research needed for producing this book must have been prodigious. In the words of Mr. Summerson (and who should know better?): "None of the arts in England has been served with a book of reference of anything like the finality of Mr. Colvin's survey." ASTRAGAL is not qualified to comment on the body of the book, but he would like to draw special attention to the two admirable introductory essays on "The Practice of Architecture" and "The Architectural Profession."

AT THE RITZ

ASTRAGAL, whose job it is to keep his ear to the ground, is never one to complain if occasionally that ground is paved with marble or softly carpeted. Jaunty, therefore, is the only word that could describe him as he set off last week for a lunch date at the Ritz. Fifteen years had passed since he had last set foot in the place (to pick up a roll of drawings left by a well-heeled client to be called for)—but it was comforting to find nothing had changed . . . brass, marble and mirror shone and winked . . . hydrangeas bloomed . . . a smell of success filled the nostrils. How exciting and how rare an experience it is to wander happily amidst a Beaux-Arts plan . . . to sense the circle opening into the long rectangle which swells, on the cross-axis into apses before passing through the square lobby into the huge interior of the restaurant. Here bloodless Bemelmans-faced waiters padded round beneath the chandeliers, sunshine patterns reflected from glasses of champagne shook and danced on the painted ceiling—(how courageous and successful

A Cathedral's Jubilee

Last Sunday special services were held in Liverpool Cathedral to celebrate the fiftieth anniversary of the laying of its foundation stone. Building work has never wholly ceased—not even during the world wars. Since the last war the building committee and the architect have had to make good bomb damage to roofs and masonry. They have also re-organized the building plant which is now partly mechanized. The surface of stones is still worked by hand, but pneumatic tools are used to shape them roughly. In the last eighteen months work has gone ahead on the nave. The piers and walls of the first bay have been carried up to the springing of the main arcade on the north side and nearly to the same height on the south. ASTRAGAL comments, in his notes on page 91, on the rarity of an architect watching his work develop—as Sir Giles Gilbert Scott has done—over half a century.

is that dangling gilded wreath of flowers!)—while outside the office-workers dozed under the trees on carefully disposed newspapers.

*

ASTRAGAL downed his lunch with only one ear for his host and both eyes for the architecture. Marble and brass and mirror—are there any other materials so eternally chic, so eternally flattering, so cheap to maintain? How trivial and smart-Alec seem so many of our modish interiors beside this French magnificence. How playfully and splendidly handled is the space horizontally, vertically, even diagonally—lunch at the Ritz is more than a meal, it is an architectural experience—and if you want the same experience (but cheaper) try the same architect's RAC in Pall Mall.

NO DREAMS LEFT?

Rumours continue to spread round the airport lounges where so many architects spend so much of their time exchanging gossip, that the Gold Rush Days of the Middle East are over. Those stories of garages lined with mosaic, of gold-leafed bus shelters, of marble-cased abattoirs and softly-carpeted market squares, which used to make the mouths of us stuffy old stay-at-homes gush with curious saliva, are now no longer—even if they ever were—true. Difficulties of balancing national budgets, of paying up long delayed oil-royalties, and of over-spending have, it is said, retarded—where they have not actually halted—many of the grandiose schemes which were promised in those countries east of Israel and west of India.

*

This is indeed sadness if it, in fact, be true, for every generation of architects needs its Dreamland where palaces are built and money is no object. There are not so many Dreamlands about these days that a single one can be spared and ASTRAGAL dreads to hear that architects in Brazil are selling their third Cadillacs, and that the Tycoons of Texas no longer commission "mood lighting" for their private offices. . . . Heigh ho, and back to the old drawing board and that half-inch through the grano-floored entrance hall of a gelatine factory. . .

ASTRAGAL

The Editors

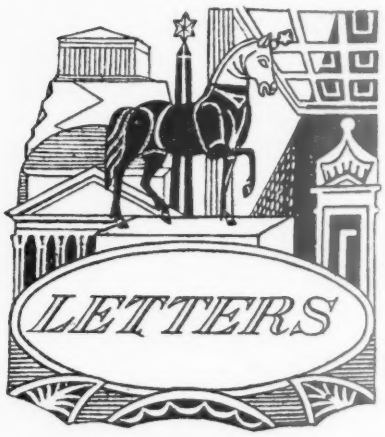
FAREWELL TO FITZ

ROBERT FITZMAURICE—Fitz—has given up his job on the JOURNAL. He has been our technical consultant for several years, but the demands of his consulting practice, which lies, as many will know, often with sheikhs and such, are catching up with him and it is well-established that sheikhs and sultans and their kind can be very time-consuming people.

This colourful and endearing personality was one of the earliest people in building research, back in the mid-1920's when Sir Reginald Stradling gathered around him the brilliant little group which was to form the back-bone of BRS for a quarter of a century. In those days they must have had a whale of a time building up the subject, judging by all the stories they tell when they get together.

Fitz emerged in the 1930's as the head of the Division dealing with inquiries, special investigations and other odds and ends such as acoustics. Wide interests and wide capacities are the necessary attributes of one in such a position and he had them. Electrical engineering was almost a passion, and he built himself a TV set well before there were regular transmissions. Civil engineering is his real profession, however, and characteristically he built, with his own (and a few other) hands a splendid swimming pool, which his wife—always by his side—inadvertently christened. But just to show that his life is not just one grand technological romp after another, it must be said that he has a love of such things as music and architecture, which give him his closest ties to our profession. His breadth of interest made it possible at all times for him to keep the whole of building research in perspective, and it was natural that he should have been selected to write "The Principles of Modern Building, Volume I"—the only one completed before the war—which is a model of the kind of bridge we have to build between architecture and science.

The war and the post-war period found him always in the forefront of building problems, thinking and working well into the future, and doing everything possible to hit new standards of quality in building, not only here, but everywhere in Europe. He became one of Stradling's deputy chief scientific advisers at the MOW until he was attracted finally to see whether the wider world had more use for his particular kind of mind. Clearly it has, and is showing it more and more. And so the JOURNAL has to relinquish its demands on his time, which it does with a good grace, knowing that this peripatetic and cheerful figure is bound to cross its path again from time to time in his busy journey through life.



B. A. F. Ellsmoor, A.R.I.B.A.

Denys B. Coombe, A.R.I.B.A.

A. A. Stuart Sharp, A.R.I.B.A.

Spec. Building

SIR,—I was very interested to see in the JOURNAL of July 8 the illustrations of various schemes approved by the Minister of Housing, both "officially and unofficially" and to read your plea that speculative house builders should avail themselves of architectural services more liberally.

One of the speculative schemes you illustrated I pass every day on my way to the office, and I am not for one moment trying to defend the design, which is far from satisfactory. Indeed, I heartily endorse your plea but, having had a certain amount of experience in acting as architect to speculative builders, I would like to draw your readers' attention to certain difficulties which anybody in such a position has to face; difficulties which are apparently beyond the control of the private developer.

May I summarize these as follows:—

HOUSE DESIGN

Plans. It is extremely difficult to sell flats and terraced houses freehold; the terraced house is unpopular with the general public and where they can exercise their choice its members will avoid a terraced house if possible for a variety of reasons among which is the need for at least space and access for a garage; the desire to own a car ranks high with those who own their house. Coupled with the need to save space, and in particular road frontage, the result is the repetition of small detached and semi-detached units which are very difficult to treat satisfactorily in large numbers.

Roofs. It is unfortunately a common experience in the freehold market that gable roofs are held by the public to be synonymous with "council houses" and for this reason they are so unpopular that such houses are already more difficult to sell than those with hipped roofs. This surprising fact, which cannot be ignored, gives so broken a roof line that integrated estate design is virtually impossible.

Elevations. With the growth of the buyers' market, such highly popular details as bay windows are bound to return as a major sales feature, as also are the shammed half-timbering and fancy brickwork so dear to the layman's heart.

Since all these features have long established precedence they are apparently beyond the effective control of town planning legislation: indeed, many lay members of local planning authority committees will actively welcome their return.

ESTATE DESIGN

Roads. In spite of ministerial recommendations, many authorities have their own schedules of estate road widths, and these are often sufficient to divorce aesthetically the dwellings on opposite sides. Most authorities insist on grass verges, although in one large south coast town outside my experience I understand that the council requires a lump sum contribution of £10 per house for verge maintenance if the bye-law roads of 24 ft. carriageway with two 6 ft. paths are not used.

Open Spaces. Our planning textbooks expound at length on the art of grouping buildings in closes and culs-de-sac, at road junctions and bends, in incidental enclosures and around squares giving on to adjacent playing fields and "green belt" areas. This art inevitably involves the provision of incidental open space to be maintained at public cost.

The private developer when applying to the highway authority for the adoption of his roads would ask in vain for the adoption of such space, since there is hardly a highway authority in the country which has the funds or labour for their maintenance; nor are authorities willing to entrust such maintenance to frontagers, since there is no guarantee of a proper standard being kept. Thus one of the major colours in his palette is denied the estate designer for private enterprise.

I do not pretend that this list of factors outside the control of the developer is exhaustive, indeed it is not, but this small selection will, I think, make it quite clear that the private developer is shackled in designing estates far more than is any housing authority. That his work is aesthetically of lower standard is hardly surprising.

B. A. F. ELLSMOOR.

Surrey.

SIR,—We are all only too familiar with the ghastly spec. builders' estates of the inter-war years, and many of us, during the last war, were naïve enough to believe that they could never happen again. How wrong we were! One has only to visit the outskirts of any town to see examples as bad as those shown in the JOURNAL for July 8.

". . . the repetition of small detached and semi-detached units . . ."

Building societies seem neither interested in contemporary design nor in old houses of character, but are only too ready to give substantial mortgages for builder-"designed" houses often with 9 in. brick external walls and unboarded uninsulated roofs. (One has only to look at any building society's posters to see the sort of thing they consider to be ideal!)

This situation has been brought home to me in a very personal manner. Rather than continue paying rent indefinitely for an expensive flat, my wife and I would like to build a house on mortgage but we haven't sufficient capital to pay for both the land and the first payment on the house. As yet we have not found a building society who will advance money for the land before

". . . are very difficult to treat satisfactorily . . . ."

the house is built. However, we could buy a spec. builder's house tomorrow—including the land.

We know many young people in the same position as ourselves and there must be thousands more. If we are to possess a house of our own how are we to keep out of the spec. builders' hands?

DENYS B. COOMBE.

London.

SIR,—Your sarcastic comments on Mr. Macmillan in your last issue, were, in my opinion, childish and petulant. You assume that by forcing the public to employ the services of architects, we will automatically ensure buildings of good design. The falseness of this assumption is shown in your very same issue in "Rebuilding of Bombed Cities." The standard of design of the buildings illustrated is generally appalling, yet the majority of them were designed by architects.

The sames thing goes for housing; there are numerous houses in my own locality, architect designed, which are worse than the ones you illustrated. It is little wonder that the public passes our profession by, until the profession as a whole has proved its worth. The blame cannot be laid at the feet of any Housing Minister, whatever his politics.

A. A. STUART SHARP.

Herts.

KENT

The Dover Flats

Although the Kent CC has approved Dover Borough Council's outline application for a revised version of the design for blocks of flats at Marine Parade, Dover, it has told the Borough Council that it feels the revised scheme would be improved if two storeys were lopped off both blocks.

In the proposed revised scheme, the architects, whose design won first prize in a competition, had already reduced the fourteen-storey section to eleven storeys. The Kent CC would like to see this reduced still further to nine storeys. And they would like the nine storey section to come down to seven storeys.

In the revised scheme the projecting lift shafts have been eliminated and the longest section of the scheme has been slightly curved.

The MOHLG is to consider Kent CC's proposals and discuss them with Dover Borough Council before a final decision is taken.

SUFFOLK

Awards to Architects

Two awards are to be made each year, by the West Suffolk County Council, to architects and builders in West Suffolk. The first of these awards—for 1953—for which the assessor was S. Rowland Pierce, have been given (*a*) to Sandon and Harding (architects), of Ipswich, and F. A. Valiant (builder), of Bury St. Edmunds, for the design and erection of a bungalow-type house, "Newlands", at Fernham All Saints, Nr. Bury St. Edmunds, and (*b*) to Hunt and Coates (architects), of Bury St. Edmunds, and Harry G. Frost (builder), of the same town, for work in the "Fishmongers' and Poulterers' Shop," Abbeygate Street, Bury St. Edmunds.

The (*a*) award is for residential buildings, and the (*b*) award is for "other buildings".

Honourable mentions have been given to E. R. Collister (architect), of Cambridge, and J. Edmonson and Son (builders), of Newmarket, for a bungalow in Regent Street, Newmarket; and D. Wyn Roberts (architect), of Cambridge, and Messrs. Bright Bros. (builders), of Tuddenham, for a house, "Queen's Hill," in Workington.

No honourable mentions have been given for work in the "other buildings" category.

OBITUARY

Thomas Tait

Thomas Tait, F.R.I.B.A., senior partner in the firm of Sir John Burnet, Tait & Lorne since the death of Sir John Burnet in 1938, has died at the age of 72. Among the work for which he will be remembered is the Glasgow Exhibition; St. Andrew's House, Edinburgh; the Mount Royal flats, near Marble Arch; Selfridges; Adelaide House, near London Bridge; The King Edward VII Gallery of the British Museum, and the Colonial Office which is at present under construction in Westminster.

Mr. Tait was educated at the Paisley Technical Institute and studied art and architecture at the Glasgow School of Art and the Royal Academy Schools.

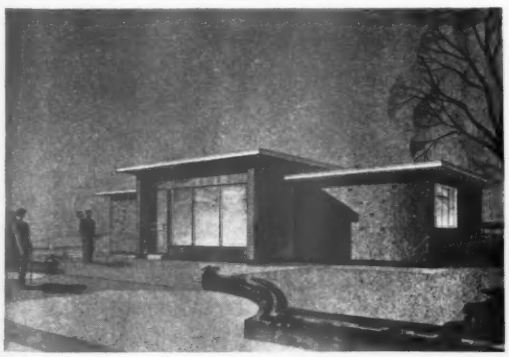
AA

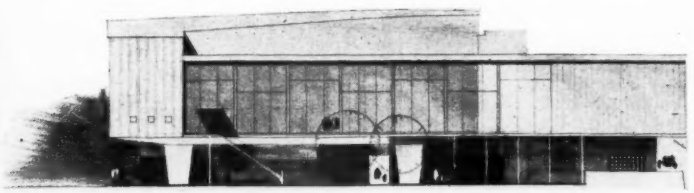
Gordon Russell Speaks at Prizegiving

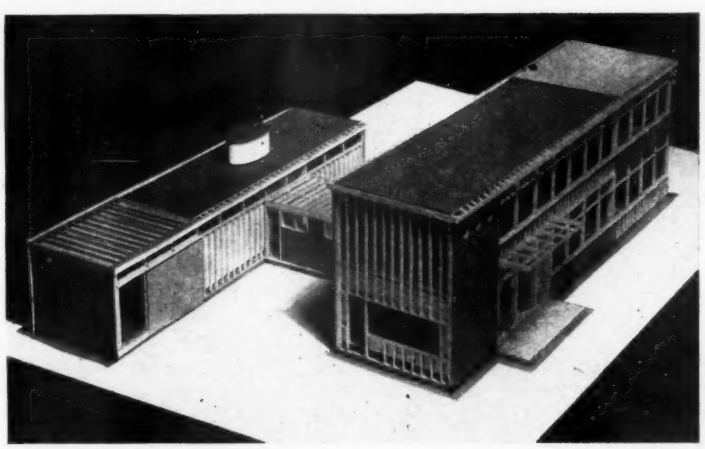
Gordon Russell, speaking last week on the occasion of the AA Prize-giving, said:

I am told that some young people today take the view that the world is in an unho y mess, that they were not responsible for getting it there and that it is not their job to get it out. In other words, they wish to stand aside—to contract out. As I see it

(*Continued on p. 101*







Three exhibits at the recent annual exhibition of the architectural department of the S.E. Essex Technical College and School of Art. This department is being closed down by Essex County Council at the end of the current term, following a suggestion made to them by MOE that there were not enough would-be students in the area to justify the three full-time school courses in operation. Above: a design for a golf professional's accommodation by G. L. R. Lewis (2nd year). Above right: a seaside pavilion by J. L. Rouse (5th year). Right, a model of a boat-builder's office, by P. J. Denney (2nd year).

£200 goes to David Kirby, a student of the Manchester School of Architecture who wishes to use the money to convert a house into a student hostel.

£200 also goes to John Reid Oberlander, a student of the Edinburgh School of Architecture, who wishes to study the transplantation of mature trees.

AJ COMPETITION RESULTS

There were 193 entries for the two AJ student awards of £200 announced last April. As readers will remember, these prizes were offered to encourage "original, unorthodox, ideas," and were open to all students RIBA. Of the 193 entries 36 were ineligible because the authors were not on the RIBA Register of Students. The remaining 156 entries were carefully studied by the assessors, H. de C. Hastings, J. M. Richards and D. A. C. A. Boyne, of the JOURNAL'S Editorial Board, advised by the head of one of the architectural schools, and a short list of thirteen entries was prepared. The authors of these thirteen entries were then interviewed and the awards were made to the two students whose names and photographs appear above.

The Assessors' Report

The rich and varied entries made fascinating reading and an extremely hard job to assess. It was unfortunate that as many as thirty-six entrants were ineligible because they were not on the RIBA Register of Students—a requirement which was clearly stated at the top of the entry form. We made this a condition of entry because we were anxious to limit the entry to those who, because they had taken their intermediate examination, and had developed a certain maturity of outlook, architecturally, and had a chance to follow specialist interests, would therefore be well placed to profit from the awards. In view of this misunderstanding on the part of over one-fifth of the entrants, and of the fact that, according to the RIBA, a considerable number of probationers do not register as students until they qualify, it might be worth while for school staffs to explain such details of the constitution of the architectural profession more fully.

It would have been possible, if the assessors had been rigid authoritarians and strict to the letter of the law, to eliminate a large number of the entries on mere technicalities and slips of the pen. A surprising number of students gave their date of birth as 1954, did not give their full names, or wrote on the back of the entry form on the space which was clearly labelled as being for illustrations "needed to amplify your answer on the previous page." The reasons we allocated a limited space for entries were as follows: firstly, we wanted to see whether the student could express his ideas clearly and succinctly in a limited amount of space; secondly, we wanted to see how capable students were of expressing their ideas graphically; thirdly, we wanted to make the task of assessing easier by keeping entries to a standard size and format.

However, these little errors made no difference to the assessing. Although it came somewhat as a relief to find the

Winner of one of the AJ's £200 awards, which he proposes spending on converting a Manchester house into a student hostel, David Kirby is a fourth-year student of the Manchester School of Architecture. Aged twenty-two, he was born in Wallasey, Cheshire, coming to Manchester as a boy. He went to the Manchester Grammar School, which he left in 1948 to work for two years in the Manchester City Architect's Department and to study architecture (part time) at the School of Art and College of Technology. In 1950 he was awarded a scholarship to Manchester University. His interests, apart from architecture, include photography, cycling and Scottish dancing, and for short periods he has eked out his student allowance by working in a cafe, a bakery, and a farm and as a guide-cum-secretary on "walking holidays." Interested in working in a public architectural office; his future plans are, however, overshadowed by the nearness of national service.

David Kirby's entry:

Research in architecture is chiefly directed into two fields—that which studies Art movements and historical background and which is largely covered by existing Academic work and that which studies the scientific aspects of structure and "building".

Research in academic fields, however brilliant or original, can surely only sap the communal architectural vitality by increasing the self-conscious cultivation of style. Scientific research must be a development from known scientific fact and/or involve test apparatus beyond the scope of £200.

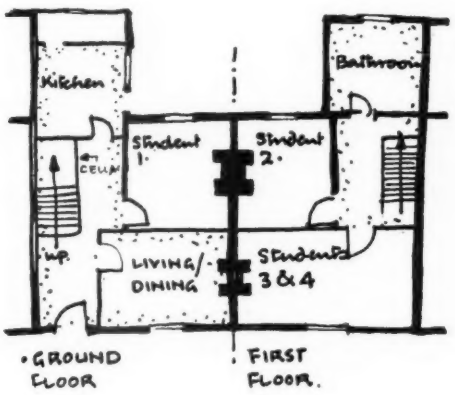
It seems to me that the best use the undergraduate could make of such a sum would be to attempt to improve the scope of his day-to-day experience; particularly in his relationships with his fellow students. To turn from the general to the particular; within a five-minute walk of our University are many small 19th-century houses. Although hardly fashionable, these houses are ideally situated and arranged for students to live in.

The physical basis of my scheme would be that three or four students would share kitchen, bathroom and dining/living room and each have a bed/study room. The house plan is generally known, but its subdivision is shown below.

The intellectual basis would be similar to a small residential college; the four students would be able to enjoy a continual interchange of ideas and criticism. The house would also serve as a centre for fellow students to meet outside University hours for discussions or debates. The shortage of such places, unrestricted by economy or narrow-minded landladies is a great lack in the life of a "red-brick" university.

Additional benefit would accrue in the minds of the residents as they learnt the many things between rates and home-decorating or good cooking and keeping ahead of the Jones's!

Financially such a scheme is possible. A suitable house can be obtained for a £100 deposit and a small weekly mortgage. Second-hand furniture can be cheap, and local prices indicate that £70 would cover the bare necessities for all the rooms. The £30 remainder would be necessary for legal fees and other



occasional entrant who had taken the trouble to type his entry or to submit a fair copy, and to get the facts about himself correct, we were determined to get the good ideas we wanted even if they were partially obscured by bad handwriting, bad English and factual errors. Unsuccessful competitors who study the two winning entries, may feel that their own ideas were better. If they were not among the thirteen who were interviewed they should be able to discover their reasons for not winning among the following comments.

A large number of the entrants attempted to do far too much. £200 is not a large sum for study. If any form of travel abroad was proposed it is unlikely that the entrant could keep it up for more than three or four months, and even if the student stayed in this country his research would inevitably put up his cost of living and limit the time he could spend on it to a maximum of six months. In this short time it would hardly be possible, as some students wished, to do research into the use of atomic power in the design and construction of buildings and cities; or the history of—and the present, and future development of—the use of timber; or "the mechanical-industrial creations that will affect architecture," or even "The design and planning of Mental Hospitals." We feel that to produce anything worthwhile from a study the student must undertake some original work. For all the subjects—even the last-mentioned above—one man would have to spend many years to collate existing information, before he would be able to do creative work himself.

A large number of entries came under the general title of "travel." We had every sympathy with the authors of these entries, but we feel that students should travel anyway, as a normal part of their education, and that the JOURNAL'S award was not just for travel but should be linked with some specific subject abroad —a subject which could be covered with

expenses. Income would be provided by rent from all four residents—probably a total of £4 a week to cover the mortgage, rates, decorating and repair reserves and the electricity. In view of the short term nature of the scheme to myself and year, it would be necessary to ensure that succeeding years could take over the arrangement and try to provide something of permanent value to local architectural education.

The scope which is available to would-be spenders of £200 seems infinite . . . one can surely find a research excuse to visit North Western Assam, or live in a 'Unité flat or even establish a furniture workshop. The scheme I have outlined is one more likely to produce four architects and a novel, rather than an abstruse thesis—and it is on this basis I would have it judged.

John Reid Oberlander proposes spending the AJ's £200 award on a study of the transplantation of mature trees. He has just completed a diploma course at the Edinburgh School of Architecture. Twenty-six years of age, the son of an American mining engineer and a Scottish mother, he was born in Maymo, Burma, and educated at Lossiemouth and Fettes College. Served for three years with the Royal Tank Regiment in Italy and the Middle East. Interested in furniture design. He hopes to study landscape architecture in the USA.

John Reid Oberlander's entry:

1. To collate information on the *transplantation of mature trees.*
2. To research into possible new techniques of transplantation.
3. To carry out *practical experiments* in the light of personal research.

This statement was amplified at an interview as follows :

There is nothing "new" about the subject I have chosen to study, namely "The Transplantation of Mature Trees." The ancient Egyptians are known to have practised it, and in the late 17th century we know that thirty-year-old trees were transplanted, to line the boulevards of the new Paris.

The technique of mature tree transplantation has been for many years forgotten in this country, and today, when much thought is given to the landscaping of our new towns and buildings, an opportunity arises to create, almost overnight, the final integration of landscape and building which would normally take decades to fulfil.

The first part of my programme will be to collate information from experts not only in this country, but also from Holland and the USA, where there have been great advances in methods of tree transplantation. The data to be collected will be on the following lines: (1) Root formation as a determinant; (2) transpiration (the position of the tree relative to its new location); (3) amenability of species to transplantation (classification of species peculiar to the United Kingdom showing their respective amenability to transplantation with height as a limiting factor); (4) techniques of pre-transplantation, transplantation and post-transplantation; (5) relative costs.

I hope to be able to give reasonably accurate information on the amenability of native species, techniques and costs of transplantation in this country.

The second part of my programme, funds permitting, will be either a follow-up of part one by personally investigating transplantation methods in the USA or possibly by carrying out actual experiments in tree moving.

The Assessors' Report (continued)

£200 and one on which a student could contribute something original. Those who wanted to study churches, or "colour" or just "modern buildings" abroad should have provided some reason why they could not just as well study these subjects in the British Isles. Many entrants wanted to study what were, to us, vague and amorphous subjects —"the nature of spatial sensation"—or "baroque in modern architecture," or "the revitalization of rural communities." We were at a loss to see how the student could cope with such subjects. But that, perhaps, only shows the assessor's lack of imagination.

A few entries were incomprehensible—or so laboured and overwritten as to raise doubts as to their author's ability. We had similar doubts about those which were only too terse.

The removal of the above categories eliminated the bulk of the entries. The assesors were then left with their favourites—the original, the practical, the urgently-needed, the intriguing, and those which were, on the whole, possible to carry out. From then on progress was painful and it was hard to arrive at a final twelve—which turned out to be thirteen—students whom the assessors wished to interview. From this final group the choice of the two winning students was made.

Inevitably there are going to be disappointments. There is no simple rule which eliminates all but the winners. A large number of entrants "passed" but two stood out, in the assessors' eyes, both because of their written statements, and their success at an interview. We are confident that David Kirby and John Oberlander have undertaken extremely worthwhile studies well within their capabilities. Both subjects fulfil a need of national importance. We look forward to reporting on the winners' studies as they progress.

In a further article we will report on the other finalists and on other entries which were of interest. From these comments next year's competitors may be able to profit.

News —(*continued from page 97*)

this is to some extent what the architectural profession has done. Of course, past generations have made mistakes, as the present generation is certain to do, but in my opinion the greatest mistake of all is to try to evade the responsibility of leadership. Captains who go below and blubber during a storm are rightly thought to be unsuitable for the honour of a place on the bridge. The soulful —if not tearful—romanticism of so many architects and their persistent refusal to face up to the problems of their great profession in a rapidly changing age has ensured that the initiative has often passed to contractors, engineers, speculative builders and surveyors, with the results we see on all hands.

More nonsense has been talked by the old brigade of architects on modern architecture and on the use of new techniques and materials than has been talked by Royal Academicians on the Impressionists and Picasso. In spite of such civil warfare, there are architects—all honour to them—who saw that a new approach was overdue and went ahead in the firm belief that the problems of today cannot always be solved best by the methods of last century. Some of them went to the other extreme and felt that no problem at all could ever be solved by any well-tried method or material. But then ridiculous opposition leads the young and enthusiastic to overstate their case ridiculously! And I would rather have warm enthusiasm, albeit somewhat wrong headed, for something worth while, than cold and fanatical zeal against any change. For change will come, whether we like it or not.

Such a far-sighted yet realist approach as the first one naturally interested the more imaginative clients and out of the partnership thus formed such notable experiments as the best of the new schools came to fruition. What remarkable developments we might have seen in other directions had sufficient trouble been taken to create a similar atmosphere! In much of the large-scale office building in blitzed areas, for instance, it seems that the architect has willingly accepted the position of hack to commercial interests, who, in better hands, might have become enlightened patrons. For I beg you never to forget that fine architecture is due every bit as much to the knowledgeable patron as to the trained and perceptive architect.

It is necessary for the architect, perhaps even more than for some other groups, to have a strong sense of social responsibility. All building—however humble or utilitarian —should interest him.

Here again, the Victorian architect contracted out. The housing of the people, and of the astonishing new machines of his age—in factory, dockyard, railway station, warehouse, gasworks—were beneath his professional notice. He was interested in the shadow rather than the substance: in the wealth the machines created, which was spent so lavishly, and for him so lucratively, on mansions, town halls, art galleries and so on, whilst towns which in earlier times had been delightful places to live in became squalid ant-heaps.

Irreparable damage was being done to the face of England while the architects hotly contested the merits of gothic and classic and of the formal landscape garden. The 19th century can claim to have done its best to destroy the English town, whilst our own century has made, and is still making, determined efforts to barbarise the countryside.

Surely every architect should visualize his building not as an isolated object but in relation to the street, the town, the countryside. And he should be no less interested in what goes into his building in the way of furnishing and equipment. Here it seems to me that the architect, with his "mansion complex," has been too much inclined to think of himself as the master-designer of everything instead of co-ordinating and inspiring a team. By such an approach he could have built up a fine collection of building components and equipment produced in quantity, of first-rate design and reasonable in price. I was told that when the standard steel window was introduced it was difficult to get a panel of architects together to decide on the most appropriate sizes. This shows a lack of imagination which is disconcerting to say the least of it, and no doubt the reason was that the well-known architects of the day were not interested in anything produced in quantity. For the same reason no doubt we are faced today with whole ranges of pre-fabricated farm buildings, which are neither designed by architects nor co-ordinated and which are in many cases altering our countryside for the worse.

I am one of those who feel that if, through a scarcity of knowledgeable patrons and imaginative architects—and both are rare—we cannot hope to see our battered towns worthily rebuilt we should at least try to see that they are worthily planned, so that a more accomplished generation than ours may rebuild without fantastic difficulty. But is it too much to expect that the new buildings should be honest, neat, orderly, workmanlike, clean, bright, well planned? These are the sort of qualities by which I would like to see buildings judged in our age. And very fine qualities they are too. Nobility grandeur, magnificence are qualities beyond our range. They have been overdone. Haussmann used them in Paris to screen the slums behind and how many vast buildings of the last fifty years in London hide slum rooms and dark passages behind their gorgeous facades? Established architects of the "impressive facade" school whose names are well known in the business world and who are asked to produce something traditional yet up-to-date are responsible for some of the worst developments, or so it seems to me. Why do so many architects feel so passionately that Wren's epitaph was really written for them?

I hope you will not misunderstand me over this matter of social responsibility. It is not necessary to turn architectural schools into political hothouses. Students go to them to learn the principles of architecture and they will be the better social reformers if they know as much as a school can teach of their profession. This is a full-time job and for those who take it seriously it involves going to look carefully at as many of the fine buildings of the past as possible. I was told recently at an architectural school that students did not go to look at old buildings much—they were only interested in work of today! What a loss! One might just as well imagine that one could acquire a knowledge of English without having heard of Shakespeare.

I am glad to hear of the AA Office Adoption Scheme, which must be of great value to students. I hope that some students also find it possible actually to work on a building job. There is no better way of understanding the other fellow's point of view than by working alongside him on a common problem. And it is only by using one's hands that one gets to know the special qualities and limitations of materials. I speak with some slight experience as a banker mason, waller, pavior and stone-carver!

Nor is the architect's social responsibility merely to the public at large. It is especially to his client. Unless an architect analyses with care and skill the social aspect of his building and reaches a right decision he is likely to find that it will be pulled down or drastically altered long before it has served its full term of usefulness. How many architects who built cinemas in the '20s allowed for the necessity of large programme notices in their designs? Anyway, most of these were so poor architecturally that the plastering of the front with contorted lettering did not make them noticeably worse. When building a home for a private client a sensitive architect, by staying with him and discussing his requirements, can find out a good deal about the way he likes to live. In public housing schemes the architect has to visualize the client and his needs, and he should be careful not to force the solution into a mould which, whilst providing a dramatic photogenic story for the press, does not ensure the best and most workmanlike accommodation for the tenant at a price which he can afford. We do not all need buildings on stilts! I strongly agree with the suggestion put forward a few weeks ago by the editor of *The Builder* that criticism of any building should not be purely architectural. Criticism by the headmaster of a new school two years after he had taken it over might be of immense value.

It is easy for us today to see the difficulties which seem to beset us on every side. But every difficulty presents an opportunity. We need more people who look for the opportunities and so put the difficulties in their right perspective. I am sure that, when you leave this great architectural school, you will have a standard of excellence in your minds, a standard which embraces the best of every age and especially of our own, a standard which does not crystallize into a frozen style, but which, when we see it, leads us all to say: "That building has style!" If you hold by it, and by tact and skill convince your clients of its validity, you will design buildings which will carry on the splendid English tradition of using suitable and beautiful materials by any appropriate technique to solve the human problems involved in building many and diverse structures in a commonsense and lovely way. To go forward we must go back to that honest tradition, which is as valid for steel and glass as it is for stone and wood, for pre-fabrication and quantity production as for individual construction on the site. The widespread interest in housing today, with care and skill on the part of architects, might develop into a zest for building which at various times in the past gave us some of the greatest works of man.

The architect, engineer, designer, artist and craftsman must find scope to use their talents in new and wider fields, and so help to direct the immense new forces which we have created into channels which do not affront all those who notice their surroundings. A beginning has been made: it is to you we look to carry on the good work. It will need imagination, knowledge and diplomacy, but most of all it will need faith and gay and dogged perseverance.

DIARY

Exhibition of Students' Work. At the AA, 34, Bedford Square, W.C.1. Monday to Friday: 10 a.m. to 6 p.m. Saturday: 10 a.m. to 2 p.m. UNTIL JULY 29

AND AUGUST 4 TO 14

Exhibition of Industrial Design: Students' Work. At the Royal College of Art, Western Galleries, Imperial Institute Road, S.W.7. Daily 10 a.m. to 5.30 p.m. (closed Sundays).

UNTIL JULY 24

New Life for Older Houses. Conversion of early nineteenth century houses to modern flats by the MOHLG. At Holles Street, off Oxford Street, W.1.

UNTIL END OF AUGUST

LCC Open-Air Sculpture Exhibition. Holland Park. Daily, including Sundays. 10 a.m. until dusk. UNTIL SEPTEMBER

BUILDINGS IN THE NEWS

Dutch Church, Austin Friars, London

The Dutch Church in Austin Friars, London, has been rebuilt after complete demolition by bombing, on the site which has been occupied by churches serving the Dutch community in London since the 13th century. The opening ceremony was carried out by Princess Irene, in the presence of Queen Juliana of the Netherlands, earlier this month. The architect, Arthur Bailey (of Ansell and Bailey), was asked to provide seating in the church for about 220 people and, in the crypt, a hall (with stage) which would form a centre for the Dutch in London and for meetings of the Anglo-Netherlands Society. Besides the hall the crypt contains a kitchen, library and small museum. The hall is wired to the church above and can therefore be used when a large number of people attend special services.

Office Building, Birmingham

Entrance hall to new office building for Chance Bros., Ltd., at Birmingham. (Architects: Clifford Tee and Gale.)

Flats in Lamble Street, Gospel Oak, London, N.W.5

This 10-storey block of fifty flats in Lamble Street, Gospel Oak, N.W.5, forms part of a scheme under construction for the St. Pancras Borough Council. The architects are Powell and Moya. The scheme includes a mixed development consisting of these flats (1-, 2- and 3-room) and 49 houses (4- and 5-room in 2-storey terraces). Density is 100 people per acre. A complete description will appear in a later issue.

FARM BUILDINGS

at BINGHAMS MELCOMBE, DORSET

designed by CRICKMAY and SONS

quantity surveyors, C. SWEETT and PARTNERS

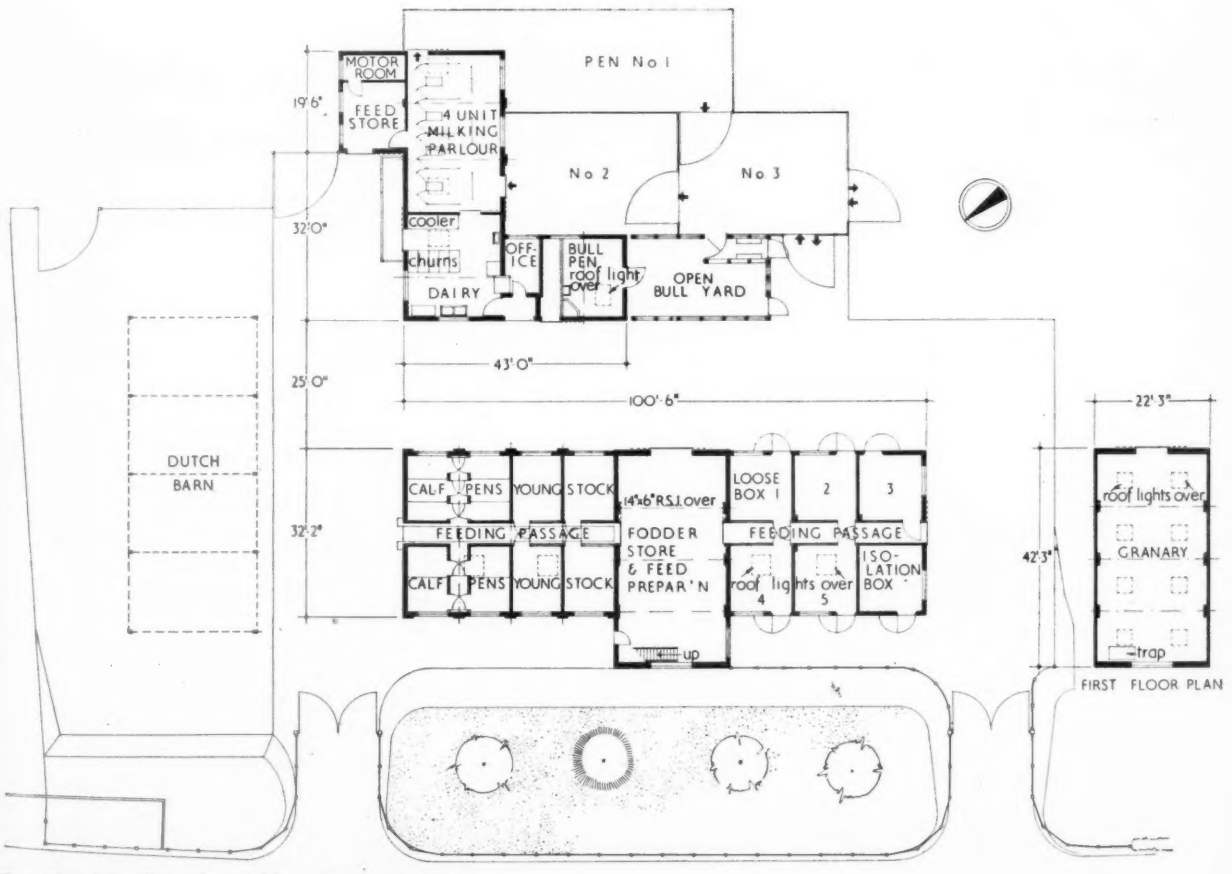
The new farm buildings at Binghams Melcombe comprise a dairy and milking parlour for about 60 cows, a bull pen and yard, pens for young stock, loose boxes, fodder store, granary and Dutch barn. The farm, of which they form a part, is of approximately 300 acres and is principally concerned with dairy farming. A secondary main road runs to the north-west of the site, which simplifies milk collection, and the ground falls towards the south-east, away from the buildings, which facilitates draining.

The stock building and granary from the south-east.

SITE.—The site is protected from the north and east by trees, buildings and higher ground. The new buildings are placed to the north-east of the site to allow for later extensions towards the south-west. The Dutch barn has been placed on the north-east side of the new buildings to provide further protection from cold winds and is in a position easily accessible from the road and fields. It is shown dotted on plan since only the stanchions appear at plan level. Arrows on pens 1, 2 and 3 and on the milking parlour on the site plan show the circulation of cows during the milking process, which takes place twice a day and was an important consideration in the planning.

PLAN.—The collection and dispersal yards (for the herd) and the bull pen and yard, are on the south-west side of the dairy and milking parlour; where they are protected from cold winds and open to the sun. At milking time the cows are driven from the yards through the door on the south side of the parlour into the stalls. After milking they pass through the control gate at the head of each stall and out through the sliding door at the end of the passage. A service pen is incorporated in the bull yard where it is conveniently close to the collect-

Above, general view from the south-west. In the centre the stock building and granary.



Ground and first floor plan, and layout (Scale : $\frac{1}{32}$" = 1' 0")

Top, from the south. On the right is the milking parlour and dairy. Above, the milking parlour looking towards the dairy. Below right, the dairy. The floor is granolithic and the asbestos cement roofing is carried on tubular steel trusses.

FARM BUILDINGS

at BINGHAMS MELCOMBE, DORSET
designed by CRICKMAY and SONS

ing yard. The granary is placed over the fodder store with chutes to mechanical equipment below. Access doors to the granary are on the south-east at upper floor level and an electric hoist is installed. A central feeding passage to calf pens and loose boxes is provided with direct access from the fodder store.

CONSTRUCTION.—The buildings, with the exception of the Dutch barn, have 9-in. solid concrete block external walls. In the granary block the walls are thickened internally on the ground floor in brick, and walls to the granary itself—of 4½-in. brick with brick piers—are faced externally with asbestos-cement sheeting. Roofs are carried on galvanised tubular steel trusses and purlins and roof lights are of plastic sheeting. The Dutch barn is constructed of standard prefabricated reinforced concrete units.

FINISHES.—External walls are rendered internally, to full height in the dairy and to window-sill height elsewhere, with waterproof cement. Roofs are covered with asbestos-cement sheeting. Floors are finished with granolithic, and external yards and access roads are paved with concrete. Windows are of standard precast concrete units. Railings and gates to pens and loose boxes are of standard galvanised tubular steel units.

SERVICES.—Milking is by electricity and there is a churn cooler and sterilizer in the dairy. Hot water in the dairy is also supplied by electricity.

The contract price was £11,640.

The general contractors were George W. King, Ltd.

For sub-contractors see page 120.

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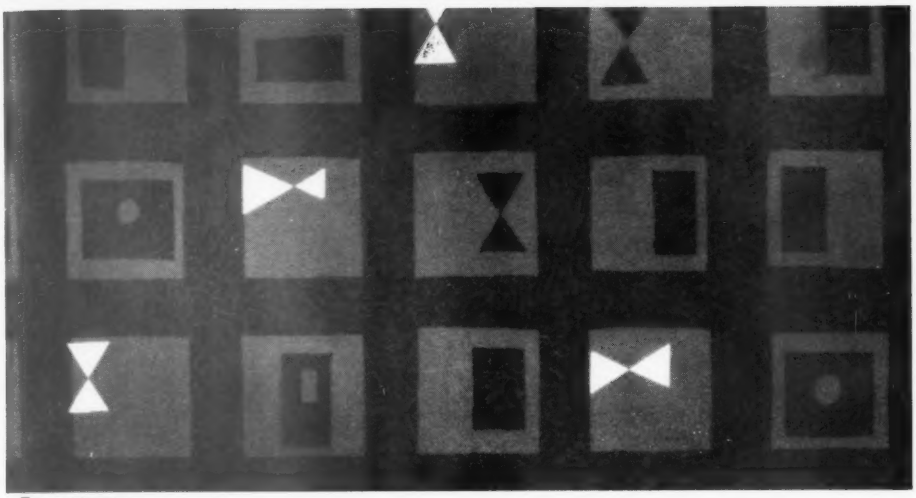
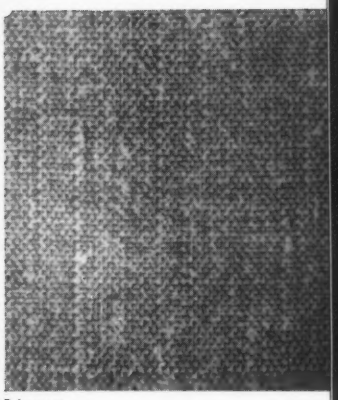
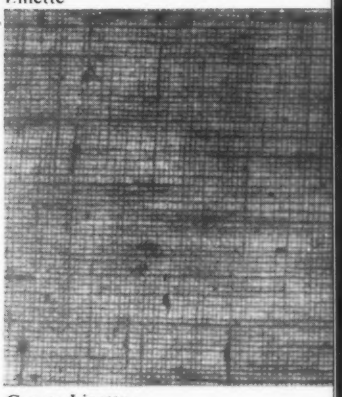


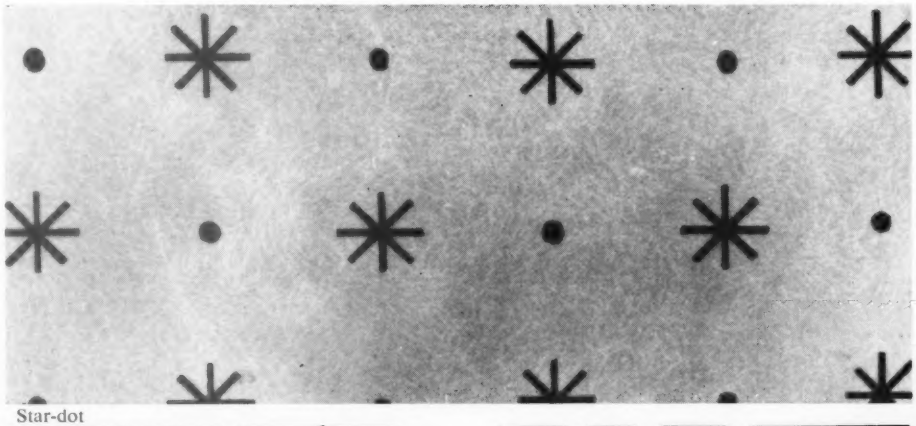
Bow-square



Linette



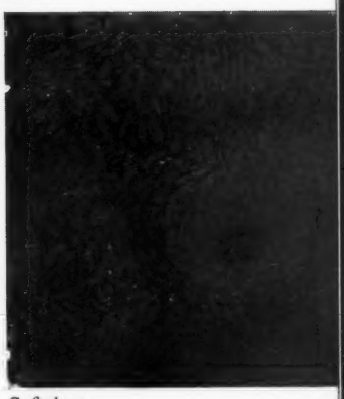
Coarse Linette



Star-dot

Onyx

Cocktail



Softglow

'FORMICA' LAMINATED PLASTICS: PATTERNS AND COLOURS 1

15.S7 'FORMICA' LAMINATED PLASTICS: PATTERNS AND COLOURS 1

This Sheet is one of a series dealing with Formica Laminated plastics. It illustrates the various all-over patterns that are available or can be made to order. Sheet 15.S8 deals with standard motifs and with murals executed to individual requirements. Other Sheets in the series give general data on the material and details of its applications.

General

All Formica decorative laminated plastic sheets are faintly patterned in one or other of a range of standard patterns. Using these standard patterns as backgrounds, it is possible to superimpose on them various designs, some of which are available, as standard, in a choice of colour combinations and others carried out to order. The sheets may be obtained with a matt or glossy finish and it should be borne in mind that a matt finish makes colours appear several shades lighter than the glossy and considerably softens the contrast in patterns.

Standard Patterns

The standard pattern range includes:—
Linette (a weave print)
Coarse linette
Onyx
Softglow (a faint arabesque design)
A number of wood-grain prints, some of which are available in alternative tints.
Most patterns are obtainable in the standard range of colours, in $\frac{1}{16}$-in. veneer.

Decorative Treatment

The constructional principle and method of manufacture of Formica plastic laminates makes possible certain variations in the standard patterns and colour combinations. They also permit of the incorporation of special motifs or mural paintings within the abrasion-resisting decorative surface of the material. A choice of three types of decoration is available as follows:—

Interlaminate all-over designs: This is a range (outside the standard pattern range) available to order in a choice of combinations from the standard colour range. It includes the three designs illustrated on the face of the Sheet, *Bow-square*, *Star-dot* and *Cocktail*, which are on backgrounds of the Softglow pattern. The colour combinations possible for *Bow-square* design, for example, are as follows:—

Red and white on dove grey
White and light blue on steel blue
White and dust pink on donkey brown
Blue and buff on cream
White and duck-egg blue on amulet green.

The veneers are produced in whole sheets (8 ft. 0 in. by 4 ft. 0 in.) to a minimum order of 5 sheets. They may, if required, be obtained in cigarette-proof grade (see Sheet 15.S6 for Grades).
The cost varies according to the pattern and the number of colours used, but averages from about 75 per cent. (for 5 sheets) to 25 per cent. (for 100 sheets) above the price of standard sheets.
For schemes involving 50 or more 8 ft. by 4 ft. sheets, special designs can be considered. In such cases, consultation with the production studio is essential. In preparing designs it must be remembered that shading is not possible and that very fine lines must be avoided.

Standard motifs: A range of standard border patterns and floral motifs is available, designed for 24 in. table-tops and adaptable for door panels, etc. They are supplied as 8 imprints on an 8 ft. by 4 ft. sheet. Each print is in several colours on any standard background, excluding dark wood-grains. A choice of colours is available for some designs. An example of one of these designs used for a table-top is given on Sheet 15.S8.
The cost varies according to the number of colours used, but averages from about 20% to 60% above the price of standard sheets.
Original designs can be produced in consultation with the production studio.

Interlaminate mural designs: These are designed and painted individually for each scheme. The technique and medium for this type of decoration are new and the painting must be carried out under controlled conditions by the staff of the production studio. Drawings and patterns can extend over several sheets and an accurate register of line and colour can be made. The normal size of sheet for this work is 8 ft. by 4 ft., in $\frac{1}{16}$ in. veneer for bonding rigidly to plywood panels.
Costs for mural designs must be individually estimated.
Examples of interlaminate mural designs are given on Sheet 15.S8.

Further Information

The manufacturer maintains a technical advisory department and a production studio which is available to answer questions and advise on problems relating to this subject generally.

Compiled from information supplied by:
Thomas De La Rue & Co., Ltd.
Address: Plastics Division, Imperial House, 84/86 Regent Street, London, W.1.
Telephone: Regent 2901.
Telegrams: Delinsul, Piccy, London.

DUCTS | CONCRETE

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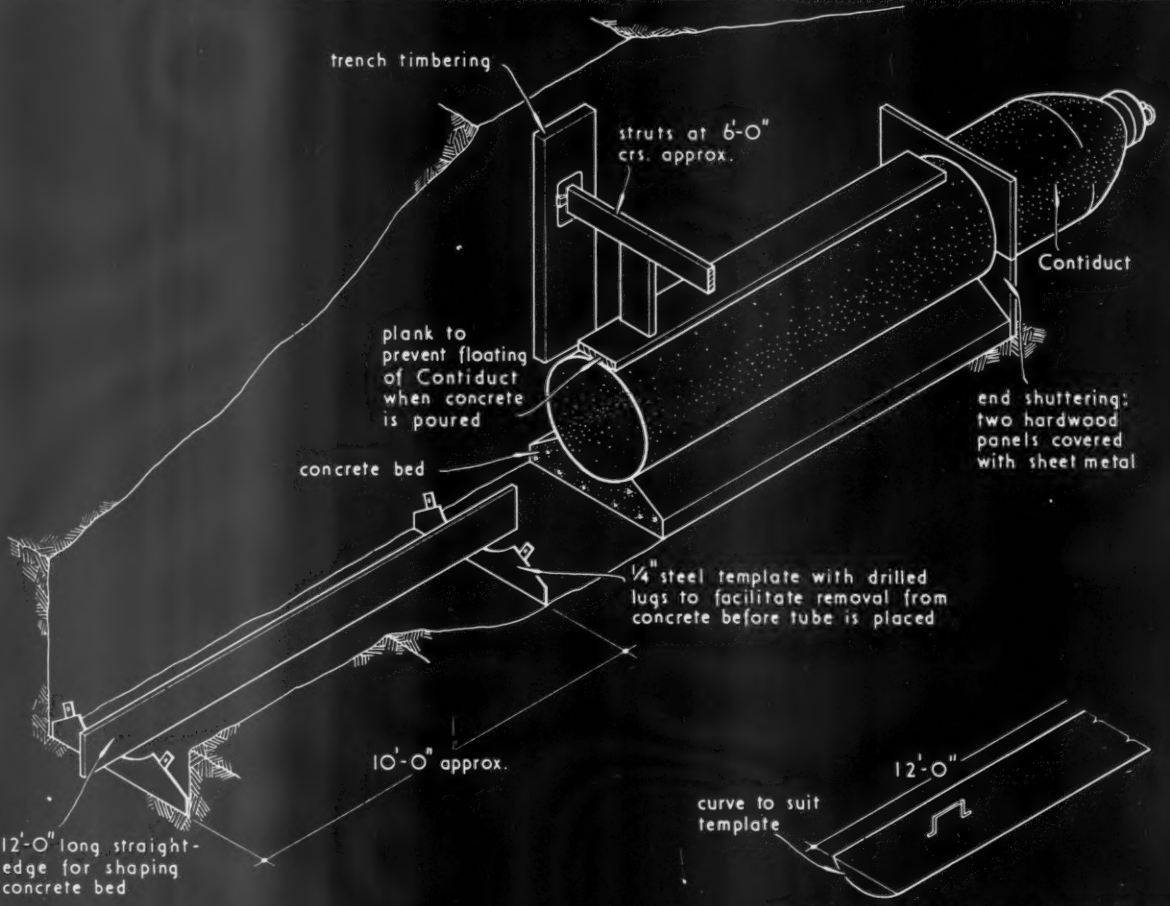
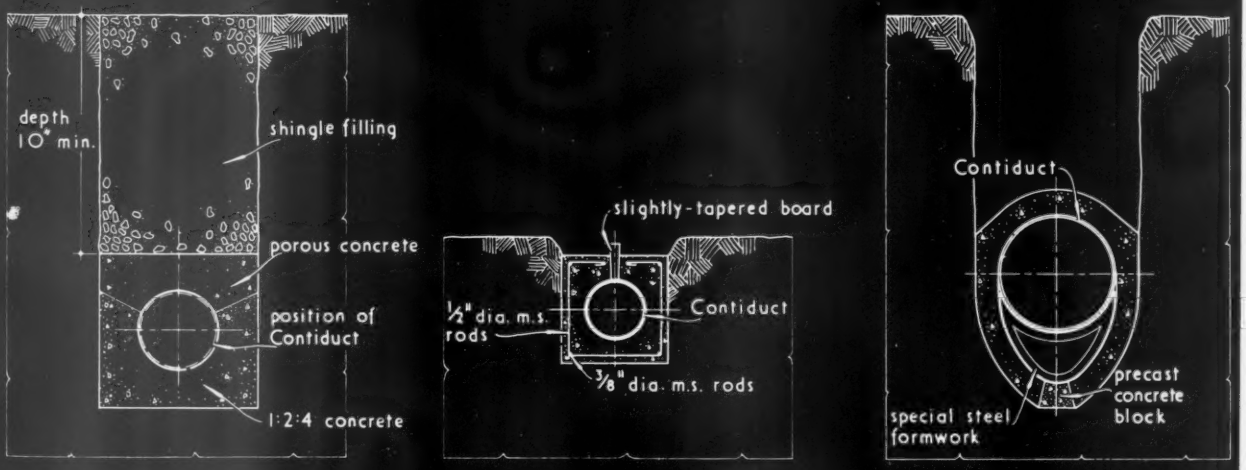


ISOMETRIC VIEW OF CONTIDUCT IN POSITION ON CONCRETE BED.

base-former for shaping bed in vibrated concrete: this is laid on templates, concrete poured on either side and vibrated so that it flows under base-former to form smooth invert



standard land drain

slotted land drain

egg-shaped sewer

TYPICAL APPLICATIONS.

CONTIDUCT· PNEUMATIC RUBBER TUBING FOR FORMING CONCRETE DRAINS AND SEWERS.

Manufacturer: Ductube Company Limited.

6.Z5 'CONTIDUCT' PNEUMATIC RUBBER TUBING FOR FORMING CONCRETE DRAINS AND SEWERS

This Sheet is one of a series on pneumatic rubber tubing for forming ducts in concrete and deals with Contiduct large-diameter tubing, which is used for drains and sewers. The principle and construction of the tubes is as described on Sheet 6.Z1.

General

The use of Contiduct makes it possible to construct a drain with perfect continuity of the inner surface which may be curved as desired in a horizontal or vertical plane. A drain of this nature has a greater rate of flow, for the same fall and diameter, than that obtained with jointed pipes, where the flow is checked at every joint.

Sizes

Contiduct is available in diameters from 12 in. to 78 in. in 3-in. increments. Intermediate sizes may be made to order. The standard length of the tubing is 75 ft., but shorter or longer lengths may be made to order up to a maximum of 150 ft.

Bends: Contiduct may be bent to a radius of not less than 30 times the diameter of the tubing.

Inflation

The tubes are normally inflated by means of a 1½ h.p. air compressor. Where a compressor of larger capacity is used, the compressor tank *must* be emptied before it is connected to the tubing, to ensure a gradual inflation from zero. The inflating process should be carefully supervised by a responsible individual. The maximum permissible pressures are:—

3 lb/sq in. for tubing up to 18 in. diameter.
2 lb/sq in. for tubing 21 in. in diameter and over.

Method of Use

The isometric drawing at the top of the face of the Sheet shows how Contiduct is laid. First, a concrete bed must be made, using the steel templates, as shown, to construct a channel of radius equal to that of the inflated tubing. After removal of the templates, the Contiduct is laid in position, with the ends held in the specially-shaped shuttering panels. Where there are obstacles (e.g., reinforcing rods, etc.) to prevent the laying of the inflated tubing in the trench, it may be inserted while still deflated. The struts shown in the drawing should be placed at approximately 2 yd. intervals to keep the Contiduct from floating. The concrete surround must be completed while the base is still fresh to ensure a monolithic construction. The Contiduct is deflated and withdrawn after the concrete is set, but not completely hard. It should not remain in the concrete longer than 24 hours and in hot climates it may be necessary to remove it the same day. The tubes take from two to three hours to deflate.

Applications

The drawings on the lower part of the face of the Sheet show three typical applications of Contiduct. The standard land-drain is made by forming the concrete bed and laying the Contiduct in the usual way, but, instead of covering the whole of the tubing with the normal 1 : 2 : 4 concrete, the top layer is composed of a porous mix of one part cement to ten parts ¾ in. aggregate. The remainder of the trench is filled up with shingle. The minimum gradient for this type of drain is 1 in 300 and at its highest point there should be a depth of at least 10 in. of shingle.

The slotted land-drain, suitable for airfields, etc., is made by fixing a board, slightly tapered in section, above the Contiduct and withdrawing it after the concrete has been poured.

The egg-shaped sewer necessitates the use of special steel formwork to make the invert section. This is mounted on precast concrete blocks and the inflated Contiduct laid on it. The concrete to surround the entire assembly is poured in one operation. The Contiduct and steel formwork (the latter having been treated with mould oil) are pulled out when the concrete has set.

Cost

The use of Contiduct results in a saving of 25% to 40% over the traditional method of drain-laying for the following reasons:

Labour: No labour is required for unloading and stacking. The concrete surround is laid in one casting and no jointing is required ; the operations can be carried out by unskilled workers.

Material: Pipes and jointing material are not required.

Transport: A 75 ft. length of 36 in. Contiduct weighs 700 lb. and will lay 2,500 yards of duct.

Breakages: There are no losses from breakage of pipes.

Excavation: Savings in width and depth of trenches are possible as no working space is required. (With pipes, an allowance equal to the thickness of the wall of the pipe must also be made.)

Equipment: Shearlegs and crane are not required for lifting, simply a compressor for inflating the tubing.

Further Information

The manufacturer maintains a technical advisory department which is available to answer questions and advise on technical problems relating to the use of Contiduct.

Compiled from information supplied by:

Ductube Company Limited.
Address : Regent House, 235-241, Regent Street, London, W.1.
Telephone : Regent 2592-4.
Telegrams : Ductube, Wesdo, London.

PRIMARY SCHOOL

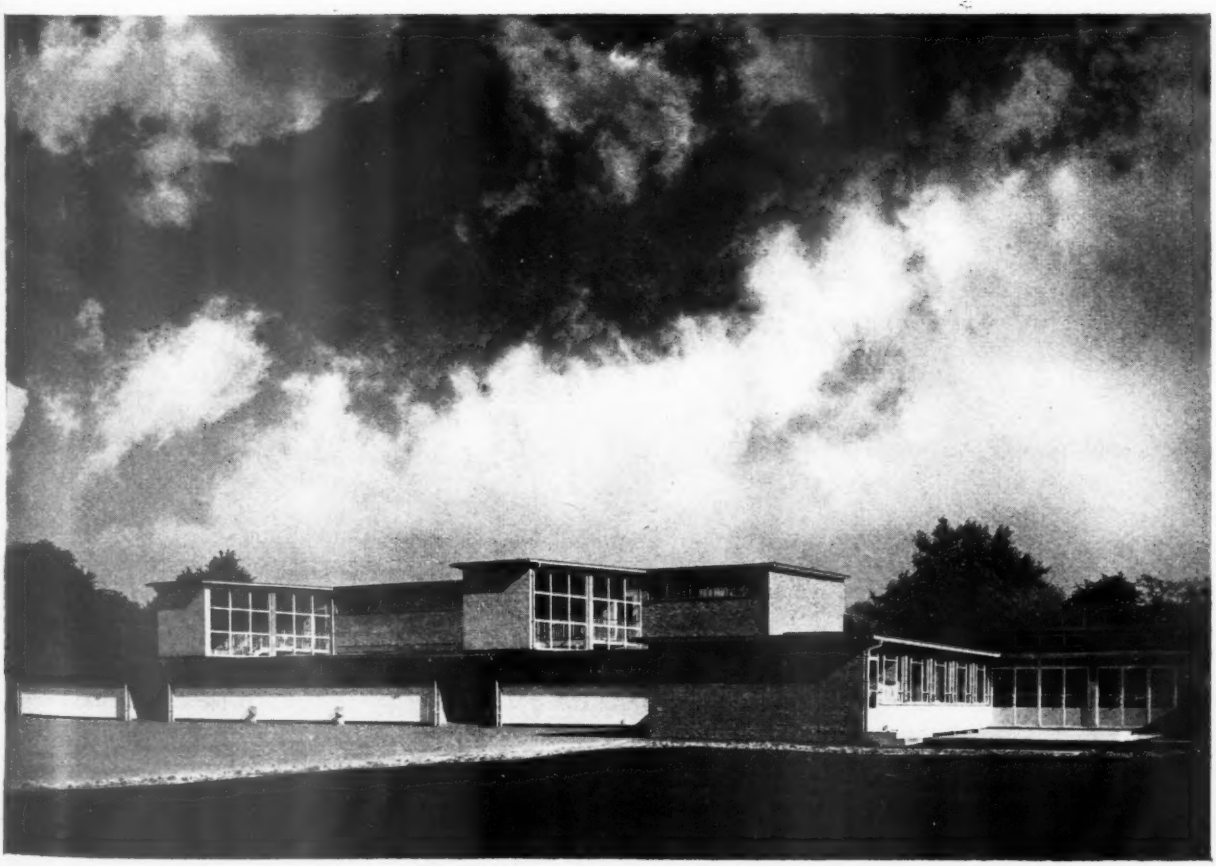
in WORSLEY BRIDGE ROAD, BECKENHAM, KENT

designed by ALISTER MACDONALD; assistant architect, G. E. CRANE
in collaboration with S. H. LOWETH, formerly County Architect,
consultants, structural, MALCOLM GLOVER and PARTNERS, heating, BARLOW, LESLIE and PARTNERS
electrical, J. ROGER PRESTON and PARTNERS, quantity surveyors, JOHN LEANING and SONS

The Worsley Bridge County Primary School has been built for the Kent County Council to relieve overcrowding in schools in this area and accommodates 320 children. The client required the school to have a two-storey classroom block and a compact arrangement of circulation space. Staircases to first floor classrooms are arranged to avoid the need for an upstairs corridor, which in turn permits clerestory lighting to ground floor classrooms and large windows on the north side of the first floor. There are 45 sq. ft. per place.

South wall of assembly hall.

General view from the north-west.



Top, the assembly hall, which has a roof carried on light welded steel trusses. Above, south facade of the two-storey classroom wing. Panels under windows are of common brickwork, rendered and painted blue. Facing bricks are sand-faced, straw coloured.

PRIMARY SCHOOL

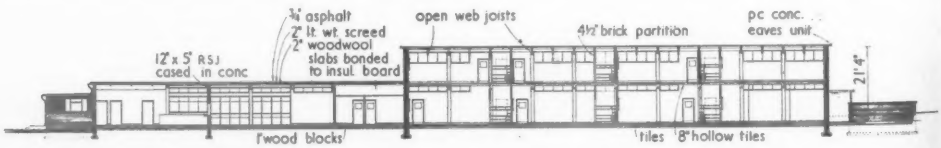
at BECKENHAM, KENT

designed by ALISTER MACDONALD

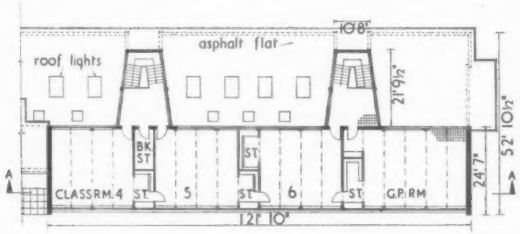
SITE.—The part of Beckenham where this school is built is developed at a low density, with large detached Victorian houses standing in their own grounds. The site is bounded on two sides by wide, tree-lined roads and has a gentle fall to the north and some distant views. When the position of the present building was chosen on the site, space had to be left for a future school for a different age-group.

PLAN.—The assembly hall, which also serves as a gymnasium, has continuous openings on the south side to allow PT activities to extend into the open air. The kitchen is designed to serve about 500 meals a day for the present school and for a future school on the site. The dining hall had to be kept small to allow the overall floor space to come within the permissible limit in force at the time, and is separated from the assembly hall by folding doors.

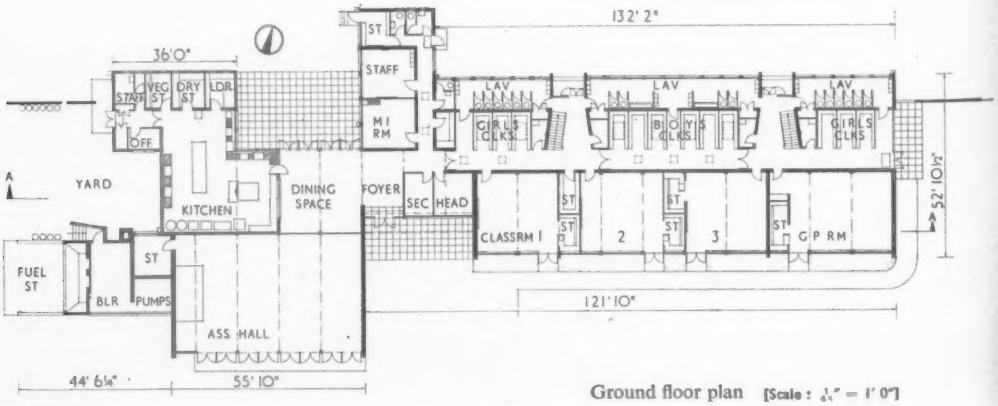
CONSTRUCTION.—There are normal strip foundations under load-bearing walls and block foundations under stanchions. Generally, the classroom block, assembly hall, dining area and kitchen have a light steel frame and load-bearing end walls. There are entirely load-bearing walls to the staff wing, boiler house and cloakrooms. All low portions of the building have flat concrete roof slabs and the assembly hall and classroom block have roofs carried on light welded steel trusses. The school, which forms part of the 1951-52 building programme (nett cost per place limit in force, £140) had a total cost on tender (dated January 8, 1952) excluding site works, of £44,130. Nett cost per place on tender, £132 or £137 18s. allowing for extra meal- and kitchen-space. The general contractors were Herbert Richardson & Son, Ltd. For sub-contractors see page 120.



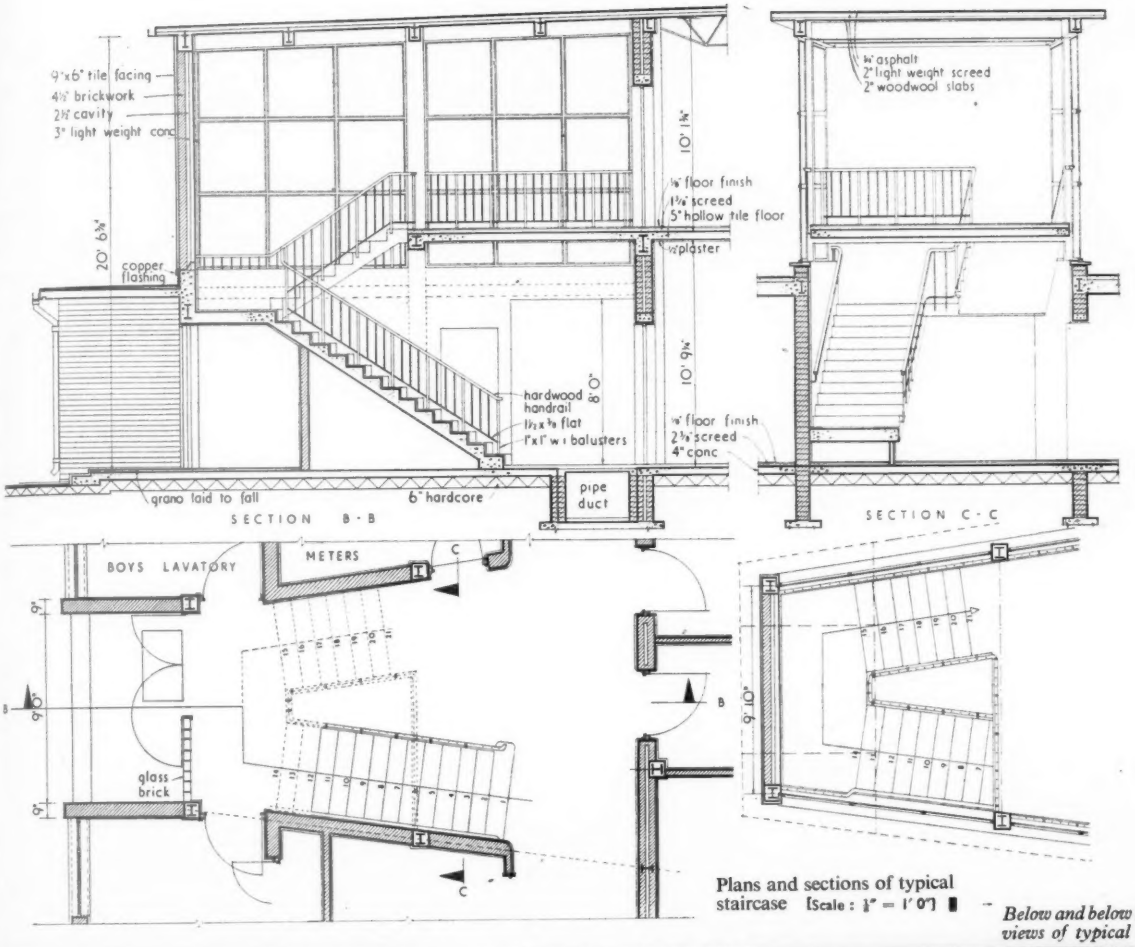
Section A-A



First floor plan

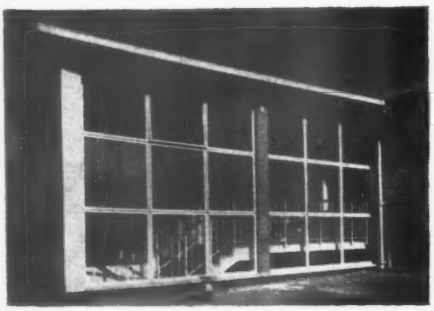


Ground floor plan [Scale: $\frac{1}{16}$" = 1'0"]



Plans and sections of typical staircase [Scale : ¼" = 1'0"]

Below and below left, three views of typical staircase.



HOUSES

1. in NEW YATT ROAD, WITNEY, OXFORDSHIRE

designed by GERALD BANKS

2. in WEST GARTH ROAD, EXETER, DEVON

designed by ANNE G. J. HARTSHORN and HENRY T. SWAIN

The north-west elevation of the house at Witney.

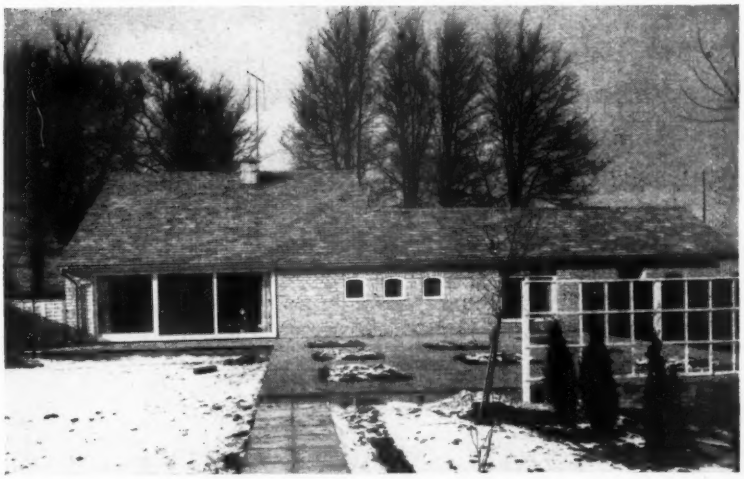
This house at 52 New Yatt Road, Witney, has been built by direct labour for the architect's own occupation. The accommodation was required for the owner, his wife, three children and a children's nurse. The main consideration in planning was the provision of a suite for the owner and his wife, which is in a single-storey wing on the north-east side of the house, and separate accommodation for the children and nurse on the first floor.

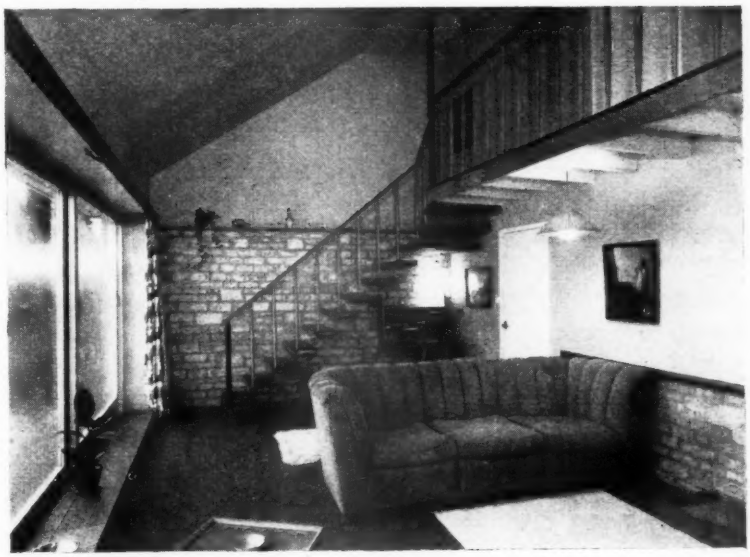
The two-storey living area of the house at Witney.

SITE.—The site, which is on a north-west to south-east axis, is 296 ft. in depth, with a road frontage of 124 ft. The best view is to the north over the Cotswolds, but there is also a pleasant view to the south. Mature elm and beech trees border the edge of the site to the north. There are also chestnut and silver birch trees on the site. The house was built on the east side of the site so that a single storey addition could be added to the west, if required.

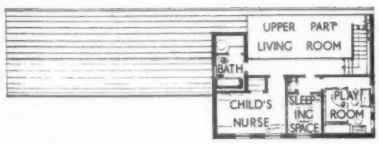
CONSTRUCTION.—Up to first floor level the external walls, which are of cavity construction, have an outer skin of Cotswold stone and an inner skin of concrete blocks. Above first floor level the outer skin is of meranti weather-boarding. Similar vertical weather-boarding is also used on the north facade of the single storey wing. The foundations are of reinforced concrete, as the ground is of heavy clay to a depth of 8 ft.

FINISHES.—Although the road in which this house stands has no particular traditional character, the houses in Witney are almost all constructed of Cotswold stone and the architect aimed at designing a contemporary house "without violating the town's traditional character." Internally most of the rooms have three walls finished with emulsion paint and the fourth wall is covered with wallpaper. The staircase has treads of 3-in. planks cantilevered from the stone gable end wall. The stone is left untreated on the interior face.

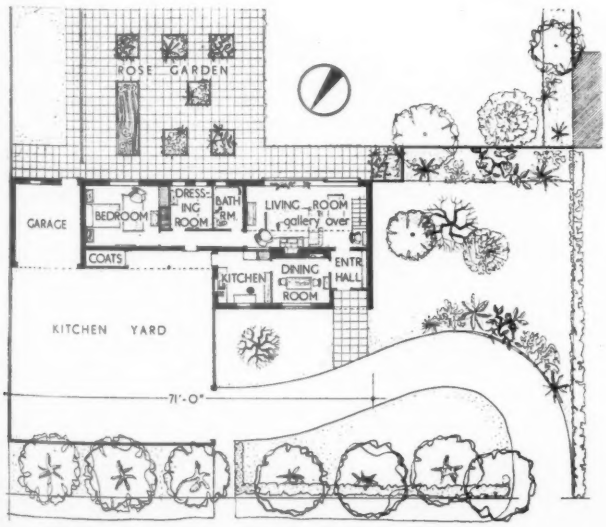




Top, the garden facade from the south-east. Above, the main living area with staircase and first floor gallery above.



First floor plan



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

HOUSE

1. in WITNEY, OXON

designed by GERALD BANKS

SERVICES.—After experiments with water heating by two methods using solid fuel, the hot water is now provided by an immersion heater and the owner has found that additional cost of about 1s. 9d. per week is compensated for by the greater convenience. Heating is by an open fireplace in the living area and by two electric radiators. A small boiler house at the back of the garage may be added later to supply a central heating system. The cost was approximately 50s. per sq. ft., with site works an additional £300. The work was completed in approximately six months.

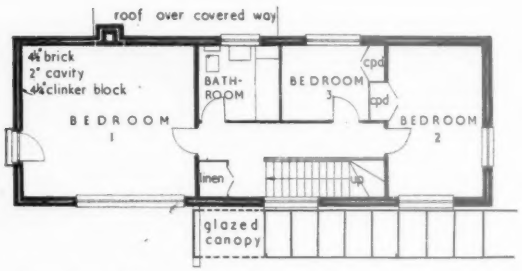
The house was built by direct labour. For sub-contractors see page 120.

Above, the house from the south. Top right, from the north-east, with the garage on the right. Above right, from the south-east.

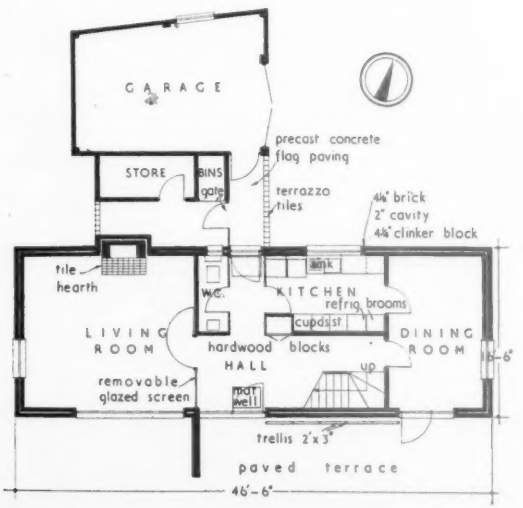
HOUSE

2. in EXETER, DEVON

designed by ANNE G. J. HARTSHORN and HENRY T. SWAIN



First floor plan



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

SITE.—The site, which is on the outskirts of Exeter, has a downward slope towards the south and has a good view of the distant River Exe to the south-west. There is also a pleasant outlook to the east. An estate road runs along the east side of the site.

PLAN.—The house, which is for the owner and his wife, with accommodation for guests, has a long narrow plan to take advantage of the south aspect. The owner required a separate dining room and a large hall, which could be combined with the living room by the removal of a detachable glazed screen. The area of the house is 1,315 sq. ft., plus 333 sq. ft. for the garage and outbuildings.

CONSTRUCTION.—External walls are of 11-in. cavity brickwork faced with a local red facing brick. A covenant in the land sale required the house to be built in brick with a tiled roof. The roof is supported on timber trusses.

FINISHES.—The roof is finished with clay pantiles and insulated with glass silk. The windows are specially designed and purpose-made, based on standard wooden sections. Internal window sills are of polished hardwood. Floors in the living room, hall and dining room are finished with hardwood blocks.

SERVICES.—Heating and hot water are provided by electricity, and in addition there is an open fire in the living room. The contract price was £3,255. The cost per sq. ft. was 40s. for house, garage and outbuildings, excluding space heating.

The general contractors were A. E. Eveleigh. For sub-contractors see page 120.

TECHNICAL SECTION

The Regional Hospital Board Committee of Inquiry into the fire at the Dellwood Maternity Home revealed what can only be described as a flaw in our massive fire regulations. It seems that an iron boiler flue passed horizontally through a 9-in. brick wall and that heat from this flue ignited a wall plate fixed some 8 in. above. What is technically interesting about this is that the heat reached the wallplate not through its under-face but through the face which turned towards the centre of the wall. The heat, therefore, did not pass through the bricks but through a vertical mortar joint. The Committee's report doubts whether the byelaw distance of 9 in. allows sufficient space above a horizontal pipe and suggests that flue pipes passing through walls should invariably be sleeved. This seems a sensible recommendation; it will be interesting to see whether it becomes law. Remembering how prone the Englishman is to costly legislation after a disaster, architects will be relieved to learn that in this case safety can be bought so cheaply.

This week's special article

24 LIGHTING
a new approach to artificial lighting

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

The calculations in common use for artificial lighting show how much light will result from a given installation on a hypothetical plane, but little more. In September, 1953, a Sub-Committee of the British National Illumination Committee published a report entitled "Design of the Visual Field," which proposed a more positive function for lighting: namely, to further the designer's visual intentions. This week J. M. Waldram, the Senior Research Illuminating Engineer to the GEC, and the Chairman of the Sub-Committee mentioned above, discusses the implications of this idea and proposes a new concept of "Apparent Brightness" which should enable lighting engineers to translate the architect's wishes into a calculable form.

Lighting is an integral part of architecture; there is no architecture in the dark. Architectural forms have evolved in daylight; but artificial light, free from the restrictions of daylight, is less well understood, and often so unintelligently used that it mars the architecture. Recent studies have led to a new approach to interior artificial lighting, in which the first principle is to recognise that the problem is basically architectural, and that the design initiative must rest with the architect. He must conceive and state the effect he wants by artificial light, and it is for the illuminating engineer to supply it. Long term collaboration is necessary between the architect and the illuminating engineer, analogous to that between the architect and the structural engineer.

This conception is unfamiliar to both; to realize it, new means must be found suited to the architect, by which he can state his ideas and the engineer can translate them into figures; new means need practice in their use.

There are three elements in the architect's conception which specially concern the lighting engineer:

(1) The pattern of light and shade in the interior.

(2) The scheme of decoration and furnishing.

(3) The "modelling" or the appearance of solid objects.

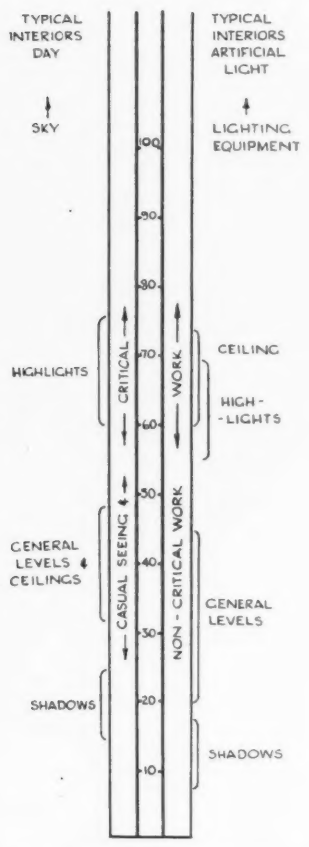


Fig. 1 (*above*). *The scale of Apparent Brightness. The scale gives the values as seen by the eye. The values therefore are relative and can only be converted into photometric readings when the "adaptation level" has been determined and with the use of the graph given in Fig. 6.*

Fig. 2 (*above right*). *A church interior, as seen by day, with the "apparent brightness" values marked up.*

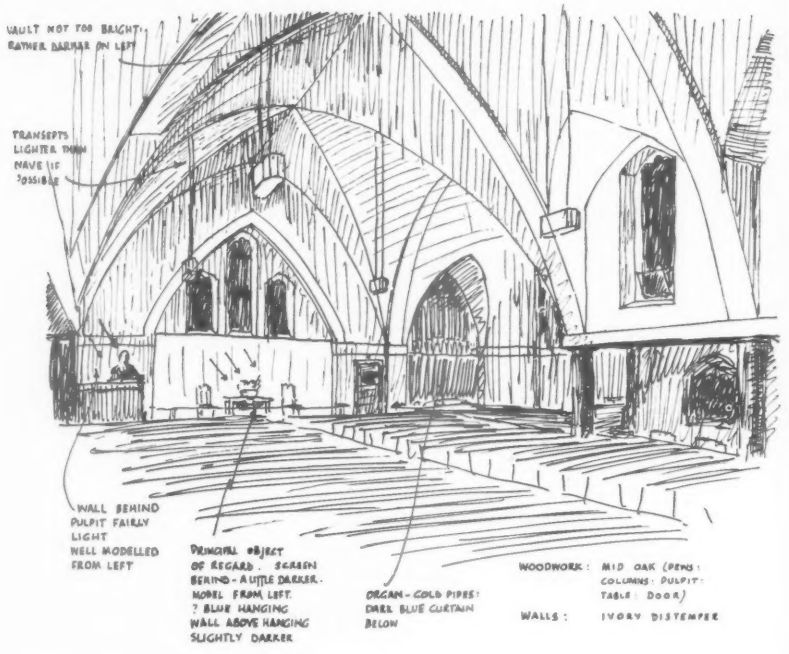


Fig. 3 (*right*). *"Architect's sketch" giving the proposed finishes and illustrating his intentions for lighting.*

There are doubtless others as well, but these three are essential; they have all been the subject of recent study, and three new methods of expression have been devised.

The Pattern of Light and Shade. Many photometric terms are used to express "brightness," but none take into account the capacity of the eye to adjust itself to its surroundings—to get used to the light. What we have needed for some time is something simpler which will take this into account, and yet be capable of translation into conventional photometric terms for the engineer. It has in fact, been possible to devise a single and simple scale of a quantity called "Apparent Brightness," which takes adaptation into account. An indication of the scale is given in Fig. 1, on which is marked some typical values. This scale is new, both to architects and to illuminating engineers, and both have to study it. No doubt the man who first measured his body temperature found that it was 102 deg. F, but did not know if it was up or down or if there was a normal value. The use of the scale of Apparent Brightness and some of its meaning will be shown by an example below.

The Scheme of Decoration and Furnishing. A scheme of decoration involves reflection factors, i.e., the tone of the finishes, the textures and the colours, for both interior surfaces and for furniture. It is clear that there are many questions (particularly that of colour) to be considered, but for the time being we shall deal only with the reflection factor. For this it is sufficient to indicate the finishes on a shade card as precisely as possible. If such a system as the Munsell System is available, the task of the engineer may be simplified. He needs to know the properties of the finished surfaces. When there are large areas of colour in a high interior, it may be necessary to adjust the colours used for finishing to allow for effects of inter-reflection; it is common knowledge that colours chosen from a flat sample appear much too strong when applied to an interior. For simple cases, it is now possible to work out the necessary dilution of the paint or finish applied, to allow for this effect.

The "Modelling" or the appearance of solid objects. Modelling has been intensively studied, and what is in effect a "shade card" for modelling has been produced, showing different degrees of modelling from different directions, from which a desired effect can be chosen by the architect; his choice can be interpreted by the engineer in photometric terms, and he can design lighting to produce it. There is not space to discuss this aspect in detail at present.

EXAMPLE OF DESIGN BY NEW METHOD

As an example of a design actually carried through as an experiment by the new method, the Methodist Church shown in Fig. 2 will be studied. It is a simple and rather austere interior, which "reads" sufficiently by day, but not by artificial light; the ceiling is too bright and featureless, and there is

LS51

Polyflex

Patent pending and registered trade mark

The 'Polyflex' toilet seat has a *flexible mounting*. Breakages are very unlikely. 'Polyflex' includes a flexible PVC rod attached to the seat and firmly fitted into Polythene seat pillars. The pillars, reinforced with a threaded brass insert, are self-centering in the WC pan with polythene washers secured by wing nuts. The 'Polyflex' seat can be fitted by the housewife without any tools, and, because of the flexible mounting, it will stay firmly in position. The 'Polyflex' is hygienic. The seat, hinge, and pillar heads cannot corrode or peel. All are easily cleaned. The 'Polyflex' is available in black, white and a range of standard pastel shades.

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Shires are the largest manufacturers of moulded cisterns in the country. They also make WC pans and seats, flush-pipes and complete WC suites.

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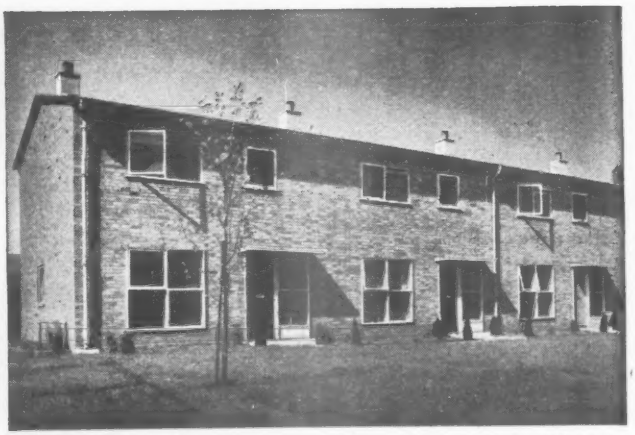
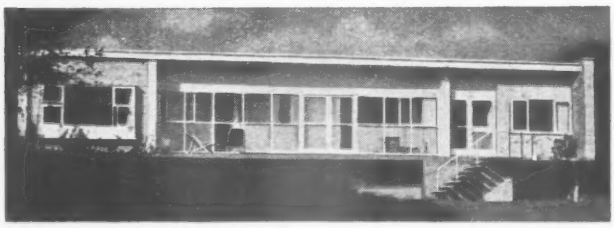
SHIRES (IRELAND) LTD., STANNAWAY DRIVE, CRUMLIN, DUBLIN

ZINC in Zn plenty



TERRACE HOUSES AT COWLEY PEACHEY. *Architects—F. R. S. Yorke, F.R.I.B.A.; E. Rosenberg, F.R.I.B.A.; C. S. Mardall, A.R.I.B.A.*

Flashings and hoods, rainwater goods and weatherings — from roof to foundations zinc plays an important part in building. Our illustrations show contemporary houses roofed with zinc laid on the standing seam system. The roofing of the Cowley Peachey houses has an added interest because it has been laid on insulation boarding to combine good insulation with lasting protection.

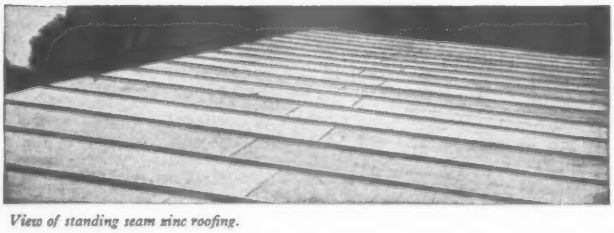


HOUSE AT LUCCOMBE, I.O.W. *View from South-west. Architect and owner—F. R. S. Yorke, F.R.I.B.A.*

There are now no restrictions on the use of zinc. Supplies are plentiful and are likely to remain so for many years to come.

The price of zinc has dropped considerably and it is again one of the most economical roofing materials.

The Zinc Development Association will be pleased to send to potential users lists of stockists of all zinc building materials and of firms specialising in zinc work.



View of standing seam zinc roofing.

ZINC DEVELOPMENT ASSOCIATION · LINCOLN HOUSE · TURL STREET · OXFORD · Tel. 47988

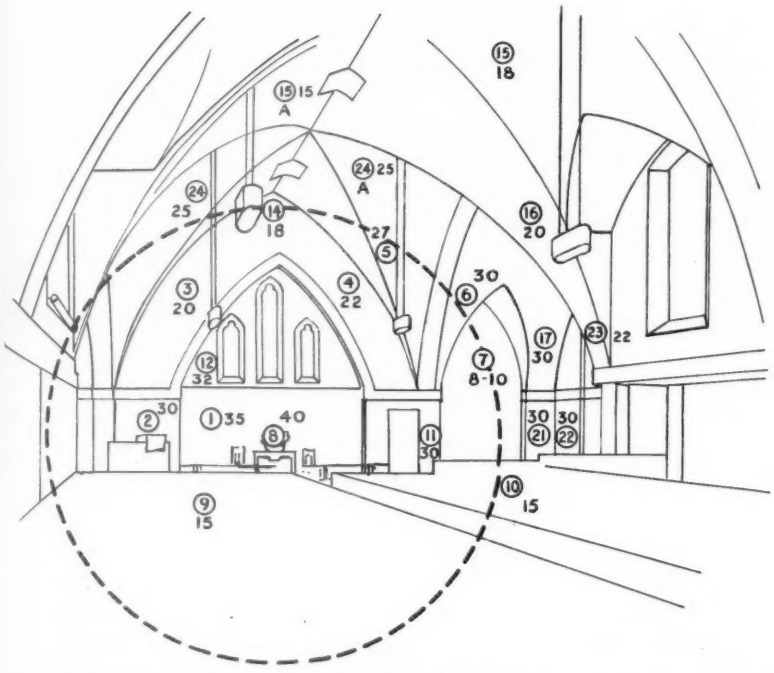


Fig. 4. *The intentions described graphically in the sketch (Fig. 3) translated into terms of "apparent brightness." The figures in circles are point reference numbers. The large dotted circle represents the field of vision which is taken as determining the "adaptation level" of the eye.*

no satisfactory point of repose for the eyes; the communion table is dark and the pulpit dull.

The first step is to set out a desired appearance by night; this has been done in the sketch in Fig. 3, which may be supposed to have been made by an architect. It gives indications of the pattern of light and shade, indicates very roughly the decorations and gives some guidance on modelling. These rough indications must be expressed numerically, using, for the pattern of light and shade, the scale of Fig. 1. A series of reference points is taken in the perspective, indicated in Fig. 4 by circles, and to each an apparent brightness is assigned, by the architect's judgment, perhaps guided by the engineer. The principal object of regard is the communion table, usually decorated with flowers; it is given the value 40, which is towards the upper end of the "general levels" of apparent brightness. The panelling behind it (or the curtain over the panelling), is made slightly less, at 35; the wall above is less again at 32 and the east wall diminishes in brightness up to values of 15-18 at the crown of the vault, a fairly subdued brightness. The transepts are made a little lighter than the nave vaulting in order to distinguish them (at 25); and the right hand (south) side of the nave vault is intended to be a little brighter than the left hand side, to give it shape and to imply a coherent flow of light in the interior. The wall behind the pulpit is to be about 30, and is to be modelled from the left—if it were modelled from the right, the preacher would be seen down-light by most of the congregation and would look very "flat," like a flashlight photograph, and moreover would have to look into the modelling light and would experience glare.

CONVERSION INTO PHOTOMETRIC TERMS

These are the requirements of the architect. Values have been set on these requirements, but in order to convert these values into photometric terms, it is necessary to estimate the adaptation level *i.e.*, the value of apparent brightness to which the eyes will be accustomed. Probably when more is understood about this, it can be determined fairly exactly; but for the present purposes it can be estimated by inspection. A mean value within a circle of about 15° radius, as shown in the sketch, is estimated; probably 25 is not far out in this case. We have now to refer to the set of curves given in Fig. 5, which is the only set involved. Each curve connects the apparent brightness with the photometric brightness (luminance) in foot lamberts (sometimes formerly called equivalent foot-candles) for a specific value of the adaptation level. To find the appropriate curve, follow the adaptation level of 25, on the vertical scale, along horizontally to intersect the dotted curve; the point of intersection gives the corresponding photometric brightness of the adaptation level—1·5 ft.-lamberts—and the curve to follow is the one running through the point of intersection, in this case one which can be interpolated lying between the curves for 1 and for 2 ft.-lamberts. Using this curve, we can transform all the apparent brightnesses chosen into photometric brightnesses (or "luminance"), which are read on the bottom (horizontal) scale; they are marked in Fig. 6, and are shown in the Table, Fig. 7, col. 3 for each point.

THE ILLUMINATION REQUIRED

Luminance, or photometric brightness, is the product of illumination and reflection factor; if we know the reflection factor of each surface involved, the necessary illumination of the surface is found simply. In this case the reflection factors were measured on site, since the building existed; they appear in col. 4, and by dividing col. 3 by col. 4, we find the total illumination required on each surface, shown in col. 5.

Now the total illumination required has two components; the light received directly from the lighting equipment, and the light received from all other bright surfaces in the interior. The latter factor has hitherto

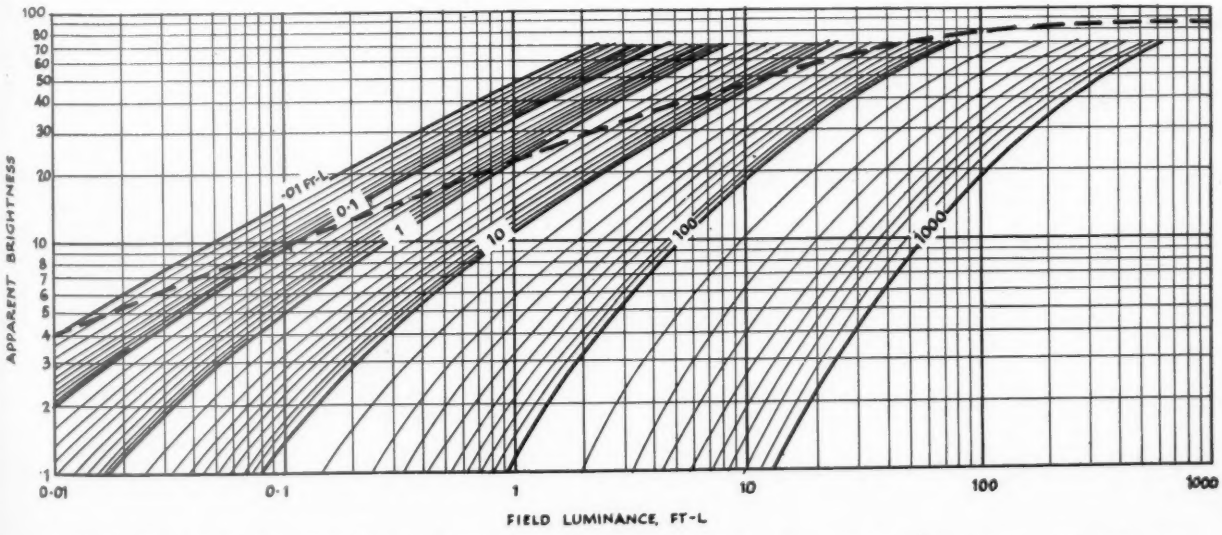


Fig. 5. *Curves showing "apparent brightness" as a function of field luminance, the dotted curve representing the adaptation level. (After Hopkinson).*

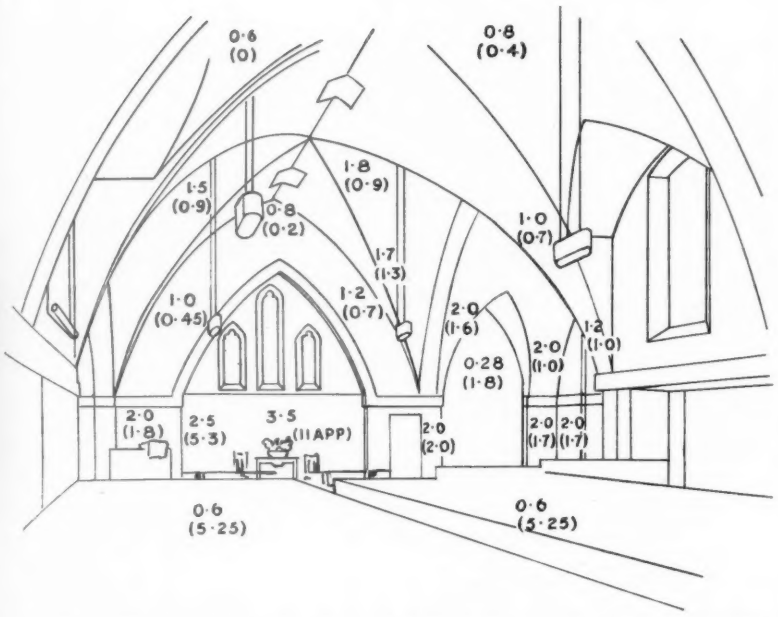


Fig. 6. *Sketch of the interior showing the luminances in foot-lamberts corresponding to the apparent brightness figures given in Fig. 4. Also showing (in brackets) the direct illumination in lumens per sq. ft. from lighting equipment required to achieve these luminances.*

greatly complicated the problem, because it has been treated as a problem of inter-reflection; but a much simpler solution presents itself if we start by specifying what we want. Each surface concerned is surrounded by a "sky," which is composed of all the other surfaces; and the brightness of all these surfaces is already known, because we have specified them, and they are already marked on Fig. 6. To find the illumination which will result from them is then a fairly simple problem in daylight illumination, and in fact for many purposes it can be solved by inspection; in more complex cases, the BRS protractors can be used. It will be recalled that if a surface is faced by a complete sky of brightness B ft. lamberts, it will receive an illumination B lum./sq. ft. (foot candles). One half of this illumination comes from the part of the "sky" extending from the horizon to 45° and the remainder from 45° to the zenith. This notion, suitably oriented, can be applied to any point in the interior, and the illumination from a non-uniform "sky" can be calculated or estimated. Take for example, Point 15, near the crown of the vault. It faces an inverted "sky" of which the part from 45° up to the "zenith" will be mostly the pews, of luminance 0·6 ft. lamberts; they will account for about half the illumination at Point 15. The other half will mainly come from the walls and vault opposite, which will be from 0·6 to about 1·0 ft. lamberts. The illumination received by reflection at point 15 will evidently be about 0·7 lm./sq. ft.

This process is repeated for each point, and appears in col. 6. Clearly, if we subtract col. 6 from col. 5, the remainder is the direct illumination which must be provided from the lighting equipment; this is shown in col. 7, and is marked in Fig. 6, in brackets for each point. The design of a lighting system to provide these illuminations is a matter of fairly straightforward illuminating engineering.

1 Point	2 Apparent brightness (design)	3 Luminance	4 Reflection factor (measured or designed)	5 Total illumination required (Lm./ft.²)	6 Inter-reflection component	7 Direct illumination required (Lm./ft.²)
1	35	2·5	0·10	25	0·9	24 Impracticable : vary reflection factor.
		change to :	0·4	6·25	0·9	5·35
2	30	2·0	0·75	2·7	0·9	1·8
3	20	1·0	0·75	1·35	0·9	0·45
4	22	1·2	0·75	1·6	0·9	0·7
5	27	1·7	0·75	2·3	1·0	1·3
6	30	2·0	0·75	2·7	1·1	1·6
7	8—10	0·28	0·10	2·8	1·0	1·8
8	40	3·5	0·3 (flowers)	12	1·0	11 (approximately)
9	15	0·6	0·10	6·0	0·75	5·25
10	15	0·6	0·10	6·0	0·75	5·25
11	30	2·0	0·75	2·7	0·7	2·0
12	32	2·2	0·75	3·0	1·0	2·0
14	18	0·8	0·75	1·1	0·9	0·2
15	18	0·8	0·75	1·1	0·7	0·4
15a	15	0·6	0·75	0·8	0·8	0
16	20	1·0	0·75	1·3	0·6	0·7
17	30	2·0	0·75	2·7	1·7	1·0
21	30	2·0	0·75	2·7	1·0	1·7
22	30	2·0	0·75	2·7	1·0	1·7
23	22	1·2	0·75	1·6	0·6	1·0
24 (24a)	25	1·5	0·75	2·0	1·1	0·9
Adapting level (est.)	25	1·5	—	—	—	—

Fig. 7. *Table giving the direct illumination required to give the specified apparent brightness figures.*

One or two points are of interest; for example, if the reflection factor of the wood panelling is taken for point 1, a very high illumination of 24 lm./sq. ft. must be provided on it, but the off-white wall just above it needs only 2 lm./sq. ft. This is impracticable; to avoid the difficulty a curtain of some lighter material could be provided over the panelling; the architect will have to suggest an appropriate colour. If its reflection factor is raised to about 0·4, which will permit a fairly strong colour, the illumination required will drop to 5·4 lm./sq. ft., which is reasonable. At point 15a, however, on the north vault, the indirect light is sufficient and no direct light is needed. Had we specified a lower brightness at this point, it would have been impossible to achieve it with this reflection factor. The total illumination on the pews, 6 lm./sq. ft. is adequate for a church; had it not been, an adjustment would have been necessary.

In this particular case the building already possessed a lighting installation, the effects of which can be judged in Fig. 8.

By a series of simple calculations which need not be described, based on the luminances in this existing installation, it was concluded that the direct illuminations on the vault were much too great with the existing installation, and there was too much light on the left ("north") side. The fittings were, therefore, temporarily modified by putting an opaque white top on them, which slightly increased the downward and decreased the upward illumination, the north side of each fitting was further obscured by sticking detail paper over it. A curtain of the proper reflection factor was hung over the panelling, and two 150-W. reflector lamps attached to the left-hand (north) lighting fitting next the communion table, directed at the table and screened from the pulpit; these, it was calculated, would give the required illumination on the table and curtain. For the modelling of the pulpit and preacher, a single reflector lamp was mounted high up in the N. transept; its position and power were found by calculation for the direction and amount of modelling required. There were two reflector lamps used in the S. transept for lighting the choir, which were also turned on, to increase the brightness of the S. transept.

Though these arrangements could not be wholly based on measurement nevertheless the result which is shown in the photograph Fig. 9 was close to what was intended, and measurement showed that the desired modelling and apparent brightness pattern had been achieved quite closely. It should be stressed that the interest is not in the particular result achieved, nor in the quite simple means used to achieve it, so much as in the fact that the desired effect was specified, and was achieved by *predicted* methods, first time and without experiment.

CONCLUSION

The saving of time and effort and uncertainty which this procedure may bring about in the lighting of new and important interiors, in which experiment may be impossible when the building is unfinished, and alteration impossible when it has been, will be evident to all who have experienced the method of cut-and-try which has usually been necessary. The ideas here set forth are new and experience has yet to be gained with them; but they promise much for the future. In this article nothing has been recorded of the new tools which

Fig. 8 (*top*). *The interior as it appeared with the original artificial lighting, the figures being "apparent brightnesses." The direct illumination on the vault is too high, with too much light on the left side, giving insufficient modelling. The altar is lost against its dark background.*

Fig. 9 (*above*). *The lighting as finally adjusted with its "apparent brightness" figures marked up.*

the lighting engineers are shaping to help them; already they have worked out some great simplifications in their calculations; they can predict the installations to give desired brightness patterns and modelling. The problems of colour are technically of baffling complexity, but progress has been made with them.

The new approach is not a new system of lighting. It may lead to arrangements which an experienced man might well have come to empirically. But it may also lead to new trends. For example, it is clear that there is no necessary virtue in arrays of lighting fittings hung throughout the interior space, unless the architect needs them for decorative effect. Such systems may, however, be used for the basic lighting, with "trimming" by such devices as reffector lamps concealed in the positions necessary for modelling, either at the walls or concealed in large lighting fittings. It is conceivable that we may have lighting fittings the distribution of light from which can be modified without spoiling their form. We may find that our present lighting schemes are making the ceilings much too bright, and may return to a balance of brightness nearer to what occurs in daylight. But it is not to be supposed that we must copy the daylight effect. By day the view through the windows is a natural object of regard, and the room seems a pleasant shelter from which we may look at it; but by night the windows are dark and blank, and another focus and emphasis is needed; otherwise the room may seem aimless. We have new possibilities available with fewer restrictions; we must work out the best ways of using them in their own right, without copying the limitations of daylight, but so that they combine with the architectural forms and decorations in a common purpose to form a memorable result.

INFORMATION CENTRE

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

7.42 practice
LAW

The Architect and the Law. Richard Body. Institute of Registered Architects. 8s. 6d.

This book, in 65 pages, explains the architect's legal responsibilities to his client and his relationship to the contractor. In this condensed form the lay mind can more easily understand the law, and it should be especially useful to young practising architects.

Emphasis is rightly laid on the necessity of clear agreement with a client on the fees to be paid, and it is explained when it is necesary for such an agreement to be in writing, and, in some cases, also under seal. The architect's duty as agent to the client is distinguished from his quasi-judicial duty when acting under the building contract. The ownership of drawings is made clear. Even architects who have been long in practice still appear to think that the drawings are their property.

There is a useful chapter on the architect as arbitrator and the particular points involved in arbitration proceedings. It is doubtful, however, whether it would be wise for an arbitrator to announce his decision and reasons at the conclusion of the hearing, as the author suggests may be done. This might result in the court setting aside an award which would be unfortunate for the parties.

16.109 materials: miscellaneous
STABILIZED SOIL CONSTRUCTION

The use of stabilized soil for road construction in the USA. Road Research Technical Paper No. 29. (HMSO. 1954. 2s. 6d.)

Paper dealing with techniques for soil survey, classification of soils and design of pavements.

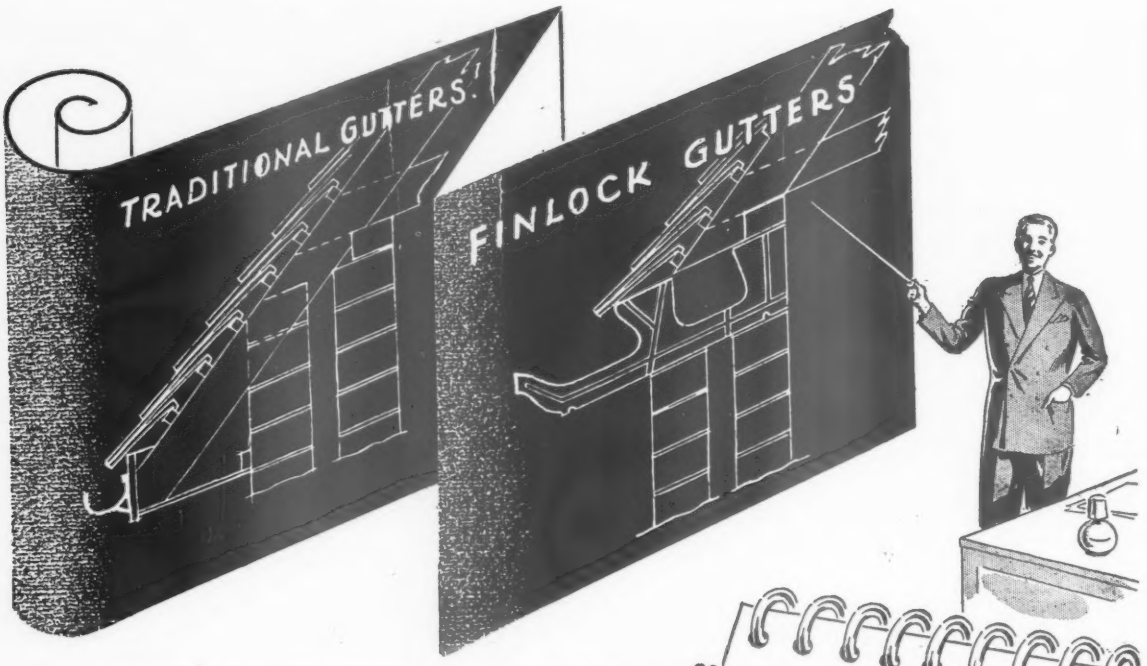
Methods of stabilization using cements, bituminous materials and chemicals are described in detail and the performance of main, secondary and urban roads constructed in this way is considered. A section on mechanical plant for stabilized soil road construction deals with mix-in-place equipment, travelling-plant-mix equipment and miscellaneous plant.

18.154 construction: theory
THEORY OF STRUCTURES

Structural Theory & Design. J. McHardy Young. (Crosby Lockwood & Son Ltd. 30s.)

This book, which has already been reviewed in Information Centre, has now been published in one volume for greater convenience.

Vol. I was reviewed on June 14, 1951 (18.77) and Vol. II on February 14, 1952 (18.95).



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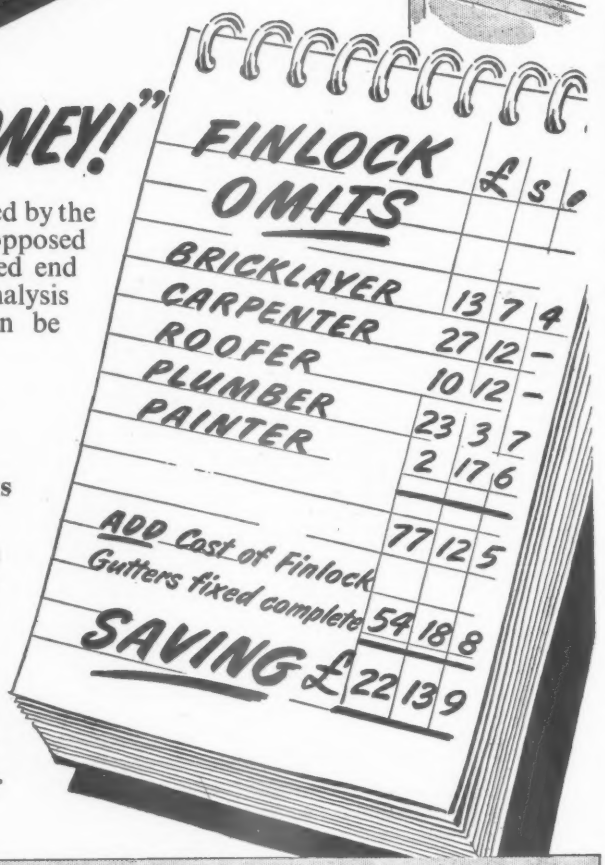

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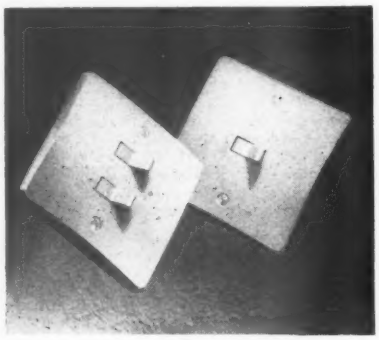
THE INDUSTRY

From the Industry this week, Brian Grant reports on a new switch, heating equipment, flat finishes for interior use, heat and sound insulation, and a hand drier.

LIGHTING SWITCHES

A new type of switch, the Plateswitch, has been introduced by M. K. Electric. It is intended for a.c. supplies and is silent in action, the movement being totally enclosed and sealed at the factory. Single and double units are produced (see illustration) both having 2¾ in. fixing centres to fit into BS. 1299 boxes. In addition, a range of shallow steel and hardwood boxes is produced so that there is a choice of conduit and cable entry for almost any type of



Mk. 1 and 2 gang switches which can be screwed direct to the conduit box.

installation. At the moment the single switch is produced in a one-way and a two-way version, the twin switch being two-way only, though switches of this kind can always be used as single-way. Each type is produced in either brown or ivory finish, and both three- and four-switch units are to be made in the future. Prices vary from 31s. 4d. a dozen for the single one-way switch to 66s. 0d. for the two gang two-way. Ivory finish costs 4s. 0d. or 5s. 0d. per dozen more. (*M. K. Electric Ltd., Wakefield Street, Edmonton, London, N.*18.)

HEATING EQUIPMENT

Associated Builders Merchants have just introduced two new fittings. The first is the Economic fire, which costs only 36s. 6d. and is intended for day and night burning. It will fit any normal type of 16 inch fireback and is merely set in the opening without any fixing screws: the side wings of the grate are adjustable if the shape of the fireback should vary.

Second is the ABM one kilowatt electric fire, which has been designed to fit into the firebasket of the Economic fire and so screen the empty grate, though it can, of course, be used with its own feet as a separate unit. Price is 42s. 0d. plus 16s. 0d. purchase tax. (*Associated Builders Merchants Ltd., Peters Hill, Upper Thames Street, London, E.C.*4.)

INTERIOR FINISHES

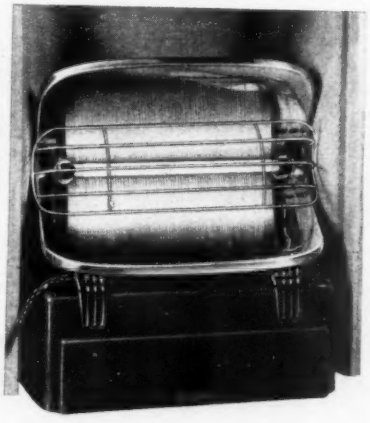
Panodec flat finishes for interior use are based on an alkyd resin and have much the same application properties as plastic emulsion paints, while they have the adhesion and durability under adverse conditions of a high gloss paint. Covering capacities vary from 110 to 120 square yards per gallon for smooth surfaces, 70 to 80 yards if the surface is rough or porous. If a gloss finish is required the makers produce a Panodec finishing varnish. There are a dozen standard colours, chosen to give a well balanced range, but any colour can be supplied as long as it is needed in reasonable quantities. The standard range can best be described as the sort of colours architects like, and this is not altogether surprising, since they have, in fact, been chosen by an architect. How many firms, I wonder, adopt such an eminently sensible method? (*P. & A. New Ltd., Ditchford Mill, Wellingborough, Northants.*)

HEAT AND SOUND INSULATION

Lightly bonded Rocksil is a new type of mineral wool insulation which is prepared in paper backed mats 36 in. wide and 10 ft. long, with thicknesses of ¾, 1¼ and 1½ in. The effect of the light synthetic bonding is to bind the fibres enough to make an easily handled mat which can be cut to shape on site with scissors, while the paper covering can be removed if necessary. The material is used for thermal insulation over ceiling joists in roofs, the conductivity being 0·25 B.Th.U. per square foot/°F/inch thickness per hour. As a sound insulator the mats are laid below floor boards or floor screeds and turned up at the edges to make the floor discontinuous with the structure, while as a sound absorbing insulation the mats are laid over perforated soffits, having an average absorption coefficient of 0·95 over a large range of frequencies. (*William Kenyon & Sons Ltd., Dukinfield, Cheshire.*)

HAND DRIERS

Warm air systems for drying hands are obviously to be preferred to the communal and insanitary roller towel, and are very much cheaper in use than separate towels. Electrically operated hand driers are, of course, no new thing, but most of them are controlled by a wall or foot switch, while a recently introduced model, the Broughton, is entirely automatic, the flow of warm air starting as soon as the hands are placed in the opening. This is done by a capacitor switch and the appropriate relays and other components, and avoids current waste as the heater cannot be left on. Overall dimensions are 14½ in. wide by 24¾ in. high, with a depth of 9½ in.:



A one Kilowatt electric fire designed to fit the firebasket ABM's economic fire.

In the Broughton electrically operated hand drier, the flow of warm air is started by placing the hands in the opening.

current consumption of heater and air fan is 2 kilowatts and hands are dried in about half a minute. (*J. Broughton & Son (Engineers) Ltd., Security Works, Pershore Road South, Birmingham* 30.)

ALUMINIUM FOR ROOFING

Below is a letter, slightly abbreviated, from Mr. R. L. Latham, T. I. Aluminium's Development Superintendent, taking me to task for some remarks I made in the AJ on July 1. He points out, first of all, that NS.3 (BS.1470) is an aluminium manganese alloy, and contains no magnesium. This was an error of mine, and should be corrected. The letter goes on:

"With regard to... Mansard sheet, may we point out that Mansard is not a trade name but a generic term describing a type of sheet which has a similar profile to a Mansard roof, therefore, strictly speaking, whilst our own Mansard sheet conforms to the dictionary definition in as much as it has two distinct slopes, neither of the other two patterns mentioned fit in with this, as they have semi-circular corrugations. We, therefore, feel that we are quite correct in referring to this particular sheet as a Mansard one.

"May we also add that the confusion which arises due to different references for almost exactly the same alloys is not added to by ourselves, as we do not adopt trade names which are liable to cause confusion. All our alloys are numbered in a logical sequence and conforming precisely to B.S. Specifications. The majority of the confusion, we feel sure, exists only amongst the uninitiated, and all the leading firms in the Aluminium Industry are only too happy to explain and to advise on the correct choice of their products for a given use."

Mr. Latham is, of course, quite right in that "Mansard" is not a trade name. T.I. may be correct, and other makers wrong, but none of this alters the fact that Mansard sheet can be of two different sections, and this cannot but make ordering more complicated both for architects and stockists. The final sentence of Mr. Latham's letter is a fair summary of the situation, but so far as the final technicalities of alloys and sections are concerned, architects and builders *are* uninitiated, and are unlikely ever to have time to master the technicalities which are an every day matter to Mr. Latham.

F

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22.7.54

Buildings Illustrated

Farm Buildings at Binghams Melcombe, Dorset. (Pages 104-106). Architects: Crickmay & Sons, F/F.R.I.B.A. Quantity Surveyors: C. Sweett & Partners. General Foreman: Mr. Crouch. General Contractors: George W. King Ltd. Sub-contractors: excavation, G. & G. F. Maidment Ltd.; concrete blocks, supplied by Bath & Portland Stone Firms; structural steel, supplied by M. A. C. Engineering (Bristol) Ltd.; special roofings, Turnall's Trafford Tiles (fixed by Roberts Adlard & Co. Ltd.); electric wiring, electric light fixtures, Davis & Hadley; door furniture, supplied by Parker, Winder & Achurch Ltd.; dairy and milking parlour equipment, Gascoignes (Reading) Ltd.; electric hot water appliance, J. W. Woolley & Co. Ltd.

County Primary School in Worsley Bridge Road, Beckenham, Kent, for the Kent County Council. (Pages 107-109.) Architect: Alister MacDonald, F.R.I.B.A. Assistant Architect: G. E. Crane, A.R.I.B.A., in collaboration with S. H. Loweth, F.S.A., F.R.I.B.A., formerly County Architect. Consultants: (Heating) J. Roger Preston & Partners, (Electrical) Barlow Leslie & Partners, (Structural) Malcolm Glover & Partners. Quantity Surveyors: John Leaning & Sons. General Contractor: Herbert Richardson & Son Ltd. Clerk of Works: G. E. Dixon. General Foreman: Mr. Rush. Sub-contractors: Dampcourses, Ruberoid Co. Ltd., R. I. W. Products Co. Ltd.; asphalt, Permanite Ltd.; reinforced concrete, Caxton Floors Ltd.; bricks, Leicester Brick Co. Ltd., Woodride Brickworks Ltd.; structural steel, Smith Walker Ltd.; tiles, Carter & Kernahan Ltd.; wood wool roofing slabs, Marley Tile Co. Ltd.; roofing felt, Permanite Ltd.; partitions, Zanelli (London) Ltd.; glass, James Clark & Eaton Ltd.; patent glazing, T. & W. Ide Ltd.; woodblock flooring, Vigers Bros. Ltd.; patent flooring, Marley Tile Co. Ltd., Vigers Bros. Ltd.; waterproofing materials, R. I. W. Protective Products Ltd.; central heating, William Freer Ltd.; electric wiring and fixtures, Gilbert & Stamper Ltd.; plumbing, H. Bonner Ltd.; sanitary fittings, classroom fittings, B. Finch & Co. Ltd.; door furniture, Nettlefold & Moser Ltd.; casements, The Crittall Manufacturing Co. Ltd.; folding doors, Esavian Ltd., (sliding folding doors), Shinkfield Ltd., (extension gates), Dennison Kett & Co. Ltd.; rolling shutters, Adam Ltd.; iron staircases, balustrading, Geo. Wright & Co. Ltd.; plaster, Sandland Bros. Ltd.; metalwork, George Wright (London) Ltd., Clark Hunt & Co. Ltd.; joinery, P. H. Barker & Son Ltd.; textiles, Heal & Sons Ltd.; paints and decorative materials, Thos. Parsons & Sons Ltd., Plastic Surfaces Ltd.

House at 52, New Yatt Road, Witney, Oxfordshire. (Pages 110-111.) Architect: Gerald Banks, A.R.I.B.A. Built by direct labour. General Foreman: R. Smith. Sub-contractors: concrete blocks, Midland Builders Supply (suppliers); stone, H. Haines Ltd. (suppliers); structural steel, Raylor Bros. Ltd.; slates, Robert Abraham (suppliers), roofers, Midland Builders Supply; glass, H. Hunters; waterproofing materials, Pudlo; electric wiring, Lomax & Staines; electric light fixtures, Heal & Sons Ltd.; plumbing, R. Haines; stairtreads, Johnson Bros.; door furniture, Stephensons; joinery, Franklin & Butler.

House in West Garth Road, Exeter, Devon. (Page 112.) Architects: Anne G. Hartshorn, A.R.I.B.A. Henry T. Swain, A.R.I.B.A. General Contractor: A. E. Eveleigh. Sub-contractors: bricks, Western Counties Brick Co.; tiles, Devon Trading Co.; glass and sanitary fittings, Rowe Bros.; electric wiring, C. Lye; plaster, A. C. V. Telling.

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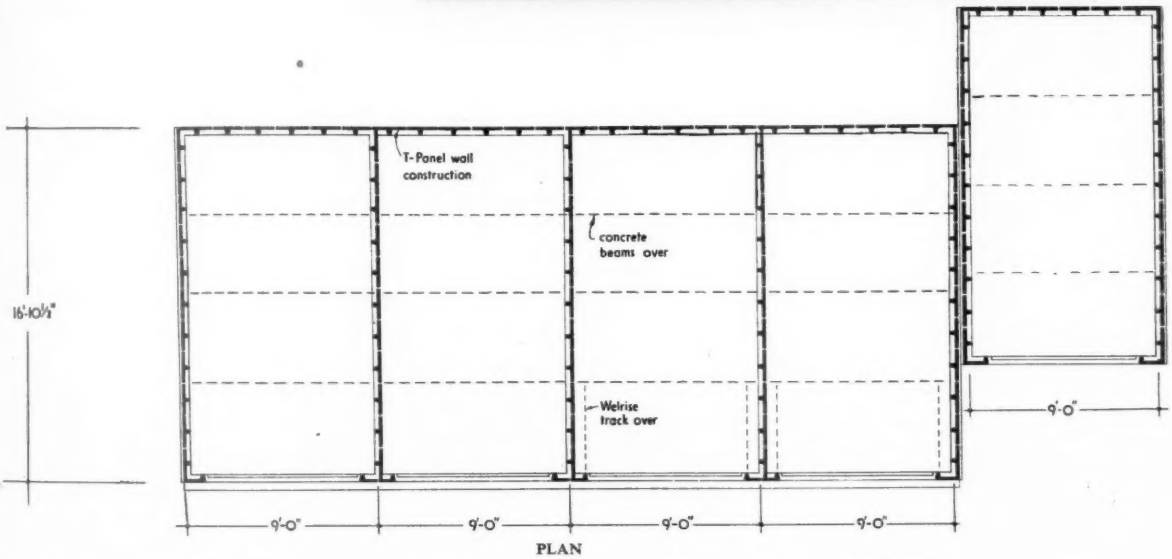
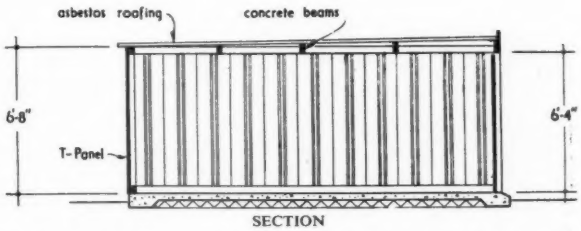


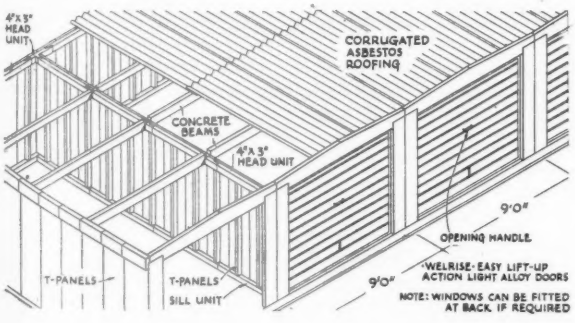
PLAN

This battery of five garages was erected in five days at Weston-super-Mare by a Woolaway building team.

Being space saving, fireproof and of a very neat appearance, these garages are favourably regarded by property owners and local authorities all over the country. T-Panel garages need little or no maintenance and last a lifetime. The dimensions of each garage are length 16' 10½" overall; width 9' 0" centres; height 6' 8". The garages are made of T-Panel lightweight reinforced concrete units which are easy to handle, waterproof and give a high degree of thermal insulation. The units are bolted together with rust-proofed steel bolts. Joints between panels are sealed with weatherproof mastic compound.



SECTION



Roofing is asbestos cement sheeting on precast concrete roof beams. The "Welrise" door is made of swaged light alloy on a steel frame. It is light yet strong, and so balanced that without the use of springs it can be opened or closed with one finger. The door, which can be locked, is weatherproof, slides up under roof beams when open, leaving an unobstructed entrance.

Woolaway are able to supply and erect complete T-Panel Battery Garages anywhere in England and Wales, and are always glad to send quotations and information. They maintain a sufficient stock of units which enable them to fulfil orders with a minimum of delay.

Please write to Specifications Department,

WOOLAWAY CONSTRUCTIONS LIMITED

Head and Registered Office:

11, CANON STREET, TAUNTON, SOMERSET · PHONE: TAUNTON 4496

Works at Bridport, Dorset and Pontyclun, Glam.

W.7

CLASSIFIED ADVERTISEMENTS

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

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

Public and Official Announcements

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

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

LONDON COUNTY COUNCIL.
ARCHITECTS DEPARTMENT.

Vacancies for ARCHITECTS in Schools and Housing Divisions. Salary to £721.

Particulars and application forms, from Architect (AR/EK/A/2), County Hall, S.E.1. (374.) 2266

COUNTY BOROUGH OF SOUTHEND-ON-SEA.
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following established posts:—

CHIEF ASSISTANT ARCHITECT, Grade X (salary: £920×£40 (2)×£50 to £1,050).

SENIOR ASSISTANT ARCHITECT, Grade VII (salary: £735×£25 (3) to £810).

ASSISTANT ARCHITECT, Grade V (salary: £620×£15 (2)×£20 to £670).

(Applicants should be Associate Members of the Royal Institute of British Architects.)

ASSISTANT QUANTITY SURVEYORS:

Grade V. Salary: £620×£15 (2)×£20 to £670.

Grade VI. Salary: £695×£20 (2)×£25 to £760.

Grade VII. Salary: £735×£25 (3) to £810.

(Applicants should be Associate Members of the Royal Institute of Chartered Surveyors.)

The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and the N.J.C. Scheme of Conditions of Service. The successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications and experience, with the names of two persons to whom reference can be made, should be submitted to the Borough Architect, 30, Alexandra Street, Southend-on-Sea, not later than the 30th July, 1954.

ARCHIBALD GLEN,
Town Clerk.
3240

CITY OF STOKE-ON-TRENT.
CITY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(*a*) ASSISTANT QUANTITY SURVEYOR. Salary: A.P.T. Div., Grade VIII (£785-£860).

(*b*) ASSISTANT ARCHITECTS. Salary: A.P.T. Div., Grade V (£620-£670).

Housing accommodation may be made available in approved cases.

Applications, stating date of birth, particulars of training and experience, with copies of two recent testimonials, should be received by J. R. Piggott, T.D., F.R.I.B.A., City Architect, Kingsway, Stoke-on-Trent, Staffs., endorsed with the title of the appointment, not later than 7th August, 1954.

HARRY TAYLOR,
Town Clerk.
3rd July, 1954. 3256

EDINBURGH COLLEGE OF ART.

Applications are invited for the post of ASSISTANT INSTRUCTOR in Building Construction in the School of Architecture. Salary scale: £690×£30—£990 per annum. Commencing salary will be determined according to qualifications and experience.

Applications are also invited for the post of ASSISTANT INSTRUCTOR in the School of Architecture. Salary scale: £690×£30—£990 per annum. Commencing salary will be determined according to qualifications and experience.

Forms of application and conditions of appointment can be obtained from the Secretary, Edinburgh College of Art, Edinburgh, 3, and should be returned to him not later than 30th July, 1954
3283

CORBY DEVELOPMENT CORPORATION.

Applications are invited for:—

CLERK OF WORKS (2). For the supervision of major building contracts. Salary within the scale £575 x £25-£675 (subject to review in September).

The appointments are subject to one month's notice on either side, the provisions of the Local Government Superannuation Act, and to the passing of a medical examination.

Applications, stating age, education, training, qualifications, experience, past and present appointments and salaries, together with the names of two referees, must be received by the undersigned not later than 3rd August, 1954, in envelopes endorsed "Appointments."

Housing available.

R. F. BROOKS GRUNDY,
General Manager.
The Stone House, South Road,
Corby, Northants. 3361

LINDSEY COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Vacancies on the permanent staff for:—

ARCHITECTURAL STAFF:

(*a*) TWO ASSISTANT ARCHITECTS, A.P.T., VII-VIII (£735 to £860). Candidates must be A.R.I.B.A.

(*b*) SENIOR ARCHITECTURAL ASSISTANT, A.P.T., V-VI (£620 to £760). Candidates must be A.R.I.B.A.

(*c*) ARCHITECTURAL ASSISTANT, A.P.T., IV (£580 to £625). Candidates must have passed Inter. R.I.B.A. or equivalent.

(*d*) JUNIOR ASSISTANT, A.P.T., I (£490 to £535). Candidates should be of Intermediate standard, with some period of office practice.

QUANTITY SURVEYORS:

(*e*) SENIOR QUANTITY SURVEYOR, A.P.T., VII (£735 to £810). Candidates must be A.R.I.C.S. or equivalent qualification.

(*f*) JUNIOR QUANTITY SURVEYOR in General Division. Opportunity for an entrant into the profession.

(*g*) ELECTRICAL ASSISTANT, Miscellaneous, Grade VI (£550 to £610). Experience in preparation of schematic plans and specifications.

(*h*) TWO BUILDING INSPECTORS, A.P.T., IV (£580 to £625). Duties in connection with repair and minor improvement of County Buildings, preference for persons able to prepare rough estimates, explanatory drawings, and brief specifications.

Allowance of 25s. per week and return fare home bi-monthly may be paid up to six months to married men unable to find housing accommodation.

N.J.C. Conditions of Service. Canvassing will disqualify. Candidates must disclose in writing whether to their knowledge they are related to any member or senior officer of the Council.

Applications, stating age, qualifications and experience, with names of two persons to whom reference can be made, to be sent to the undersigned by 7th August, 1954.

A. RONALD CLARK, A.R.I.B.A., A.M.T.P.I.,
County Architect.
County Offices, Lincoln. 3355

CITY OF LIVERPOOL.
EDUCATION COMMITTEE.
COLLEGE OF BUILDING.
Clarence Street, Liverpool, 3.

Principal: T. E. Hall, Dip.Arch. A.R.I.B.A.

Applications are invited for the following appointment (full-time). (Duties to commence 1st September, 1954.)

ASSISTANT, GRADE B, to teach ARCHITECTURE in the Department of Building and Professional Studies to the standard of the Final Examination of the Royal Institute of British Architects.

Salary, £490 x £25 to £765 p.a. (men); £437 x £20 to £612 p.a. (women).

The correct position at entry will be determined by the length of industrial or professional, teaching and war service of the candidate. Increments of £18 (£15 for women), up to a maximum of 12, may be allowed for time spent in industry or in professional work.

Additions to the scale for training and graduate qualifications are payable up to a maximum of £114 per annum (men); £93 per annum (women).

Applicants must possess the appropriate professional qualification and professional or industrial experience. Teaching experience is desirable.

Application forms and further particulars may be obtained on receipt of a stamped, addressed envelope, from H. S. Magnay, Director of Education, 14, Sir Thomas Street, Liverpool, 1, to whom completed applications should be returned within two weeks of the appearance of this advertisement.

THOMAS ALKER,
Town Clerk and Clerk to the Local Education Authority.
3328

BOROUGH OF REIGATE.

ARCHITECTURAL ASSISTANT required, A.P.T., IV. Intermediate Examination R.I.B.A. desirable. Previous experience in design of buildings and estate development required. Housing accommodation for married man. Application forms from Borough Engineer, Town Hall, Reigate, returned to him endorsed "Architectural Assistant," by 6th August, 1954.

HEBER DAVIES,
Town Clerk.
3340

BOROUGH OF EDMONTON.

QUANTITY SURVEYING ASSISTANT (Established) required for Borough Architect's Department. Candidates must have passed Intermediate or Final R.I.C.S. Salary within A.P.T. IV/V, £580 rising to £670 plus London weighting £10—£30 according to age. Interesting work including multi-storey flats.

Applications on forms from the Town Clerk, Town Hall, N.9, to be delivered by 6th August.
3366

COUNTY BOROUGH OF NEWPORT.

Applications are invited for the appointment of PLANNING ASSISTANT, Grade A.P.T., I.—Salary £490-£535. A University Degree, preferably in geography or sociology and/or previous planning experience is desirable. The post is superannuable and subject to a medical examination. Canvassing will disqualify.

Applications, stating age, qualifications and experience and names of two referees to be forwarded to Borough Engineer, Civic Centre, Newport, Mon., by 4th August. 3367

NORTH-EAST METROPOLITAN REGIONAL HOSPITAL BOARD.
REGIONAL ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

ASSISTANT ARCHITECT (£600×£25 (7)×£30 (3)—£865, plus London weighting, £20-£40). Applicants must be Registered Architects and should be able to make working drawings of new buildings and alterations to existing ones. Hospital experience not essential.

ARCHITECTURAL ASSISTANT (£440 (21 years or over)×£25 (1)×£20 (8)—£625, plus London weighting, £20-£30). Applicants must have passed the Intermediate Examination of the R.I.B.A. (or equivalent), and be able to make working drawings of new works, surveys, and take levels.

ASSISTANT QUANTITY SURVEYOR (£600×£25 (7)×£30 (3)—£865, plus London weighting, £20-£40). Candidates must be Corporate Members of the R.I.C.S., having qualified in Quantities (Sub-Div. III), or, under certain circumstances, Associate Members of the Institute of Quantity Surveyors. The duties will comprise taking off, billing, and abstracting, preparation of preliminary estimates, site measurements and valuation of works in progress, and the preparation of final accounts. Experience in works of alteration will be an advantage.

QUANTITY SURVEYOR'S ASSISTANT (£440 (at age 21 or over)×£25 (1)×£20 (8)—£625, plus London weighting, £20-£30). Candidates must have passed the Intermediate Examination of the R.I.C.S. in Quantities (Sub-Div. III) (or equivalent). The duties will comprise mainly "working up" and assisting generally in the preparation of final accounts, etc.

Commencing salaries for these posts may be advanced beyond the minima on grounds of experience as follows:—

(*a*) Assistant Architect and Assistant Quantity Surveyor; by not more than one increment for each year of professional experience over age 25.

(*b*) Architectural Assistant and Quantity Surveyor's Assistant; up to £525 per annum.

Applications, giving age, present salary, qualifications and experience (with dates), together with the names of two referees, should be sent to The Secretary, North-East Metropolitan Regional Hospital Board, 11a, Portland Place, W.1, within 14 days. 3308

BOROUGH OF ILFORD.
BOROUGH ENGINEER'S DEPARTMENT.

(*a*) *QUANTITY SURVEYING SECTION.*—(1) ONE ASSISTANT QUANTITY SURVEYOR, Grade A.P.T., VI. Salary: £695-£760 p.a. Applicants should be prospective or qualified Chartered Quantity Surveyors, and be fully experienced in the preparation of Quantities, Specifications, site measuring and estimates for all classes of building works.

(2) JUNIOR ASSISTANT QUANTITY SURVEYOR, Grade A.P.T., I/II. Salary: £490-£565. Applicants should have passed the A.R.I.C.S. first examination and be experienced in working up and measuring up on site.

(*b*) *ARCHITECTURAL SECTION.* — ONE SENIOR ASSISTANT ARCHITECT, Grade A.P.T., VII/VIII. Salary: £735-£860 p.a. Applicants should be Associate Members of the R.I.B.A. and have a thorough knowledge of architectural works, with practical experience in the design and development of buildings of all types, preference being given to candidates with specific experience in post war housing schemes, including flats.

Appropriate London weighting will be paid in addition to all salaries above mentioned.

THE COUNCIL IS PREPARED, IF NECESSARY, TO CONSIDER THE PROVISION OF HOUSING ACCOMMODATION IN CONNECTION WITH ALL THESE APPOINTMENTS.

The appointments will be superannuable and subject to medical examination.

Application forms may be obtained from the Town Clerk, Town Hall, Ilford, Essex, to whom they must be returned not later than Saturday, 7th August, 1954. Applicants should clearly state the position in respect of which application forms are required. 3346

MIDDLESEX COUNTY COUNCIL—COUNTY ARCHITECT'S DEPT.

ASSISTANT ARCHITECTS, A.P.T., VI (£695-£760 p.a., plus London weighting). Appointments at grade minimum. Unestablished, subject to prescribed conditions. Must be Registered Architects and experience of design of School Buildings advantage. Application forms (stamped addressed foolscap envelope) from County Architect, 1, Queen Anne's Gate Buildings, Dartmouth Street, S.W.1, returnable by 3rd August (quote N.797 AJ). Canvassing disqualifies. 3318

COUNTY BOROUGH OF WOLVERHAMPTON.
PLANNING STAFF.

Applications are invited for the appointment of PLANNING ASSISTANT, Grade A.P.T., III (£550-£595 p.a.), in the Department of the Borough Engineer and Planning Officer.

Candidates should have had appropriate training and Town Planning experience.

Appointment subject to N.J.C. conditions and to one month's notice on either side. Superannuated post, subject to medical examination.

Applications, with full details of education, training, and experience, and two testimonials or names for reference, to Borough Engineer and Planning Officer, Town Hall, Wolverhampton, by 25th July.

A. G. DAWTRY,
Town Clerk.
Town Hall, Wolverhampton. 3317

OXFORD REGIONAL HOSPITAL BOARD.
Applications are invited from qualified persons for the post of SENIOR ASSISTANT QUANTITY SURVEYOR in the Regional Architect's Department. Commencing salary: £875 p.a., rising by annual increments of £30 to £1,025 p.a. Compulsory superannuation. A car is necessary. Applications, stating age, training, qualifications, previous experience and present salary, with the names of two referees, should be submitted to the Secretary, Oxford Regional Hospital Board, 43, Banbury Road, Oxford, by not later than 14th August, 1954. 3296

THE UNIVERSITY OF LIVERPOOL.
Applications are invited for the post of LECTURER AND STUDIO INSTRUCTOR in the School of Architecture. The initial salary will be within the range £550-£850, according to qualifications and experience.
Candidates will be expected to have had several years of experience in practice, and preference will be given to those with special knowledge of building science and construction, or with interest in pursuing architectural research in historical social or structural fields.
Applications, stating age, qualifications and experience, together with the names of three referees, should be received not later than 31st July, 1954, by the undersigned, from whom further particulars may be obtained.

STANLEY DUMBELL,
Registrar.
3273

CHESTERFIELD HOSPITAL MANAGEMENT COMMITTEE.
BUILDING FOREMAN required in Group Engineer's Department Applicants should hold an Ordinary National Certificate in building or comparable qualification, and must have served full apprenticeship and gained experience as a general foreman
Duties will include supervision of building maintenance work, measuring and quantities, preparing specifications and drawings, and estimating for repairs and adaptations. Salary scale £610-£710 per annum, and Whitley Council conditions of service.
Applications, stating age, qualifications, experience and the names and addresses of two referees to M. H. Boone, Secretary, Royal Hospital, Chesterfield, by 31st July, 1954. 3350

BOROUGH OF LUTON.
TECHNICAL STAFF.
Applications are invited for ARCHITECTURAL ASSISTANTS (salary between General Division at £170 per annum and A.P.T. V at £620, according to qualifications and experience). Previous experience of schools and housing work an advantage.
Appointments are subject to National Conditions of Service and Local Government Superannuation Acts, 1937/1953.
Particulars of age, qualifications, experience, previous and present appointments and salary, with names of two referees, to the Borough Engineer, Town Hall, Luton, by 3rd August.

A. D. HARVEY,
Town Clerk.
3353

METROPOLITAN BOROUGH OF FULHAM.
ASSISTANT ARCHITECT.
Borough Architect's and Housing Department. Salary A.P.T. VI £695-£760 plus London weighting £30 p.a. over 26 years. Applicants should be registered architects. Experience in planning and designing schemes of multi-storey flats, handling jobs in progress and in dealing with contracts essential. Application forms from me. Closing date 4th August.

CYRIL F. THATCHER,
Town Clerk.
Town Hall, Fulham, S.W.6.
3365

COUNTY BOROUGH OF PRESTON.
APPOINTMENT OF ASSISTANT ARCHITECTS.
Applications are invited for the following appointments on the staff of the Borough Engineer and Surveyor's Department:—
(1) SENIOR ARCHITECTURAL ASSISTANT (EDUCATION), Grade VIII, A.P.T. (£785-£860).
(2) SENIOR ARCHITECTURAL ASSISTANT, Grade VI, A.P.T. (£695-£760).
Applicants must be Registered Architects, and preferably Corporate Members of the Royal Institute of British Architects, with good experience in design and control of contracts. Experience in design of houses and Public Buildings, and particularly in the case of appointment (1)—of schools—will be an advantage.
The form of application, obtainable with conditions of appointment from my office, should be completed and returned to me not later than the 12th August, 1954.

W. E. E. LOCKLEY,
Town Clerk.
Municipal Building, Preston. 3310

ARCHITECTURAL ASSISTANT required by the GOVERNMENT OF ADEN P.W.D. for one tour of 18-24 months in the first instance. Salary scale (including pay differential): £930, rising to £1,452 a year. Gratuity at rate of £100-£150 a year. Outfit allowance £60. Liberal leave on full pay. Free passages. Furnished quarters available at moderate rent. Candidates must have passed the Intermediate Examination of the R.I.B.A., and have had at least two years' practical experience in a Drawing Office. Write to the Crown Agents, 4, Millbank, London, S.W.1, State age, name in block letters, full qualifications and experience, and quote M2B/30684/AG. 3336

BOROUGH OF BARKING.
DEPARTMENT OF THE BOROUGH ARCHITECT.
The following vacancies occur on the established staff:—
TWO QUANTITY SURVEYING ASSISTANTS, Grade A.P.T., VI (£695-£760).
ONE SENIOR ASSISTANT ARCHITECT, Grade A.P.T., V-VI (£620-£760).
ONE ASSISTANT ARCHITECT, Grade A.P.T., III-V (£550-£670).
ONE ASSISTANT ARCHITECT, Grade A.P.T., I-V (£490-£670).
ONE ARCHITECTURAL ASSISTANT, General Division (£170 at age 16 years, rising to a maximum of £470).
These salaries are subject to the addition of London weighting, which is £10 per annum at age 16, increasing to £20 per annum at age 21 years, and £30 at age 26 years.
Application forms, together with further details of the appointments, may be obtained from the Borough Architect, Town Hall, Barking, Essex, and completed applications should reach the undersigned not later than 9 a.m., 6th August, 1954.

E. R. FARR,
Town Clerk.
Town Hall, Barking, Essex. 3354

BRANDON AND BYSHOTTLES URBAN DISTRICT COUNCIL.
ARCHITECT'S DEPARTMENT.
Applications are invited for TWO ARCHITECTURAL ASSISTANTS in the above Department, at a salary applicable to Grade II of the National Scheme of Conditions of Service for Local Authorities Administrative, Professional, Technical and Clerical Services. The appropriate scale commences at £520 per annum, and rises to £565 by £15 increments.
The appointments will be of a temporary nature, with the prospect of a fair period of employment, and candidates should have a good general experience, particularly in the design and layout of Municipal Housing Schemes.
The appointments will be terminable by one month's notice, in writing, on either side.
Form of application can be obtained from the undersigned, and it will be necessary for applicants to declare whether or not they are related to any member or senior officer of the Council. Closing date for applications: Thursday, 29th July, 1954.

A. A. LUXMOORE,
Clerk to the Council.
Clerk's Office, Browney House,
Browney Colliery, Durham.
8th July, 1954. 3314

DERBY CORPORATION.
BOROUGH ARCHITECT'S DEPARTMENT.
SENIOR QUANTITY SURVEYOR, Grade VI. Salary: £695-£760, commencing at £695 per annum.
Candidates should have had considerable experience in taking off quantities for large building projects and in the settlement of final accounts.
Preference will be given to qualified members of the Royal Institution of Chartered Surveyors (Quantities Section).
Permanent staff appointment, subject to one month's notice and pensionable subject to medical examination.
National Conditions of Service.
Form of application obtainable from, and to be returned to, the Borough Architect, The Council House, Derby, not later than 4th August, 1954.

G. H. EMLYN JONES,
Town Clerk.
3331

CITY OF LIVERPOOL.
EDUCATION COMMITTEE.
COLLEGE OF BUILDING.
Clarence Street, Liverpool, 3.
Principal: T. E. Hall, Dip. Arch., A.R.I.B.A.
Applications are invited for the appointment of an ASSISTANT LECTURER, (Grade "A"), in the Department of Building Trades. Duties to commence, if possible, on 1st September, 1954.
Salary (at present)—£415 x £18 to £670 p.a. with additions for experience and training.
Applicants must possess technical qualifications and experience appropriate to the teaching of MATHEMATICS and SCIENCE to students preparing for Final City and Guilds of London Institute Examination in a wide range of building craft subjects. Teaching experience is desirable.
Application forms and further particulars, may be obtained from H. S. Magnay, M.A., Director of Education, Education Offices, 14, Sir Thomas Street, Liverpool, 1, to whom completed forms should be returned within two weeks of the appearance of this advertisement.

THOMAS ALKER,
Town Clerk and Clerk to the Local Education Authority.
3329

CORPORATION OF GLASGOW.
Architectural and Planning Department.
ASSISTANT ARCHITECTS
ASSISTANT QUANTITY SURVEYORS.
Applications are invited from persons having general experience and holding the A.R.I.B.A. qualification or the A.R.I.C.S. qualification. Scale £520-£870, with placing according to age and experience. Posts are superannuable subject to medical examination. Form of application may be obtained from the Principal Administrative Officer, 20 Trongate, Glasgow, C.1.

A. G. JURY,
City Architect and Planning Officer.
3360

METROPOLITAN BOROUGH OF WANDSWORTH.
ARCHITECTURAL ASSISTANTS.
Applications are invited for the appointments of:—
(*a*) ASSISTANT ARCHITECT, unestablished (A.P.T., 5A-6—£680-£790 p.a.).
(*b*) ARCHITECTURAL ASSISTANT, established (A.P.T., 1-5—£520-£700 p.a.).
Applicants for (*a*) must be Associates of the Royal Institute of British Architects, and have had some experience in the design and planning of houses and flats.
The person appointed to post (*b*) will be graded according to the qualifications and experience prescribed in par. 21 (8) (xi) of the National Scheme.
Application forms, obtainable from the Borough Engineer, must be returned to me by 31st July, 1954.

R. H. JERMAN,
Town Clerk.
Municipal Buildings, Wandsworth, S.W.18.
9th July, 1954. 3316

CITY OF SHEFFIELD.
APPOINTMENT OF CHIEF CLERK OF WORKS (HOUSING), GRADE A.P.T., VII.
(Salary: £735-£810.)
Applications are invited from appropriately qualified persons for this appointment on the staff of the City Architect, Mr. J. L. Womersley, A.R.I.B.A., A.M.T.P.I.
Candidates must have a sound knowledge of all branches of building trades, including the construction of roads and sewers, and several years' experience as a Clerk of Works.
The successful candidate, in addition to personally supervising certain contracts, will be responsible for the co-ordination of the duties of the other Clerks of Works in the Housing Section.
Applications, stating age, present and past appointments (with dates and salaries), and full particulars of qualifications and experience, accompanied by names and addresses of two persons to whom reference may be made, should reach the undersigned not later than 31st July, 1954.

JOHN HEYS,
Town Clerk.
Town Hall, Sheffield, 1. 3347

COUNTY COUNCIL OF SUTHERLAND.
COUNTY ARCHITECT'S DEPARTMENT, DORNOCH.
Applications are invited for the appointment of ASSISTANT ARCHITECT in the County Architect's Department, Dornoch, Sutherland.
The salary will be in accordance with Grade Va of the A.P.T. Division of the N.J.I.C. Scheme, *i.e.*, £660 by annual increments of £20 to £720.
The appointment will be subject to termination by one month's notice in writing on either side; to the provision of the Local Government Superannuation (Scotland) Act, 1937, and to conditions of service of the National Joint Industrial Council. The successful candidate will require to pass a medical examination.
Applications, stating age, qualifications, present and past appointments, and details of experience, together with the names of three referees, should be forwarded to the undersigned within 14 days of the date of appearance of this advertisement.

A. J. MACRAE,
County Clerk.
County Offices, Golspie, Sutherland.
8th July, 1954. 3307

BOROUGH OF FINCHLEY.
TEMPORARY ARCHITECTURAL ASSISTANT.
HOUSING AND TOWN PLANNING DEPARTMENT.
Salary: A.P.T., Grade IV (£580-£625), or A.P.T., Grade V (£620-£670), plus London weighting, according to qualifications.
Candidates must have reached R.I.B.A. Intermediate standard, and have at least two years' practical office experience in housing work.
The National Scheme of Conditions of Service and the Local Government Superannuation Acts apply, and medical examination required.
Applications, stating age and full particulars of qualifications and experience, with the names of two referees, to the Borough Housing and Town Planning Officer, The Avenue, Finchley, N.3, by first post on Monday, the 26th July, 1954.

R. M. FRANKLIN,
Town Clerk.
3341

NATIONAL COAL BOARD—NORTH-EASTERN DIVISION.
Applications are invited for the appointment of ARCHITECTURAL ASSISTANT, Grade II, on the staff of the Divisional Chief Architect at Denaby Main, near Doncaster. Salary scale: £440×£20 to £540 per annum, and the appointment will be superannuable.
Applicants should have passed the Intermediate Examination of the R.I.B.A., and have had some subsequent practical experience, and should be able to prepare Sketch Plans and Working Drawings under supervision, and have a sound knowledge of building construction.
The work in this office will consist chiefly of Pithead Baths, Canteens, Medical Centres, Offices, Laboratories, etc.
The point of entry in the above scale will depend on qualifications and experience.
Application forms may be obtained from the Divisional Chief Architect, J. A. Dempster, F.R.I.B.A., and on completion should be returned to him at the above address not later than 5th August. 3338

EASTERN ELECTRICITY BOARD.
ESSEX SUB-AREA.
VACANCY:
ARCHITECTURAL DRAUGHTSMAN

Applications are invited for the above position in the Essex Sub-Area Drawing Office, Near Brentwood, Essex.

Candidates should have had a good technical training in building construction. Duties would be the preparation, under supervision, of plans and detailed drawings in connection with offices, showrooms, workshops and substation buildings.

The salary would be in accordance with the National Joint Board Agreement—Schedule "D," Grade 6, £458 to £595 7s. inclusive of London weighting, depending upon qualifications and experience.

Future salary and conditions of service will be in accordance with agreements made from time to time by the appropriate negotiating bodies.

The successful candidate will be required to contribute to a superannuation scheme.

Applications by letter, stating age, education, qualifications and experience with details of present employment, should be submitted to the Manager, Essex Sub-Area, Eastern Electricity Board, "Millfield," Bentley, Nr. Brentwood, Essex, within 14 days of the appearance of this advertisement. 3352

URBAN DISTRICT COUNCIL OF ENFIELD.
APPOINTMENT OF ARCHITECTURAL ASSISTANT (GRADE V).

Applications are invited for the appointment of Architectural Assistant. Candidates should have good general experience, of which Housing will be an advantage.

The salary will be in accordance with Grade V (£620 to £670) of the A.P.T. Division, and will be plus the London weighting of £30.

The appointment will be subject to:—

1.—The Conditions of Service adopted by the National Joint Council for Local Authorities Administrative Professional Technical and Clerical Services and the Council's General Conditions of Service relating to permanent staff as made from time to time.
2.—The provisions of the Local Government Superannuation Acts.
3.—The passing of a medical examination.
4.—Determination by one month's notice on either side.

Forms of application may be obtained from Mr. Frank Lee, M.Inst.C.E., F.S.I., Engineer and Surveyor, "Percy House," 7, Little Park Gardens, Enfield, and should be returned to the undersigned on or before the 29th July, 1954, in an envelope endorsed "Architectural Assistant, Grade V."

Candidates must state whether they are related to any member or officer of the Council.

Canvassing will disqualify.

CYRIL E. C. R. PLATTEN,
Clerk of the Council.

Public Offices, Enfield.
July, 1954. 3312

COUNTY BOROUGH OF MERTHYR TYDFIL.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment on the permanent staff in accordance with A.P.T. Division, Grades 4 (£580-£625) to 6 (£695-£760), according to qualifications and experience.

Housing accommodation will be provided if required.

Applicants should have had experience in the preparation of plans, specifications, etc., for architectural work (including schools) usually undertaken by a local authority.

Appointments will be subject to the National Conditions of Service, the Local Government Superannuation Acts, a medical examination, and to termination by one month's written notice on either side.

Applications, stating age, training, qualifications, experience, past and present appointments and present salary, together with three copies of recent testimonials, must be received by the undersigned not later than 24th July.

Canvassing, directly or indirectly, will disqualify as well as failure to disclose relations with any member of the Council or Senior Officer.

T. S. EVANS,
Town Clerk.

Town Hall, Merthyr Tydfil.
9th July, 1954. 3313

BOROUGH OF WALTHAMSTOW COMMITTEE FOR EDUCATION.
ARCHITECTS' DEPARTMENT.

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

ARCHITECTURAL ASSISTANT, at a salary of £580, rising by increments of £15 to £625 per annum (Grade A.P.T., IV, of National Scales).

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

Form of application should be obtained from and returned to the Borough Education Officer, Town Hall, Forest Road, Walthamstow, E.17, within three weeks of the appearance of this notice. 3309

COUNTY BOROUGH OF BARROW-IN-FURNESS.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
QUANTITY SURVEYOR.

Applications are invited for the permanent post of Quantity Surveyor, Grade VII (£735-£810 p.a.), at a salary of £810 p.a. Candidates should preferably be Associates of the Royal Institution of Chartered Surveyors.

It is possible that the Council will allocate a Corporation house for the post, subject to the merits of the case being satisfactory to the interviewing Committee.

Further details and forms of application may be obtained from the Borough Engineer and Surveyor, Town Hall, Barrow-in-Furness, to whom applications must be returned not later than Tuesday, 3rd August, 1954.

LAWRENCE ALLEN,
Town Clerk.

Town Hall, Barrow-in-Furness. 3330

BOROUGH OF KEIGHLEY.
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments on the permanent staff:—

(*a*) ONE ASSISTANT ARCHITECT, Grade A.P.T., IV. Salary scale: £580-£625.
(*b*) ONE ASSISTANT ARCHITECT, Grade A.P.T., II. Salary scale: £520-£565.
(*c*) ONE QUANTITY SURVEYING ASSISTANT, Grade A.P.T., I. Salary scale: £490-£535.

Applicants for positions (*a*) and (*b*) should possess general architectural experience; knowledge of School work an advantage for position (*a*).

Applicants for position (*c*) to have sound practical experience of measuring and valuation for interim certificates and final measurement, in connection with Housing Contracts.

Conditions of service and salaries are in accordance with the National Joint Council Scheme for Local Authorities.

Applications to be made upon the prescribed form, to be obtained from the undersigned, to whom same must be returned, accompanied by copies only of two recent testimonials, not later than first post Wednesday, 4th August, 1954.

E. G. FELGATE, A.R.I.B.A.,
Borough Architect.

Borough Architect's Department,
College Street, Keighley. 3345

COUNTY BOROUGH OF DONCASTER.
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of JUNIOR QUANTITY SURVEYING ASSISTANT, A.P.T., Grade III (£550-£595).

Applicants must have received proper training as a Quantity Surveyor and have reached Intermediate standard R.I.C.S., and be competent to assist in the preparation of bills of quantities and the settlement of accounts.

Applications, stating date of birth, particulars of training and experience, present appointment and salary, together with copies of two recent testimonials, should be received by the undersigned not later than 10 a.m. Saturday, the 31st July, 1954.

Canvassing, directly or indirectly, will be a disqualification.

H. R. WORMALD,
Town Clerk.

1, Priory Place, Doncaster.
July, 1954. 3319

BOROUGH OF BEXLEY.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of an ASSISTANT ARCHITECT (General) at a salary in accordance with Grade A.P.T., V (£620-£670 per annum, plus London "weighting").

Candidates should have experience in housing, school and other building projects, and preference will be given to applicants who have passed the Final R.I.B.A. examination or are Registered Architects.

Forms of application with conditions of appointment may be obtained from Borough Engineer and Surveyor, West Lodge, Broadway, Bexleyheath, to whom completed applications must be returned by 9th August, 1954.

Canvassing, directly or indirectly, will disqualify.

W. WOODWARD,
Town Clerk.

Council Offices, Bexleyheath, Kent. 3380

Architectural Appointments Vacant

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

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

JUNIOR ASSISTANT required September busy private office West Central London. Write Box 3287.

ASSISTANT (at Intermediate stage) required for Architects' London office engaged in major works of restoration and construction of Schools and Colleges. Appointment offers excellent opportunities for supervision of works and calls for a candidate with initiative. Salary £350-£450 per annum. Box 2974.

A SENIOR ARCHITECTURAL ASSISTANT required, full experience in preparation of Working Drawings, Details, and supervision of office and Industrial Buildings in the London Area. Good knowledge of construction and design essential. Apply in writing giving full particulars of qualifications, age, experience and salary required to Box 9829.

SENIOR AND JUNIOR ARCHITECTURAL ASSISTANTS and Draughtsmen or women required in busy office in the Home Counties. Some experience essential. Large varied practice. Please state experience and salary required. Box 2137.

ECCLESIASTICAL ARCHITECT has vacancy for an ASSISTANT of Intermediate Standard who would be interested in old and new church work. Lawrence H. Bond, 11, Elmer Street, Grantham, Lincs. 2650

RILEY & GLANFIELD require one SENIOR ASSISTANT ARCHITECT for work on Churches, Private Houses, Factories, Shops, Flats, etc. CHA. 7328. 2967

ARCHITECTS' ASSISTANTS required by a large Chain Store organisation. Commencing salary £600 to £750 per annum, according to experience. Staff canteen. Pension scheme. Write Box AJ 333, LPE, 110, St. Martin's Lane, W.C.2. 3048

WEST END office, with varied practice, requires male ARCHITECTURAL ASSISTANTS, having a contemporary outlook and some experience in office block and shop design. Salary: £550-£600 p.a. Details (age, experience, previous employment, etc.), to Box 3186.

ASSISTANT for general practice in Midlands. One about to finish 3- or 5-year School course suitable. Box 2960.

ARCHITECTURAL ASSISTANT, between Inter. and Final R.I.B.A. standard, required in Reading office of Chartered Architects. Applicant must be capable of preparing working drawings, details, and specifications. Salary: £500 to £550. All details to Box 3214.

WEST END Firm of Architects require JUNIOR staff, with office experience. Capable working drawings. Salary: £350-£500 per annum. 5-day week. Box 3145.

ARCHITECTURAL ASSISTANT, between Inter. and Final R.I.B.A. standard, required in Reading office of Chartered Architects. Applicants must be capable of preparing working drawings, details, etc. Apply in writing, giving full particulars, age, and salary required, to Box 3149.

ARCHITECTURAL ASSISTANT, Intermediate R.I.B.A. standard, with office experience, required in busy Lincolnshire office. State age, experience, and salary required. Box 3230.

CLIFFORD TEE & GALE, F./F.R.I.B.A., require ARCHITECTURAL ASSISTANT, for industrial work in their office at 43, Frederick Road, Birmingham, 15. 5-day week. 3162

EAST MIDLANDS.—Chartered Architect, with varied practice, requires ASSISTANT, up to Intermediate standard. Salary according to experience. State full details. Box 3270.

SLOUGH ESTATES, LTD., require an ARCHITECTURAL ASSISTANT, with at least three years' experience, and capable of preparing working drawings of factories and other buildings, estate layouts, etc., with the minimum of supervision. The work is interesting, and carries the benefits of pension and sickness schemes. Five-day week, except for one Saturday in four. Brief particulars, please, of age, experience, and salary required, to The Architect, Slough Estates, Ltd., Trading Estate, Slough. 3276

ARCHITECT'S SENIOR ASSISTANTS required for private office in London, E.C., with widely varied practice. Must be Associate R.I.B.A., and preferably with not less than three years' practical office experience. Reply, giving age, full particulars of qualifications and experience, and stating salary required. Box 3243.

ARCHITECTURAL ASSISTANT required. Intermediate standard, with some office experience, for small busy practice. Shaw & Lloyd, F.R.I.B.A., 74, Gt. Russell Street, W.C.1. Museum 9693. 3244

YOUNG ARCHITECTURAL DRAUGHTSMAN required for London Office; full particulars and salary required to Box 3542.

CO-OPERATIVE WHOLESALE SOCIETY, LTD., ARCHITECT'S DEPARTMENT, LONDON. APPLICATIONS are invited for the following appointments:—

(*a*) ASSISTANT ARCHITECTS, of Intermediate and Final R.I.B.A. standard (salary range: £320-£680 per annum, according to age and experience), for work on varied and interesting projects.

(*b*) WORKER-UP (commencing salary up to £600 per annum, according to age and experience). The appointments are permanent and offer prospects of up-grading.

Successful candidates will be required to undergo medical examination for compulsory superannuation scheme.

Applications, stating age, experience, qualifications and salary required, to W. J. Reed, F.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 99, Leman Street, London, E.1. 3248

SENIOR ARCHITECTURAL ASSISTANT required by Architects and Surveyors; excellent prospects. Full particulars to A. T. Butler & Partners, 31, Priory Street, Dudley, Worcs. 3250

ARCHITECTURAL ASSISTANT (about 25-30 years old) required in London Architect's Department. Should have passed R.I.B.A. Inter., and must have had some years' experience in Architect's office. Secure future for suitable applicant. Write, stating age, details of past work and salary required. Box 3251.

ARCHITECTURAL ASSISTANT required in busy office, Leeds. Office experience essential. Fully qualified preferred. Excellent future prospects. Reply in confidence, giving full experience and salary required. Box 3258.

4 ARCHITECTURAL ASSISTANTS required for office in London area, preferably up to or over Intermediate R.I.B.A. standard, with experience in Industrial and Commercial work and with knowledge of Surveying. Salary about £500 p.a., according to qualifications and experience. Apply, giving details, to Box 3266.

ARCHITECTURAL ASSISTANT required by Architects' Department, of between Intermediate and Final standards, capable of seeing job through from start to finish. Canteen facilities, alternate Saturdays, contributory pension scheme. Salary according to age and experience. Apply MacFisheries, Ltd., Architects' Dept., 10/12, Little Trinity Lane, E.C.4. Reference MG/BT/D. 3228

GOOD salary offered to keen ARCHITECTURAL ASSISTANT of Intermediate standard; small office in North London area; must be good draughtsman and have good general experience in a private office. Reply with brief details of experience, age, etc., to Box 3158.

REEMA CONSTRUCTION LTD., MILFORD MANOR, SALISBURY, require DRAUGHTSMEN; additional draughtsmen required. Sound experience of building details for work on precast concrete prefabricated houses and other buildings up to £600 a year. YOUNG ARCHITECT. The position advertised has been filled. 3292

ASSISTANT (at intermediate stage) required for Architects' London office engaged in major works of restoration and construction of Schools and Colleges. Appointment offers excellent opportunities for supervision of works and calls for a candidate with initiative. Salary £350-£700 per annum. Box 2909.

JUNIOR ARCHITECTURAL ASSISTANT about R.I.B.A. intermediate standard, required immediately in contemporary London Office. Work will entail preparation of working drawings and details. Please write giving experience and salary required. Box 3311.

URGENTLY REQUIRED: A.R.I.B.A. with experience to be in charge of large Industrial Project. Salary commensurate with responsibility. Waterhouse & Ripley, Staple Inn Buildings, High Holborn, W.C.1. (Tel.: HOL 2399). 3344

ARCHITECTURAL DRAUGHTSMAN for shopfitting and display work. Site surveys in various parts of the country. Interesting work. Yearly agreement. State salary. Free-lance applicants considered. Box 3356.

WANTED.—JUNIOR ASSISTANT (age 17-21), in Architect's and Surveyor's office, Curzon Street. Free lunches. One Saturday on in three. Salary according to age and experience. Box 3357.

SENIOR ARCHITECTURAL ASSISTANT required in Central London office. Experience of shops and shopfitting an asset. Please write to Box 3358, stating age, experience, and salary required.

NEWLY formed Architects' Section of a manufacturing company, specialising in timber structures, requires further staff. Applications are invited from:

(1) Qualified school trained men up to 30 years of age, with a minimum of one year's experience. Enthusiasm essential. The position is an attractive one, offering security and interest.

(2) ARCHITECTURAL DRAUGHTSMAN, experienced in the preparation of working drawings and surveys. Interesting work, with good prospects.

Applications, stating age, training and experience, to: Company Architect, Vic Hallam, Ltd., Valley Works, Langley Mill, Nottingham. 3359

ARCHITECTURAL ASSISTANT required in busy West End office engaged on commercial work. Able to prepare sketch schemes and working drawings. Ability to prepare perspectives an asset. Reply stating age, experience and salary required to Box 3339.

ARCHITECTURAL DRAUGHTSMAN required for large Birmingham Engineering Company. Applicant should be experienced Draughtsman in minor survey work, specification and quantities, preparation ½ scale details. Vacancy offers opportunity for young man who has either completed his military service or is exempted. Apply, giving age, complete details of experience, etc., and salary required, to Personnel Manager, Fisher & Ludlow, Ltd., Albion Works, Kingsbury Road, Erdington, Birmingham, 24. 3384

REQUIRED at Company's Head Office, Guildford, ARCHITECTURAL ASSISTANT. A.R.I.B.A. Varied work, mainly factory. Five-day week. Salary by arrangement. Box 3334.

ARCHITECTURAL ASSISTANT required for private practice in S.W. London. Inter. R.I.B.A. Standard with at least 2 years office experience. Salary according to experience and ability. Write stating full particulars to Box 3333.

ARCHITECT with some office experience required by S.W. London firm of Building Contractors for design and layout of new housing schemes around London. Replies to state age, experience and salary required to Box 3332.

CARDIFF Architects require ASSISTANT of Intermediate Standard for varied and interesting work. Box 3325.

QUALIFIED ASSISTANT—R.I.B.A. Finals—age 25/30 for Bournemouth Office. Must carry out contracts from sketches to final accounts. Reply stating salary required and when free. Box 3322.

NORTHERN IRELAND office requires a CHIEF ASSISTANT to take charge of school building section. Interest in design and experience in contractual procedure essential. Salary from £800 p.a. 3321

SENIOR ARCHITECTURAL ASSISTANT required with minimum qualification of Intermediate R.I.B.A. Preference will be given to applicants having several years of office experience in the design of industrial buildings and housing. Write stating age and details of experience and qualifications to: Staff Officer, Handley Page Ltd., Cricklewood, London, N.W.2. 3306

AN exceptional vacancy for qualified experienced ASSISTANT ARCHITECT with old established Birmingham Firm; varied, good class practice. Highest references required, prospects of partnership for suitable applicant after a period of satisfactory service. Apply full particulars of age, training experience and Salary to Box 3320.

ARCHITECTURAL ASSISTANT required for expanding City practice. Quick and accurate draughtsman with sound knowledge of construction. Minimum five years office experience. Salary £500-£700 according to qualifications. Apply with full details to Box 3362.

DRAUGHTSMAN, with knowledge of building construction, required by designers and builders of non-traditional Houses. Scope for advancement. Starting salary, £8 10s. weekly. Unitroy, Ltd., 31/33, High Holborn, W.C.1. 3385

LADY ARCHITECTURAL ASSISTANT required in West End Architect's office for contemporary work. 5-day week. Write with full details, including salary required.

JUNIOR ASSISTANTS, Intermediate standard, required immediately for large scale contemporary projects. Write, with full details, including salary required, to Edward D. Mills, 16, Carlisle Street, W.1. 3381

CLIFFORD TEE & GALE, F/F.R.I.B.A., require SENIOR and JUNIOR ASSISTANTS in their offices in Westminster and Birmingham for work on Power Stations, Research Laboratories and other interesting projects. Please apply to 5, Buckingham Palace Gardens, S.W.1 (SLOane 2296), or 43, Frederick Road, Birmingham, 15 (Edgbaston 3676). Five day week. 3335

WEST END London firm of Architects require several ARCHITECTURAL ASSISTANTS. Full experience in preparation of working drawings, details, etc. Only those over the age of 30 need apply. Box 3383.

Architectural Appointments Wanted

YOUNG A.R.I.B.A., school trained, with additional Quantity Surveying and Accountancy qualifications, plus five years comprehensive office and administrative experience wishes to join practice as Senior Assistant/Junior Partner. Box 3361.

KEEN ARCHITECTURAL ASSISTANT (25) 7 years varied experience, seeks post with prospects and responsibility. Salary by arrangement. Write Box 3348.

A. R.I.B.A. (28) seeks senior position in small London or Surrey office. General experience including Schools, Churches, etc. Salary by arrangement. Box 3327.

YOUNG A.R.I.B.A. with comprehensive experience in well-known London office, would welcome opportunity to reside and work in S. England. Box 3326.

A. R.I.B.A. (31) 8 years varied experience, seeks position with scope for initiative and possible view to partnership. Any district. Box 3323.

Other Appointments Vacant

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

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

VACANCY arises for Articled Pupil (Architectural or Building Surveying) in City Firm. Box 1720.

STRUCTURAL DRAUGHTSMEN required by the Steel Company of Wales, Ltd. (Steel Division), Port Talbot.

Applicants should have experience in design and detailing of riveted and welded steel structures.

Qualifications to Higher National Certificate desirable.

Permanent and pensionable positions offered to suitable men with rates varying with age and qualifications.

Successful applicants will be employed at the Company's large modern integrated steel plant, where the new drawing office block, incorporating the latest architectural design, is erected in interesting and agreeable surroundings.

Those wishing to apply should send full particulars of age, qualifications, experience, etc., to the:—

PERSONNEL SUPERINTENDENT,
The Steel Company of Wales, Ltd.,
P.O. Box No. 3, Port Talbot, Glam. 3195

CIVIL ENGINEERING DRAUGHTSMEN required by the Steel Company of Wales, Ltd. (Steel Division), Port Talbot. Applicants should have some knowledge of either:—

(*a*) Industrial Architecture and Building Construction, or

(*b*) R.C. Structures and general Civil Engineering work.

Qualifications to Higher National Certificate desirable.

Permanent and pensionable positions offered to suitable men with rates varying with age and qualifications.

Successful applicants will be employed at the Company's large modern integrated steel plant, where the new drawing office block, incorporating the latest architectural design, is erected in interesting and agreeable surroundings.

Those wishing to apply should send full particulars of age, qualifications, experience, etc., to the:—

PERSONNEL SUPERINTENDENT,
The Steel Company of Wales, Ltd.,
P.O. Box No. 3, Port Talbot, Glam. 3196

WEST END Architect requires SECRETARY with shorthand-typing speeds of 120/50. Salary £7 10s. per week plus luncheon vouchers. Reply with details of age, experience, etc., to Box 3337.

DRAUGHTSMAN required by light chemical manufacturing company in North-West Kent for detailing factory buildings of all types. Some experience in taking off quantities advantageous. Please give brief details of education and experience, also state age, present salary, and whether married. Box 3260.

SENIOR QUANTITY SURVEYOR required by old established and progressive Midland company of building and civil engineering contractors. Experience is required in control of staff and settlement of final accounts on contracts up to £500,000 value. Salary range £1,250/£2,000 per annum according to qualifications and experience. Assistance with housing may be provided, if necessary. The appointment is intended to be permanent and has considerable opportunities for advancement, and will be subject to superannuation scheme after preliminary period of satisfactory service. Replies will be treated in strict confidence. Box 3285.

Services Offered

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

GOOD LETTERING IS ESSENTIAL for Commemorative Wall Tablets, Foundation Stones, etc. Layouts and F.S. templates prepared. Estimates given for the finished work in any material. Renowned as a Lettering Centre since 1934. Sculptured Memorials. 67, Ebury Street, London, S.W.1. Tel.: Sloane 6549. 2010

DETAILED SURVEYS and drawings of sites and buildings, reports, schedule of repairs, etc. Qualified Surveyor. LIV. 1839. 2785

EXPERIENCED LADY TRACER invites work to do at home. Tel. FIN. 4414. 3150

CHARTERED Architect offers services for Supervision, Surveys, Site Inspections, Reports, etc., in North and Midlands. Mobile and fully experienced. Box 3152.

FREE-LANCE SURVEYOR offers services to Architects requiring accurate surveys of land and buildings, contouring, etc.; own car and complete equipment. 3315

PRELIMINARY SCALE MODELS promptly executed from Architect's Sketches. J. Nicolson, 43, Woodfield Ave., S.W.16. 3324

For Sale or Wanted

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

SITES WANTED.

BLAGDON INVESTMENTS, LIMITED, have large funds available for the purchase of Sites for the erection of Shops and Offices and other Commercial Buildings. They are also interested in the purchase of Commercial Buildings capable of improvement and further development. Architects who have clients wishing to dispose of such properties are invited to submit particulars.

If arrangements could be made the Company would wish to retain the services of the architect. Blagdon Investments, Ltd., 106, Regent Street, London, W.1. Telephone: Regent 3786. 2921

FOR SALE.—Six bound folders, containing plates of Late Renaissance Architecture in England. What offers? 'Phone Balham 5140. 3236

ARCHITECT wishes to rent one or two rooms forming part of an existing suite of professional offices. Box 3364.

MAYFAIR.—2,450 sq. ft. Ideally suitable for offices and drawing office on 2nd and studio floor; between Bond Street and Berkeley Square; no premium. Maple & Co., Ltd., 5, Grafton Street, Old Bond Street, London, W.1. Tel.: Hyde Park 4685. 3382

Miscellaneous

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

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

FOR FULLY GALVANISED Chain Link always specify MASTERFOIL, made to B.S.S. 1722. Fencing & Gates, Ltd., fourteen, Stanhope Gate, London,, W. 1. Tel. Grosvenor 4527. 9926

OFFICES to let, W.1. Self-contained basement, two rooms, washroom & W.C. 500 square feet, professional use only, Architect or Engineer, £200 per annum inclusive. PAD 5320. 3349

Partnership

6 lines or under, 12s. 6d.; each additional line, 2s.

ARCHITECT (34) wishes to purchase a practice from a London City member about to retire, and who would be prepared to carry on as a paid consultant. Box 3077.

ARCHITECT (33) wishes to purchase an established practice in the City of London, partnership or outright, from a member who would be retiring in the course of a few years and who would like to hand over the principal responsibilities beforehand. Principal could advise on an agreed salary after retirement. Highest references given. Box 3209.

ARCHITECT (F.R.I.B.A.) with extensive London experience wishes to purchase a practice in London from a retiring principal. Box 3363.

Educational Announcements

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

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

ESSEX EDUCATION COMMITTEE
SOUTH-EAST ESSEX TECHNICAL COLLEGE & SCHOOL OF ART
Longbridge Road, Dagenham.
ARCHITECTURE COURSES.

Part-time Day and Evening courses in Architecture are held at the South-East Essex Technical College, and they will not be affected in any way by the recent decision to discontinue full-time courses in Architecture.

Enrolment for Day courses—13th September, 10 a.m. to 12 noon.

Enrolment for Evening courses—13th to 17th September, 6.30-8.30 p.m.

Classes commence—20th September.

Further information and prospectus from the Head of the Arts Department. Telephone: Seven Kings 3766. 3343

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