THE ARCHITECTS' JOURNAL

standard contents

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

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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.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy. : W. Marlborough Whitehead, " Dyneley," Castle Hill Avenue, Berkhampstead, Herts.	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Langham 5721
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association. 34/36, Bedford Square, W.C.1.	
ARCUK	Architects' Registration Council. 68. Portland Place, W.1.	Langham 8738
AScW	Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.1.	Grosvenor 4761
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Langham 5721
BATC	Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1.	Reliance 7611, Ext. 1706
BC	Building Centre. 26, Store Street, Tottenham Court Road, W.C.1.	Museum 5400
BCC	British Colour Council. 13, Portman Square, W.1.	Welbeck 4185
BCCF	British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.	Perivale 6869
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Redditch 716
BDA	British Door Association. 10, The Boltons, S.W.10.	Fremantle 8494
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Glasgow Central 2891
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Euston 5385
BID	Building Industries Distributors. 52, High Holborn, W.C.1.	Chancery 7772
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Langham 2785
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140
BRDB	British Rubber Development Board. Market Buildings, Mark Lane, E.C.3.	Mansion House 9383
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246
BSA	Building Societies Association. 14, Park Street, W.1.	Mayfair 0515
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
BTE	Building Trades Exhibition. 4, Vernon Place, W.C.1.	Holborn 8146/7
CABAS	City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Civic Centre, Newport, Mon.	Newport 5491
CAS	County Architects' Society. C/o F. R. Steele, F.R.I.B.A., County Hall, Chichester.	Chichester 3001
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Sloane 5255
CCP	Council for Codes of Practice. Lambeth Bridge House, S.E.1.	Reliance 7611
CDA	Copper Development Association. Kendals Hall, Radlett, Herts.	Radlett 5616
CIAM	Congrès Internationaux d'Architecture Moderne. Doldertal, 7, Zurich, Switzerland.	
COID	Council of Industrial Design. Tilbury House, Petty France, S.W.1.	Abbey 7080
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.	Sloane 4280
CUC	Coal Utilization Council. 3, Upper Belgrave Street, S.W.1.	Sloane 9116
CVE	Council for Visual Education. 13, Suffolk Street, Haymarket, S.W.1.	Reading 72255
DGW	Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1.	Reliance 7611
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Whitehall 0540
DPT	Department of Overseas Trade. Horseguards Avenue, Whitehall, S.W.1.	Trafalgar 8855
EJMA	English Joinery Manufacturers' Association (Incorporated), Sackville House, 40, Piccadilly, W.1.	Regent 4448
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	Sloane 2837
FASSC	Federation of Association of Specialists and Sub-Contractors, 5, Arundel Street, Strand.	Temple Bar 6633
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 6711
FC	Forestry Commission. 25, Savile Row, W.1.	
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	Sloane 1002
FDMA	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Ilkeston 623
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ulverston 201
FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	Chancery 7583
FPC	The Federation of Painting Contractors, St. Stephen's House, S.W.1.	Whitehall 3902
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Langham 4041
FS (Eng.)	Faculty of Surveyors of England. Buckingham Palace Gdns., S.W.1.	Sloane 2837
GC	Gas Council. 1, Grosvenor Place, S.W.1.	Sloane 4554
GG	Georgian Group. 27, Grosvenor Place, S.W.1.	Sloane 2844
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 5615
ICA	Institute of Contemporary Arts. 17-18, Dover Street, Piccadilly, W.1.	Grosvenor 6186
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577
IEE	Institution of Electrical Engineers. Savoy Place, W.C.2.	Temple Bar 7676
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1	Abbey 5215

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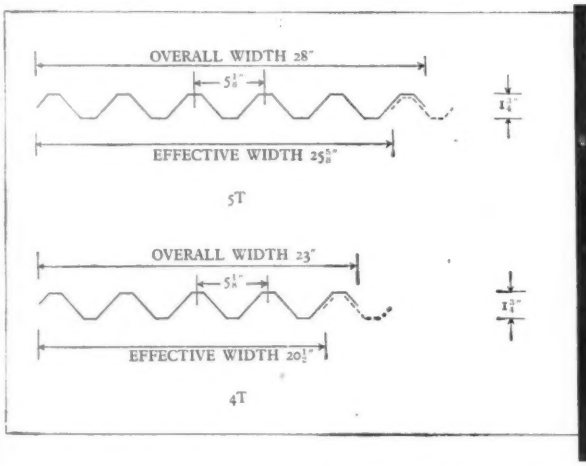

Purlin spacings and recommended maximum design loads

Purlin Spacing	Design loads (lb./sq. ft.)	
	18 swg	19 swg
6′ 0″	87	71
6′ 6″	76	61
7′ 0″	64	52
7′ 6″	56	46
8′ 0″	49	40
8′ 6″	44	36
9′ 0″	40	32
9′ 6″	36	28
10′ 0″	32	25
10′ 6″	28	*

*Not recommended

Notes 1. The above design loads are based on a maximum working stress of 11,000 lb./in.² giving a factor of safety of 2 on the 0.1% proof stress (yield).

2. The zigzag line indicates the maximum purlin spacings which may be employed when working to B.S. Code of Practice C.P.3., Ch. V Para. 7b. Use of purlin spacings below the line depends upon the pitch of the clad surface, the maximum spacings shown being those recommended for vertical walls.

3. The recommendations tabulated above are based on an assumed minimum roof pitch of 10°, with sheets fixed in accordance with recommended practice, including seam bolts at 18″ centres.

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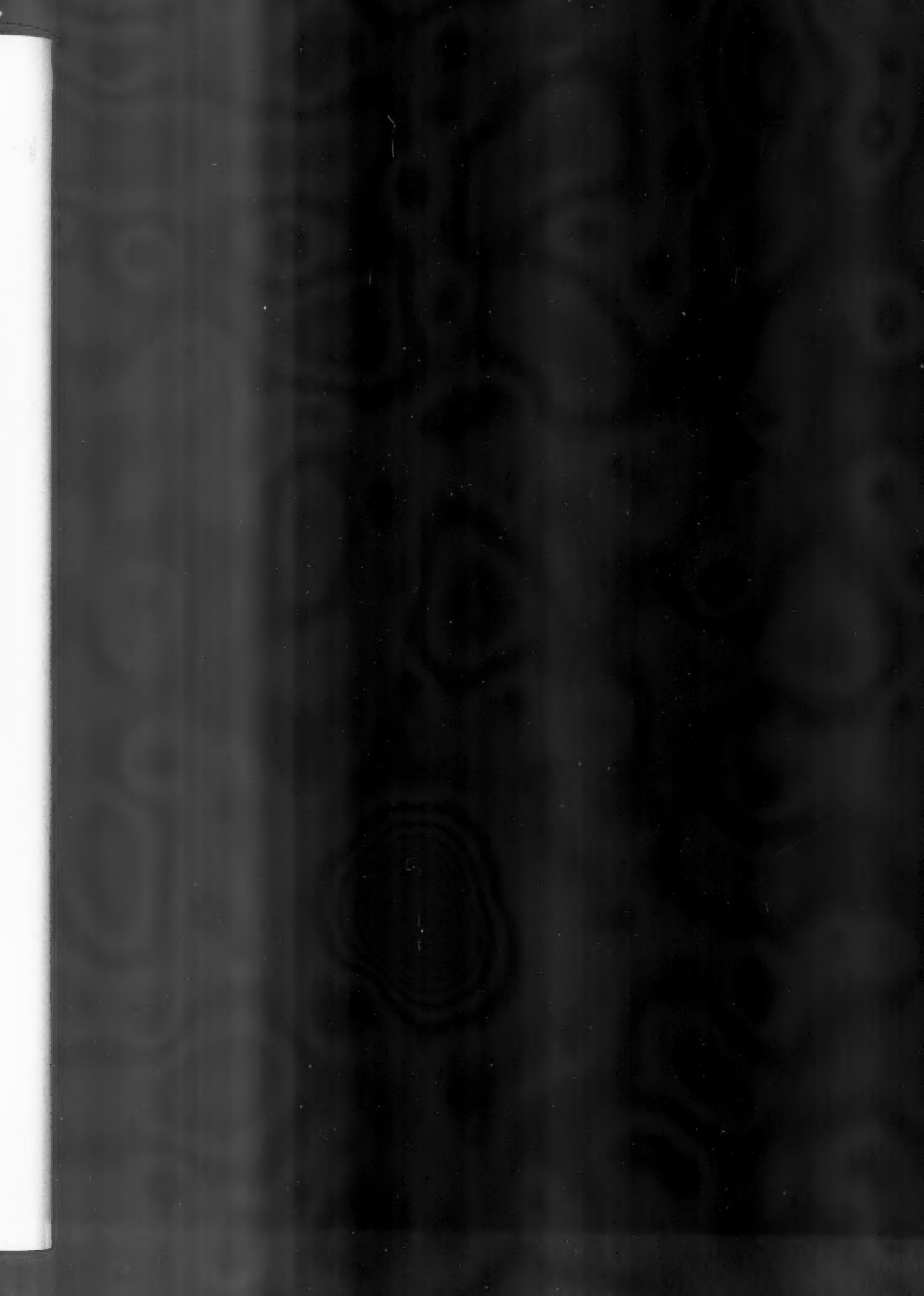

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Fenham Baths, Newcastle-on-Tyne.
Rolls Royce Factory, East Kilbride.
Bangour Hospital.
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St. Mary's Hospital, Luton.
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Luton General Post Office.
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Prudential Building, Cardiff.
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Rolls-Royce Factory, Derby.
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E.M.I. Factory, Hayes, Middlesex.
Windsor Castle, Berks.
Kensington Palace, Kensington.
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L.T.E. Canteen, Lots Road, Chelsea.
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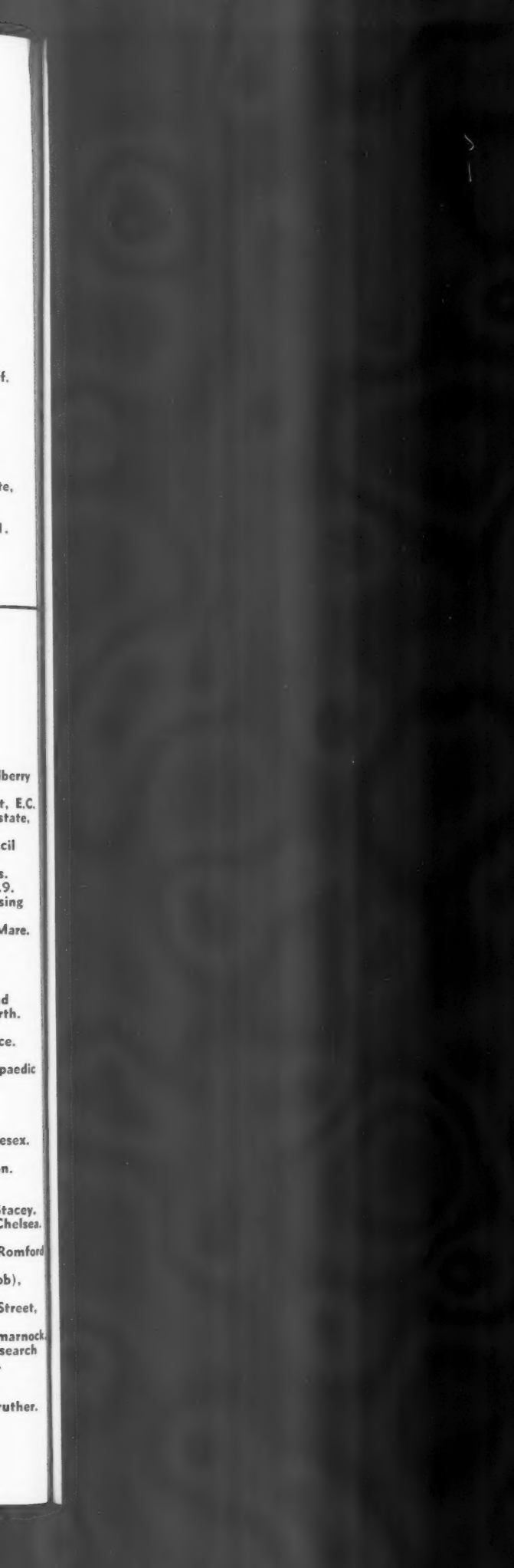

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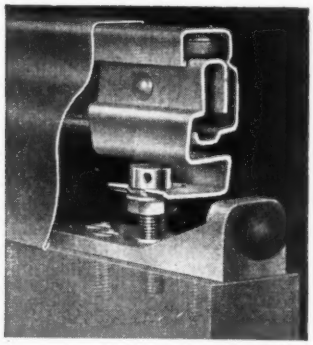

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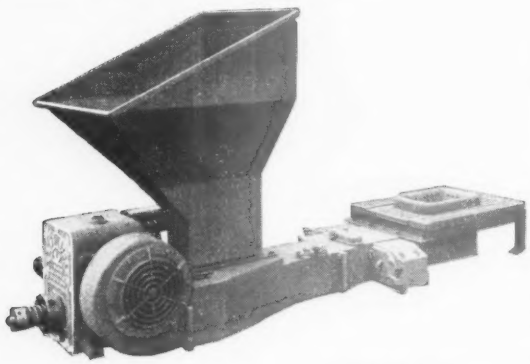

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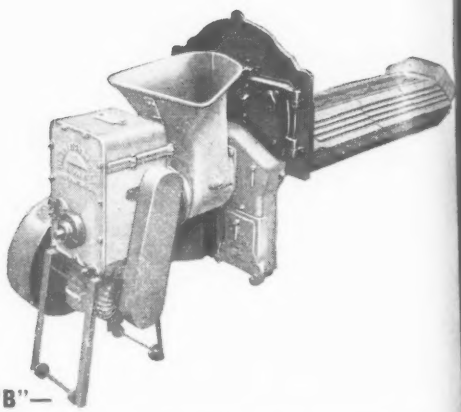

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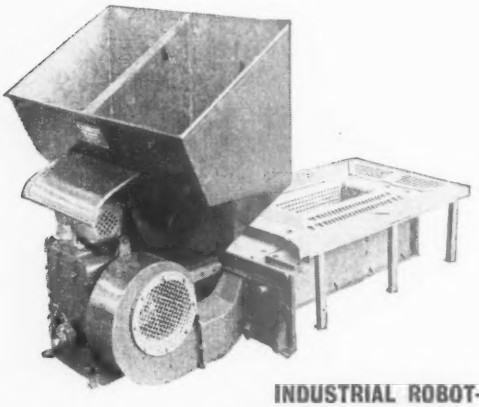

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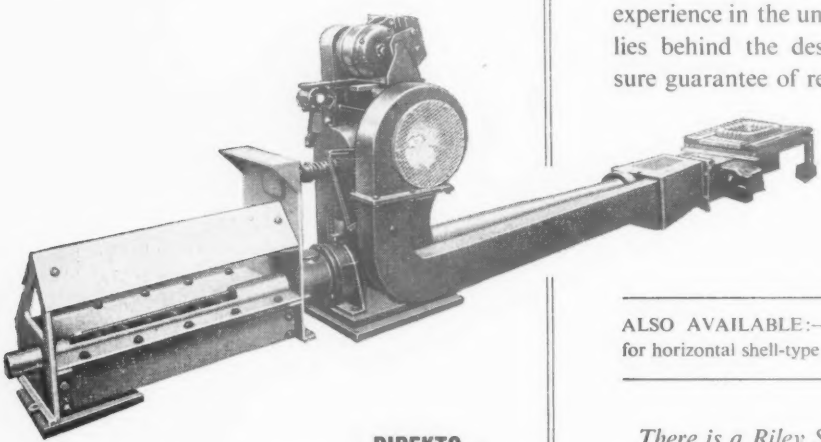

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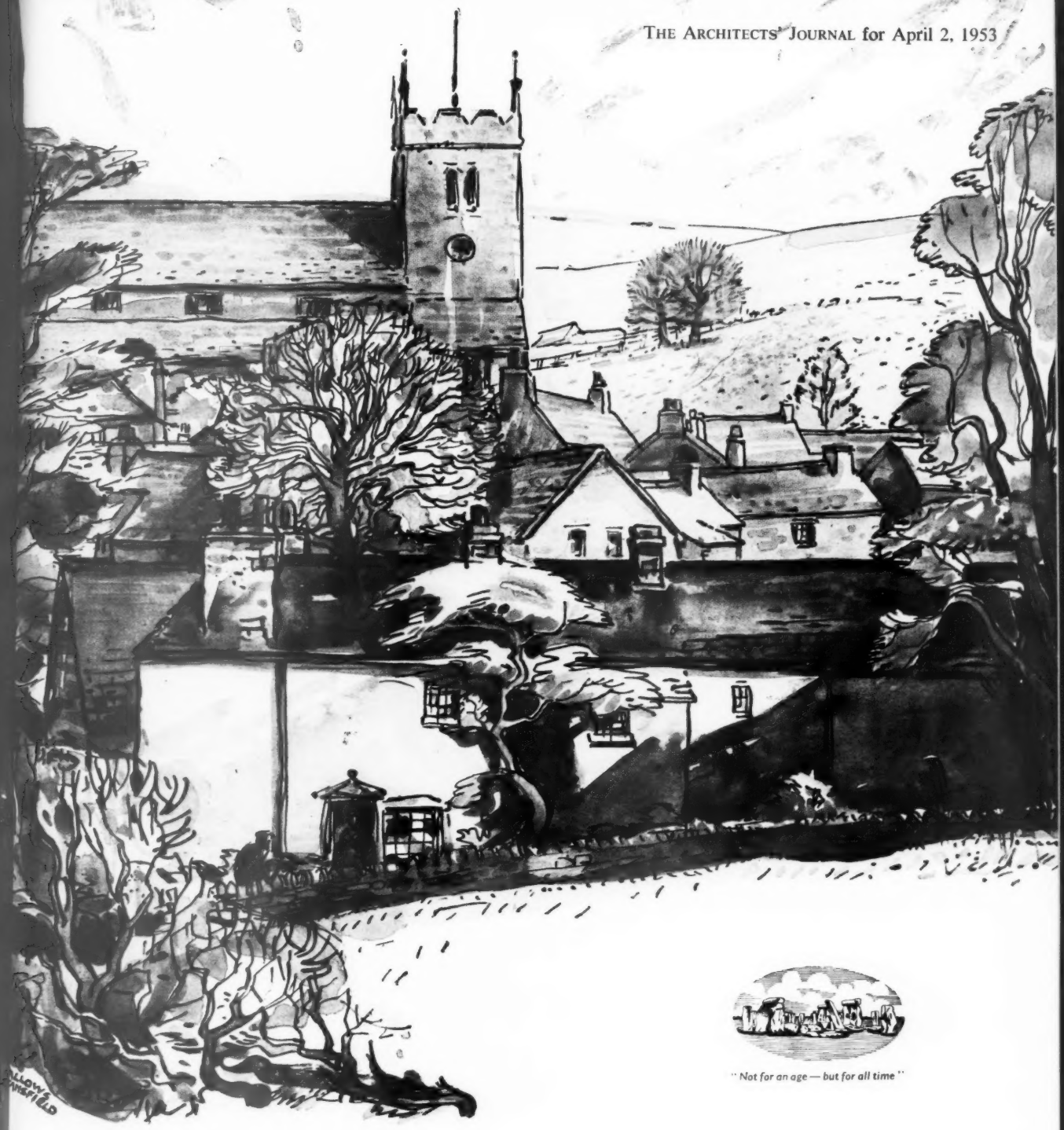

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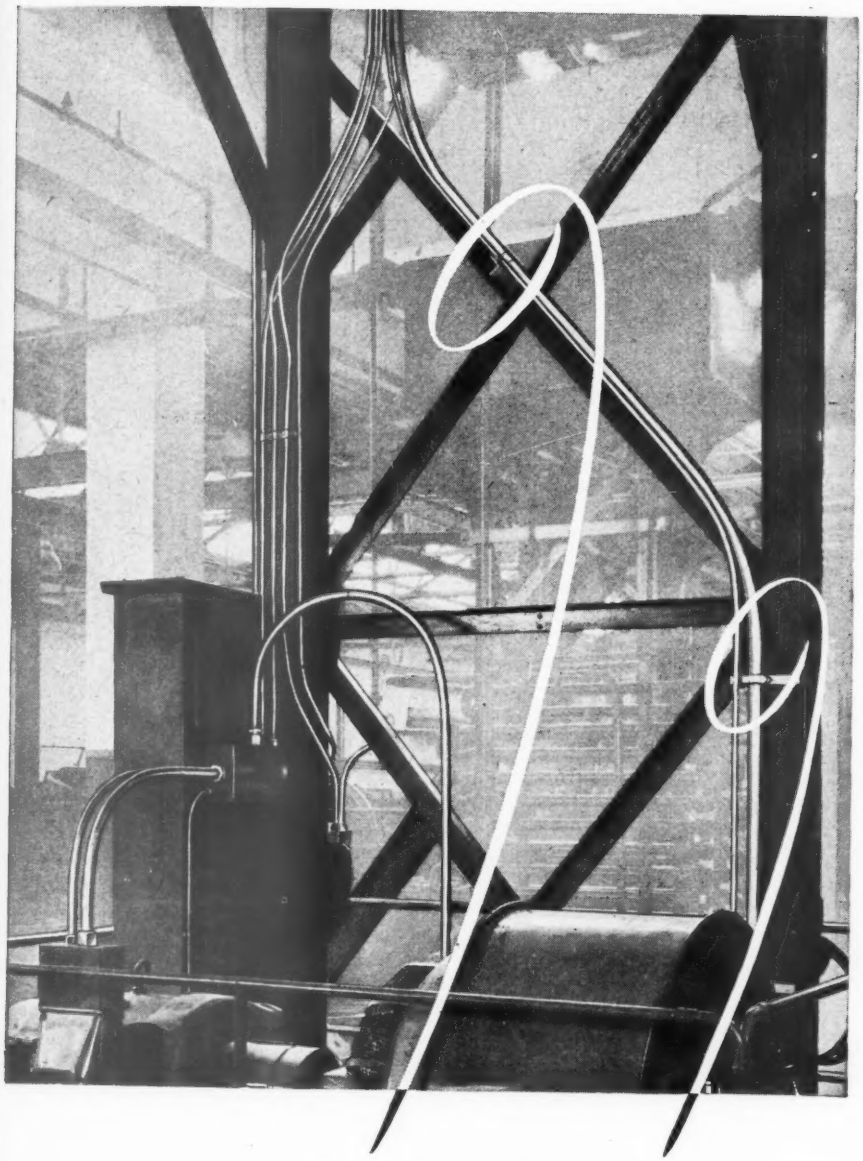

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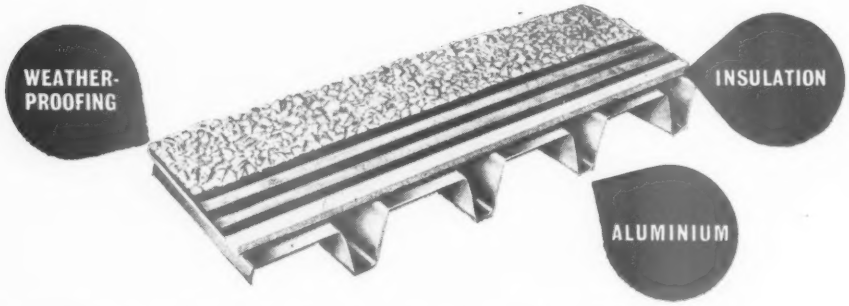

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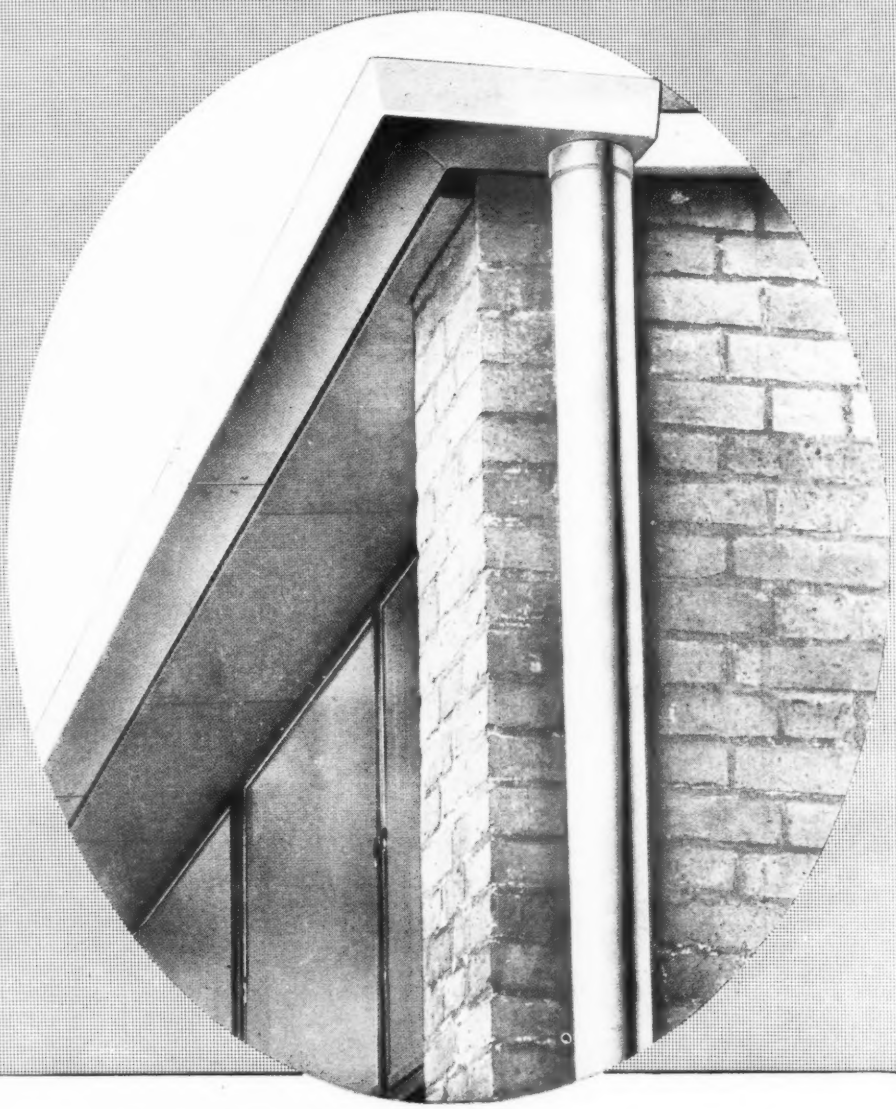

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AJ

THE ARCHITECTS' JOURNAL

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SALUTE TO SALOP

The architects of Shrewsbury are ill-placed for joining in the activities of the Birmingham and Five Counties Architectural Association. It is not surprising, therefore, to learn that they have recently formed a local society called the Column Group. Originally exclusive to architects, its membership has been widened to include any one interested in architecture and the fine arts. Although less than a year old, the society has seventy members and a most progressive programme of lecturers. One of the powers behind the formation of the Group is the new county architect of Shropshire, C. H. Simmons. A colleague who attended a recent talk to the Society (which is reported elsewhere in this week's JOURNAL), says that already, in the eighteen months since his appointment, the county architect—and his lively staff—have made enough progress to enable one to forecast a visually exciting and attractive building programme for the county.

*

The great advantage which this architectural society has over most others is its meeting place—Attingham Park, only three miles from Shrewsbury. Clough Williams-Ellis, in his second volume on National Trust property, waxes lyrical about his youthful motoring mishap of forty-five years ago which stranded him before George Steuart's late eighteenth century masterpiece (face-lift by John Nash, *ensemble* by Humphry Repton). His lyricism, my colleague tells me, is still justified. The river Tern, diverted by Repton to flow past the house, the elegant classical bridge over it at the focal point of the landscape, and the house itself are much as they were when Williams-Ellis first saw them—save for a thinning of trees, and the substitution of Ayrshires for the deer which grazed in the park beyond the ha-ha.

*

No more suitable place could be found to house an architectural—or indeed any other—society, and this fact has occurred to others. The owner, the late Lord Berwick, devised the property to the National Trust, retaining one wing, which is now occupied by Lady Berwick. The rest of the house is occupied by an adult educational college run most enthusiastically by George Trevelyan, that all too rare person: a layman who talks intelligently about architecture and modern design.

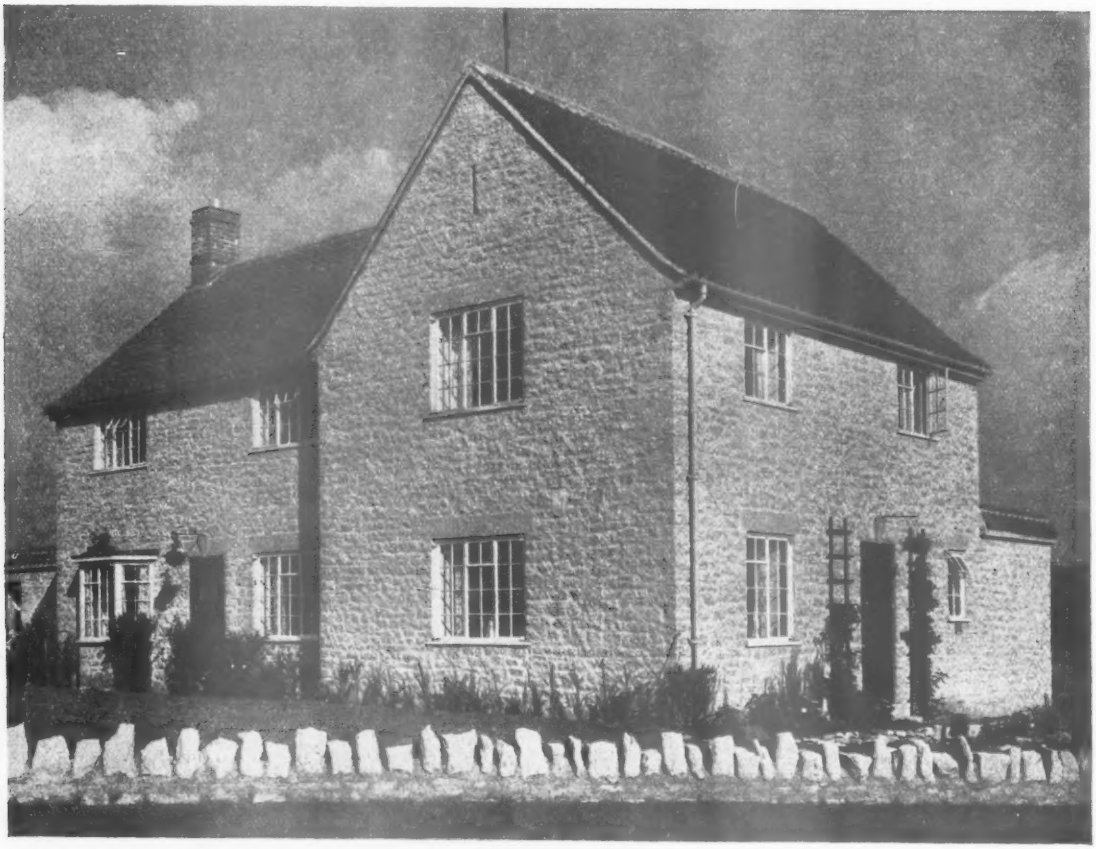
The building is an enveloping object lesson to any audience of modern architects, and it would in itself serve as a subject for a week-end course. Superb proportions, fine landscaping, wonderful Italian craftsmanship in the enriched ceilings and inlaid floors, and, to counterbalance, an unique collection of Empire furniture of almost shoddy construction, and a plan, by Nash, which begins with a bang and ends with a whimper. That is to say, an imposing portico and entrance hall, and great picture-gallery beyond, with, on the axis, a grand staircase leading virtually nowhere. A fine house from which the core—the vertical axis—has gone.

*

The last talk held at Attingham for the Column Group was by Grenfell-Baines. Covering many aspects of architectural practice, his comments on education seem particularly pertinent. The McMorran committee, it is rumoured, is considering very seriously the virtues of combining a school course with some form of office experience. Grenfell Baines calls it, appropriately, a sandwich course—the debatable matter being the thickness and number of layers of bread and filling—and he advocates a two-years' office, three-years' school, two-years' office, two-years' school programme. A formidable test from which the unfit could be extracted at three points and diverted into other channels.

*

The good feature of such a proposal is this opportunity it allows for filtering off those who will never make architects. It is idle to pretend that schools today seriously attempt this, and there is no adequate machinery today for turning "failed dip. archs." into clerks



HELMSLEY RURAL DISTRICT HOUSING *at* HELMSLEY, YORKS
Needham, Thorp & White, Chartered Architects

of works, building managers, and so on. Many students will be the first to agree that five years' theory at a stretch is far too long and can only encourage academicism. We wait with some eagerness for the results of the McMorran committee.

WRENCOTE

Wrencote, to coin a phrase, has had it. In case you should wonder why you are supposed to be interested, let me remind you. It is, but will soon have ceased to be, 119-121, High Street, Croydon, a decent classical façade which, if not by Wren himself, was a sufficiently successful imitation to have won for itself a place in local sentiment. Two years ago the Borough Council decided not to acquire and preserve, and the structure, though scheduled by MOHLG, has now fallen into such disrepair that an application to demolish cannot decently be refused.

*

Local feeling has run considerably hotter than the apathy which commonly greets such news, and ASTRAGAL notes with a certain wry satisfaction that the fuss is as much about the proposal to rebuild "in more or less the same Georgian style" as it is about the loss of a monument.

*

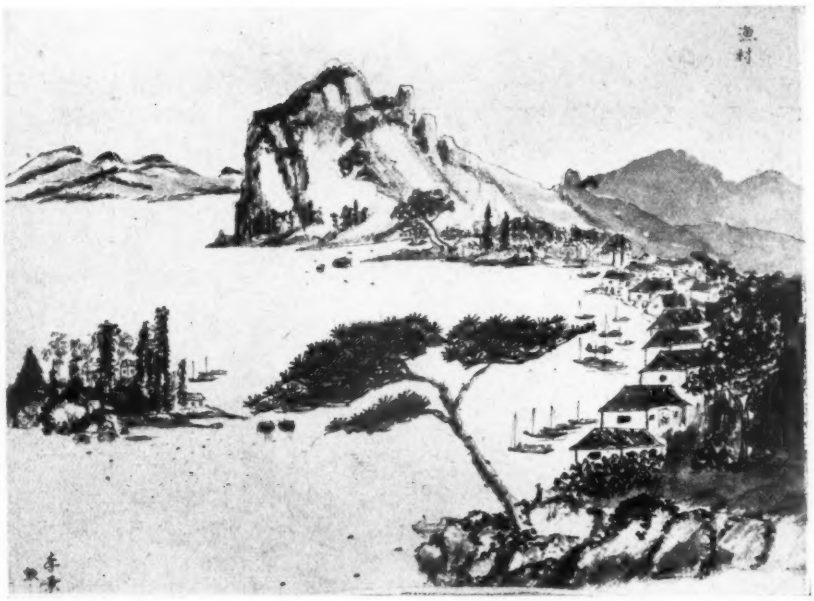
The moral is uncomfortably clear—that one can always sidestep a scheduled restraint on demolition by neglecting the property until it becomes dangerous. The blame lies largely on the scheduling authorities who can include any property which takes their fancy in classes II and III, thus imposing a moral obligation on the owner, but laying responsibility on the Minister.

*

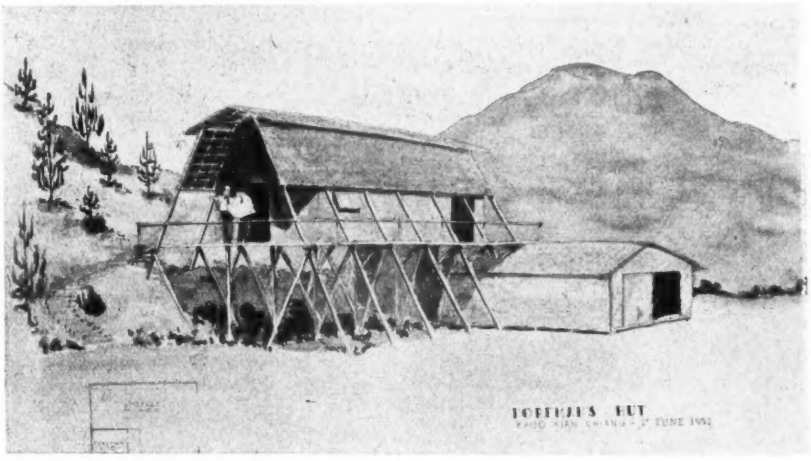
Might it not be more equitable to ask the Minister to accept some of the charge of maintenance if he really thinks the property is too good to be pulled down? If we go on as at present, and the Wrencote type of loophole is left un-plugged, the whole business of scheduling will become meaningless.

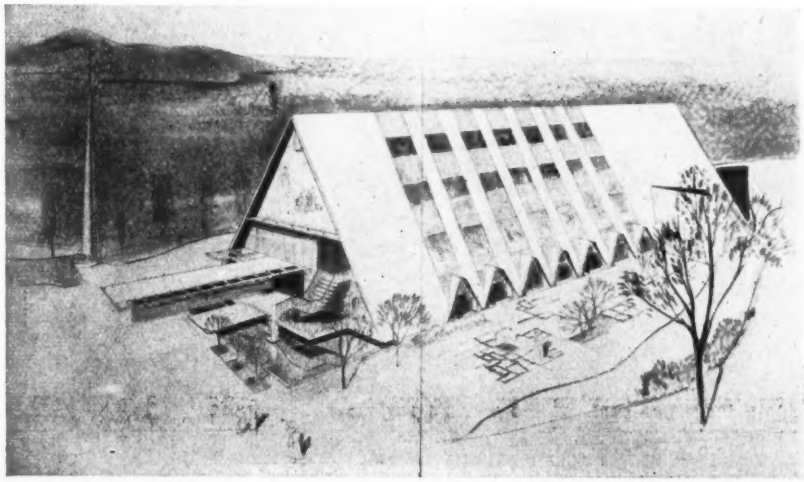
MANY HAPPY RETURNS

To be still in practice at the age of 90 may not be a record, but it is a remarkable achievement. I am sure all my readers will want to join with me in sending congratulations to Henri van



Three examples of students' work from the school of architecture at Hong Kong University that has now been established nearly three years under Professor Gordon Brown. The Chinese style of painting, as well as the Western, is taught in the art classes; above, a landscape by a second-year student. It is interesting to note that design subjects differ little from those set in Western schools, yet produce buildings with a genuine Chinese flavour; below, first-year sketch for a foreman's hut; bottom, a church (second year).





Tropical Building Conference

The Conference of Tropical Architecture, held at University College, London, last week under the chairmanship of Alister MacDonald, indicates a growing interest in building developments in tropical areas, and a need for a more intense study of the problems connected with this development. "The Tropics" may be a loose term—and no doubt the organizing committee had some trouble defining it—but it is a comprehensive term, for it embraces some forty per cent. of the world's surface and a great number of countries and varieties of people. These countries, long neglected, now press for development. There is an almost unlimited demand for housing, and educational and industrial buildings—a demand which impinges upon the conscience of the world for solution. This conference was, as far as we know, the first to deal with the comprehensive problems of tropical building as opposed to narrower ones of Colonial building. Although it was a modest affair, nearly two hundred delegates were present—including students, architects, scientists and the like, from as far away as Malaya and South America. The building shown in this photograph, which was included in an exhibition at University College, is the Wesley School for girls at Cape Coast, designed by Fry, Drew and Partners; engineer, Ove Arup.

de Velde, great pioneer of the early days of modern architecture, founder of the *art nouveau* movement and founder also of the school of art at Weimar, Germany, which, under his successor Gropius, became the famous Bauhaus.

*

Van de Velde celebrates his 90th birthday on Friday of this week. He has been living in Switzerland since 1947, working principally on his memoirs (a first instalment of which was published a few months ago in *The Architectural Review*), but is still busy as an architect. He is engaged at the moment on an extension of the Kroeller-Mueller museum at Otterlo, in the south of Holland, a building he himself designed many years ago.

*

Pioneering in modern architecture and longevity seem to go together happily. There is Perret busily rebuilding Le Havre at the age of 80, and Frank Lloyd Wright with more irons in the fire at 84 than most architects of half his age—to say nothing of our Sir Ninian Comper, 89 in June. May all four continue to flourish.

RIBA CONFERENCE

The reluctance public architects, and sometimes even private architects, have for speaking frankly and freely in the presence of the Press will be avoided this year at the RIBA Conference. The Press are being asked not to report the discussion which follows the papers read—or, at any rate, to publish only an official, expurgated version of the discussion. This announcement at an RIBA Press conference last week (see page 422) caused some dismay amongst the journalists present at the thought of being balked of their favourite prey.

*

But, as ASTRAGAL said in '51 (quite true—page 721 of the JOURNAL for June 7—See!), and it certainly applies to the editors of this journal, "if a secret, unreported session would really lead to more vigorous and valuable contributions to the often vital subject under discussion, and a fuller attendance at the lectures, then editors . . . would be only too willing to forego the pleasure of publishing them."

*

Judging from Paine's statement to the Press, it would seem that this year's conference will be well worth attending.

ASTRAGAL

POINTS FROM THIS ISSUE

The Editors

KNOW YOUR CLIENT

ONE of the reasons why many architects like designing individual private houses, in spite of the fact that such work often involves much labour for little fees, is that they really get to know their clients and therefore have a chance to define a real and fairly ascertainable programme. In the case of local authority housing this personal contact is lacking and the "programme" has to be obtained in less direct ways. It is because of this that architects are sometimes blamed for forcing their ideas on the public. It is probably true that the professional adviser should guide his client—whether an individual or the unknown crowd—towards new ideas, for so often the customer is unaware of new developments. It is important, however, that such guidance should be based on as sound a knowledge as possible of the existing habits of the people. Many architects have little knowledge of the habits of the people they are planning for when they are designing housing for the "masses." Any sound source of factual information is, therefore, to be welcomed.

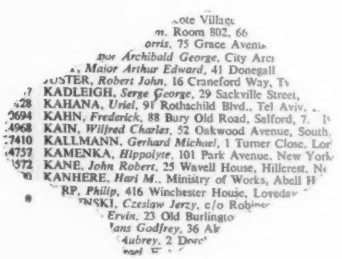
A recent publication of the Coal Utilisation Council* gives useful information on one aspect of living conditions. It reports on a statistical survey into the domestic use of solid fuel and solid fuel appliances in Great Britain. Not everyone will agree with the inferences drawn by the Council from the Survey, and it is surely unlikely that much can be gained by recording a man's "likes" about something he has not tried, but the facts are useful to have. Seventeen per cent. of the houses in the survey had no piped water supply. Forty-four per cent. used gas for water heating, but this high figure is due to the fact that so many people have only a gas cooker or ring as their means of heating water. Eighteen per cent. had one modern solid fuel appliance. Fuel storage is deplorably inadequate. Seventy-four per cent. do not use any coke.

* A Survey into the Domestic Use of Solid Fuel and Solid Fuel Appliances in Great Britain. A report by the Coal Utilisation Council. Price 6s.

Twenty-four per cent. use a range or cooker for heating their main living room, etc., etc.

It is a pity that such a survey could not have covered the lack of thermal insulation in most houses, both old and new. The resultant figures might have given some valuable additional ammunition for use against the recent official recognition of retrograde standards in the issue of the new Model Byelaws. It is good news that MOHLG has published a memorandum showing that improved insulation standards need not substantially increase first costs, but many people will continue to comply only with the minimum standards laid down in the bye-laws, unless the Minister does something stronger than "suggest."

FOCUS ON



YOU

This week Professor Bowen continues his investigation into the present state of the architectural profession. The names in the title-piece above were taken at random from the Architects Register.

Guest Editor:
Professor IAN BOWEN

Full-time and Part-time Study Courses

It has been possible to obtain figures, from various official returns, of the number of architectural students attending full-time courses (in January of each year) at (*a*) universities and recognized architectural schools and (*b*) technical colleges. The figures are shown in Table I.

These figures show that in terms of the "post-war bulge" the "population" of full-time students reached its peak as early as 1950. Numbers were 1,000 down at the beginning of 1952. The substantial effect of the post-war training programme is working itself out. On these figures alone it is easy to suppose that the situation will largely have righted itself (in the sense of the "bulge" having disappeared) by 1954 or 1955, and this must be our preliminary conclusion.

PART-TIME TRAINING

There are many part-time courses in architectural subjects being given in "major establishments" sponsored by the Ministry of Education (*i.e.*, in the main technical colleges and art schools). It is difficult to assess the importance of these courses. For example, the student may attend a part-time evening course as well as a part-time day course, or he may take architecture as a subsidiary subject in the study of building or civil engineering. He may even attend an evening course because he is curious to know a little about the subject. It is, therefore, a mistake to over-emphasize the importance of the figures in Table II.

It will be noted that part-time day students have not been added to the right-hand column of this table, which represents the total of evening students only. This total must be an understatement of the number of part-time students, since *some* part-time day students are not taking evening classes. Even so, the total is very high; if it is combined with the total of *full-time* students, we see that at least 11,300 students are taking either part- or full-time architectural education.

If there really were 11,000 to 12,000 students training for architecture in 1950-51 there would probably be a continuing "bulge" of new entrants to the profession for several years to come. But it is difficult to judge how much attention ought to be paid to the part-time technical college courses. These courses would rarely take a student beyond the intermediate level; and perhaps only a small fraction of the students would expect to complete their training at the level of registration qualification. However, the part-time courses may be of considerable value in that they can provide draughtsmen and technical assistants in architects' offices with some of the rudiments of the professional qualifications.

INVESTIGATION NEEDED

It is unfortunate that there is little information available either on the character of these part-time courses, or on the intentions—or even the occupations—of the students. The figures published here can certainly be interpreted as giving an *a priori* case for further investigation. Until such investigation has been made we shall not know whether these figures can be regarded as a foreboding of overcrowding in the profession.

But to look on the bright side for a moment: never before have there been so many fully trained and qualified architects in the profession. Once the problem of providing the younger architects with experience has been solved, the architectural profession in Britain ought to be exceptionally well constituted and capable of bearing responsibilities more easily than ever before.

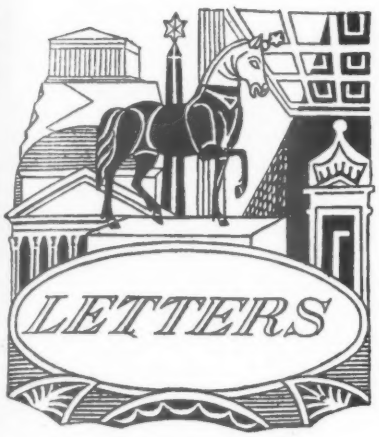
—	Universities and recognised schools	Technical colleges	Total
January, 1947	3,003	1,256	4,259
1948	Not available	Not available	Not available
1949	4,597	1,839	6,436
1950	5,147	1,110	6,257
1951	4,777	1,061	5,838
1952	4,354	905	5,259

Table I. Students attending full-time courses.

—	Art establishments		Other establishments*	Art and other
Year	Part-time day	Evening	Evening	Total evening
1946/47	366	1,149	2,208	3,357
1947/48	688	2,427	Not available	Not available
1948/49	778	2,638	2,046	4,684
1949/50	908	2,850	3,236	6,086
1950/51	911	2,537	3,504	6,041

* No details of part-time day students. Source: Ministry of Education reports.

Table II. Students attending part-time courses.



David R. Lewis, Student

Thomas Coulton, *B.Arch.*

J. Lubicz-Nycz

John W. McArtney, *A.R.I.B.A.*

Antony F. Sealey, Student

John Sharp, *A.R.I.B.A.*

Frank Marshall

Full Time—Every Time

SIR,—Your correspondent Mr. Shannon has suggested that full-time architectural training is of little use. As one who has apparently, if I am to regard his letter with any sincerity, taken the wrong path, I would point out that he suffers not from lack of restraint, of which he accuses my fellow compatriots, but lack of foresight, a less curable malady.

He disagrees with a system that produces the greater, by far, majority of men responsible for *progress* in architectural standards. Surely the system thus proves itself. Mr. Shannon also mentions that the client suffers in the hands of the school-trained "villain."

School training surely affords the best conditions for formulating a sensible and sincere approach to architecture, cultivating the mental machinery to attain high design standards which are economically sound.

Does Mr. Shannon think the solution lies in us all receiving part-time training, the majority "rotting" in offices of rustics far behind in contemporary thought?

If architecture is to progress and design standards be raised, it is only the infusion of new blood from the schools, men whose interest lies in the future, whose training, has been in the majority of schools to that ideal, that will continue to give us this desire.

I say, full-time every time.

DAVID R. LEWIS.

London.

Is School Training Useless?

SIR,—Re the letter of R. P. Shannon, "Is School Training Useless?" Mr. Trollope may well have a grievance, but surely a good principal will automatically attract tried and tested assistants, and if he treats them well he will keep them and they will not fail him.

I disagree that school training is a mistake. The growing complexity of design can hardly be learned in any other way. The student has just as big a grievance if he is to be denied the opportunity of learning those aspects which can only come by experience.

THOMAS COULTON.

London.

Schools—The Profession's Backbone

SIR,—I have read with great interest the recent correspondence which started with Mr. Trollope's letter and wonder if you would extend to me the courtesy of your columns to add a few words.

In the first place I must express my amazement at Mr. Shannon's astonishing revelation—pronouncing so openly that school training for architects is an undoubted mistake.

The architectural profession—it's more than just a profession, it is an art, it's almost a religion—is not an easy one to practise.

To conceive architecturally means to achieve a harmony of æsthetic, utilitarian and economic aspects. It is a great thing—it is creation.

Instead, this great art is being practised—not practised, it is being violated, murdered—every day by thousands of people who could be clerks, shopkeepers, solicitors, politicians, actors—anything but architects; by people to whom architecture is merely a source of income or a conglomeration of various facts, tricks and odds and ends they have accumulated—but they simply don't know what the whole thing is about.

It is not just a matter of being trained in the school or the office, or setting more difficult questions in the final examination papers, or having a year's practice before election.

It is a matter of vocation, yes, vocation and the talent.

One does not become an architect in the true sense of the word by training only. One has to be born one, and one's abilities can only be assessed by training. That's where the school of architecture has the advantage over the commercial office: it can give the entrant to the profession the backbone, and systematically develop his abilities, if there are any, or persuade him to take up something else—that is what I personally would suggest in most cases.

J. LUBICZ-NYCZ.

Chelsea.

Architect Pirates

SIR,—I heartily agree with W. W. Scott-Moncrieff's letter and would add that the "pirates" are not only to be found among unqualified persons, but also among fellow architects working in government and local government offices. I fail to see how it is possible for such people to give the client a square deal, seeing that they are unable to make themselves available at all times during the course of the contract.

J. W. MCCARTNEY.

Sidcup.

"Live" Education

SIR,—It would seem obvious that it is to the advantage of the profession as a whole that students should be privileged to assist in carrying out a live scheme before the end of a five-year course at a school of architecture.

The teacher will keep in touch with practical problems, and the students will set out to "flood the profession" with a certain amount of real efficiency. Or is this undesirable?

ANTONY F. SEALEY.

Birmingham.

Schools Provide Architects—Not Assistants

SIR,—With regard to correspondence originating from W. W. J. Trollope's letter and as an associate, having attended a full-time five-year course at a recognized school and also having served eighteen months in an office, I would like to explain the purpose of the recognized schools of architecture for the benefit of your reader, R. P. Shannon, who, in criticizing school-trained architects for becoming so heated over Mr. Trollope's remarks, has "risen to the bait" himself!

The recognized schools of the British Isles are in existence for the purpose of training architects, and not assistants, for which Mr. Trollope was originally advertising.

As school-trained architects, we realize our shortcomings when we first set foot in an office and are only too well aware that we do not represent a good financial proposition as prospective assistants for an initial period. From my experience, this deficiency can very quickly be overcome after about twelve months in a good office and we are sooner or later worth as much to the architect principal as the responsibility and confidence he wishes to impart to us. He would, in fact, rapidly regain his losses of the first few months.

It does not appear that Mr. Trollope is one of those valued few, with the long-term view of the profession, as characterized by his essential monetary attitude when considering the employment of an assistant. In passing, it is as well to note that recently-qualified architects find it difficult to chalk up very much "office experience" owing to interruption by war service.

But would Mr. Shannon like to supplement the last paragraph of his letter, in which he states that "school training for architects has been a mistake," by suggesting a better way of training them? From my experience, it would not be good policy for the country to rely entirely on the "office trained" for the supply of architects: there are so many practical disadvantages, well known to those who qualify in this way and often the precedents of design laid down in some offices, to which the student is bound to abide, have their ageing roots in the unfortunate influences of the worst Victorianism and the non-committal transitional architecture of the inter-war period.

The school of architecture should indeed be respected and regarded as the fountain-head of learning, where planning and design is modulated to the requirements of the times, and where the young students of the profession, aided by the best possible instruction and facilities for the study of the history and theory of their art, learn to take their places among the "architect principals" of the country.

JOHN SHARP.

Stow-on-the-Wold.

Architectural Blue

SIR,—I see that in your issue for March 19 you refer to the awarding of a blue—a rowing blue—to 3rd-year architectural student, D. T. Leadley, of Emmanuel College, Cambridge, as a rare distinction.

Without wishing to detract from Leadley's distinction, I would like to point out that E. T. Coghill, who rowed at bow in last year's Cambridge boat was then also a 3rd-year architectural student.

FRANK MARSHALL.

London.

RIBA

Annual Conference Theme Decided

Members of this year's RIBA Conference, to be held at Folkestone and Canterbury from June 10 to 13, will discuss the architectural problems arising from changing educational requirements and will "investigate" the type of organization tackling it—the official architect's department, the official architect employing private practitioners and the free-lance private architect.

When he announced this to members of the Press at the RIBA's headquarters last week, R. W. Paine, who is president of the South Eastern Society of Architects—the conference "host"—referred to Press criticisms of the RIBA's annual conference which had been made in recent years. It was not the ceremonies and accepted rites that had been criticized, he said, but the "work" done on this annual outing.

Mr. Paine explained that educational building had been chosen as the subject for discussion after æsthetics had been rejected as unsuitable, because of the increasingly large number of official architects who attended at the public expense. "Matters of solemn moment palatable to the government auditors must form the staple fare," he said. Other subjects had been well threshed out, but although everyone was busy building schools, no one except the MOE had time to consider why, or to what purpose; the brief respite of a conference was thought to be a good opportunity for a general review.

Architects attending the conference will receive, in advance, "lively, informative and controversial papers" prepared by experts, and the "work" sessions will consist of discussions of these papers.

The South Eastern Society of Architects is organizing a comparative exhibition of schools, to be held in addition to the usual exhibition of members' work. The City Development Plan will be on view in Canterbury, and there will be an exhibition of English cathedrals at the garden party—in the grounds and buildings of St. Augustine's Abbey, Canterbury. The banquet is to be held in Hugh Wilson's recent building, the Simon Langton School for Girls.

No Superannuation for Architects

The RIBA's Allied Societies' Conference recently recommended that, as there is little chance of architects—whether principals or assistants—affording the cost that would be involved in superannuation schemes for assistants in private practice, the RIBA Council should defer study of the matter for a further two years.

The Council approved the recommendation.

DIA

Results of "Compare and Choose" Votes

Sixty per cent. of those people who voted at the DIA "Compare and Choose" Exhibition at Charing Cross Underground station recently preferred the contemporary living room to that furnished with what is described as best selling lines by retail shops and the National Association of Retail Furnishers. Phoebe De Syllas designed the rooms and selected the furniture for them.

An analysis of the 30,300 votes shows that 53 per cent. of people over 35 and 63 per cent. of people under 35, preferred the contemporary room; two out of every three young women also preferred the contemporary room. The exhibition is to be staged at Manchester in May.

OBITUARY

James Macgregor

James Macgregor, who was for sixteen years director of the School of Architecture at Cambridge University, died on March 20 at the age of 63. He studied at the School of Architecture, Edinburgh College of Art, and worked for Williamson & Inglis in Kirkcaldy, Hippolyte Blanc in Edinburgh, and Sir Edwin Lutyens in London before entering private practice in 1919. In 1921 he became senior master in design and lecturer on mediæval architecture at the School of Architecture, Manchester University. He became a studio master at the AA in 1926, (remaining there until 1933) and was also later lecturer in architectural history and design at the School of Building, Brixton, from 1931 to 1933, after which he became head of the School of Architecture at the Edinburgh College of Art. He went to Cambridge in 1936, and became a fellow of the RIBA in the same year.

SCOTLAND

Dry-Wall Construction

The first building for which the dry-wall system of construction, invented (and patented) by F. R. Henderson and described in the JOURNAL for January 1 (p. 26), has been used was completed in Glasgow recently. It is a whisky store measuring 21 ft. by 9 ft. The external walling consists of an outer skin of dense concrete blocks, 3 ft. long, 8 in. deep and 3 in. thick; the inner skin, of breeze blocks of the same dimensions. Running vertically through the blocks are ¾-in. mild-steel rods at 18-in. centres. The rods are tightened, by means of bolts, on to a peripheral tie bar at eaves level, which compresses into watertight joints the hemp cords used to separate adjacent courses of blocks.

Mr. Henderson exhibited his building system at last year's Building Exhibition at Glasgow; since then he has been improving the moulds used for casting the specially shaped blocks. His system of construction, at its present stage of development, is particularly suitable for simple buildings, such as garages, piggeries, dairy buildings, stores, etc., which Mr. Henderson claims to be able to construct one-third cheaper than they can be built by conventional methods. The buildings are, moreover, demountable.

It is hoped that the system will soon be developed to the stage where it can be used for cottages and houses.

MOHLG

Thermal Insulation of Houses

The MOHLG has issued a circular to all housing authorities drawing attention to a memorandum on thermal insulation in houses.* In this circular Harold Macmillan, the Minister of Housing and Local Government, emphasizes that the importance of adequate thermal insulation is not generally understood. He points out that the desirable standards are set out in the technical appendices to the Housing Manual, 1949. And he makes it clear that work for improving the insulation of a house may be included in work ranking for improvement grant under the Housing Act, 1949.

The memorandum gives examples and estimates of cost of insulation applied to the normal three-bedroom house. The saving in cost and the better thermal insulation resulting from the use of materials other than brick for the internal leaf of external walls should be particularly noted.

ARCUK

Ordinary and Annual Meetings

The eighty-fourth ordinary meeting and the twenty-first annual meeting of ARCUK were held in the RIBA's Council Chamber, 66, Portland Place, on March 20. At the ordinary meeting, following the report of the Board of Architectural Education, a member of the Council asked if a report could be made on the number of architectural students with scholarships who successfuly complete their training.

In the report of the Finance and General Purposes Committee, it was stated that 74 per cent. of the fees due had been paid (1952: 77 per cent.). During 1952, 933 names were added to the Register, 153 names were restored and 519 names removed owing to

DIARY

Fuel Efficiency and Smoke Abatement. Exhibition at Charing Cross Underground Station, W.C.2. (Sponsor: Solid Smokeless Fuel Federation.) Weekdays, 10 a.m. to 7.30 p.m. APRIL 7-25

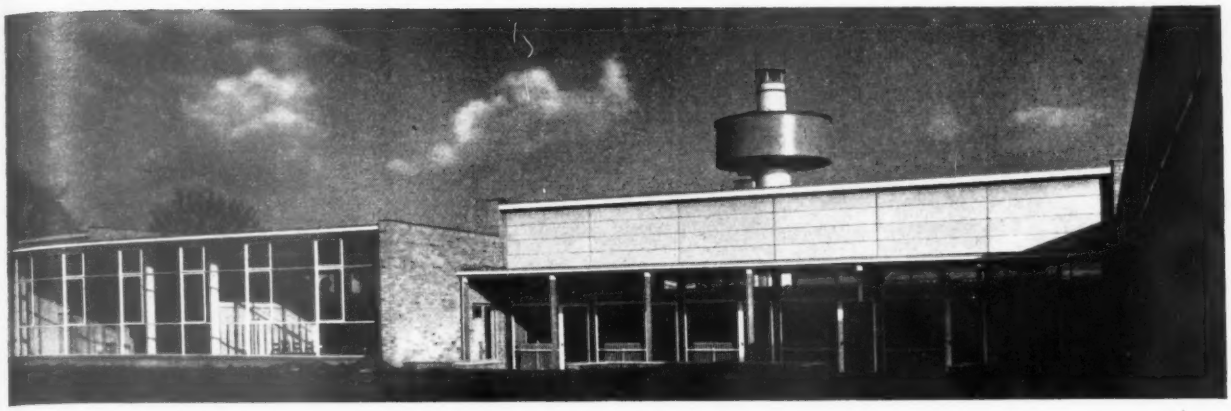
Designers of Textiles. Textiles and wallpapers by SIA members. At Hamilton House, 138, Piccadilly, W.1. Weekdays, 10 a.m. to 5 p.m. UNTIL APRIL 9

Mural Paintings. Exhibition at the RIBA, 66, Portland Place, W.1. Monday to Friday, 10 a.m. to 7 p.m.; Saturday until 5 p.m. APRIL 10-MAY 2

Tour of Harlow New Town. Starting from ICA. 9.30 a.m. APRIL 11

Harrow Potteries. At the Craftsman's Market, Heal & Son, 196, Tottenham Court Road, W.1. Usual shopping hours. UNTIL APRIL 11

* *Memorandum on Thermal Insulation of Houses.* HMSO. Price 4d.



Primary School in Worcestershire

The assembly hall and dining room (on the left) of the primary school at Causeway Green, Oldbury, Worcestershire, was designed by Francis W. B. Yorke and H. M. Barker, in association with F. R. S. Yorke, E. Rosenberg and C. S. Mardall; assistant-in-charge J. G. Fryman. This is part of the infants' section, accommodating 240 children at a cost (excluding special site work) of £140 per place. The combined chimney and water tower in the background is faced with blue frost-proof tiles. The school is to be fully illustrated in a future issue of the JOURNAL.

BUILDINGS IN THE NEWS

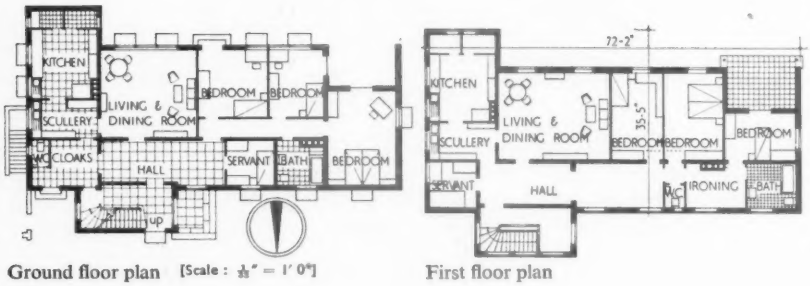
Students Hostel in London

Below right, the exterior of the YMCA Indian Students Union and Hostel at 41, Fitzroy Square, W.1, from the north-west. The hostel, which was opened last week, was designed by Ralph Tubbs; the consulting engineer was Frederick S. Snow. The building contains 55 bedrooms and is to be a social centre for all Indian Students. Below, the staircase leading to the main entrance hall.

Prefabricated Houses at Hemel Hempstead

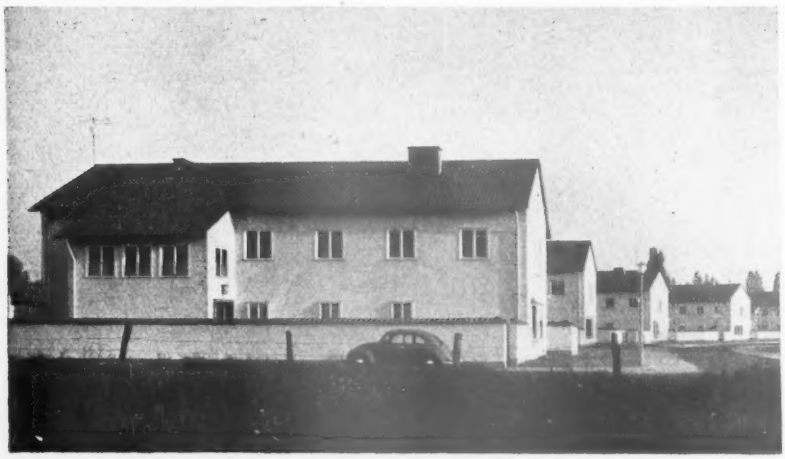
The first pair of five houses with prefabricated interiors took only twelve working days to complete. They were designed by Maurice Bebb for Sir Robert MacAlpine and Sons Ltd. The project was sponsored by the Hemel Hempstead Development Corporation.

HOUSES FOR THE OCCUPATION, COLOGNE



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

Seven two-storey flats form part of the Junkersdorf estate outside Cologne, designed by Wilhelm Wucherpfennig to accommodate officers of the Belgian Occupation Force. Eventually each flat is to be converted for occupation by two German families. Exterior walls and floors are of concrete. Inner walls are of grey porous stone covered with rough fibre wallpaper. Walls and floors in kitchens and bathrooms are tiled. Living rooms have oak parquet floors. Flats are centrally heated; there are fireplaces in living rooms; cooking is by electricity. The average cost per building is £14,000. *Above, the flats from the south; below, from the north.*



deaths, resignations and other causes. This left 17,639 names at December, 1952.

At the Annual Meeting, which followed the ordinary meeting of the Council, E. D. Jefferiss Mathews and Denis Poulton were re-elected as chairman and vice-chairman of ARCUK respectively. The Council membership remains, for 1953-54, substantially as last year. Of the twenty-four members appointed by the Council of the RIBA (two more than last year) D. H. Beaty-Pownall, Dr. F. F. C. Curtis, J. K. Hicks, Howard L. Kelly and Ernest Seel are new members. (H. Conolly, Kenneth M. B. Cross and J. E. K. Harrison have left the Council.) The FAS have appointed a new member: S. A. Brett. The Council of the ISE have appointed a new member: F. R. Bullen, and the Council of the IOB Lt.-Col. Rooney Dougall. The six members elected by the "Unattached Architects" were: Vincent Burr, E. W. Chapman, Montague Evans, J. H. Melville Richards, W. H. Scanlan and H. E. G. Stripp. Major Athoe, who also stood, failed to be elected.

The constitution of the Board of Architectural Education consists of 75 persons nominated by:—

The University of Oxford (1), Cecil C. Handisyde. *The University of Cambridge* (1), J. Macgregor (who has since died, see page 422). *The University of London* (1), Professor A. E. Richardson. *The Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom* (3), Dr. J. F. Mountford, Dr. B. Ifor Evans, Professor T. B. W. Reid. *The Royal Society of Teachers* (3), A. E. Evans, Dr. R. W. Holland, Dr. W. M. Varley. *The Liverpool School of Architecture, University of Liverpool* (1), Professor R. J. Gardner-Medwin. *The Bartlett School of Architecture, University of London* (1), Professor H. O. Corfiato. *The School of Architecture, Victoria University, Manchester* (1), Professor R. A. Cordingley. *The AA School of Architecture, London* (1), J. Brandon-Jones. *The Glasgow School of Architecture* (1), Professor William J. Smith. *The School of Architecture, Edinburgh College of Art* (1), Ralph Cowan. *The School of Architecture, Robert Gordon's Technical College, Aberdeen* (1), Edward F. Davies. *The School of Architecture, Leeds College of Art* (1), F. Chippendale. *The Welsh School of Architecture, Technical College, Cardiff* (1), Lewis John. *The Birmingham School of Architecture* (1), A. Douglas Jones. *The Department of Architecture, University of Sheffield; The Cambridge University School of Architecture; The School of Architecture, Royal West of England Academy, Bristol; The Department of Architecture, Northern Polytechnic, London; The School of Architecture, Leicester College of Arts and Crafts; The School of Architecture, Municipal College, Southend-on-Sea; The Nottingham School of Architecture; The School of Architecture, The Polytechnic, Regent Street, London; The School of Architecture, King's College, Newcastle-on-Tyne* (4), E. Freeth, R. J. Howrie, T. E. Scott, J. S. Walkden. *The Director of Education of the School of Architecture of the Architectural Association, London* (1), Michael Pattrick. *The Association of Technical Institutions* (4), Principal J. C. Jones, Principal D. A. G. Reid, Principal F. H. Reid, R. L. Roberts. *The National Society of Art Masters* (1), M. W. Hawes. *The Association of Principals of Technical Institutions* (1), Dr. T. J. Drakeley. *The Association of Teachers in Technical Institutions* (1), T. E. Hall. *The Institute of Builders* (2), (not given). *The National Federation of Building Trades Operatives* (2), W. Cotter, H. Kelly. *The Headmasters' Conference* (1), C. S. Walton. *The Incorporated Association of Head Masters* (1), E. W. Maynard Potts. *The Association of Head Mistresses* (1), Miss L. C. Jewill Hill. *The ABT* (1), P. J. Marshall. *The RSA* (1), O. P. Milne. *The RIAS* (1), John Watson. *The RSUA (Incorporated)* (1) A. Neill. *The British School at Rome, Faculty of Architecture* (1), S.

Rowland Pierce. *The Royal Academy of Arts* (1), Professor A. E. Richardson. *The Union of Educational Institutions* (1), T. J. Lynch. *The Workers' Educational Association* (1), H. Edmund Poole. *The Educational Executive of the Co-operative Union* (1), W. J. Reed. *The Education Officer of the London County Council*, John Brown. *The Master of the Art Workers' Guild*, W. Godfrey Allen. *The President of the TPI*, S. L. G. Beaufoy. *The President of the AA*, A. R. F. Anderson. And twenty-four members of *The Architects Registration Council*, as follows: *Nominated by*:—*The RIBA* (2), P. G. Freeman, A. M. Chitty. *The IAAS* (2), A. P. Lambert, W. G. Sinning. *The FAS* (2), N. J. Rushton, D. J. A. Lock. *The AA*, not nominated. *The ABT*, not nominated. *The Provincial Associations* (2), A. E. Geens, A. Newton Thorpe. *The Unattached* (2), V. Burr, M. Evans. The following were nominated by P. G. Freeman and were elected by the Council:—D. H. Beaty-Pownall, M. S. Briggs, H. Conolly, K. M. B. Cross, Prof. W. B. Edwards, R. O. Foster, F. E. Green, J. K. Hicks, D. H. McMorran, J. Needham, D. W. Notley, J. E. Ralph, J. R. Tolson, Prof. S. Welsh. Not elected:—L. A. Butterfield and I. G. Foster were not elected.

The Constitution of the Discipline Committee, 1953-54, consists of eight persons nominated by:—*The MOW* (1), H. Kendrew. *The MOHLG* (1), S. Symon. *The President of the Law Society* (2), R. Egerton Johnson, Leslie E. Peppiatt. And four members of *The Architects' Registration Council*, as follows:—*Nominated by* P. G. Freeman and elected by the Council, A. H. Mottram (who has since died), W. A. Rutter, H. E. G. Stripp, H. R. Uren.

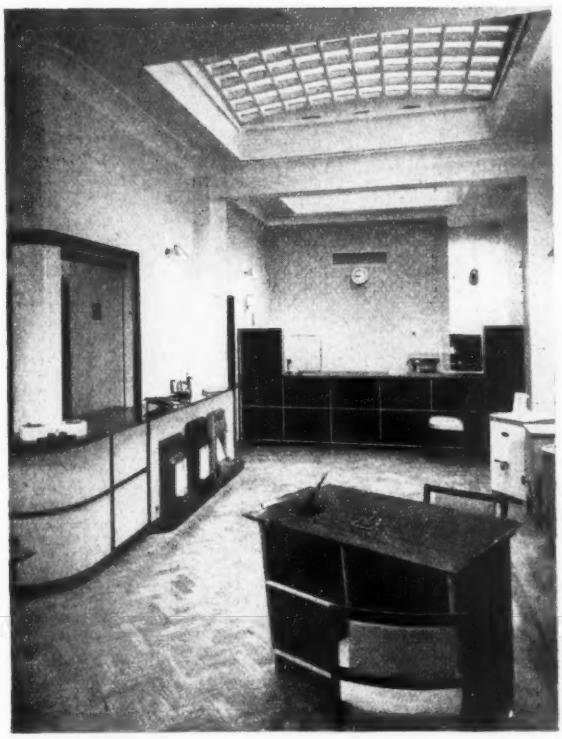
The membership of the *Finance & General Purposes Committee* consists of 17 members, appointed as follows:—*The RIBA* (1), C. Kennard. *The IAAS* (1), I. G. Foster. *The FAS* (1) S. A. Brett. *The AA* (1), J. Brandon-Jones. *The ABT* (1), H. J. E. Pyne. *The Provincial Associations* (1), A. E. Geens. *The Unattached* (2), W. H. Scanlan, H. E. G. Stripp. The following nine were freely chosen by the Council, following nomination by P. G. Freeman:—D. H. Beaty-Pownall, L. A. Chackett, A. M. Chitty, Dr. F. F. C. Curtis, J. K. Hicks, H. Kelly, E. D. Lyons, A. L. Roberts, H. G. C. Spencely.

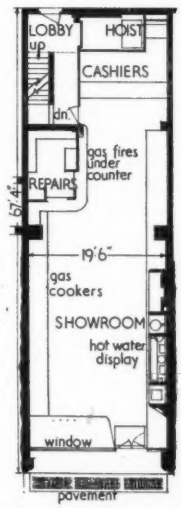
The membership of the *Professional Purposes Committee* consists of 17 members appointed as follows:—*The RIBA* (1), H. V. Lobb. *The IAAS* (1), I. G. Foster. *The FAS* (1), S. A. Brett. *The AA* (1), J. M. Austin-Smith. *The ABT* (1), H. J. E. Pyne. *The Provincial Associations* (1), A. E. Geens. *The Unattached* (2), E. W. Chapman, M. Evans. The following nine were freely chosen by the Council following nomination by P. G. Freeman:—H. Anderson, J. T. Castle, Dr. F. F. C. Curtis, A. G. Sheppard-Fidler, P. K. Hanton, H. L. Kelly, C. Kennard, T. E. North, E. Seel.

The *Constitution of the Admission Committee for* 1953-54 consists of twenty-three persons nominated by:—*The IME* (1), J. H. Melville Richards. *The SE* (1), W. R. Howard. *The RICS* (1), E. W. Spiller. *The ISE* (1), F. R. Bullon. *The IOB* (1), Lt.-Col. Rooney Dougall. *The RIBA* (4), L. A. Chackett, C. J. Epril, H. Martin Lidbetter, Dennis Poulton. *The IAAS* (4), Vincent Burr, Arthur S. Cripps, T. C. Garland, N. A. Royce. *The FAS* (1), G. C. Fox. And nine members of *The Architects Registration Council*, as follows:—*Nominated by The AA* (2), D. Clarke-Hall, J. M. Austin-Smith. *The ABT* (1), H. Moncrieff. *The Provincial Associations* (1), R. O. Foster. *The Unattached* (2), E. W. Palmer, H. E. G. Stripp. The following were nominated by P. G. Freeman and were elected by the Council:—H. N. Haines, A. H. Ley, H. G. C. Spencely. L. A. Butterfield and I. G. Foster were not elected.

GAS SHOWROOM AT RICHMOND, SURREY

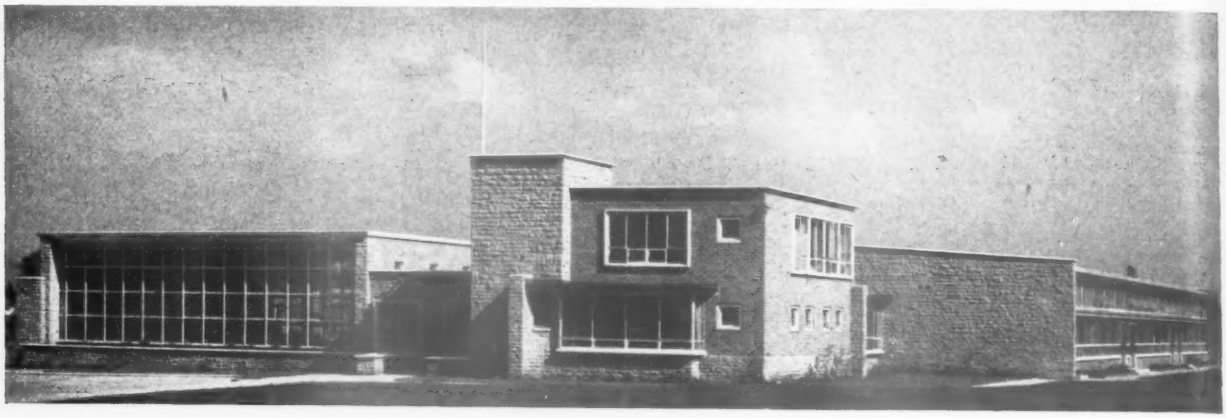
The gas showrooms at 13, The Quadrant, Richmond, for the North Thames Gas Board were designed by Victor L. Johnson in collaboration with T. C. Haynes, Display Architect to the Board, who designed the desks in the bottom photograph. These desks, made in the Gas Board's workshops, are of mahogany with narrow fillets painted blue to match the counter front of laminated plastic (seen on the left in the photograph above). The new shop front (top of page) is faced with travertine marble. General contractors, Perrys (Ealing) Ltd. Sub-contractors, see page 444.



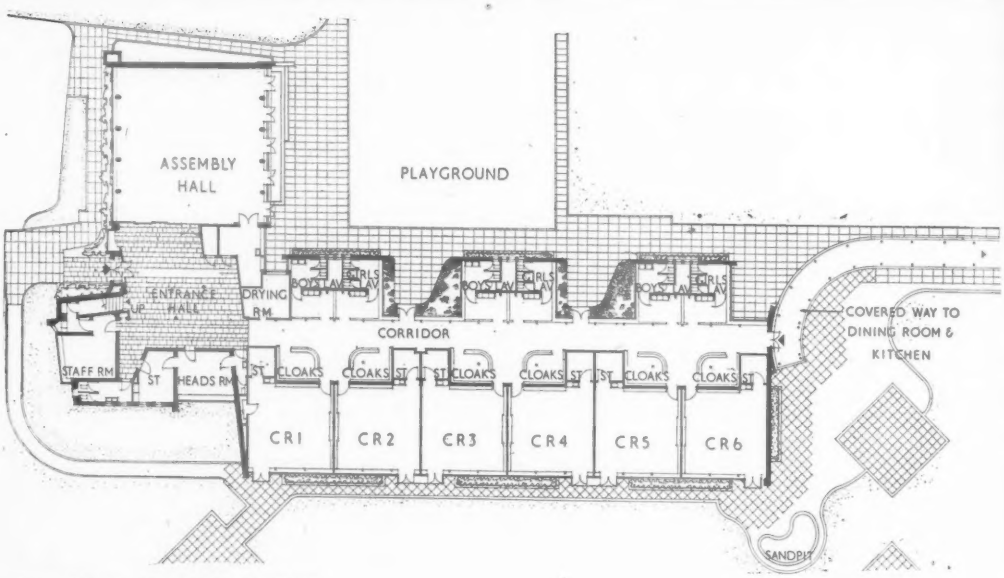


Plan [Scale: $\frac{1}{4}$" = 1' 0"]

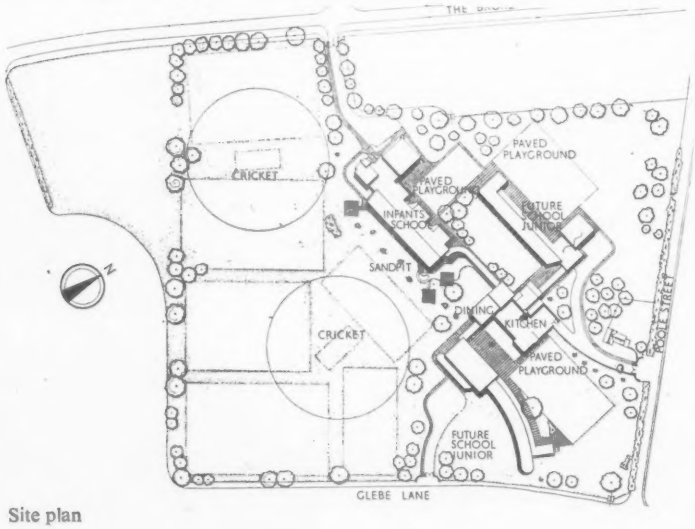
INFANTS' SCHOOL AT STOURBRIDGE FOR WORCESTERSHIRE



The Gig Mill school at Stourbridge for the Worcestershire County Council was designed by Jackson and Edmonds (assistant architect, C. F. Walker). The photographs show, above, from the south-west, below, the classroom wing from the west, on the opposite page, from top to bottom, the west end of the classroom wing and window to headmaster's room, the entrance hall, the main entrance doors and stairs to the first floor medical inspection room and the covered way leading to the dining hall. This school is the first of three to be



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



Site plan

COUNTY COUNCIL

built on the site and a central dining hall will serve all three. Each of the six classrooms has its store and cloak space and a pair of classrooms share a lavatory block. The building is steel framed with external walls of brick or Guiting stone. The general contractors are William Cooper & Sons Ltd. For sub-contractors see page 444.

LIVERPOOL

E. Gardner - Medwin's Inaugural Address

"The main reason for the low standard of efficiency in the building industry and the low average standard of architectural design is that the large number of specializations in the factory and on the site are seldom integrated as a single effective operation."

Professor E. Gardner-Medwin, who gave that explanation in his inaugural address at the Liverpool School of Architecture, went on to say that the architect was inclined to be professionally aloof from the industrial organizations which were producing the new factory-made elements of building, and almost as aloof from the specialist engineering organizations which assembled and fitted these elements on the site.

A very large proportion of the parts of a modern building were factory produced, but it was rarely that the architect had any influence on the design of these parts which played such an important rôle in the behaviour and appearance of his building, and which naturally affected its cost.

The time had come, said Professor Gardner-Medwin, when the architect must re-examine the professional code which had served him so admirably in the past, and ask himself if today it did not establish barriers which prevented his full participation in the process of production. For however much he might keep pace with progress in building science, and however proficient he might be as planner and designer, if he remained professionally aloof from backstage production he would lose complete mastery of the building team's performance.

The architect was in the position of a conductor of an orchestra, conducting his own composition. There was a time when he conducted a quartet (builder, foreman, craftsman, tradesman), but now he conducted a full symphony orchestra of technical specialists.

The building orchestra had many players, and it was up to the architect-conductor to get them to work as a team and satisfy the client (the audience) who today usually consisted of a large committee, very hard to please.

Sometimes the performance might be compared to a concerto, with the structural engineer in the position of the soloist. In other types of structure, such as bridges and hydro-electric dams, the rôles of architect and engineer were reversed.

Architecture today had become a science and an art of intricate team work. It was more important than ever that the architect should keep his imaginative hold of the big idea, and that he should possess to the full a sense of the possible.

In the Liverpool University there was a great opportunity for developing team work in the training of the architect—and indeed in the training of many other professions associated with architecture and building science. There was a constant interaction of architecture with the other arts—with civil and mechanical engineering, physics and chemistry, social science and economics, medicine and public health, history and literature, archæology and geology, and psychology.

That is why it was so splendid to have a school of architecture in a university. The interactions of the faculties could be stimulated, not only for the good of architects, but for the good of all the professions who joined with them. No profession—whether of the Arts or the Sciences—was fully educated without some appreciation of the all-embracing art-and-science of architecture. The theories of architecture were the theories of life; its pleasures ranged from simple to sublime, and they were free for all.

COLUMN GROUP

Grenfell Baines on Architectural Practice

"I was trained in architects' offices after leaving a junior technical school; nine years later I got to a school of architecture—where I was ruined—for three years. It was there that I found my deficiencies," said Grenfell Baines in his talk to the Column Group, an architectural society meeting at Attringham Park, near Shrewsbury. In his early office experience, Mr. Baines went on, he learnt how *not* to run an office; the relationships were thoroughly bad between the staff and the boss. Architecture could only be produced by co-operation, and the three R's of a satisfactory office were: Relationship (between staff and chief); Recognition and Reward. He felt that the atmosphere in architectural schools encouraged equal relationships between principal and staff and group working.

The success of the Grenfell Baines Group was partly due, he thought, to the fact that the buildings they designed during the war could hardly be called architecture, which therefore meant that there was no arguing. This gave solidarity to the group. Group practice developed individual personality, and personality, he contended, was a key to good architecture. This development of personality, however, had a disintegrating effect on the group. As the group had developed into five separate offices they changed the "empire" into five self-governing offices. Then the differences of opinion on design, organization, etc., began to be resolved. The offices still circulated problems between each other, and had a system of exchanging staff, so as to be able to combat peak periods of work without having to take on extra staff.

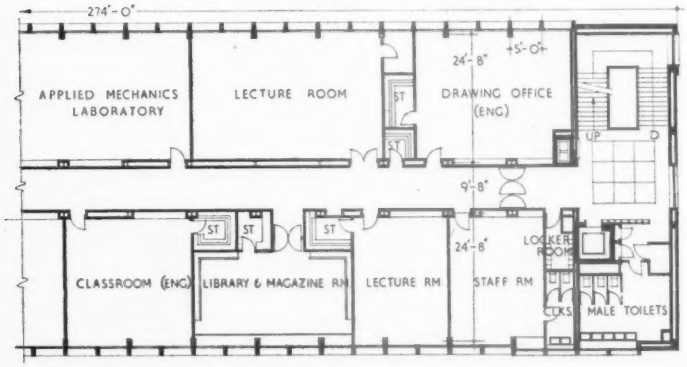
A successful group practice was easier to obtain, the speaker explained, if the participants were of the same age and background, and, if possible, had a balance of talent. A group might also be successful if a very much older man, with greater experience, could act in a consultant capacity. A difference in age of ten years or so had the worst effect on a group. The group was strongest when its members were most dependent on each other. As the members achieved more self-assurance the group tended to break apart, so that further fields of dependence should be found. One such was a group superannuation fund which was on better terms than most, and an antidote to the path of local authority offices.

Mr. Baines then went on to give his view of the difference between public and private architects. He thought that public architects were often not able to design as freely as they would like. There was a difference in the quality of the best work of the public architect and that of the private architect. Private architects made experiments which the public architects did not do. There was a deep-rooted belief that going out to a private architect was more expensive. It was a myth. There was a tradition that all officials were cheaper because "you have him there."

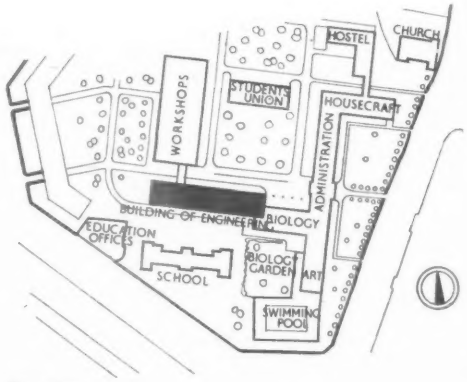
Mr. Baines proposed a scheme whereby the private architect entered the public office in a senior role to organize part of the staff and thus get good high-level designers into the office. "It's not without precedent in industry," he said, "and we've done it at Aycliffe." He was quite convinced that architecture should be done by very small groups indeed—only one job at a time and each job seen right through. A typical group would consist of an architect, two assistants and a typist. He also proposed linking design and production—a contract-

BUILDING AND ENGINEERING BLOCK, TECHNICAL COLLEGE, PLYMOUTH

The first block of the new technical college at Plymouth is to accommodate the building and engineering departments. The city architect is H. J. W. Stirling. Left, the block from the south-west. The cost is estimated at £204,310. It is to have a steel frame and reinforced concrete floors and roof, cast in situ. *The building is to be faced with Portland stone to first floor level, facing brick above. Ventilation will be mechanical; extract fans will be located in the roof and will be connected by ducts placed in the false ceilings to corridors to all rooms in the building. General contractors are A. N. Coles, Ltd.*



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



Site plan

ing organization with a team of designers in it. This would take managerial work away from the architect, which was reasonable, as he was not good at it.

On the questions of training, Mr. Grenfell Baines pointed out that school-trained men were now rising to senior positions, but schools were tending to become ingrowing—in fact, producing teachers to teach in the schools who had had no practical experience.

He thought that the responsibility for choosing entrants to the profession should be put on to the *office*, and not on the schools. If would-be architects had two years in an office to learn what architecture really meant, they could then take an entrance examination to a school. Two years should not be long enough to miss a man and he could then have three years at school, with some sort of diploma at the end before having a further two years in an office. He could then complete his fourth and fifth years' training.

There should be no examinations in the form of memory tests, and students taking their finals should be allowed all possible reference books. Examinations should be held locally by the allied societies, who would also have the responsibility of providing text books, and the activities of the RIBA thus would be decentralized.

NFBTE

Cricket Match

The annual cricket match between the NFBTE and the architectural papers is to take place at the Richmond Cricket Club on June 19.

A talk by Guy Biscoe is summarized here by Ernest Watkins.

ERNEST WATKINS

Professional Responsibility

All professional men offer their skill to the public and are all liable in damages if they are negligent in the employment of that skill on behalf of a member of the public, their client. This aspect of professional responsibility was discussed by Guy Biscoe in a recent paper read by him before the RICS. Mr. Biscoe was speaking as a surveyor, but all that he had to say is relevant to the position of an architect who is asked to report on an existing building.

The main points made by Mr. Biscoe can be summarized as follows:—

(*a*) Whatever the fee paid, the architect or surveyor is required to use all his professional skill and experience, and he may be liable in damages if he fails to use it. Work, in short, cannot be skimped just because the fee is small.

(*b*) An architect or surveyor is engaged both to find out the facts and to draw the necessary inferences from those facts. In the examination of an existing building inference is bound to play a considerable part, since the whole building cannot be exposed for examination. The standard of care required is high. (Mr. Biscoe quoted a case where a surveyor was held to be negligent because he reported a roof as sound when in fact the roof tiles were disintegrating, due to efflorescence. There was evidence of a deposit of dust on the floor of the attic under the tiles and from that, the Court held, an inference of decay should have been drawn—at least, the roof should not have been stated to have been sound.)

(*c*) It is as well for the architect or surveyor to find out just what is expected of him when he is asked to make an examination, and to get his client's requirements in writing. If, for instance, a house to be examined is occupied and the tenant is not likely to co-operate in the lifting of any floor boards, the client should be warned that if the floor boards are not lifted the examiner cannot report whether or not decayed or infected timber lies beneath them.

(*d*) It is never advisable to attempt to do other specialists' work for them, nor is it wise to offer opinions on matters which are not mentioned in the client's instructions. How many architects, for instance, feel competent to advise on electrical wiring systems, or on values? Architects or surveyors should state specifically what aspects of the examination they do not propose to cover and should remain silent on matters outside their own province.

(*e*) It is important to remember that the report will be treated by the client as a guide to his own actions. It should be written with the effect it will have on a layman in mind.

(*f*) All professional men should be covered by insurance against claims based on professional negligence. The cost of even one mistake in a lifetime of practice may be most damaging.

Mr. Biscoe's paper is of great practical value to all members of professions concerned with building.

WORKSHOP BLOCK

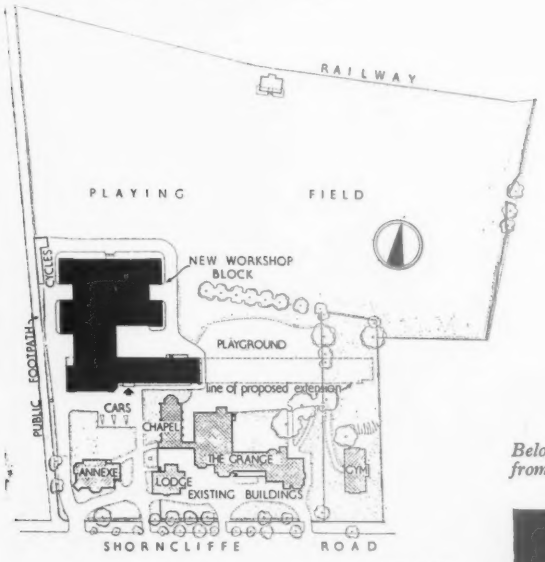
at the TECHNICAL COLLEGE, SHORNCLIFFE ROAD, FOLKESTONE, KENT
designed by S. H. LOWETH, County Architect, R. TILSLEY GREEN, Deputy County Architect and R. L. PASSMORE, Principal Assistant Architect
consultants, structural, MALCOLM GLOVER and PARTNERS, consultants, services, J. STINTON JONES and PARTNERS, quantity surveyors, D. R. NOLAN & CO.

The new workshops, erected for the Kent Education Committee, form part of the Folkestone Technical College and accommodate courses in the building trades and engineering. The building is planned to allow for the future development of a new full-scale technical college, but, in the meantime, to be used in conjunction with the converted houses on the site.

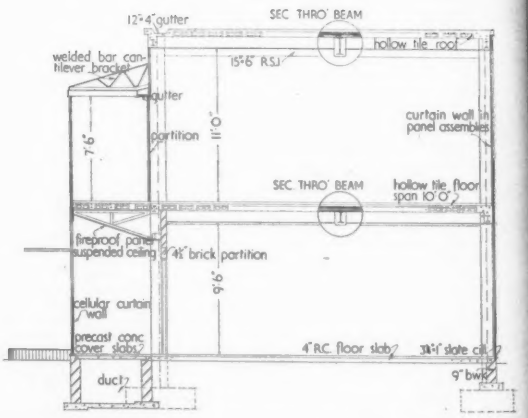
The main entrance doors.

The new workshops from the south-east.

Above, on the left the two-storey block with the workshops beyond, seen from the east.

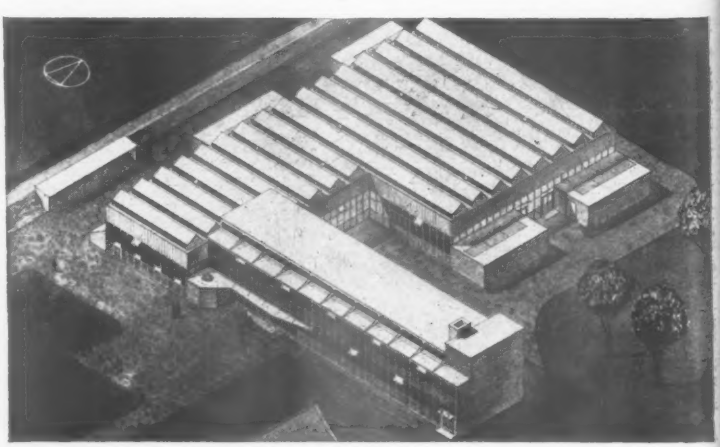


Site plan



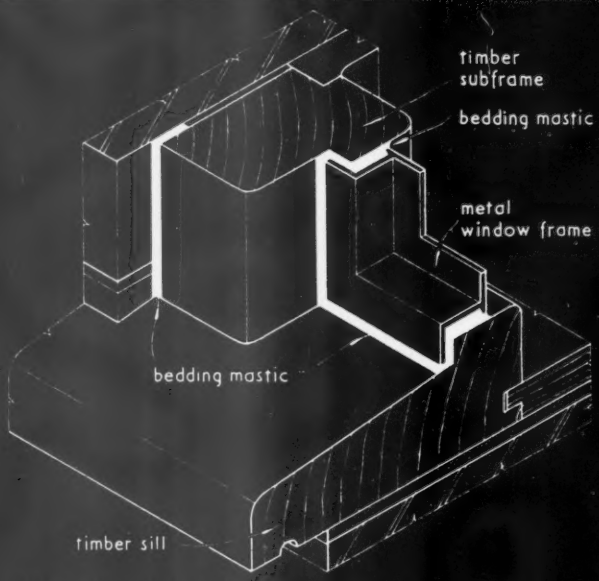
Section A-A [Scale : $\frac{1}{12}$" = 1'0"] An exterior wall of this block and the workshop roof will be illustrated as Working Details in a later issue of the JOURNAL.

Below, aerial view from the south-east.

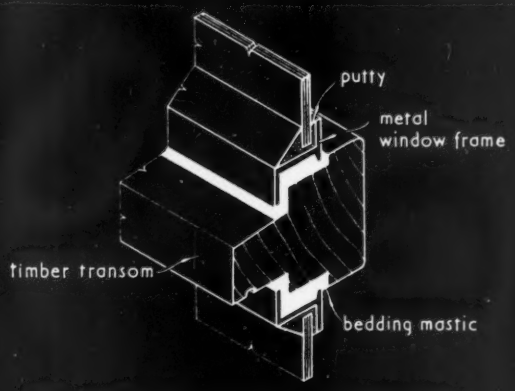


SITE.—The two main conditions governing the siting of the new workshops were firstly to avoid interruption in the use of the existing buildings and, secondly, to preserve the playing fields to the north of the site. The future extensions will eventually replace all the old buildings, but the whole scheme is devised so that a main teaching block, which will form the next phase, can be added to the new workshops and brought into use before any of the old buildings are demolished.

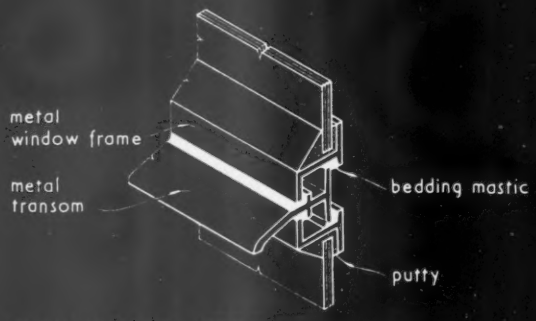
of this
Working.



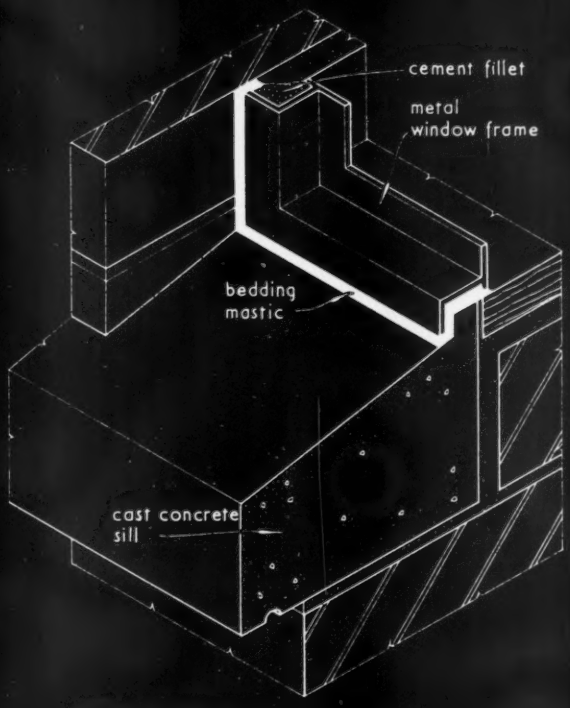
METAL WINDOW IN TIMBER FRAME.



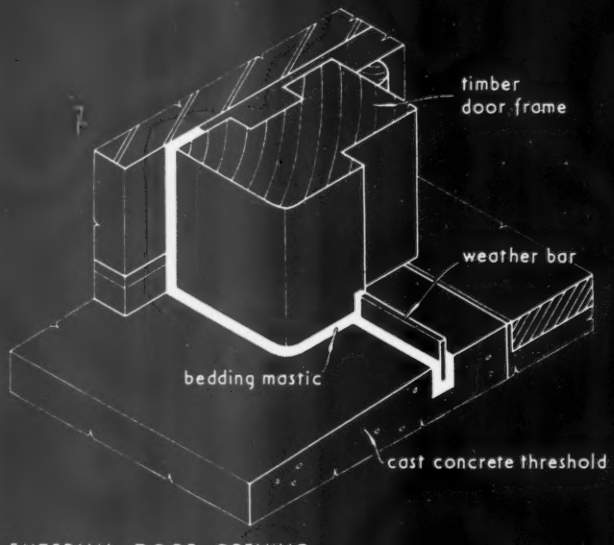
METAL WINDOW WITH TIMBER TRANSOM.



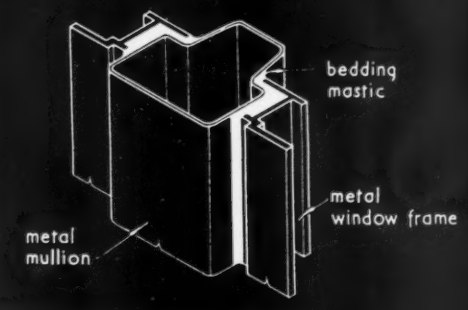
METAL WINDOW AND TRANSOM.



METAL WINDOW FIXED DIRECT TO BRICKWORK.



EXTERNAL DOOR OPENING.



METAL WINDOW AND MULLION.

·ARBOMAST BI· BEDDING MASTIC: ·ARBOLITE· PUTTY FOR METAL CASEMENTS.
Manufacturer: Adshead Ratcliffe and Co. Ltd.

26.M3 'ARBOMAST B1' BEDDING MASTIC: 'ARBOLITE' PUTTY FOR METAL WINDOWS

This Sheet describes Arbomast bedding mastic and Arbolite putty for metal windows. The drawings on the face illustrate the use of Arbomast for sealing joints around door and window frames.

'Arbomast B1' Bedding Mastic

Composition: Arbomast has for its base a scientific blend of processed drying and non-drying vegetable oils and is free from mineral oils or adulterants.

Adhesion: It will adhere satisfactorily to metal and to all forms of dry dust-free building material.

Elasticity: A tough skin forms on the surface of the mastic after a day or two from the time of application, so that the material beneath remains sufficiently plastic to take up any movement.

Water Resistance: The compound maintains a watertight seal and does not bleed into the surrounding surfaces.

Method of Application: Arbomast is applied manually and pointed to a neat, smooth surface with a putty knife or small trowel.

Colour: The standard colour is stone, but it may also be obtained in silver grey for use with aluminium windows.

General Applications: Arbomast is recommended for bedding and pointing window frames and sub-frames, sills and door frames. It is also used in conjunction with wood splines for filling the interstices in composite window units.

'Arbolite' Putty

Composition: Arbolite has a base of specially processed linseed oil.

Drying Process: This takes place in two distinct stages. The initial stage is rapid, taking from 24 to 48 hours, depending on the atmospheric conditions and whether there is exposure to direct sunlight. It prevents flowing or sagging and provides a surface on which dirt is not easily retained and that is satisfactory for painting.

The second stage takes several weeks, after which time the putty is hardened throughout and is keyed to the metal in a solid durable joint. It is not subject to the cracking and crazing often experienced with rapidly hardening putties.

Water Resistance: Arbolite produces a perfectly watertight joint.

Finish: Putty should never be left unpainted for longer than four weeks.

General Applications: Arbolite is suitable for fixing glass in all types of metal windows, doors, screens and lights, both external and internal.

Compiled from information supplied by:

Adshead Ratcliffe & Co., Ltd.

Address: Premier Works, Belper, Derbyshire.
Telephone: Belper 351/2.
Telegrams: Premier, Belper.

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

PRIVATE CARS : TURNING CIRCLES AND DIMENSIONS

The following data are given by permission of *The Autocar* and are based on their *Buyers' Guide to* 1953 *cars*

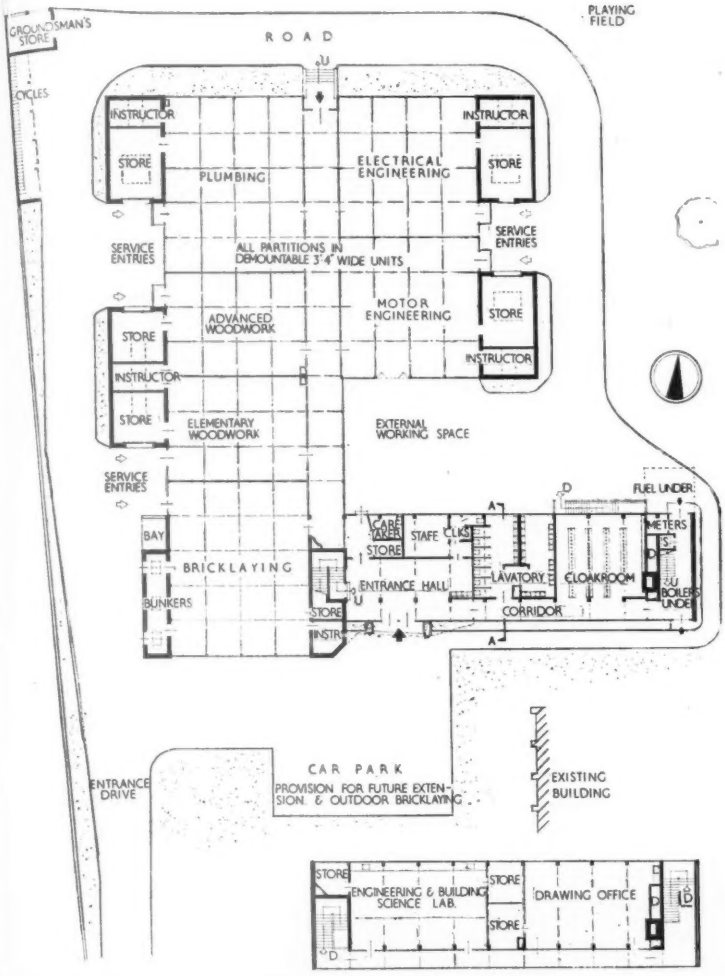
Make and Model	Turning Circle Dia. (ft. and in.)	Length (ft. and in.)	Width (ft. and in.)	Height (ft. and in.)
A.C.				
2-litre saloon ..	39 0	15 4	5 7	5 1
Sports tourer ..	39 0	15 4	5 7	5 1
Allard				
Palm Beach 3-seater sports	28 0	13 0	4 10	4 3
K.3 2/3-seater sports	38 0	14 9	5 6	4 6
P.1 saloon	41 0	15 6	5 11	5 2
J.2X 2-seater sports..	38 0	13 0	5 8	3 8
Monte Carlo saloon	40 0	16 0	5 11	5 0
Alvis				
3-litre saloon ..	39 6	15 3	5 6	5 3
Armstrong-Siddeley				
Whitley saloon ..	37 0	15 5	5 8	5 3
Hurricane coupé ..	37 0	15 6	5 8	5 1
Sapphire saloon ..	42 6	16 1	6 0	5 3
Aston Martin				
D.B.2 saloon ..	35 0	13 7	5 5	4 6
Austin				
A.30 Seven saloon ..	35 0	11 5	4 8	4 11
A.40 Somerset saloon	37 0	13 4	5 3	5 4
A.40 Sports	38 0	13 4	5 1	4 10
A.70 Hereford saloon	39 0	14 0	5 10	5 6
A.90 Atlantic Sports saloon	39 0	14 10	5 10	5 2
A.125 Sheerline saloon	43 0	16 0	6 1	5 7
A.135 Princess saloon	43 0	16 1	6 1	5 6
Bentley				
Sports saloon ..	41 3	16 8	5 11	5 6
Bristol				
401 saloon	37 6	16 0	5 7	5 0
Citroen				
Light 15 saloon ..	43 0	14 7	5 6	5 0
Big 15 saloon.. ..	45 6	15 7	5 10	5 1
Six saloon	45 6	15 11	5 10	5 1
Connaught				
L.3, L.3/S.R. sports ..	35 0	12 4	5 0	3 5
Daimler				
Consort saloon ..	41 0	15 2	5 5	5 5
Regency saloon ..	42 0	15 11	5 11	5 5
3-litre coupé	42 0	16 3	5 11	5 1
Straight Eight saloon	50 0	18 6	6 2	6 0
Dellow				
Mark II 2-seater sports	28 6	11 5	4 7	4 5
Mark III tourer ..	30 6	11 11	4 9	4 5

Make and Model	Turning Circle Dia. (ft. and in.)	Length (ft. and in.)	Width (ft. and in.)	Height (ft. and in.)
Ford				
Anglia saloon ..	34 9	12 9	4 9	5 5
Prefect saloon ..	36 3	13 0	4 9	5 4
Consul saloon ..	40 6	13 7	5 4	5 1
Zephyr saloon ..	41 6	14 4	5 4	5 1
Frazer-Nash				
Le Mans, Mark II sports	39 0	12 3	3 2	3 0
Mille Miglia sports ..	39 0	12 6	4 8	3 1
Targa Florio 2-seater sports	39 0	12 6	4 8	3 0
Healey				
2.4-litre saloon ..	34 0	14 6	5 5	4 6
3-litre coupé ..	34 0	14 2	5 5	4 2
Hillman				
Minx, Mark V saloon	33 0	13 2	5 2	5 0
H.R.G.				
1100 2-seater ..	32 0	11 11	4 7	4 2
1500 2-seater ..	32 0	12 0	4 7	4 2
Humber				
Hawk saloon	37 0	15 1	5 10	5 5
Super Snipe saloon ..	40 0	16 5	6 2	5 6
Pullman, Imperial saloon	48 0	17 8	6 3	5 9
Jaguar				
Mark VII saloon ..	36 0	16 5	6 1	5 3
XK 120 2-seater sports	31 0	14 6	5 2	4 5
XK 120C sports ..	31 0	13 1	5 5	3 8
Jenson				
Interceptor saloon ..	38 0	15 8	5 6	4 10
Jowett				
Javelin saloon ..	33 0	14 0	5 1	5 1
Jupiter coupé ..	31 0	14 0	5 2	4 8
Lagonda				
Mark II saloon ..	38 0	15 8	5 8	5 4
Lanchester				
Fourteen saloon ..	33 6	14 8	5 6	5 5
Lea-Francis				
14-h.p. saloon ..	35 0	15 1	5 4	5 1
18-h.p. saloon ..	35 0	15 1	5 4	5 1
2½-litre sports ..	32 0	13 9	5 3	4 6
M.G.				
TD Midget saloon ..	31 3	12 1	4 11	4 6
YB 1½-litre saloon ..	33 6	13 8	4 11	4 9
Morgan				
Plus 4 2-seater sports	33 0	11 8	4 8	3 11

4.E1 PRIVATE CARS : TURNING CIRCLES AND DIMENSIONS

Make and Model	Turning Circle Dia. (ft. and in.)	Length (ft. and in.)	Width (ft. and in.)	Height (ft. and in.)
Morris				
Minor, series II saloon	33 2	12 4	5 1	5 0
Oxford saloon ..	37 0	13 11	5 5	5 3
Six saloon	41 3	14 9	5 6	5 4
Renault				
750 saloon	27 0	11 10	4 9	4 10
Riley				
1½-litre saloon ..	30 0	14 11	5 4	4 11
2½-litre saloon ..	36 0	15 6	5 4	5 0
Rolls-Royce				
Silver Wraith ..	42 4 to 44 10	16 10 to 17 10	6 1 to 6 5	5 4 to 5 6
Rover				
75 saloon	37 0	14 11	5 6	5 4
Singer				
S.M.1500 saloon ..	33 0	14 9	5 3	5 4

Make and Model	Turning Circle Dia. (ft. and in.)	Length (ft. and in.)	Width (ft. and in.)	Height (ft. and in.)
Standard				
Vanguard saloon ..	35 0	13 10	5 9	5 4
Sunbeam Talbot				
90 saloon	36 6	14 0	5 3	5 1
Triumph				
Mayflower saloon ..	34 0	12 10	5 2	5 2
Renown saloon ..	40 0	15 1	5 4	5 5
Vauxhall				
Wyvern saloon ..	35 0	14 5	5 8	5 4
Velox saloon ..	35 0	14 5	5 8	5 4
Wolseley				
Four-forty Four saloon	32 0	14 5	5 1	5 0
Four-Fifty saloon ..	42 6	14 2	5 6	5 3
Six-Eighty saloon ..	41 3	14 9	5 6	5 4



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

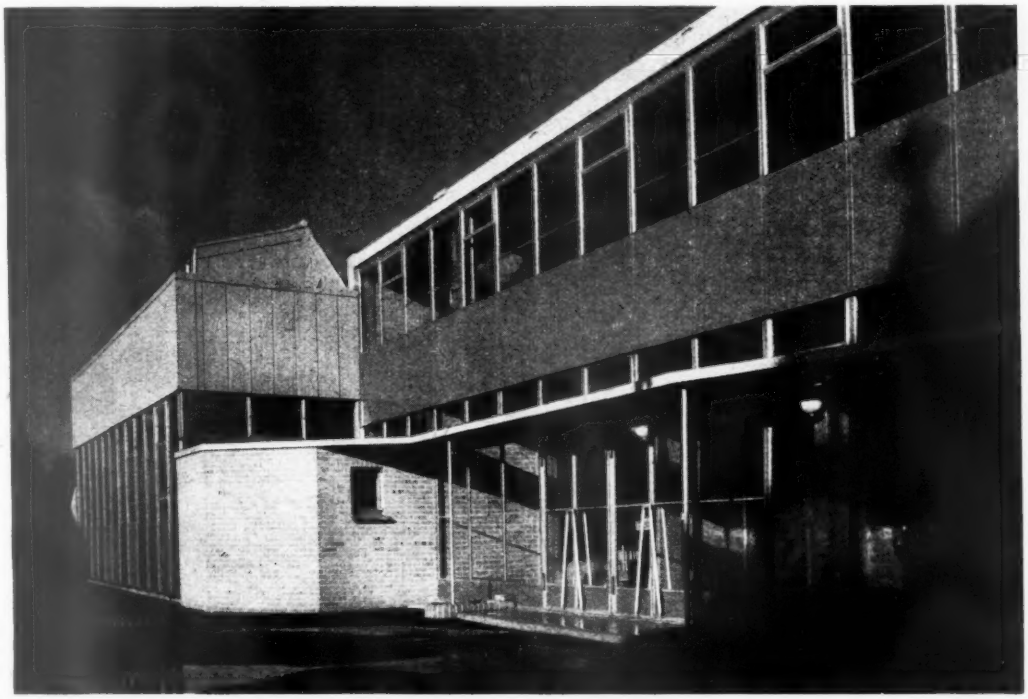
PLAN.—The compact plan was chosen because of the restrictions of the site and for economy. The general layout is similar to that of a normal factory. The workshops are formed by dividing up a large covered space provided with roof lighting. Stores are built externally with easy access to the supply road and the working area. The drawing office and science laboratory are in a two-storey block, which may later be extended to four storeys and have a main teaching wing added eastwards. Flexibility of planning internally is obtained by the use of demountable partition units with junction posts which allow four-way connections, and these conform to the system of roof lighting where trusses and tie-members form an "egg-crate" type of structure beneath the roof monitors on a 10-ft. square module. Partition units will fit anywhere beneath the fins of the crate. The fins are hollow and contain service pipes, as well as providing sound absorption. Lighting is mainly from the north, but there are also strips of glazing facing southwards, designed so that direct sunlight falls only on the fins.

CONSTRUCTION.—Prefabrication methods were adopted to promote speedy erection with a limited site labour force. The buildings are steel framed,

WORKSHOP BLOCK

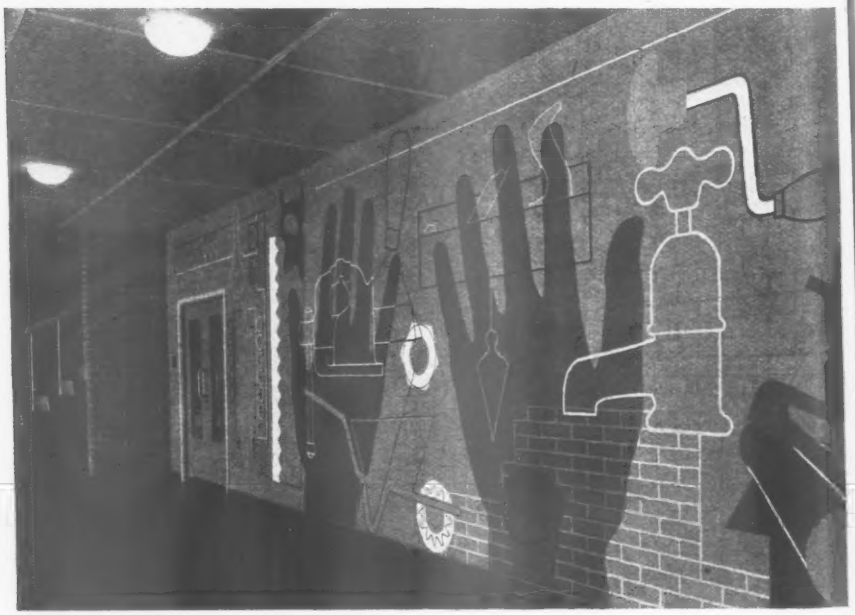
at the TECHNICAL COLLEGE, FOLKESTONE, KENT

designed by S. H. LOWETH, County Architect



Right, the main entrance on the south facade of the two-storey block. In the background a corner of the workshops.

Above, stairs leading from the entrance hall to the first floor laboratory and drawing office. Right, mural in the entrance hall, painted by students of the Folkestone College of Art.



WORKSHOP BLOCK

at the TECHNICAL COLLEGE, FOLKESTONE, KENT
designed by S. H. LOWETH, County Architect

with box-shaped stanchions in the workshops section, some containing rainwater pipes. In the two-storey block, detachable cantilevered steel brackets are used to support the corridors. Until additional storeys are built, the top brackets are left exposed, allowing clerestory lighting to the teaching rooms. The cladding of the main external walls and the internal partitions is of laminated plastic panels fixed in light alloy frames, assembled before delivery to the site. The stores are separate structures with cavity brick walls and roofs of asbestos cement decking. Structural walls adjacent to staircases in the two-storey block are in brickwork. The construction of an external wall of the two-storey block and the workshop roof will be shown as Working Details in a later issue of the JOURNAL.

FINISHES.—The colour of the plastic curtain wall panels is deep terra-cotta red, similar to the brickwork of most of the existing buildings in the neighbourhood, but darker in tone. External facing bricks are of rough texture and a light tone. The stores have no windows, being top lit, and are in marked contrast to the remaining external walls. The workshop roof consists of asbestos cement corrugated sheeting externally and insulation board, exposed and painted, internally. The deep fascia is of asbestos cement sheeting. The ground floor finish is a plastic-based jointless composition, the surface hardness of which is varied according to the requirements of each area. The first floor is finished in grey-green coloured bitumastic tiles. Internally, all the plastic partitioning is in the same deep red colour. In the workshops, the underside of the monitor roofs is painted bright yellow or blue

in alternate boxes of the "egg-crates." The north-south fins, which generally receive most light, are painted white (reflection value, 72 per cent.); the fins facing north glazing are painted light grey (R.V., 57 per cent.); fins facing south glazing are

Left, the electrical workshop. Top lighting is from monitor roof lights, under which is an "egg-crate" ceiling on a 10-ft. grid, with fins 5 ft. deep. Below, corridor on the first floor of the two-storey block. This corridor is carried on steel brackets cantilevered from the main steel frame.

painted grey, with an addition of red and green in alternate boxes. Exposed steelwork is painted neutral grey. In the entrance hall the side wall by the waiting space is faced with dark blue-black stable paving blocks, found on the site. On the wall facing the entrance doors a mural has been painted by students of the Folkestone College of Art, under the direction of G. M. Norden—a design based on suggestions made by the architects.

SERVICES.—Oil-fired boilers are used for heating services, with low velocity unit heaters. These units are confined to non-movable walls and heating pipes are fixed in the east-west fins of "egg-crate" roof. There are aluminium grilles at a low level in these fins and slots at the top, immediately below the glass, to allow warm air to circulate across the glazed roof areas. Each box contains a single tungsten light fitting. The total cost was £76,000, out of which the general contract was £52,000, mechanical services £11,000, electrical services £3,700, site works, contingencies, etc., £9,300. The cost per ft. cub. was 4s. 1d., and per ft. sq. 64s. 0d. The technical research, design and preparation of the scheme were carried out by Schools Group One, under the supervision of J. H. Garnham Wright, assisted by G. G. Grylls, L. B. Matthews and W. A. Shirbon (executive assistant for the contract). The general contractors were O. Marx & Son, Ltd. For sub-contractors, see page 444.

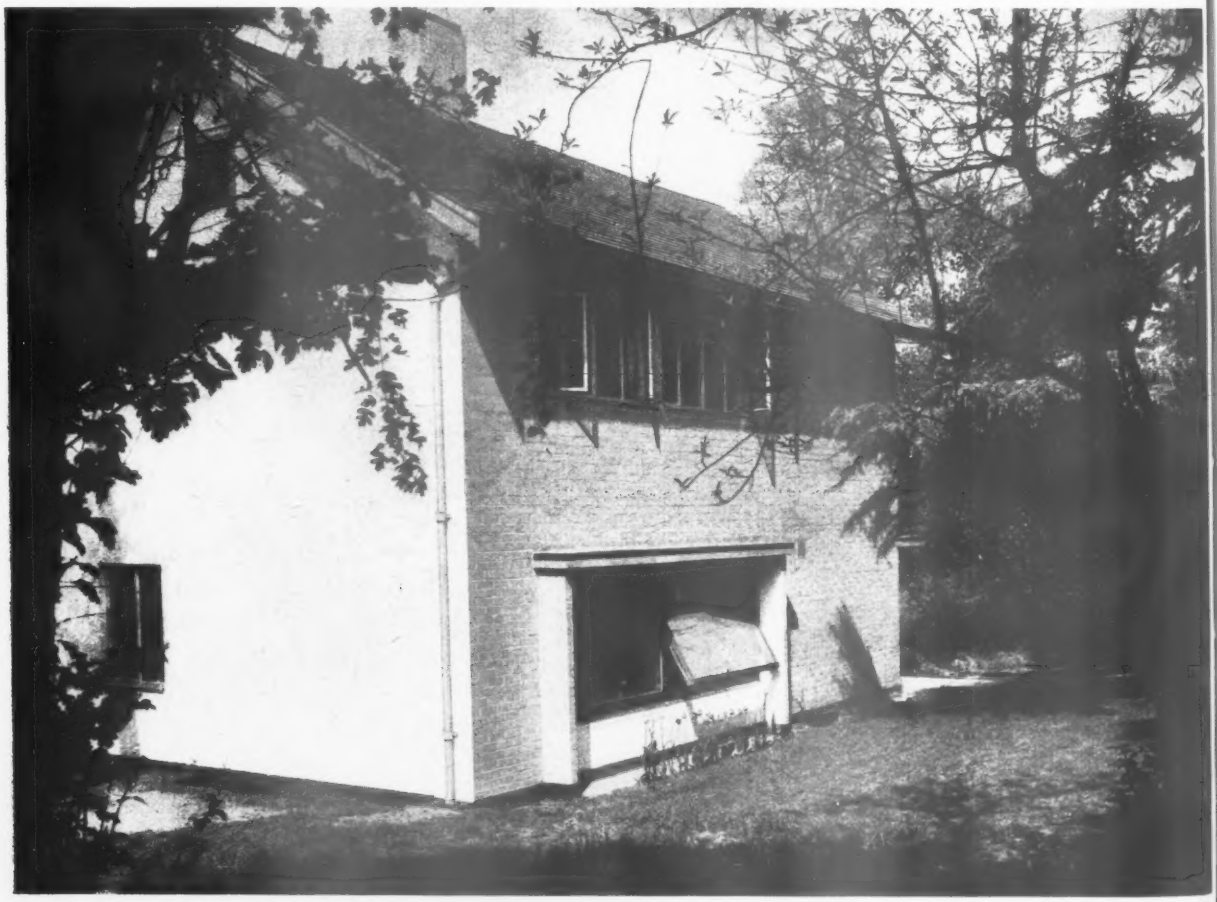
HOUSE

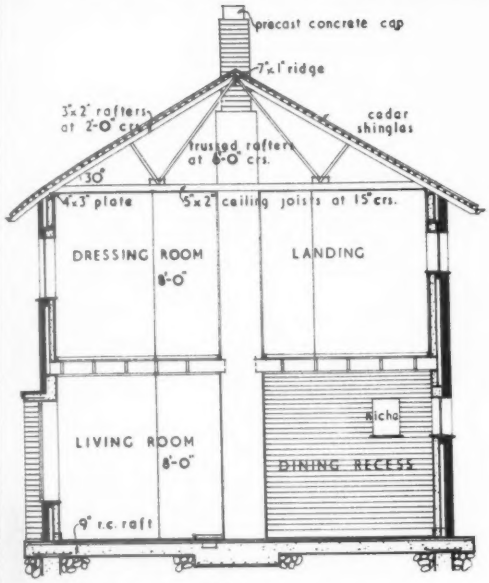
in ST. MARY'S ROAD, WIMBLEDON, LONDON, S.W.19

designed by R. A. J. GAZZARD

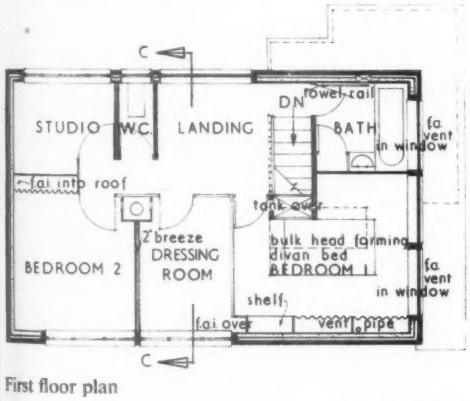
This private house on the Vicarage site in Wimbledon was designed by the architect for his own occupation. The house is built on part of the old Vicarage garden and has been sited in relation to the large number of well developed trees, which have all been preserved. The nearby St. Mary's Church and a fine view towards West London can be seen from the large kitchen window.

The house from the south-west.

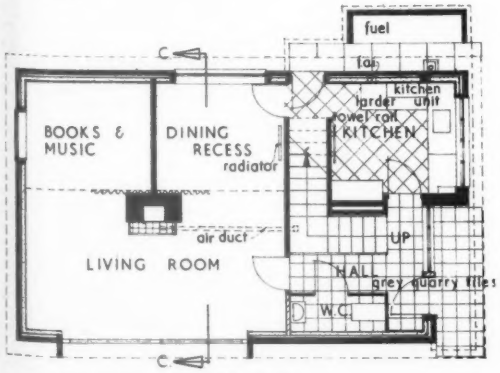




Section C-C [Scale : $\frac{1}{8}$" = 1'0"]



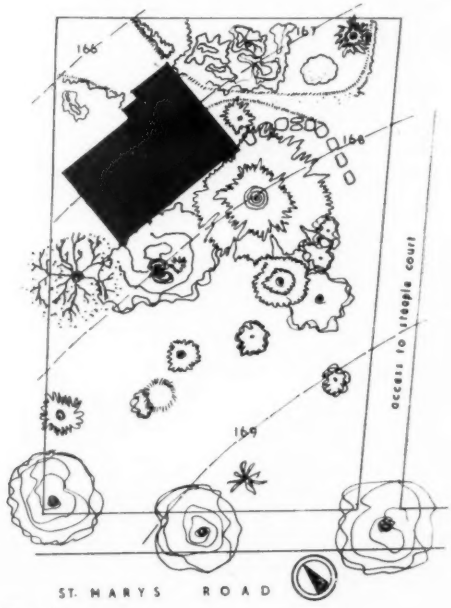
First floor plan



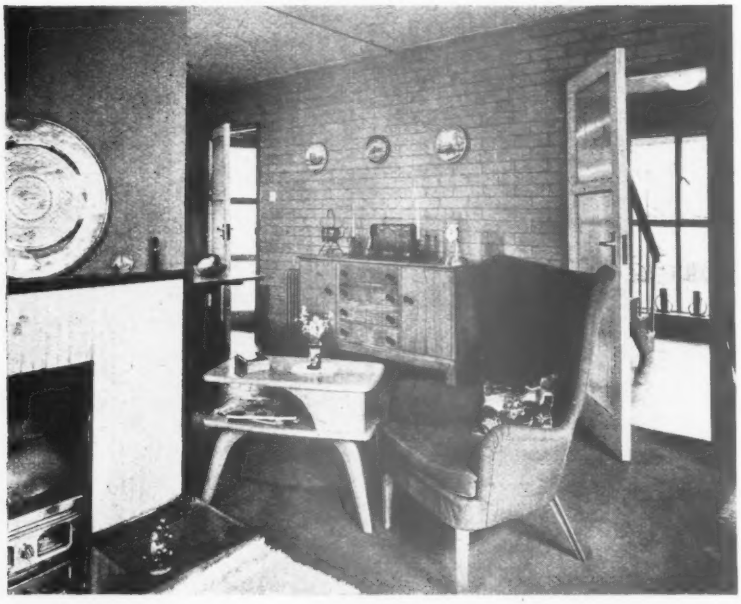
Ground floor plan [Scale : $\frac{1}{8}$" = 1'0"]

Above, left, the dining space. Above, the main entrance on the east facade.

PLAN.—The asymmetrical south-west elevation was governed by the position of existing trees on the site. As originally designed the house was to have a flat roof, but in this form planning permission was not granted. Even after the design had been altered to a pitched roof with shingles, permission was refused because of the asymmetrical south elevation—a decision reversed by the (then) MOTCP. The living room is planned around the fireplace, behind



Site plan



which is a partition wall dividing areas for dining and for music. A bulkhead, which gives headroom to the staircase, is concealed under a divan bed in the main bedroom.

Above, the living room, with dining space beyond. Right, the large double-glazed living room window, which is a Swedish patent. Centre right, the double-glazed window opened for cleaning. Below right, the staircase from the hall.

CONSTRUCTION.—External walls have a brick outer skin, a 2-in. cavity and a 4-in. inner skin of foamed slag blocks. Internal walls are brick and partitions are 2-in. breeze or 3-in. foamed slag. The roof is of trussed rafters at 6-ft. centres and the first floor is of lattice beams 8½ in. deep and at 18-in. centres, bearing on a special pressed-steel trimmer.

FINISHES.—Facing bricks are flint limes and some of the brickwork is left unplastered internally. The roof is covered with cedar shingles. Ceilings are of aluminium backed plasterboard. The staircase has deal treads and a 2-in. circular wood handrail supported on ⅜-in. dia. steel reinforcing bars, painted white.

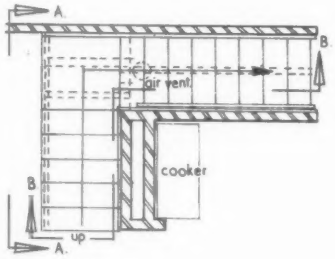
SERVICES.—The living room fireplace has a back boiler which supplies warmed air to first floor bedrooms, heats two radiators and towel rails.

The general contractors were Holbrow & Sons (London), Ltd. Sub-contractors on page 444.

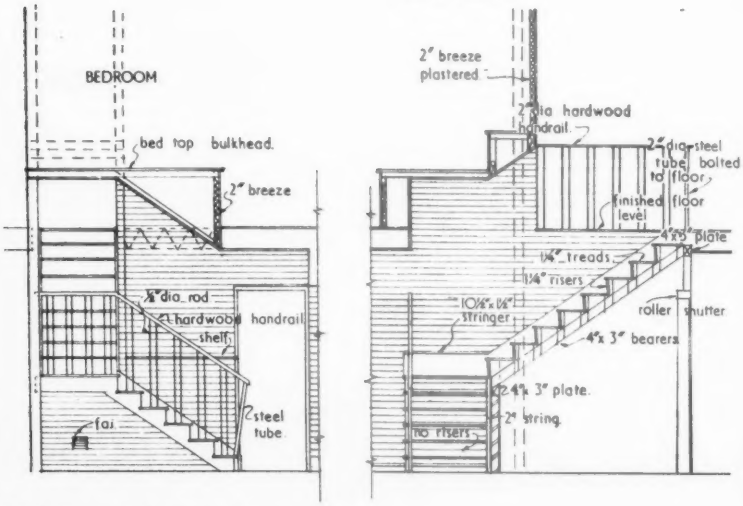
HOUSE

in WIMBLEDON, LONDON, S.W. 19

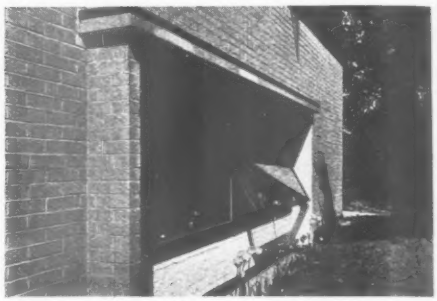
designed by R. A. J. GAZZARD

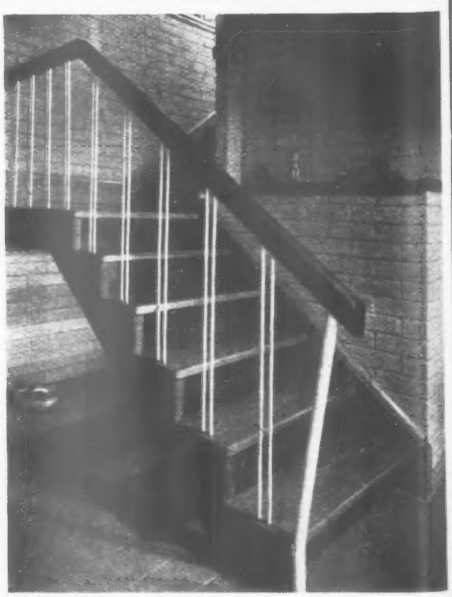


Plan of staircase



Sections A-A and B-B [Scale : ½" = 1' 0"]





TECHNICAL SECTION

The comparatively low efficiency of the process of producing electricity from coal, in spite of recent improvements, limits the use of electricity for heating to certain fields, where cleanliness and the minimum of attention are especially important. Although the use of electricity may not *cost* a great deal more than gas or solid fuel, far more coal is being consumed than would be consumed by efficient gas and solid fuel appliances. Hence the value of thermal storage which, by using off-peak electricity, evens out the load on the power station and increases its overall efficiency.

We are pleased to note, therefore, that the Government has removed purchase tax (at least, for commercial users) from the small-scale, thermal-storage heaters which were described in the JOURNAL for October 23, 1952—a move which we advocated in that issue.

Another move towards the efficient use of fuel was the publication by MOHLG last month of a Memorandum on Thermal Insulation of Houses (HMSO, 4d.). This memorandum lists methods of achieving insulation standards higher than those provided by 11-in. cavity brickwork and the normal pitched roof, battened, felted and tiled. The approximate cost of each item, compared with normal construction, is given, and in the Minister's circular No. 19/53, dated March 20, he points out " there need be no additional cost on the whole house, for an increase on one item can often be matched by a saving on others."

This week's special article

10 DESIGN : BUILDING TYPES
colour in schools

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 rationalization of design of colour schemes is part of the development of a science of æsthetics. Aided by our new knowledge of applied psychology, the time will surely come when other aspects of visual art will be as scientifically analysed as the art of colour design (in schools) has been analysed in the latest of the MOE's excellent Building Bulletins, reviewed below by Specialist Editor No. 17.*

The Bulletin is a modest document, but how pleasant and stimulating it is to read. Its presentation expresses humility and caution in a subject about which there are so many individual preferences and differences of opinion. Yet it is written with a firmness which clearly comes from a sense of purpose and conviction that the basic ideas put forward are well-founded. Even the titles of the two main parts of the Bulletin (1) an *approach* to the design of a colour scheme, and (2) an *approach* to the design of a colour range, are in themselves expressive of this attitude.

* *Colour in Schools.* Building Bulletin No. 9. MOE (HMSO, 1953

Why a Bulletin on colour at all? As is said in Part I of the Bulletin, "If everyone responsible for the decoration of school buildings possessed a well-developed sense of colour and was fully aware of what was appropriate in buildings designed for educational use, this Bulletin would probably be unnecessary," but "the element of artistry which we all possess . . . is not always sufficient to enable those concerned with school buildings to work directly from intuition and imagination. Indeed, many who believe they are working imaginatively are sometimes following only the whims of their fancy, selecting colours arbitrarily, often from precedents that are not relevant to the task in hand." Colours should be chosen appropriate to the situation; a colour beautiful in itself may not be suitable for, say, a corridor wall or a chalkboard in a school. Thus, it becomes necessary to consider "systematically the functions which colour can be made to perform and the particular effects it is desired to achieve." First comes the analysis, and second the creative act of the imagination. The analysis will "define the limits within which the imagination is free to conceive and create." A systematic approach such as this must be based on the realization that colour deeply affects most aspects of design; that it is not merely a final stage in the construction of a building.

Three main objectives of a colour scheme are given: (i) it should be a means of expressing the appropriate character of the building, its inhabitants and their activities; (ii) it should, together with the lighting, be a means of achieving an environment that will ensure comfortable and efficient vision; (iii) it should follow naturally from, and be the expression of, the constructional elements and surfaces in the building. These three objectives are discussed broadly in Part 1 of the Bulletin and in more detail in three related appendices.

COLOUR, CHILDREN AND ACTIVITIES

The first of the objectives, the character of a building, is, as the Bulletin says, "one of its most intangible, but nevertheless most impressive, qualities." Since colour can play strongly on people's feelings and emotions, skilful use of it naturally requires a deep understanding of the people who are to live with it. The character of the children, their gayness and energy, their spontaneity, quick movements and varied clothing "make a sparkling pattern which can be reflected in the character of the colour scheme, particularly in the scale and disposition of strong accents and patterns."

The child's character can be a general guide only to the choice of colours: the choice becomes more specific when the varying activities in a school are considered, *i.e.*, the degree of stimulation, concentration, gaiety or repose, etc., which may be required in different parts of the school. The colours chosen should "match" these needs, for they can stimulate and excite, or they can be restful and encourage concentration; if they are chosen inappropriately, they can be distracting and irritating, or merely boring. For example, in a classroom where the work demands concentration, close attention and the ability to see well, the colour scheme will inevitably tend to consist of "quiet" colours; whereas in circulation and ancillary areas, through which children move without staying for long in any one place, bold colours can be used.

The Bulletin touches on the problem encountered in schools with a free plan where there exist close relationships between the different parts. (See illustrations, reproduced from the Bulletin, on p. 439 and top of p. 440.) Several colours may come into view simultaneously and it is suggested that, if they are to combine harmoniously, they should be chosen from one range. The "Archrome" (Munsell) range which is illustrated and described in the Bulletin is designed to ensure this sympathy between colours. Of course, it is possible to achieve unity by a repetition of particular relationships of colour, but this will probably not express the different activities, and the "persistence of one scheme throughout the school would, if bold, pall on the inhabitants or, if dull, merely pass unnoticed . . . strong contrasts of activity and character within one building need to be brought out and exploited, not blunted and subdued by the general colour treatment."

The other figures on p. 440 are from Appendix I, which contains suggestions for the treatment of individual spaces: halls, gymnasia, teaching spaces, entrance halls, dining spaces and staff rooms. A statement in this Appendix referring to halls seems open to question: "Bold colours, however, should be used in small areas adjacent to larger areas of neutral or near white colours." Experience *may* have shown this to be so, but nothing is said to substantiate it.

COLOUR, LIGHTING AND VISION

"Colour and lighting are inseparable and together they create the conditions which control vision." The *quantity* of light in a room is altered by the colour of the room's surfaces. Conversely, the choice of colour, particularly its reflection factor, is conditioned by the amount of light falling on it. The *quality* of light is chiefly determined by the pattern of brightness contrast; excessive contrast causing glare and insufficient contrast leading to dull or soporific environments. This pattern is directly affected by the degree of lightness or darkness of a colour and hence the choice of colour helps to control the quality of light in a room. In the appendices several problems are dealt with, in relation both to direct and to indirect daylight (Sky Factor and Daylight Factor):—glare (the use of white or light colours around windows and artificial light sources); texture (dazzle from shiny surfaces); chalkboards and pin-up areas; patterns of light and shade to provide stimulation and focus. The section on chalkboards is particularly comprehensive and fills one more gap in our knowledge. Optimum reflection factors are given together with suitable Munsell chroma numbers and a selection of nine suitable colours from the "Archrome" (Munsell) range. There is also a footnote summing-up excellently the relative merits of suitable materials for chalkboards, ranging from painted plywood to ground plate glass.

COLOUR AND THE BUILDING ELEMENTS

The third objective concerns the power which colour has to express the structure of a building. In other words, a colour scheme should be in sympathy with the line and form of a building. In good design the use of colour will be anticipated, in so far as the relationship of the shapes and elements can be anticipated, for only in this way can the power of colour to clarify, exaggerate or even camouflage the lines of a building be used fully. Unsatisfactory relationships will limit the choice of colours, in much the same way as in the re-decoration of old buildings the designers may inherit poorly related elements which cannot be coloured as freely as might be desirable.

Briefly, therefore, colour can be used to exploit the good features of a building and, by the use of camouflage techniques, it can help to mask the bad features; the further ahead the designer thinks at the formulative stages of a design the more successful will be the colour scheme. A building's ill-proportions will tend to restrict one's choice to weak colours and it is important, therefore, to ensure that any surface on which strong colour is wanted is worthy of this special attention.

The bulletin divides building elements into two general types: "those which are *extensive* in area, such as walls, doors, floors and ceilings, and those which are *linear*, such as beams, pilasters and pipes." Extensive areas are usually more significant than linear ones and the colour emphasis should usually be placed on the former. Linear elements have comparatively slight spacial effect and the use of strong colours on them is bad, as their significance will be exaggerated and the balance of surface and line destroyed. "Linear elements should be looked upon as providing a frame round the colour picture." Appendix 3 goes deeper into the problem and makes three further points:—

"(*i*) the degree of emphasis, which will depend, not only on the strength of the actual colour to be applied, but upon the *size* of the area to be decorated;
(*ii*) the successful *delimitation* of the area to be decorated;
(*iii*) the pleasing composition of these defined areas.
These three factors are closely integrated in the process of design."

The delimitation of the surface to be coloured is critical, especially where a strong colour or a decorative treatment is used. Changes should generally be made at defined positions such as at corners or at a break in plane; an arbitrary junction of two colours on a flat plane is usually unsatisfactory. Normally in frame construction the members, where expressed internally, impose a regularity which simplifies the colouring. The walls become a series of panels in which colours can easily be placed—as in the Hertfordshire schools. If the pilasters (the linear elements) are painted a near-neutral colour, the colour in the panels will be enhanced.

In buildings which do not have this natural structural sub-division, the colours are not as easily limited in extent or as freely changed and this fact has almost certainly encouraged the extensive use of a single colour throughout a building. Major reliance must be placed on good composition of wall surfaces at an early stage in the design. Since the disposition of doors and windows mainly determines wall proportions, particular attention should be paid to their arrangement; for example, if door reveals are not taken right up to the ceiling an often unpleasant U-shaped area of wall is left which would be exaggerated by the use of a strong colour. (Classical architects turned to decoration to achieve this delimitation.)

The use of dados often create difficulties in the use of colour. If a dado is thought desirable for easy maintenance, it follows that the break in colour must be made not arbitrarily but by a break in plane. The Bulletin advises that in particularly vulnerable areas, such as dining rooms and classrooms, the problem can be overcome from the first by protecting the walls at the lower level with fitted equipment; or at least that the top of the dado should be related to some other features on the wall such as the chalkboard or the pin-up panel.

Light-coloured ceilings and floors are recommended to reflect light, but in halls and other rooms with high ceilings and where the activities do not require close attention there is more freedom in the choice of colours. Surprisingly little is said in the Bulletin about ceiling colours, although the ceiling is the biggest unobstructed area in view. Lighting, particularly artificial, exerts a major constraint, and the need for good reflection and low contrast with the sources seems to lead inevitably to the use of light colours.

THE DESIGN OF A COLOUR RANGE

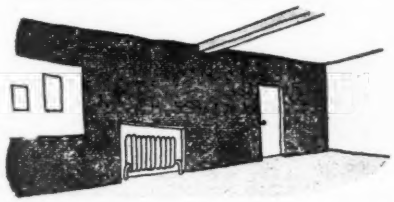
The difficulty of communicating ideas about colour and describing individual colours makes it essential to have a reliable and widely understood vocabulary and to make this vocabulary the basis of a good reference system. For the architect's purpose a reference system should:—

(i) Have a place for every colour and not merely some of them.

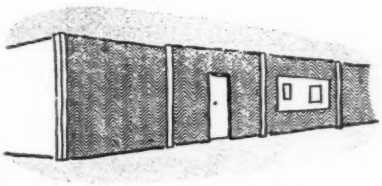
(ii) Distinguish colours in terms of the characteristics which are significant in practice, namely *hue, value* and *chroma.*

(iii) Show differences in hue, chroma and value in uniform steps.

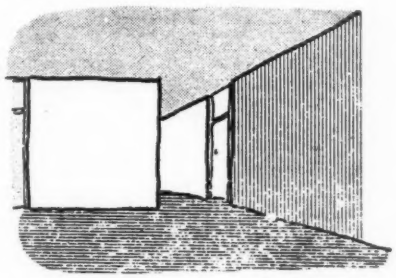
The two best known reference systems, those devised by Ostwald and Munsell, are fully described in an appendix and the merits of each discussed. The Munsell system is shown to meet the requirements best, and it has been adopted to identify the colours of the "Archrome" (Munsell) range. Scientifically the Ostwald system is inferior to the Munsell, its serious disadvantages to architects being the rigid adherence to symmetrical boundaries which permit no addition or interpolation and the lack of direct help in choosing colours according to their lightness or reflection factors. The Munsell system at once reveals the facts of interest to the designer by allowing colours to find their own levels of lightness and boundaries of saturation. All colours with a value of, say, 5 have the same reflection factor—about 20 per cent.—and all colours of chroma, say, 8 are equally saturated.



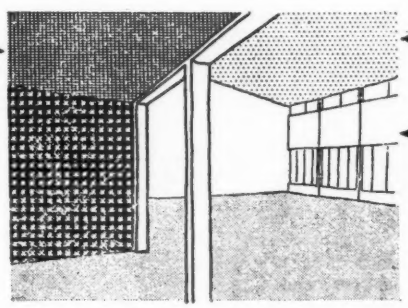
"Untidy arrangements of features such as beams, notice boards, radiators and doors are aggravated by strong colour, whose use may consequently be inhibited."



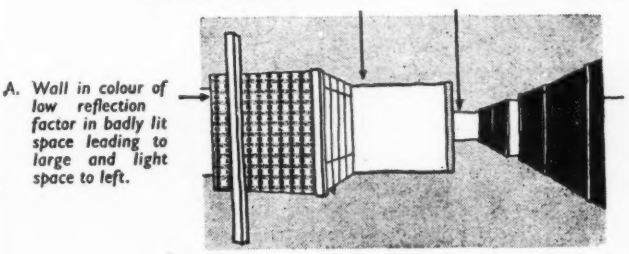
"Forms of construction in which the stanchions 'read' as pilasters make tidy arrangements of doors, etc., more easy, and thus strong colours are easier to use."



"Where there is no regular articulation by stanchions or pilasters, door frames carried to the ceiling simplify wall shapes and may allow the colour to be changed where required more easily."



Entrance to assembly hall.



Entrance hall.

The Bulletin outlines the need for a colour range to encourage more widespread, high quality design, to cut down administrative work in large and small local authorities and offices, and to ensure the continuity of paint supply —particularly to help the matching of colours.

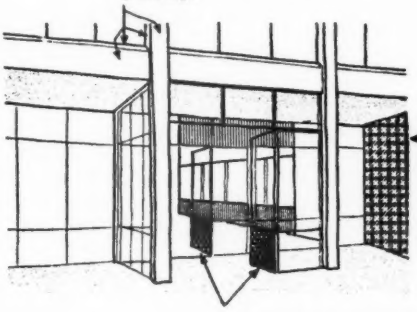
THE "ARCHROME" (MUNSELL) RANGE

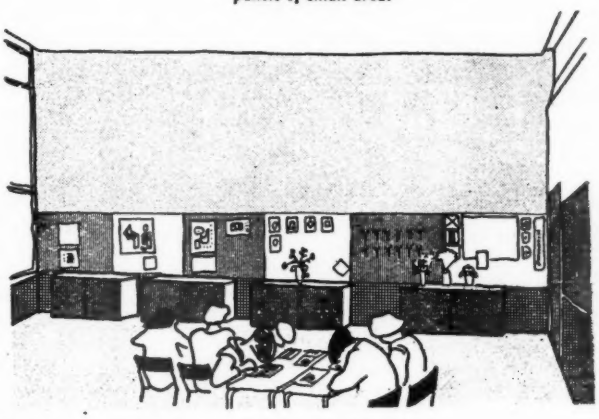
The "Archrome" range illustrated in the Bulletin is a new colour range evolved to meet these needs. It consists of 47 colours, and Munsell notations have been used to describe them. The particular colours were chosen because they were each known to be useful in educational buildings; the system has been in use for some time by a number of local authorities. The range provides a reasonable distribution over the whole range of colours (probably unlike all other ranges in existence), and, as far as possible for each hue (red, yellow, green and blue), there are colours of high and low chroma and of high, medium and low value. The list of "Archrome" (Munsell) colours is given in Table I.

Serial Number	Munsell Reference	†Appropriate Reflection Factor (Per cent.)
1	7·5 R 9/2	72
2	7·5 R 8/4	60
3	7·5 R 6/10	30
4	10·0 R 5/14	20
5	7·5 R 4/16	12
6	7·5 R 3/12	7
*7	7·5 R 3/4	7
8	5·0 R 2/12	4
9	10·0 YR 8/4	60
10	10·0 YR 8/2	60
11	10·0 YR 6/4	30
*12	10·0 YR 4/4	12
*13	10·0 YR 3/2	7
14	7·5 Y 9/6	72
15	7·5 Y 8/10	60
16	2·5 Y 8/12	60
17	5·0 Y 8/2	60
18	2·5 Y 8/4	60
19	2·5 Y 7/10	43
20	5·0 Y 6/2	20
21	2·5 Y 5/2	20
22	10·0 Y 5/6	20
*23	5·0 Y 4/4	12
24	7·5 GY 9/4	72
25	10·0 GY 9/2	72
26	2·5 GY 8/10	60
27	2·5 GY 8/6	60
28	2·5 GY 7/10	43
29	2·5 GY 6/2	30
30	10·0 GY 5/2	20
*31	5·0 GY 4/6	12
*32	10·0 GY 3/2	7
*33	7·5 G 3/4	7
34	7·5 BG 6/2	30
35	10·0 BG 5/4	20
36	5·0 B 9/2	72
37	5·0 B 7/4	43
38	7·5 B 6/6	30
*39	7·5 B 3/4	7
40	2·5 PB 4/10	12
41	2·5 PB 3/8	7
42	N 9	72
43	N 8	60
44	N 7	43
45	N 6	30
46	N 5	20
*47	N 4	12
	WHITE	—
	BLACK	—

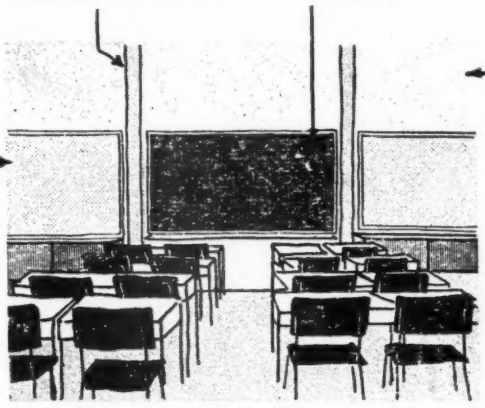
* Colours that are suitable for chalkboards when white chalk is used.

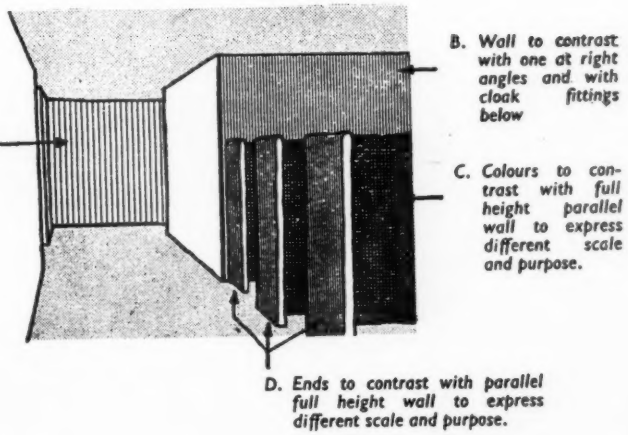
† These figures represent the approximate per cent. reflectance at each value under average daylight illumination.





Above, "unity of interior and exterior." Right, infants classroom— "strong patterns confined to scale of children at low level with plain surface above." Below, classroom — chalkboard wall. Bottom, circulation and cloak areas. (Illustrations here and on page 439 reproduced by permission of HMSO).

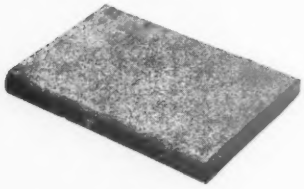




ALTRO
NON-SLIP
PRESTILE

Monumental Mason : S. T. Reeves, Englefield Green

for maintenance of stone and concrete stairs



Eliminates wear and danger of slipping. Full range of colours.

After 70 years the natural stone stairs at the Royal Holloway College, Egham, had become so worn that they were dangerous. To make them safe the existing treads were cut away and 9" x 4" x ¾" round nosed Altro Prestile bedded in. The back of the treads and landings were made good with grano in which Altro (aluminium oxide) grain was incorporated to increase the resistance to abrasion and to make them non-slip. For further particulars write to me for Bulletin No. 1.

Cecil Kahn

THE ADAMITE COMPANY LTD., Manfield House, Strand, W.C.2. Tem. Bar 6233/6

taken from the Bulletin. The colour chart itself is well-arranged so that the hues read horizontally and so that the colours of equal value appear in the same vertical columns.

Paints based on the range are already commercially available, and it is open to any manufacturer to produce the colours.

The Bulletin concludes with notes on finishes and a note by the LCC on the use of the "Archrome" (Munsell) range in the re-decoration of old schools.

CONCLUSIONS

This Bulletin is more than the first really practical exposition of the use of colour in schools; it contains in brief lucid sentences many canons of good contemporary design which should be readily appreciated by those people who are striving to understand the architect's outlook—architects are often, unfortunately, only too inept at conveying their ideals. The Bulletin should, therefore, be of great value in helping to clear the architect's path. Perhaps it is the subtleties of architecture which so many people, including some inside the profession, find difficult to understand, and the clarity of the Bulletin will be a revelation to many. The authors, primarily the Development Group of MOE, the colour section of the BRS and the architects of Herts. County Council and the LCC, are to be congratulated on their achievement. Valuable assistance was also given by two paint firms—Messrs. Docker Brothers, and Messrs. R. Gay & Company.

The new War Department houses described below represent a more decisive step towards the "quicker completion of house interiors" than the report of the committee with that title. Following in the "Schindler" tradition see JOURNAL *for Sept.* 13, 1952, *these houses take the principle of prefabricated interiors one step farther. They are, however, already out-dated by further developments, as yet at the drawing-board stage, which we hope to describe in due course.*

WAR DEPARTMENT USES PREFABRICATED INTERIORS OF GYPSUM PLASTER

One of the principal snags with prefabricated houses is the high cost of factory overheads and transport of precast units. The temporary site "factory"—simply a large shed hired for the duration of the job—is a partial solution to this problem. It is of interest that it is one of Levitt's principles that "the factory should be brought to the site."

The shed used at the War Department's experimental housing site in Sussex is a standard "Romney" hut, about 30 ft. wide and 100 ft. long. It is divided into four sections. In the first, the gypsum plaster for the wall and ceiling panels is mixed; in the second, they are cast. In the third section, they are cured (roughly 24 hours in hot air); in the fourth, the electrical conduit is fixed to the units and all necessary holes drilled through them.

This building system was designed for use in countries where there is little skilled building labour, and where gypsum plaster and stone for the no-fines are available. Hence the absence of brickwork—the main walling is of no-fines concrete, for which the cement will have to be imported. For use in Britain the constructional system could be adapted so that external cladding was of brick.

The casting bed is covered with aluminium sheets which impart a very smooth surface to the plaster, which can, therefore, be painted direct. Oiled timber moulds are used to produce waffle-type wall panels, for the main part of the ½ in. thick, the ribs being 2½ in. thick. The panels, which are storey height and up to 12 ft. wide, have a frame of 2½-in. × 1-in. timber, grooved round the edges, so that they can be joined together with loose tongues. Hook nails are driven into the inside of the frame to bond it to the plaster. Timber sub-frames for doors and windows are cast into the panels. The backs of the panels, which act as permanent shuttering for the no-fines concrete, are painted with a bituminous emulsion to keep out the damp when the concrete is poured.

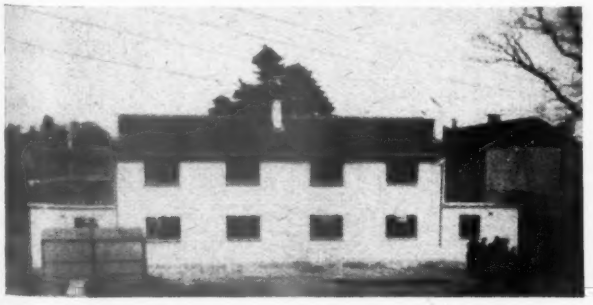
The foundations and ground floor slab are conventional, except that (i) grooved timber sole plates are cast into the slab—these are used to locate the wall units, a tongue being placed in the groove, (ii) a ledge is formed about 6 in. below floor level—this serves as a locating and starting point for the external shuttering—fine expanded metal mesh on timber framing.

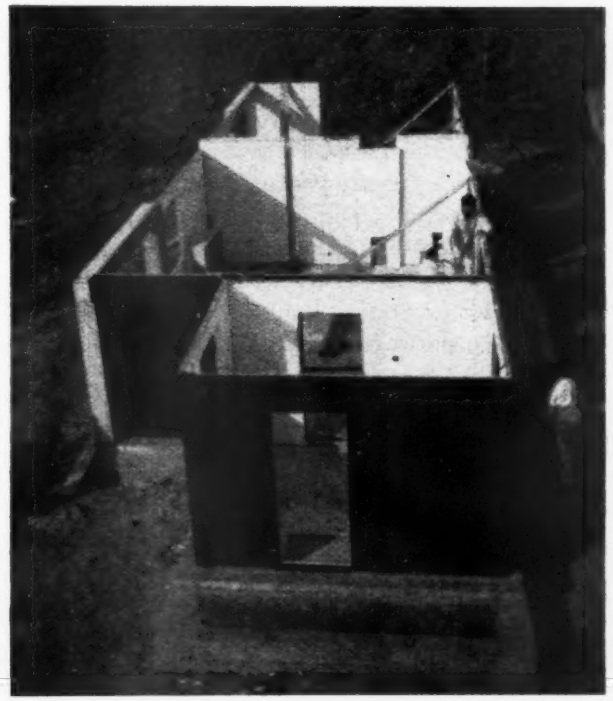
The casting of the units takes 20 minutes. In order to facilitate the removal of the panel the casting bed is tilted from its normal horizontal position to the vertical position. Tolerance in the length of the units is $\pm\frac{1}{16}$ in. This is taken up at one point where there is a cover strip.

When all the precast panels for the ground floor have been placed in position, the door and window frames (of timber) are placed into the sub-frames; precast R.C. floor beams and the precast gypsum plaster ceiling panels placed in position; and the electrical installation connected up. The external shuttering is then set up, and the external walls of 8:1 no-fines concrete 10 in. thick poured. A very dry mix is used.

The electrical installation is very simple. It is on the "Octopus" system. Drops to floor points are attached to the panels before they leave the shed, ceiling switches are used throughout to minimize the number of drops. Plumbing is prefabricated. All holes for plumbing pipes, conduit, etc., are drilled in the wall and ceiling panels before they leave the shed.

After the *in situ* topping to the first floor





War Department housing in no-fines concrete; below, the rear of a completed pair of semi-detached 2-bedroom houses. Right, progress photo of part of ground floor of pair of houses after about 12 of the precast gypsum-plaster panels have been placed in position.

has set, the second storey is constructed in the same way as the first, except that the ceiling is simply of plasterboard; any type of roof can be used. The chimneys are constructed of precast concrete units.

The War Department's house plan has a load-bearing spine wall on the ground floor, consisting of two panels back to back and bolted together. The party wall (the houses are semi-detached) consists of the normal internal wall panels of the two houses with, between them but free-standing, a 2-in. solid plaster panel for fire resistance. There are, therefore, two air spaces providing good insulation. These are closed off at the ends by timber filler pieces.

The problem of fixings has been solved in the following manner: supports for the sinks, etc., consist of frames of reinforcing rods which are passed through pre-drilled holes in the precast wall panels so that they project into the space into which the no-fines concrete is poured. The ends of the rods which project into the interior of the house are threaded so that fittings can be bolted to them.

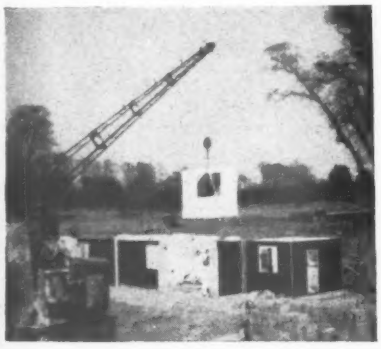
On the War Department site, a mobile jib crane on caterpillar tracks is used; other types of crane might serve equally well or better. Within the casting shed, the units are carried on a specially designed trolley.

In the site "factory" five labourers produce all the wall panels for one pair of houses in nine days; three labourers produce 20 ceiling panels per day. The average number of men on the site (five pairs of houses are under construction) is 26, including nine tradesmen (four carpenters and joiners, two bricklayers, two painters, one crane driver). The shells of the first pair of houses (plinth to roof trusses) took 16½ working days (3,711 man-hours); the last pair, it is anticipated, will take only eight working days (1,500 man-hours).

An interesting feature of the construction is the new approach to the problem of standardization of unit sizes. It was decided to impose no strict limits on the number of individual panels, but to design a production process which would be almost infinitely and instantaneously variable. The large panels are cast from a series of sub-units and "spacers" which are locked into the mould like the type in a printer's forme. This has worked most satisfactorily.

The War Department would like to stress that this system is entirely without any patent restrictions and that it cannot be patented by anybody as all rights are reserved by the War Department. However, the War Department desires to make the system and all information about it freely available to all those interested and it is hoped that if any organization, private or public, feels that it can obtain advantage by using this system, they will do so. Only by the free distribution of information can benefits be obtained.

(Consulting civil engineer to the War Department, R. Fitzmaurice; consulting architect, C. C. Handisyde; general contractor, C. Bryant & Sons Ltd.)



Above, one of the precast gypsum-plaster panels being lowered into position. Below, R. Fitzmaurice, consulting civil engineer to the War Department and the technical editor of the JOURNAL *(facing camera) and C. C. Handisyde, consulting architect, discussing the experiment with representatives of the War Department.*

The behaviour of prestressed concrete during and after fires is being studied at the Fire Research Station in collaboration with BRS, with particular reference to post-tensioned beams. One series of tests has been completed; the results are summarized below.

FIRE RESISTANCE OF PRESTRESSED CONCRETE

The type of beam selected for these tests was a precast element of rectangular or I-section which was fully prestressed before a narrow concrete strip representing a floor slab was cast on top, provision being made for composite action. Concrete of the same composition was used throughout and the size of the wire and initial stress in the wire were the same in all specimens. The aim of the tests was to observe, within certain limits, the effect on fire resistance of load, restraint, concrete cover to the cable, and size of beam, together with the improvement given by protective encasements.

Although the following conclusions are tentative, being based on a small number of tests, there are reasonable grounds for believing them valid.

(i) Time to collapse is determined largely by the rate of rise of temperature of the cable. A fire-resistance of 2 hrs. can be obtained with a concrete cover to the cable of about 2¼ in. Longer periods are likely if the cover is increased, but it may be desirable to include a light reinforcement, say, steel mesh, in the cover to the cable as a precaution against its spalling away if its thickness is increased beyond about 3 in.

(ii) For a fire-resistance of 4 hrs. or more an insulating encasement is probably required. Normal *in situ* plastering with gypsum or cement/lime/sand may give up to ½ hr. additional resistance if there is an adequate key with the concrete. Protection incorporating vermiculite should increase the fire-resistance by about 2 hrs. when applied 1 in. thick.

(iii) Beams may fail a little earlier if longitudinal expansion is prevented than if they are free to expand. The effectiveness of the restraint is a determining factor, but the results so far do not permit a quantitative statement to me made.

(iv) There is little difference in performance between a beam of rectangular section and an I-beam having the same load-carrying capacity and the same concrete cover to the cable.

(v) Explosive spalling, which was observed in very small units made with gravel-aggregate, does not seem likely to occur in beams having no part less than about 2 in. thickness.

(vi) Failure is unlikely to be sudden. There is a progressive sagging, which in beams of large span would be most noticeable. The formation and visible extension of cracks with a marked increase in deflection are signs that collapse is imminent.

(vii) Beams which have been exposed to a fire of shorter duration than that which would cause failure, representing, say, less than half of their fire-resistance, are likely to retain a high percentage of their original strength on cooling, but with a marked residual deflection and loss of prestress.

* Reference to the Model Byelaws of MOHLG will give the fire-resistance requirements for floors and beams in different classes of building (Bye-law 46).

THE LIBRARY OF INFORMATION SHEETS

CANCELLATION

Sheet 4.E1 (*published* 18.8.49) *has been cancelled and is re-published in the current issue by one giving information on* 1953 *private car models. As the information contained in the previous Sheet applies to older models still in existence, readers are advised to retain it in their collections.*

ENQUIRY FORM

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

.....

.....

.....

Please ask manufacturers to send further particulars to :—

NAME .....

PROFESSION or TRADE

.....

ADDRESS .....

.....

AJ 2.4.53

E

Buildings Illustrated

Gas Showrooms at 13, The Quadrant, Richmond, Surrey, for the North Thames Gas Board. (Page 425.) Architect: Victor L. Johnson, F.R.I.B.A., in collaboration with T. C. Haynes, DIP.ARCH. (L'POOL), Display Architect to the Board. Quantity Surveyors: Eric G. Lynde & Partners. General Contractors: Perrys (Ealing) Ltd.; shop front and fittings, Cullens (Shopfitters) Ltd. Sub-contractors: gas fittings, North Thames Gas Board; electrical installation, J. B. Marr & Co. Ltd.; asphalt roofs, Val de Travers Asphalte Paving Co. Ltd.; concrete beams and roofs, Girlingstone; roller shutter, Haskins; woodblock floor, Viger Bros. Ltd.; hand lift, Aldous & Campbell Ltd.; showroom fire surround, Fenning & Co. Ltd.; plumbing, Newman & Watson Ltd.; plastering, Alan Milne Ltd.; painting, except showroom, South London Decorators Ltd.; glazing (except shop front), Faulkner Green Ltd.; floor tiling to showroom displays, John Williams & Co. (Rotherhithe) Ltd.; joinery, Puleys Ltd. (Romford); representatives' desks, N.T.G.B.

Gig Mill Infants' School, Stourbridge, Worcs. (Pages 427-428.) Architects: Jackson & Edmonds; Assistant-in-charge, C. F. Walker, A.R.I.B.A. Structural Engineer: S. Willis, M.INST.C.E., M.I.STRUCT.E. Quantity Surveyor: T. Selwyn Berry, F.R.I.C.S. (Robottom & Berry). Clerk of Works: J. B. Stokes. General Contractors: William Cooper & Sons Ltd. Sub-contractors and suppliers: steelwork, Jesse Tildesley Ltd.; roofing, The Ruberoid Co. Ltd.; facing bricks, Himley Brick Co. and Blockleys; flush doors, The Adamite Co. Ltd.; reconstructed stonework, precast concrete beams, Constone Ltd.; false ceilings, Expanded Metal Co. Ltd.; sanitary goods, William E. Farrer Ltd.; metal windows, John Gibbs Ltd.; sandpit cover, Johns & Sons Ltd.; ironmongery, James Gibbons Ltd.; electrical installation, A. H. Gwilliam Bros.; composition flooring, Granwood Flooring Co.; roller shutters, Harris & Sheldon Ltd.; entrance gates, Hill & Smith Ltd.; sliding door gear, Henderson Ltd.; heating and ventilation installation, G. N. Haden & Sons Ltd.; lantern lights, Henry Hope & Sons Ltd.; asphalt tanking, Limmer & Trinidad Lake Asphalte Co. Ltd.; Terrazzo flooring, Marbello & Durus Ltd.; acoustic tiling, Midland Wallboards Ltd.; wood block flooring, Patent Oak Flooring Co.; domelights, Pilkington Bros. Ltd.; wall tiling, R. G. Robertson, Ltd.; cork tiling, Venetian Flooring Co. Ltd.

Folkestone Technical College. New Workshop Block for the Kent Education Committee. (Pages 429-433). Architect: S. H. Loweth, F.S.A., F.R.I.B.A.; County Architect, R. Tilsley Green, F.R.I.B.A., Deputy County Architect; R. L. Passmore, A.R.I.B.A., Principal Assistant Architect. Schools Group One, under the supervision of J. H. Garnham Wright, A.R.I.B.A., DIPL.ARCH., assisted by G. G. Grylls, A.R.I.B.A., L. B. Matthews, A.R.I.B.A., and W. A. Shirbon, A.R.I.B.A. (executive assistant for the contract). Consultants: (Structural) Malcolm Glover & Partners; (Services) J. Stinton Jones & Partners. Quantity Surveyors: D. R. Nolans & Co. General Contractor: O. Marx & Son Ltd. Sub-contractors: Bricks, Sussex & Dorking United Brick Companies Ltd., and Ryarsh Brick & Sand Co.; suspended ceilings and fins, Merchant Trading Co. Ltd.; structural steel, T. W. Palmer & Co. (Merton Abbey) Ltd.; fireproof construction, Smiths Fireproof floors by R. Corben & Son Ltd.; asbestos cement roofing, Turners Asbestos Cement Co.; asbestos cement vertical sheeting, Universal Asbestos Manufacturing Co. Ltd.; special roofings, Stramit Board Co. Ltd.; roofing felt, Permanite Ltd.; prefabricated curtain walls and internal partitions, Holoplast Ltd.; patent glazing, Williams & Williams Ltd.; resin tile flooring, Marley Tile Co. Ltd.; steel gutters, Lloyd Lawrence Ltd.; unit heaters, C.A. Dunham & Co. Ltd.; gas fixtures, gas-fitting and boilers, G. N. Haden & Sons, electric wiring and electric light fixtures, Troughton & Young Ltd.; ventilators, W. H. Colt (London) Ltd.; plumbing, Alfred Olby Ltd.; sanitary fittings, J. Bolding & Sons Ltd.; rooflights, Lenscrete Ltd.; rolling shutters, Haskins Roller Shutters; w.c. cubicles, Venesta Ltd.; cloakroom fittings, Cloakroom Equipment Ltd.

Private House, on the Vicarage Site, St. Mary's Road, Wimbledon, London, S.W.19. (Pages 434-436.) Architect: R. A. J. Gazzard, A.A.DIP., A.R.I.B.A. General contractors: Holborow & Sons (London) Ltd. Sub-contractors: dampcourses, Permanite Ltd.; structural steel (prestweld joists), Hills (West Bromwich) Ltd.; roofings (shingles), W. H. Colt (London) Ltd.; floor tiles, British Plimber Ltd.; grates, Allied Ironfounders Ltd.; water heater, Gas Water Heaters Ltd.; door furniture, A. J. Binns Ltd.; casements, Williams & Williams Ltd.; carda window, Holcon Ltd.

House of Brentwood, Essex. Pages 379-380 (AJ March 19.) Architect: David Jenkin, B.A., F.R.I.B.A., A.M.T.P.I. Consulting engineers: Ove Arup & Partners. General contractor: A. Saunders & Son. Sub-contractors: structural steel, English Bridge & Structural Engineering Co. Ltd.; roofing felt, Wm. Briggs & Sons Ltd.; boiler and cooker, Allied Ironfounders Ltd.; electric wiring, F. Jeffery; plumbing, Watkin, Heating Co. Ltd.; sanitary fittings, Wm. E. Farrer Ltd.; door furniture, Mountford Bros.; window furniture, Messrs. Alfred Roberts; joinery, Bovis Joinery Works.

I tell you — by switching to Finlock Gutters you'll save £15 a house *(says Mr. Fin)*

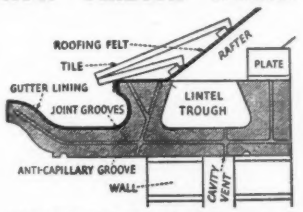
—and 3 days' construction time *(says Mr. Lock)*

EVERY time FINLOCK pre-cast concrete gutters are used a FINLOCK expert is ready to give advice and assistance. He'll take off his coat if need be, and give practical help as well!

He is a highly qualified technician and an essential member of the FINLOCK team which ensures that we don't just "supply gutters" but see that everybody is really satisfied—right through the job.

That is why the FINLOCK service is so admired by every customer we have—and that number is growing every day as this modern system is adopted by more and more architects and builders.

HOW FINLOCK WORKS



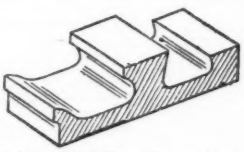
This sectional drawing shows the system in detail and illustrates the ways in which FINLOCK saves approx. 5 yards of brickwork, 80 ft. of rafter, 40 ft. of normal guttering, 40 ft. of fascia, 40 ft. of soffit and 80 ft. super of roof tiling per single house. Painting is eliminated and a reduction in down pipes and drainage is obtained. The complete eaves for a building, with all fittings, can be fixed in one day. Some typical FINLOCK units are shown on the right :—

FINLOCK GUTTERS LIMITED

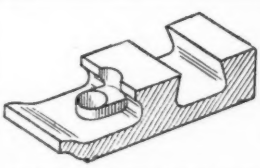
20 ST. JOHN'S ROAD, TUNBRIDGE WELLS, KENT *(Head Office)*

Telephone : Tunbridge Wells 20396/7/8

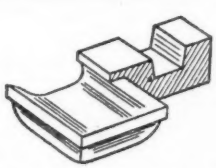
7 WORKS FOR SPEEDY DELIVERIES TO ANY PART OF GT. BRITAIN. IN DEVONSHIRE; LEEDS, YORKSHIRE; EDINBURGH, SCOTLAND; CWMBRAN, S. WALES; ROYSTON, HERTS; TUNBRIDGE WELLS, KENT; BELFAST, NORTHERN IRELAND.



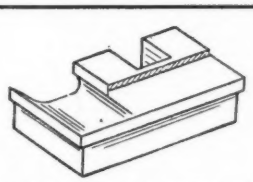
Finlock "N" Type Gutter block enabling lintels to be cast *in situ* if required.



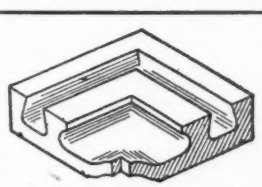
Finlock "G" Type Gutter block enabling lintels to be cast *in situ* if required, but illustrating soil vent.



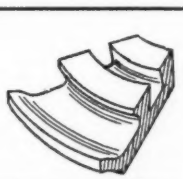
A typical standard stopped end for use on gable end walls, available for all type Gutters.



Illustrating a flush stopped end where this is also made with moulded return, available for all type Gutters.



Illustrates the typical internal angle for use with all Gutters. External angles also available.

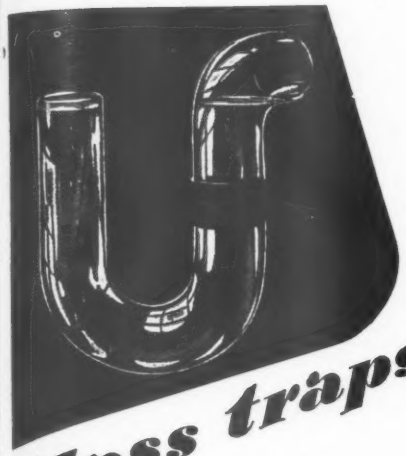


Illustrating a special Gutter for quick curves. We manufacture fittings for special purposes to order.

Fully descriptive booklet gladly supplied on request from Head Office

(A.J. Information Sheet No. 33010)

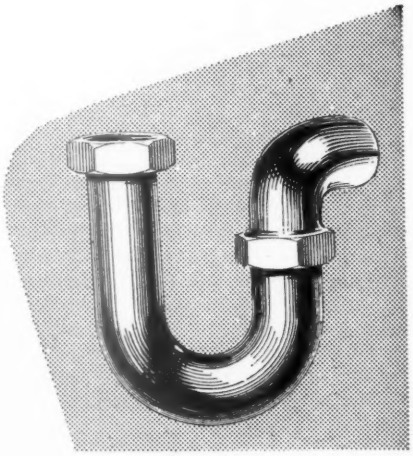
DH



Glass traps!

. . . . we use them to solve drainage problems for Architects and Sanitary Engineers.

Econa tubular copper traps,* tees, elbows, and preformed waste ranges are more practical, cheaper and nearly as smooth as glass.



Consult us about soil and waste disposal (above ground) because . . .

Econa can help you...

ECONA MODERN PRODUCTS LTD. Phone: ACOcks Green 2211
WARWICK ROAD, TYSELEY, BIRMINGHAM 11

★ *Econa traps now have outlets with the correct gradient to prevent self-syphonage in single and one-pipe plumbing.*

ZINC in plenty

1 The uses of zinc in building are too numerous to mention—from simple flashings to a structure as formidable as the vast roof of a cathedral (Cologne, for instance.)

2 There are now no restrictions on the use of zinc. Supplies are adequate to meet all demands and, according to the authoritative report of the U.S. President's Materials Policy Commission, are likely to remain so for many years to come.

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

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

ZINC DEVELOPMENT ASSOCIATION
Lincoln House · Turl Street · Oxford
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Zn

RAPID FLOORS

Laid complete at the rate of 100 yards super per gang per day

Precast Units of Approx. "I" section, designed for all loading conditions and for both simply supported and continuous spans.

Floor thicknesses are constant over a wide range of spans Interlocking lips render the floor homogeneous. Soffits are flush and even. Trimmings and Cantilevers can readily be provided.

Special bearings are not required, and our gangs fix straight from the Transport lorry.

The specified load is carried immediately and the floor at once provides a clear uninterrupted working platform for all following trades.

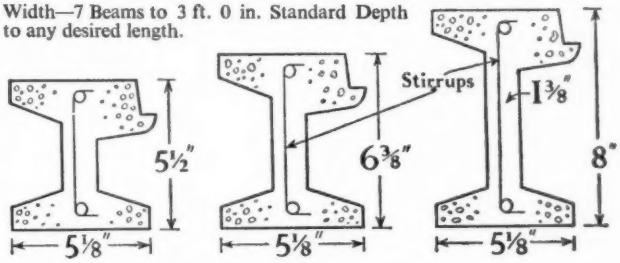
Quotations for supply only, or supply and fix as desired. Deliveries commence 6 weeks after approval of working drawings. Technical booklet free upon request.

TARMAC LIMITED
VINCULUM DEPT.
ETTINGSHALL. WOLVERHAMPTON

Telephone : Bilston 41101/11 (11 lines)

Licensees for manufacture and supply to Warwickshire, Staffordshire, Worcestershire, Shropshire, Sussex, Surrey, Hampshire, Cheshire and North Wales.

Width—7 Beams to 3 ft. 0 in. Standard Depth to any desired length.



Economies in building industry with rust-proofing

SUCCESS FOLLOWS SPECIFYING 'JENOLITE' RUST-REMOVER

Improved corrosion resistance and longer protection

OXIDATION ruins ferrous metals and presents a serious problem by promoting electrolytic action, and thereby—rusting. This condition can be avoided and existing difficulties overcome by a chemical pre-treatment—namely, Jenolite.

Jenolite's research and technical departments are constantly carrying out research on the three-fold problem of rust removal—rust prevention and paint adhesion.

BEFORE

SPARGE PIPES

The use of Jenolite for the removal of built-up corrosion and chloride deposits is illustrated here.

AFTER

Simple application

Jenolite does three tasks in one operation. It removes the rust and scale, prevents further corrosion and provides for superior paint adhesion.

Increased rust prevention an advantage

Ferrous metal treated with Jenolite looks better and is better. Jenolised surfaces provide a far greater extension of life than untreated metals.

The advice of our Technical Department is always at your disposal

Jenolite LTD.

LONDON: 43 PIAZZA CHAMBERS, COVENT GARDEN, W.C.2
TEMple Bar 1745, 3058 *and* 5059

GLASGOW: JENOLITE HOUSE, 304 HIGH STREET, GLASGOW, C.4
Bell 2438/9

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.

DEVON COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the undermentioned appointments on the permanent staff. Conditions of service and salaries are in accordance with the National Joint Council Scheme for Local Authorities:—

ONE ASSISTANT ARCHITECT, Grade A.P.T., IX (£815-£935 per annum).

ONE ASSISTANT ARCHITECT, Grade A.P.T., VI (£670-£735 per annum).

ONE ARCHITECTURAL ASSISTANT, Grade A.P.T., III (£525-£570 per annum).

ONE JUNIOR SURVEYING ASSISTANT, Grade A.P.T., I (£465-£510 per annum).

Application forms, with full particulars of qualifications and experience required for the various posts, are obtainable from the County Architect, 97, Heavitree Road, Exeter, and must be returned to him by Friday, the 10th April, 1953.

Other things being equal, preference will be given to disabled persons.

Canvassing, directly or indirectly, will disqualify.

H. G. GODSALL,
Clerk of the County Council.

The Castle, Exeter.
12th March, 1953. 8398

MIDDLESBROUGH EDUCATION COMMITTEE.
ASSISTANT ARCHITECT.

Assistant Architect, Grade A.P.T., VI, required in the Education Offices (Education Architect: P. R. Middleton, Dipl.Arch., A.R.I.B.A.). The Building Programme in hand offers excellent opportunities in the design and construction of modern school buildings.

Forms of application and conditions of service obtainable from the Director of Education, Education Offices, Woodlands Road, Middlesbrough, to whom completed forms should be returned not later than 8th April, 1953. 8402

STATES OF GUERNSEY.
PUBLIC WORKS DEPARTMENT.

Applications are invited for the following permanent pensionable appointments in the Public Works Department:—

(1) ARCHITECTURAL ASSISTANT. Salary: £685 per annum, rising by three annual increments of £20 and one of £15 to £760.

Applicants must be Registered Architects, preferably Corporate Members of the Royal Institute of British Architects, and must have a thorough knowledge of architectural work with practical experience in design and the preparation of working drawings and specifications.

Candidates must not be over 45 years of age, and the successful applicant will be required to pass a medical examination.

Appointments will be terminable by one month's notice on either side.

Applications, appropriately endorsed according to the position applied for, together with copies of two recent testimonials, should reach the States Supervisor, States Office, Guernsey, C.I., not later than Monday, 13th April, 1953. Canvassing in any form will disqualify. 8396

COUNTY BOROUGH OF BOURNEMOUTH.
BOROUGH ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointment:—

ARCHITECTURAL ASSISTANT, I. Salary: Grade A.P.T., IV, £555-£600 per annum. Unestablished post.

Applicants must have had two years' experience after passing R.I.B.A. Intermediate Examination, preferably with experience of Education Buildings

The successful candidate will be appointed at his present salary if such salary is within the incremental scale of the advertised post.

The above appointment will be terminable by one month's notice, in writing, on either side, and subject to the provisions of the Local Government Superannuation Act, 1937, also to the conditions of service in accordance with the National Scheme.

The successful candidate will be required to pass a medical examination.

No assistance can be offered regarding housing accommodation.

Applications, on forms to be obtained from the Borough Architect, Town Hall, Bournemouth, accompanied by copies of three recent testimonials, to be returned to the undersigned in envelopes endorsed "Staff Architectural," not later than 10 a.m. Saturday, 18th April, 1953.

A. LINDSAY CLEGG,
Town Clerk.
8453

CITY OF BIRMINGHAM EDUCATION COMMITTEE.
APPOINTMENT OF STAFF TO ARCHITECT'S BRANCH.

Applications are invited for the following appointments in the Architect's Branch of the Birmingham Education Department (Architect to the Committee: Mr. J. R. Sheridan-Shedden, A.R.I.B.A.).

(i) ASSISTANT ARCHITECT
Salary: A.P.T., V (£595-£645)

Applicants must be Registered or Chartered Architects, and should possess a good knowledge of construction and design and of the preparation of working drawings for large building contracts.

(ii) TECHNICAL ASSISTANTS.
Salary: General Division (£160-£450, according to age).

Applicants should be good draughtsmen, with some experience in the preparation of drawings in an architect's office.

(iii) CLERK OF WORKS.
Salary: Miscellaneous, Grade VI (£525×£15—£585).

Applicants should have a thorough technical training in building construction and materials and experience of large building contracts.

(iv) ASSISTANT CLERK OF WORKS (Temporary).
Salary: Miscellaneous, Grade IV (£440-£495).

Applicants should have had a thorough technical training and experience in building construction materials.

Application forms, which may be obtained from the undersigned on receipt of a stamped addressed envelope, must be returned not later than three weeks after the appearance of this advertisement.

E. L. RUSSELL,
Chief Education Officer.

Education Office, Margaret Street,
Birmingham, 3. 8401

GOLD COAST GOVERNMENT.
VACANCIES FOR ARCHITECTS, PUBLIC WORKS DEPARTMENT.

Applications are invited for vacancies in the post of ARCHITECTS in the Public Works Department.

Duties: The Architects will be required to carry out investigation for plan, design and supervise the construction of new Government buildings arising in connection with the Government's development programme, such as quarters, offices, hospitals, schools, halls, reading rooms, etc. They will also be responsible for the preparation of working drawings and specifications, and the administration of contracts.

Qualifications: Candidates must be Associates of the Royal Institute of British Architects. Previous experience of Government or Local Authority work is desirable.

Terms of Service: These posts are "Development Posts" for implementation of specific projects under the Gold Coast Development Plan. The appointments will be on contract/gratuity terms for one tour of 18 to 24 months, with a possible extension to two tours. Salary will be in the range £1,250-£2,020 per annum (consolidated), according to age, qualifications and experience. A gratuity at the rate of £37 10s. for each completed three months of satisfactory service will be payable on final termination of the contract.

Free passages on first appointment and on leave will be provided for the officer and his wife once each way during each tour of service. Officers will normally be required to travel by air. Free air passages will also be provided for a maximum of three children under 13 years of age.

Vacation leave with pay: seven days for each month of service. Free medical and dental attention provided for officer and family. Furnished quarters available at low rental. Income tax at local rates. Kit allowance on first appointment £30-£60, according to salary.

Intending candidates should apply in writing to the Commissioner for the Gold Coast, Melbourne House, Aldwych, London, W.C.2, for a form of application. 8444

BOROUGH OF MAIDSTONE.
APPOINTMENT OF GENERAL ARCHITECTURAL DRAUGHTSMAN IN BOROUGH SURVEYOR'S DEPARTMENT.

Applications are invited for the above appointment, at a salary in accordance with Grade II (£495 per annum, rising to £540), from candidates who have completed their National Service training.

Candidates must have a sound knowledge of building construction, and preference will be given to those who have passed parts or the whole of the Intermediate Examination of the Royal Institute of British Architects or other approved Institution, and who have had general experience in connection with housing estate development.

The appointment will be subject to the National Scheme of Conditions of Service, the Local Government Superannuation Act, 1937, the passing of a medical examination, and one month's notice on either side. The Corporation cannot undertake to assist in any way with the provision of housing accommodation. Canvassing will disqualify.

Applications, on forms to be supplied, giving the names and addresses of two referees, must reach the undersigned not later than the 11th April, 1953.

S. F. DIXON,
Borough Surveyor.

Borough Surveyor's Department.
Palace Avenue, Maidstone,
27th March, 1953. 8462

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

Applications are invited for the established post of ARCHITECT, at a salary in accordance with A.P.T., Grade VI or VII, *i.e.*, £670 to £735 per annum, or £710 to £785 per annum, plus London weighting allowance of £20 or £30 per annum, according to age.

Candidates must possess a Final professional qualification.

The Council are unable to offer housing accommodation.

Form of application and conditions of service obtainable from the Borough Engineer, Town Hall, Tottenham, N.15, to whom applications must be delivered not later than Saturday, 18th April, 1953.

M. LINDSAY TAYLOR,
Town Clerk.
8464

WEST SUFFOLK COUNTY COUNCIL.
ASSISTANT QUANTITY SURVEYOR. N.J.C. service conditions. Salary: £525-£600 (A.P.T. III-IV). Post pensionable; medical examination. Applicants should be of Intermediate R.I.C.S. standard; duties will include working up and taking off, and measurement of variations both under the Standard Method and the Code of Measurement.

Application forms and particulars of housing accommodation obtainable from the Clerk of the County Council, Shire Hall, Bury St. Edmunds. Applications to be returned by 18th April, 1953. 8469

BOROUGH OF ROWLEY REGIS.
APPOINTMENT OF ASSISTANT QUANTITY SURVEYOR.

Applications are invited for the above appointment, in the Department of the Borough Engineer and Surveyor, at a salary in accordance with Grade A.P.T., VI (£670×£20 (2)×£25—£735).

Applicants must be experienced in preparing estimates, Bills of Quantities, checking interim and final accounts, etc., and must also possess a recognised technical qualification.

The appointment will be subject to the provisions of the Scheme of Conditions of Service and the Local Government Superannuation Act, 1937.

Housing accommodation will be provided, if required.

Applications, stating age, qualifications and experience, together with copies of two recent testimonials, should be sent to the Borough Engineer and Surveyor, suitably endorsed, so as to reach him not later than Monday, 13th April, 1953.

R. HEGAN,
Town Clerk.

Municipal Buildings, Old Hill, Staffs.
March, 1953. 8468

BOROUGH OF MANSFIELD.
APPOINTMENT OF THIRD ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department. The salary will be in accordance with A.P.T., V., of the National Joint Council's Scale, and the following conditions:—

(1) N.J.C. Conditions of Service.

(2) Superannuation Act, 1937, for which purpose the selected candidate will be required to pass a medical examination.

(3) Residence within the Borough.

Applicants should have passed the Final Examination of the R.I.B.A. or equivalent examination.

A house on service tenancy agreement is available.

Applications, stating age, qualifications, present appointment and salary, previous appointments and experience, together with copies of not more than three testimonials, should be sent to the undersigned, endorsed "Third Architectural Assistant," not later than Monday, the 13th April, 1953.

A. C. SHEPHERD,
Town Clerk.

Carr Bank, Mansfield.
23rd March, 1953. 8467

COUNTY BOROUGH OF SMETHWICK.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL ASSISTANT (GRADE V).

Applications are invited for the above appointment, at a salary in accordance with Grade V (£595-£645), of the A.P.T. Division of the National Scales of Salaries.

Applicants should be suitably qualified, and have had experience in the design of houses, flats, and other Municipal buildings.

The post is subject to the National Scheme of Conditions of Service, the provisions of the Local Government Superannuation Act, 1937, the passing by the successful candidate of a medical examination, and to termination by one month's notice on either side.

Applications, endorsed "Architectural Assistant," stating age, details of education and qualifications, present and previous appointments and particulars of experience, together with copies of two recent testimonials, should be addressed to the Borough Engineer and Surveyor, Council House, Smethwick, 40, to reach him not later than 13th April, 1953.

E. L. TWYCROSS,
Town Clerk.

Council House, Smethwick.
23rd March, 1953. 8454

MANCHESTER CORPORATION HOUSING COMMITTEE. Applications are invited from suitably qualified persons for the positions of ASSISTANT ARCHITECTS, Grade A.P.T., III, £525-£570 p.a. Candidates should forward particulars of age, qualifications and experience to the Director of Housing, Town Hall, Manchester, 2, to be received by Saturday, 18th April, 1953. Canvassing is prohibited. 8466

NORTHAMPTON RURAL DISTRICT COUNCIL.
SURVEYOR AND ARCHITECT'S DEPARTMENT.
APPOINTMENT OF QUANTITY SURVEYOR.

Applications are invited for the above appointment.

Applicants should have passed the Final Examination of the R.I.C.S. (Quantity Section), or similar, and have had considerable experience in the preparation of Bills, measurement of site works, and preparation of interim statements and final accounts in connection with Housing Schemes.

The appointment will be terminable by one month's notice, in writing, on either side.

Applications, stating age, whether married or single, qualifications, full particulars of experience and range of salary required, together with copies of two recent testimonials, are to reach the undersigned by Saturday, the 11th April, 1953.

Applicants must disclose whether they are related to any member or senior officer of the Council. Canvassing, either directly or indirectly, will disqualify.

CLIFFORD E. JONES,
Clerk of the Council.

Council Offices, 1, Cheyne Walk, Northampton.
23rd March, 1953. 8455

BOSTON RURAL DISTRICT COUNCIL.
HOUSING DEPARTMENT.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant, on Grade A.P.T., III (£525-£570).

Applicants should be good draughtsmen, be able to prepare sketch plans, working drawings and details.

Appointment will be subject to provisions of Local Government Superannuation Act, 1937, the National Joint Council Scheme of Conditions of Service, and terminable by one month's notice from either side.

Applications, giving details of age, qualifications and experience, together with names of two referees, should be sent to the Surveyor, Mr. W. R. Beardall, 126, London Road, Boston, not later than Thursday, 9th April, 1953.

S. M. FORMAN,
Clerk of the District Council.

Council Offices, 126, London Road, Boston, Lincs.
25th March, 1953. 8474

LONDON COUNTY COUNCIL.
OFFICIAL ADVERTISEMENT.

LONDON COUNTY COUNCIL invites applications from ARCHITECTS in private practice for inclusion in a new panel with a view to acting in a professional capacity for:—

(*a*) major new educational projects costing over £100,000;
(*b*) major new educational projects costing £100,000 or less;
(*c*) war damage reinstatement and alteration and improvement works of all values to education buildings.

Application forms may be obtained from the Clerk of the Council (E.1), The County Hall, S.E.1, and should be returned not later than 24th April. (300) 8446

DERBYSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

Applications invited for appointment of ARCHITECTS (permanent staff), on A.P.T., Grade VI (£670×£20 (2) and £25 to £735 per annum), and A.P.T., Grade V (£595×£15 (2) and £20 to £645 per annum) for duties in connection with the erection of New Schools.

Forms and particulars to be obtained by 10th April, 1953, from F. Hamer Crossley, County Architect, St. Mary's Gate, Derby. 8449

COUNTY BOROUGH OF SMETHWICK.
BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.
APPOINTMENT OF ARCHITECT.

Applications are invited for the position of Architect on the staff of the Borough Engineer and Surveyor.

The salary will be £975, rising by three increments of £50 and one of £25 to £1,150 per annum, and a car allowance in accordance with the N.J.C. Scales will be paid.

Preference will be given to applicants who are Associates of the R.I.B.A. The successful candidate will be required to supervise the design and construction of housing redevelopment schemes, including multi-storeyed buildings, schools, and other public buildings.

The appointment, which will be terminable by one month's notice on either side, will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing by the successful candidate of a medical examination.

Forms of application may be obtained from the Borough Engineer and Surveyor, Council House, Smethwick, 40, and should be returned suitably endorsed, to reach him not later than 13th April, 1953.

E. L. TWYCROSS,
Town Clerk.

Council House, Smethwick. 8448

CITY AND ROYAL BURGH OF EDINBURGH.
ARCHITECTURAL ASSISTANT.

Applications are invited for appointment as Architectural Assistant, A.P.T., IV (£550×£15—£595). The post is superannuable, and the successful applicant will require to undergo a medical examination.

Forms of application may be obtained from the undersigned, to whom completed forms should be returned within 14 days from the date of this notice.

A. G. FORGIE, M.M., A.R.I.B.A., Dip.Arch.(Edin.), F.R.I.A.S.,
City Architect.

City Chambers, Edinburgh, 1. 8463

COUNTY BOROUGH OF BARNSLEY.
BOROUGH ENGINEER AND SURVEYOR AND PLANNING OFFICER'S DEPARTMENT.
APPOINTMENT OF SENIOR PLANNING ASSISTANT.

Applications are invited for the appointment of Senior Planning Assistant, at a salary in accordance with A.P.T., Grade VII (£710-£785 per annum). A car allowance will be paid in accordance with the prevailing scheme for essential users.

The appointment will be subject to the Scheme of Conditions of Service for A.P.T.C. Services, to the General Conditions of Service within the Corporation as varied from time to time, and to the provisions of the Local Government Superannuation Acts.

Candidates must have had extensive experience in Town Planning and be Corporate Members of the Town Planning Institute, or hold an equivalent qualification. The person appointed will be in charge of the Town Planning Section of the Department and directly responsible to the Borough Engineer for all planning matters.

ASSISTANCE IN OBTAINING HOUSING ACCOMMODATION WILL BE GIVEN IF NECESSARY.

The successful applicant will be required to pass a medical examination, and the appointment will be subject to one month's notice on either side.

Applications, stating age, present and previous appointments, experience, qualifications, etc., together with the names of three referees, should be addressed to the Borough Engineer and Surveyor and Planning Officer, Town Hall, Barnsley, to reach him not later than Wednesday, 22nd April, 1953.

Canvassing will disqualify, and applicants should disclose in their applications whether to their knowledge they are related to any member or senior officer of the Council.

A. E. GILFILLAN,
Town Clerk.

Town Hall, Barnsley.
March, 1953. 8447

COUNTY COUNCIL OF ESSEX.
ARCHITECT'S DEPARTMENT.

ASSISTANT ARCHITECTS, Grade VII, on established staff. Salaries not exceeding £785.

Candidates must be Members of R.I.B.A. Work includes schools, colleges, and other public buildings.

Application forms from H. Conolly, F.R.I.B.A., County Architect, County Hall, Chelmsford, returnable with copies of three recent testimonials, by 16th April, 1953.

Canvassing disqualifies. 8465

BOROUGH OF BLYTH.
BOROUGH ENGINEER'S DEPARTMENT.
AMENDED ADVERTISEMENT.

Applications are invited for the appointment of a JUNIOR ARCHITECTURAL ASSISTANT. The salary for the appointment will be Grade II of the A.P.T. Division, £495 per annum to £540 per annum, by annual increments of £15.

Candidates should hold the Intermediate Examination of the R.I.B.A.

The appointment is subject to the Local Government Superannuation Act, 1937, the Scheme of Conditions of Service of the National Joint Council, one month's notice on either side, and the passing of a medical examination.

Applications, endorsed "Junior Architectural Assistant," stating age, qualifications, training and experience, must be delivered to the undersigned, with copies of three recent testimonials, not later than 24th April, 1953.

Canvassing will disqualify, and applicants should disclose relationship with any member or official of the Council.

EDWIN W. CARTER,
Town Clerk.

"Dinsdale," Marine Terrace, Blyth, Northumberland. 8479

BOROUGH OF HESTON AND ISLEWORTH.
ENGINEER AND SURVEYOR'S DEPARTMENT.
ARCHITECTURAL ASSISTANT.

Applications are invited for the post of Architectural Assistant, on the permanent staff of the Borough Engineer and Surveyor, at a salary within the Grades A.P.T., II or III (£495-£570), plus London "weighting," appropriate to the qualifications of the person appointed, in accordance with the provisions of the National Scheme of Conditions of Service.

The Council is unable to assist the successful candidate with housing accommodation.

Applications, on forms to be obtained from the Borough Engineer and Surveyor, 88, Lampton Road, Hounslow, must be returned to him not later than noon on Monday, 20th April, 1953, appropriately endorsed.

HAROLD SWANN,
Town Clerk.

Council House, Hounslow 8478

AMENDED ADVERTISEMENT.
COUNTY BOROUGH OF EAST HAM.

SENIOR ARCHITECTURAL ASSISTANT. Salary: £670-£735 (Grade A.P.T., VI).

ARCHITECTURAL ASSISTANT. Salary: £555-£600 (Grade A.P.T., IV).

ENGINEERING ASSISTANTS (TWO). Salary: £595-£645 (Grade A.P.T., V).

ENGINEERING ASSISTANT. Salary: £525-£570 (Grade A.P.T., III).

QUANTITY SURVEYOR. Salary: £555-£600 (Grade A.P.T., IV).

London weighting is paid in addition. Salaries in excess of the minima may be paid according to the qualifications and experience of successful candidates.

Subsistence allowances may be paid to persons appointed if unable to obtain suitable housing accommodation.

Further details and form of application (returnable by Monday, 13th April, 1953) obtainable from the Town Clerk, Town Hall, East Ham, E.6. 8473

BRISTOL EDUCATION COMMITTEE.
COLLEGE OF TECHNOLOGY.

Principal: F. W. PARTINGTON, M.Sc.

Applications invited for the following post in the Building Department: ASSISTANT LECTURER (Grade B). Professional qualifications in Architecture essential. Duties include part-time day and evening work in Architecture and General Building Construction. Salary (with appropriate qualifications), £550×£25—£825, with training additional if applicable.

Application form (returnable as soon as possible), together with further particulars, by sending stamped, addressed envelope to Registrar, College of Technology, Bristol, 1.

G. H. SYLVESTER,
Chief Education Officer. 8476

IMPERIAL WAR GRAVES COMMISSION require an ASSISTANT ARCHITECT for their London office. Salary: £628 to £922, according to age, experience, etc. Candidates should be A.R.I.B.A. or equivalent.

Duration of appointment approximately one year.

Apply: Appointments Officer, Imperial War Graves Commission, Wooburn House, Wooburn Green, High Wycombe, Bucks. 8475

LONDON COUNTY COUNCIL.

ARCHITECTS and SURVEYORS required for safety regulations of Theatres and Special Buildings and for general building regulation work. Salaries up to £696, according to experience. A.R.I.B.A. or A.R.I.C.S. essential. Particulars and application form (for return by 30th April) from Architect, AR/EK/TBR/3, County Hall, S.E.1. (325) 8482

QUANTITY SURVEYORS and ASSISTANT QUANTITY SURVEYORS required throughout U.K. by MINISTRY OF WORKS, ADMIRALTY, WAR DEPARTMENT, AIR MINISTRY, and occasionally overseas by Service Departments. Although not established, these posts have long-term possibilities.

Salaries in London for Officers over 26 years of age £600 to £1,200. Slightly lower in provinces. Salary on entry in accordance with age, qualifications and experience.

Also vacancies for QUANTITY SURVEYING ASSISTANTS and others having some experience in a Quantity Surveyor's office, at salaries ranging from £300.

(Quoting ref. J.Q.S.) Write to Room 403, M.L.N.S., Technical and Scientific Register, 26, King Street, London, S.W.1. 8483

HERTFORDSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT.

CHIEF ASSISTANT ARCHITECT, Grade X, £895-£1,025. Previous Local Government experience not essential.

Applications, together with the names of three referees, should be addressed to the County Architect, County Hall, Hertford, to be received not later than Saturday, 18th April, 1953. 8477

CITY OF WESTMINSTER.

HOUSING DEPARTMENT—STAFF VACANCY.

ASSISTANT QUANTITY SURVEYOR (Permanent), A.P.T., Grade IV (£555×£15—£600, plus London weighting £10-£30 p.a., according to age), for maintenance and adaptation works contracts to all Council properties, and preparation of estimates of cost of repairs. Intermediate R.I.C.S. an advantage.

Applications, detailing experience, etc., to Town Clerk, by 10th April, 1953.

City Hall, Charing Cross Road, W.C.2.
25th March, 1953. 8493

Tenders for Contracts

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

METROPOLITAN BOROUGH OF ISLINGTON.

TENDERS are invited for the erection of the under-mentioned blocks of dwellings up to FOUR storeys high.

BENNETT COURT EXTENSION, SALTER-

TON ROAD—8 flats in one block;
SABLE STREET/ALWYNE LANE, CANONBURY ROAD—60 flats in five blocks.

Applications for Bills of Quantities and tender forms must be accompanied by a deposit of £3 3s. (three guineas) for each scheme (cheques made payable to the Islington Borough Council), and addressed to the Town Clerk, Islington Town Hall, Upper Street, London, N.1, by the following dates:—

BENNETT COURT EXTENSION—8th April, 1953;
SABLE STREET/ALWYNE LANE—10th April, 1953.

Deposits are returnable on receipt of a *bona fide* tender, or the return of all the documents not later than three days before closing date for receipt of tenders.

Tenders are to be delivered to the Town Clerk by 10 o'clock on:—

BENNETT COURT EXTENSION—13th May, 1953;
SABLE STREET/ALWYNE LANE—19th May, 1953.

The Council do not bind themselves to accept the lowest or any tender.

H. DIXON CLARK,
Town Clerk.

25th March, 1953. 8484

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 is, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

1 SENIOR ASSISTANT, R.I.B.A. Final standard, required in Central London Architect's office. Able to prepare all scale working drawings and supervise works on site. Ability in design and construction necessary. JUNIOR ASSISTANT also required. Write, giving full particulars and salary required, to Box 8430.

QUALIFIED and experienced assistant required. Should be able to drive car. Housing accommodation available. State age, experience and salary required to: Taylor, Knight & Co., Brooksmoor House, Grove Road, Rotherham. 8450

ONE JUNIOR ASSISTANT required. Office experience essential. Salary £300-£350. Write G. H. N. Inman & H. A. J. Darlow, F./A.R.I.B.A., The Charterhouse, E.C.1. 8362

ARCHITECTURAL ASSISTANT, with own car, required by Architects, with considerable hospital, ecclesiastical and general practice, in North Wales office. Initiative and willingness to accept responsibility primary considerations. Apply immediately with particulars, and state starting salary required, to Box 8410.

QUALIFIED ASSISTANT ARCHITECT or experienced draughtsman required by Messrs. Greenall, Whitley & Co., Limited, St. Helens. Applicants should state age, qualifications, experience, and salary required. 8451

ARCHITECTURAL ASSISTANT required: either fully qualified or approaching final examination. Mixed practice, mainly commercial and industrial. Watson, Johnson Stokes, Victoria Square, Birmingham, 2. 8471

STAFF ARCHITECT capable of handling schemes for built-in furniture. Must be competent draughtsman, prepared to accept responsibility and of good appearance and personality. Age limit 40. Good prospects and remuneration. Applications stating age, qualifications and experience to Managing Director, Peerless Built-in Furniture Ltd., Western Avenue, Perivale, Greenford, Middlesex. 8472

JUNIOR ASSISTANT required. Intermediate standard. Salary £7. Apply Walters & Kerr Bate. Holborn 9850. 8470

QUALIFIED SENIOR ASSISTANT with sound practical knowledge and experience required for progressive position in busy West Riding Architect's Office. Write giving full particulars. Box 8460.

Architectural Appointments Wanted

ASSOCIATE (Dipl. Arch. Dist.) (30) requires position in small or medium size office. 4½ years' experience in housing, flats construction and school work. Box 680.

EXPERIENCED ARCHITECTURAL ASSISTANT (32), private practice, seeks position country practice, W./S.W. Accustomed full responsibility site and office. John Hook, Rosebank, Gt. Stukeley, Huntingdon. 679

DIPL. ARCH. A.R.I.B.A. (30) single, with good general experience and ability, requires position as Senior Assistant. Salary about £625. Country practice preferred. Car driver. Box 682.

ASSISTANT (25) with part inter. and 5 years' provincial office experience, requires position in or near London with architect specialising in modern design. Available in two months. Box 681.

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

KITCHENS & BATHROOMS COMPANY specialising solely in the design and construction of modern kitchens and bathrooms require General Manager with extensive planning experience and capable of effecting intensive sales campaigns. Write stating age, full details of previous experience and present salary to Box 8456.

DRAUGHTSMAN (male or female) required by Chartered Surveyors (West End offices). Knowledge of building construction, able to measure up on site and plot. Salary according to experience. Apply, giving particulars of past experience. Box 8418.

ESTATE MANAGER, educated, take charge, building work, repairs, etc. Write, giving history, experience. Box 8433.

CLERK OF WORKS required by a firm of Architects with extensive practice. Varied and interesting work. Willingness to accept responsibility and act upon own initiative essential. Salary according to experience, and car allowance. Apply immediately, stating particulars of present employment and salary. Box 8411.

SENIOR BUILDING SURVEYOR required by Chartered Surveyors, with West End and City offices. Able to work on own initiative and deal with Schedules of Dilapidations, Estate repairs and alterations, structural surveys and general correspondence. Reply, giving particulars of past experience and salary required. Box 8417.

SANITARY ENGINEERING ASSISTANT required in architects' office, West Central area. Salary approximately £400 p.a. Apply Box 8459.

Services Offered

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

SENIOR EXECUTIVE seeks responsible sales and administrative position in progressive company. Extensive personal connections with architects, Government departments, and local authorities. Excellent references. Box 7880.

SURVEYING and Levelling of Sites, Bills of Quantities, Variation Accounts, Survey of Buildings and Reports. Qualified Surveyor. LIV. 1839. Box 8195.

CONVERSIONS, ALTERATIONS, EXTENSIONS, and all small Building Contracts efficiently carried out at keen prices by enthusiastic South London builder. Parsons, 18, Maplestead Road, S.W.2. TUL. 3052 for immediate attention. 8423

SPECIFICATIONS, Bs. of Q. Confidential service offered to Architects in the Midlands and elsewhere by efficient Typing Bureau. Enquiries to: Sheila Instone, 117, Forest Road West, Nottingham. 8461

PERSPECTIVES.—B. and W. or colour, by regular exhibitor R.A., with long experience all types building. Prompt attention. Box 8481.

For Sale or Wanted

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

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

BUILDINGS FOR SALE.—Prefabricated Factories, Stores, Workshops, Canteens, Offices, Halls, Clubs, Garages, etc.; large and small. Apply for details and prices, stating your requirements, to J. Thorn & Sons, Ltd., Box No. 126, Brampton Road, Bexleyheath, Kent. (Tel.: Bexleyheath 305.) 7947

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.

PICTURE FRAMING.—Drawings, Maps, Photographs, etc., framed at short notice. Over 200 mouldings in stock. Samples and prices on request. Blackman, Harvey, Ltd., 11, Bateman's Buildings, Soho Square, London, W.1. GER. 3463. 8416

FREE advice on better heating by oil filled radiators (rental terms), central heating, draught proofing, insulation, etc. Consult Hurseal, 229, Regent Street, W.1. (Regent 1051.) 8445

LANCASTER GATE, W.2. Small unfurnished flat (1 room, hall and bathroom), in modern Service Block. £150 p.a. inclusive, 3 years payable in advance. Telephone: AMB 6771. 8458

Educational Announcements

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

R.I.C.S., I.A.A.S., and I.Q.S. Exams.—Postal Courses conducted by the Ellis School (Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A.), 103B, Old Brompton Road, S.W.7. KEN. 4477/8/9. Descriptive Booklet on request. 7020

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

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