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

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94, Petty France, S.W.1. NT Whitehall 0211 PEP Whitehall 7245 Abbey 4504

RCA RIAS Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh. Fountainbridge 7631

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SNHTPC Scottish National Housing. Town Planning Council.

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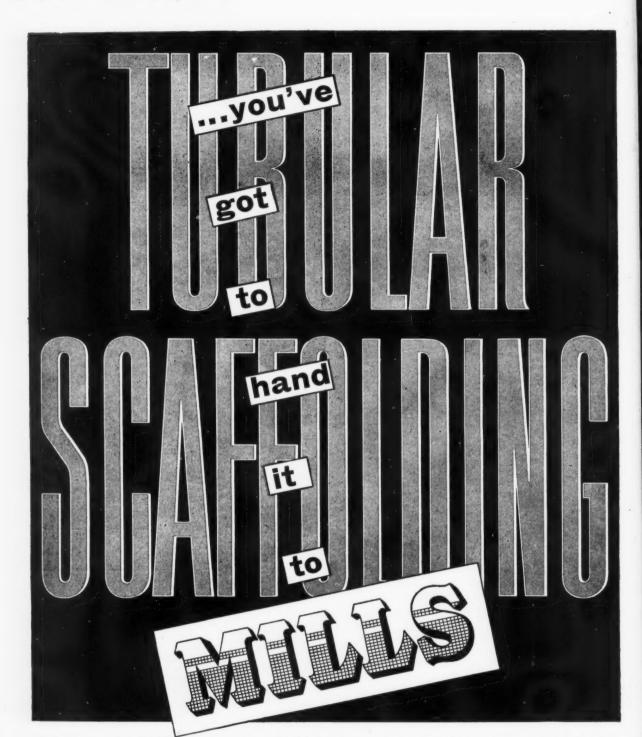
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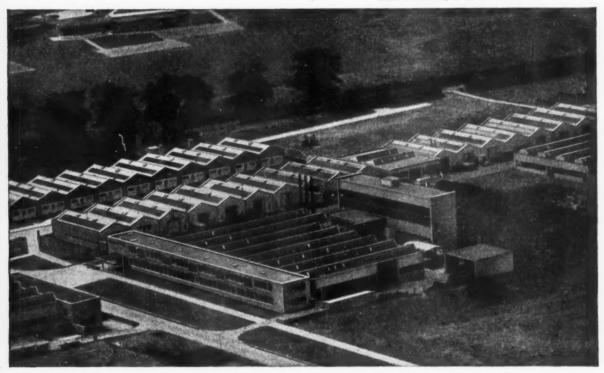
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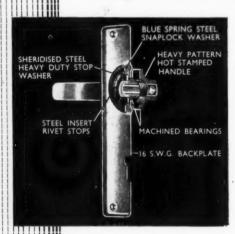
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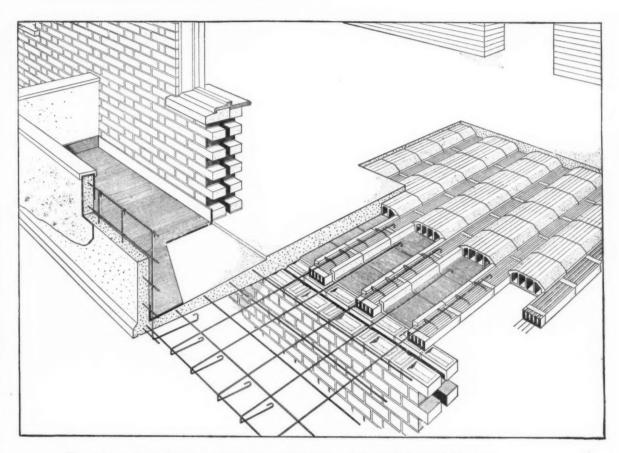
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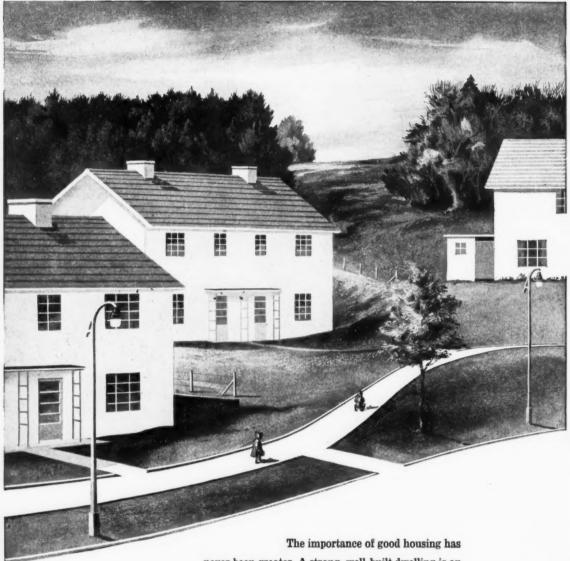
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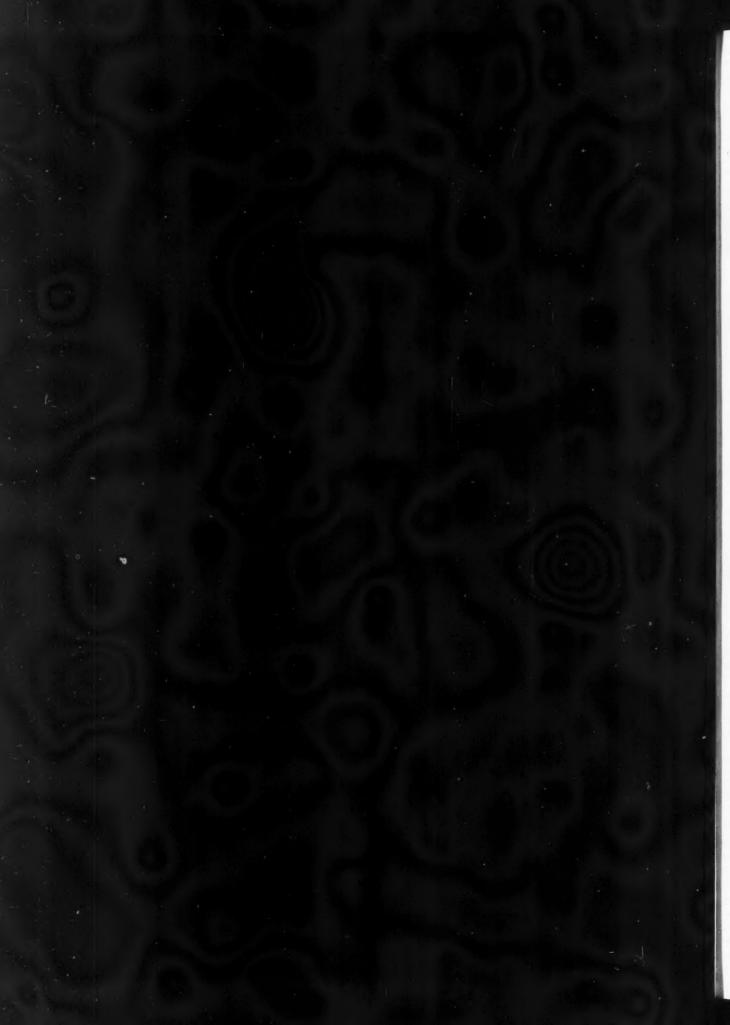
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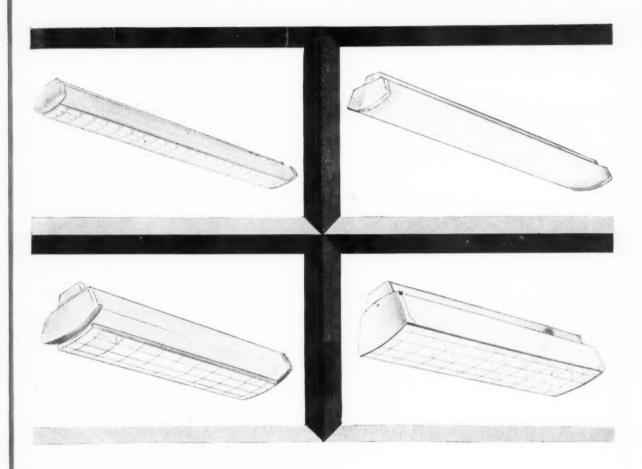


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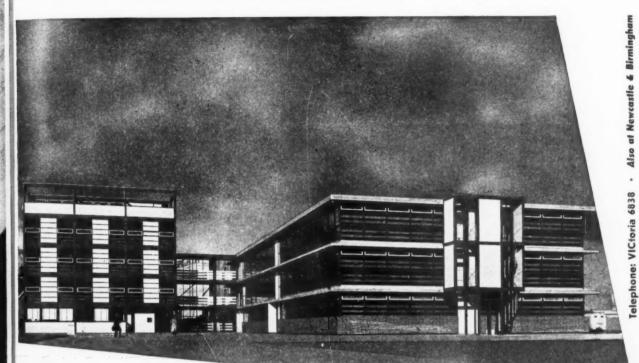
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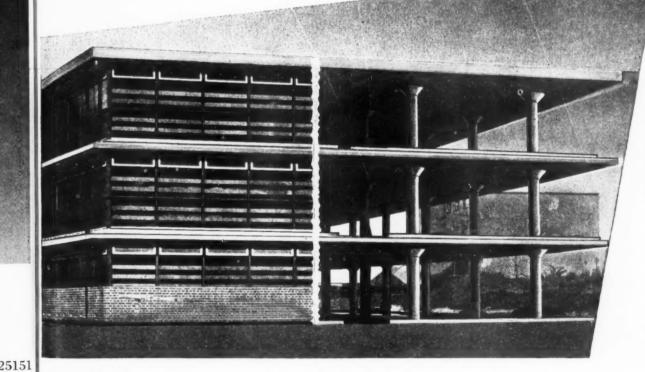
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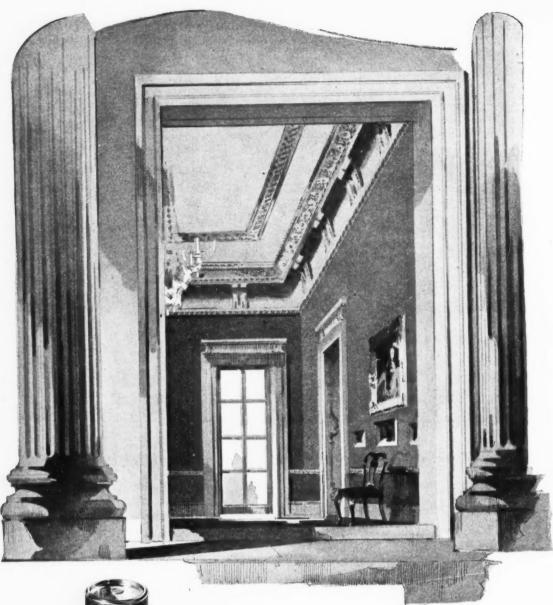
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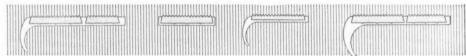
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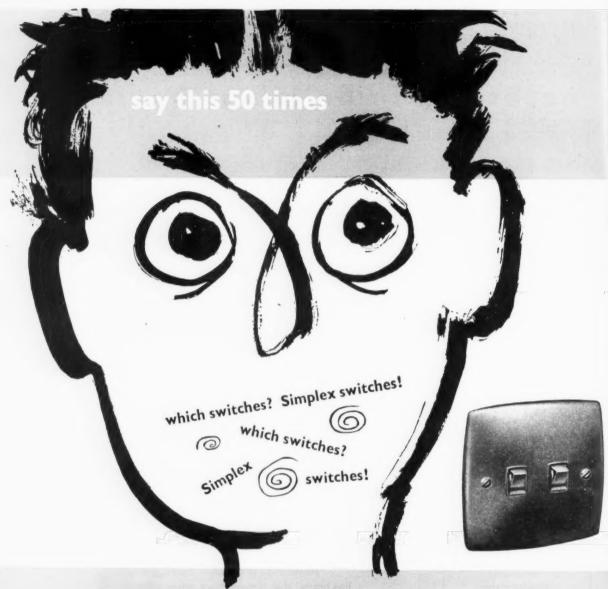
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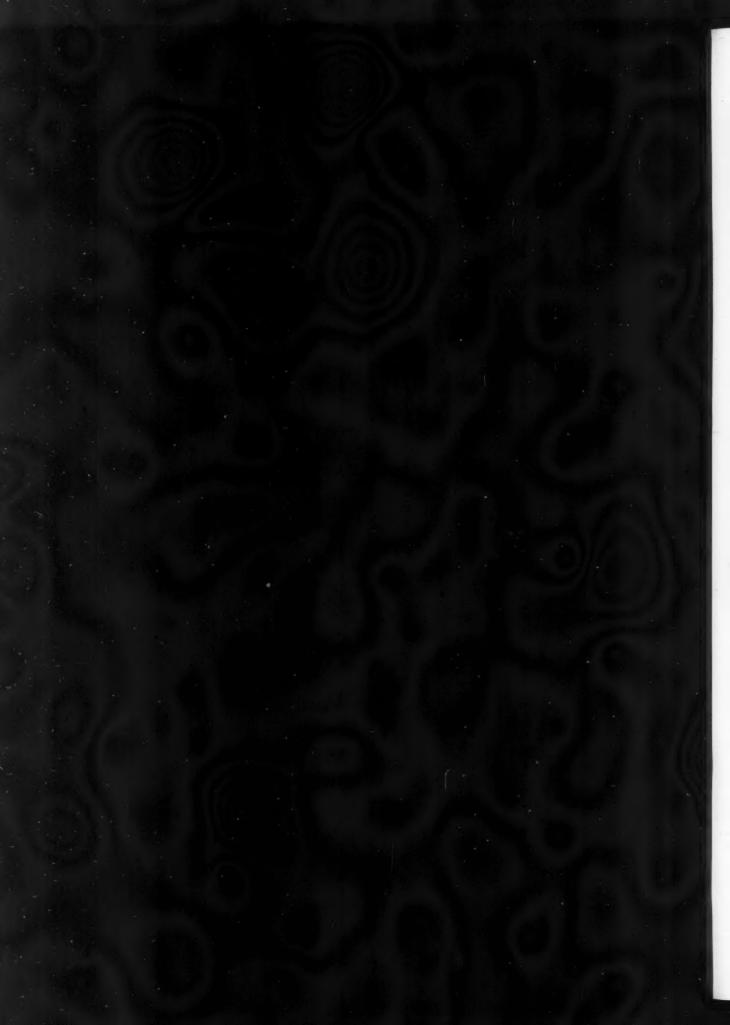
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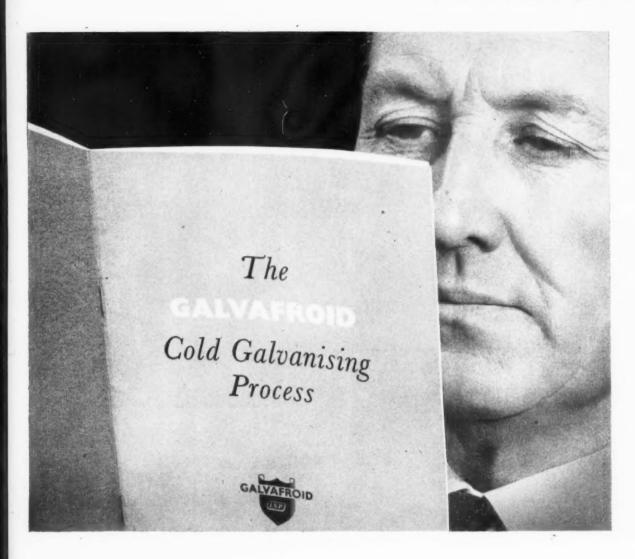
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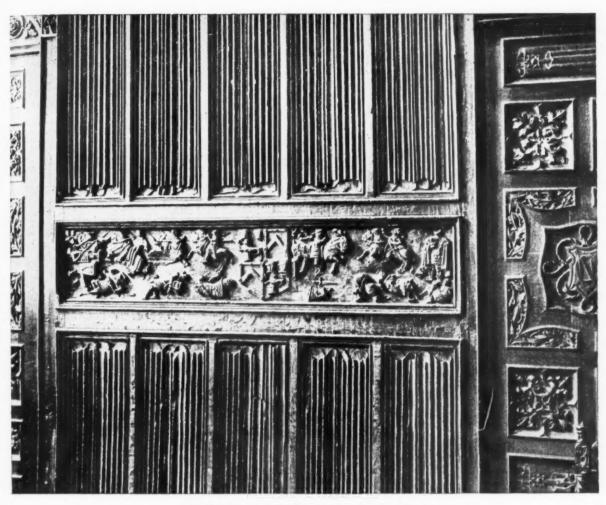
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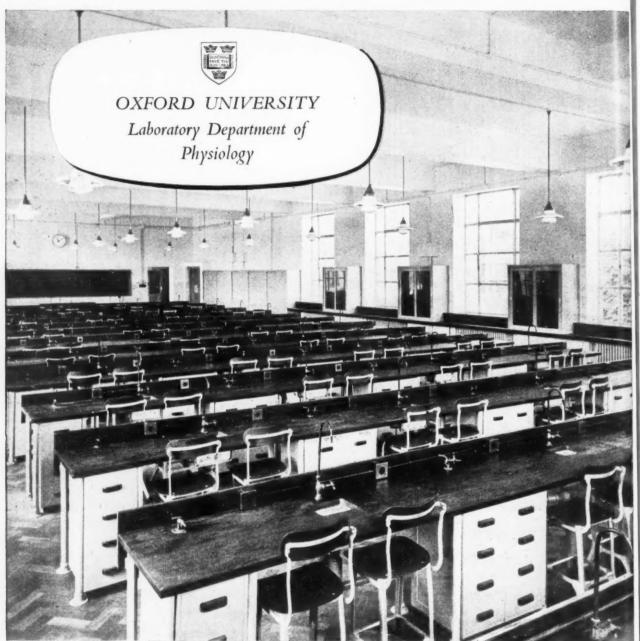
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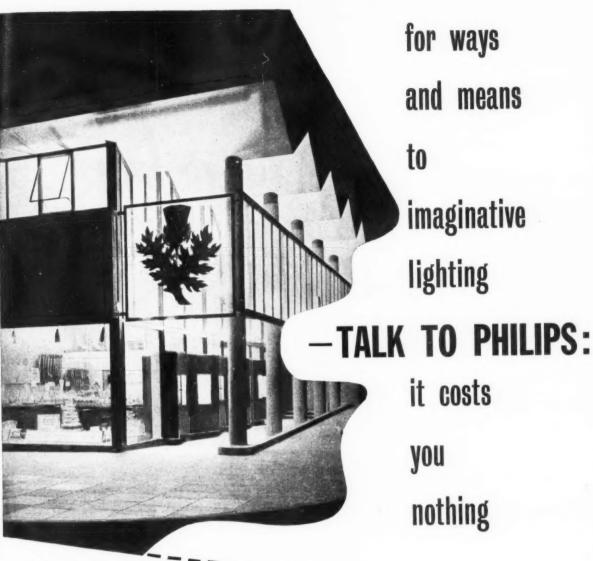




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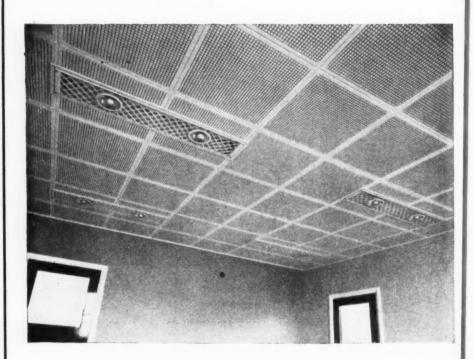
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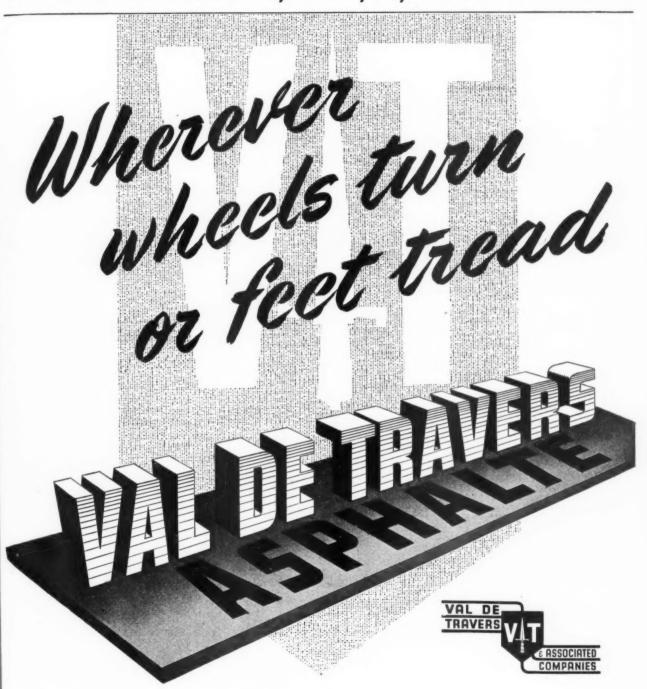
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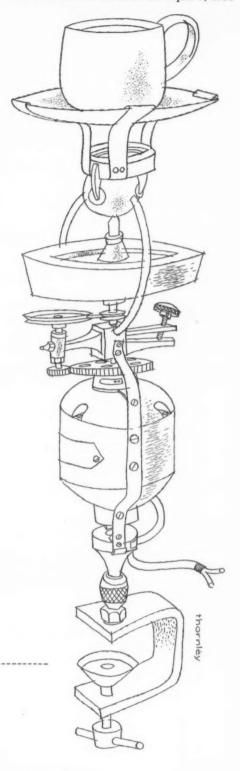
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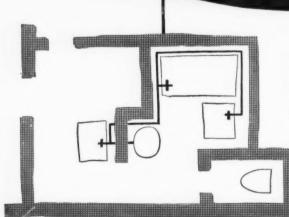


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In the rehabilitation scheme being carried out by Bangor, Caernarvonshire, Borough Council, 34 houses in Treflan and Minafon will have a scullery, bathroom and W.C. added to each by building ground-floor extensions at the back. These additions were designed in the City Surveyor's Department, Bangor, under the direction of Mr Cyril Richard, B.Sc., A.R.I.C.S, M.Inst.Mun.E.

In this project, qualifying as it does for an improvement grant under the Housing Act of 1949 and known as 'Operation Rescue', a Sadia cistern type water heater of 20 gallon capacity will be installed in each house. The Sadia cistern type were decided upon because it is so very simple and economical to connect them to the existing mains services. Furthermore, as many of the tenants are old or infirm, it was essential to install a system free from any risk of accident resulting from mishandling or negligence.

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Britain's nuclear power station construction programme provides for twelve such stations to be built at a cost of some £300 million in the next ten years.

The First Ten Years

Work will start on the first two nuclear power stations in 1957. These will each have two gas-cooled reactors and the stations will be in operation by 1960/61. Two further gas-cooled reactor stations—each housing two reactors of improved type—to be begun in 1958/9 will come into service by 1963. The output of these four stations will be between 400,000 and 800,000 kilowatts.

The construction of two groups of four stations each will begin in 1960 and 1961/2 and they will be supplying electricity to the Grid by 1963/4 and 1965 respectively. The first group of stations will probably have one gas-cooled reactor each. The second group will probably utilise liquid-cooled reactors — one high rated reactor each. These stations will add well over 1,000,000 kilowatts to the nation's power resources.

The Second Ten Years

By 1975, it is anticipated that nuclear reactor power stations in Britain will have an aggregate installed capacity of between 10,000,000 and 15,000,000 kilowatts; and about half the national consumption of electricity will be derived from nuclear energy.



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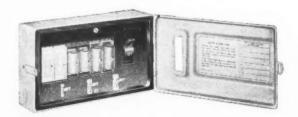




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The Glass Age Development Committee

A committee of architects and engineers, convened by Pilkington Brothers Limited has made proposals for creating a large scale shopping centre in the Black Country area, and a preliminary survey of the project and details of its locality and approach have already been published. The High Market Project has been designed under the direction of the Glass Age Development Committee, by Gordon and Eleanor Michell, A/A.R.I.B.A.

THE HIGH MARKET 3

THE FOUR LEVELS DESCRIBED

"High Market," which would be sited on the high ground formed by Turner's Hill and Darby Hill in the Black Country, has four levels. The top one for shopping, the one below for service and two levels below that for parking. Plans of each level are given on these two pages.

CIRCULATION

The circulation is the key to the whole planning of "High Market" as a shopping centre. There are four types of circulation as follows:

1 Customer's transport:

There are four entrances for the higher of the two car parking levels and two for the lower. The lower one is also for buses which go in one side and out the other.

2 Goods and Employees:

There is a one-way circulation all round the service floor with entrances at each end of the building at hill-top level. Goods are unloaded at the individual stores below each shop. Employees park their cars on this level. The two department stores have goods lifts with unloading bays in the centre of the building.

3 Customers:

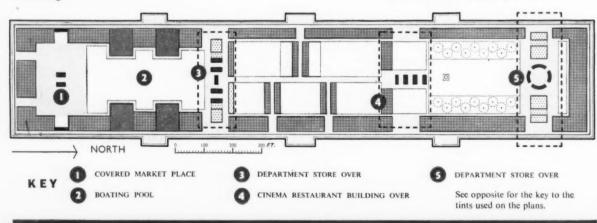
Customers take the lifts nearest to their car parking lot or the bus station and are carried to the general shopping level above the service floor. On this level, movement is entirely pedestrian, supplemented by an articulated platform moving continuously in both directions all round the outside of the building.

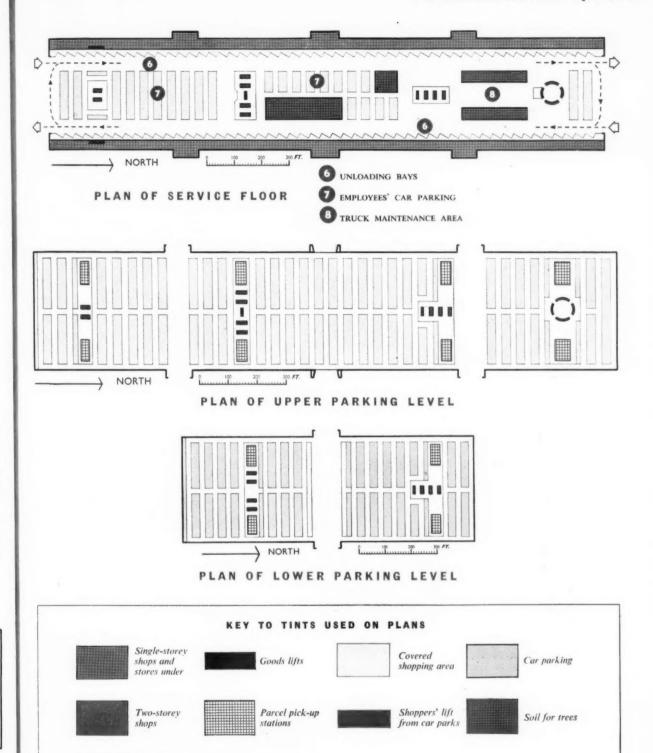
4 Parcels:

On getting out of their car or bus, customers obtain a colour token to correspond with the parcel pick-up station nearest to their lift, and an individual number. Their purchases through the "High Market," except those bought in the covered market and the closed arcades, are marked with their colour and number and placed in the shop's own vertical parcel chute. This saves considerable labour in delivery. The parcels are taken down the chutes in continuous bucket lifts and land on a conveyor belt which moves the whole way round the building. At 8 points on this belt (which are exactly above the 12 pick-up stations in the car park) an attendant takes the appropriately coloured parcels off the belt and puts them into the chutes for the pick-up station below. There they are sorted into numbered pigeon holes and collected by the customers as they return home.

GENERAL VIEW OF "HIGH MARKET"

PLAN OF SHOPPING LEVEL





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LIMITED, S.T. HELENS, LANCS.

Path of articulated moving platforms

SECTION SHOWING THE DIFFERENT LEVELS WILL BE PUBLISHED IN A SUBSEQUENT REPORT

Entrance to department stores over, with lifts, escalators and display space





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Architect: Dr. J. L. Martin, M.A., Ph.D., F.R.I.B.A., Architect to the London County Council, County Hall, Westminster Bridge, London, S.E.I.

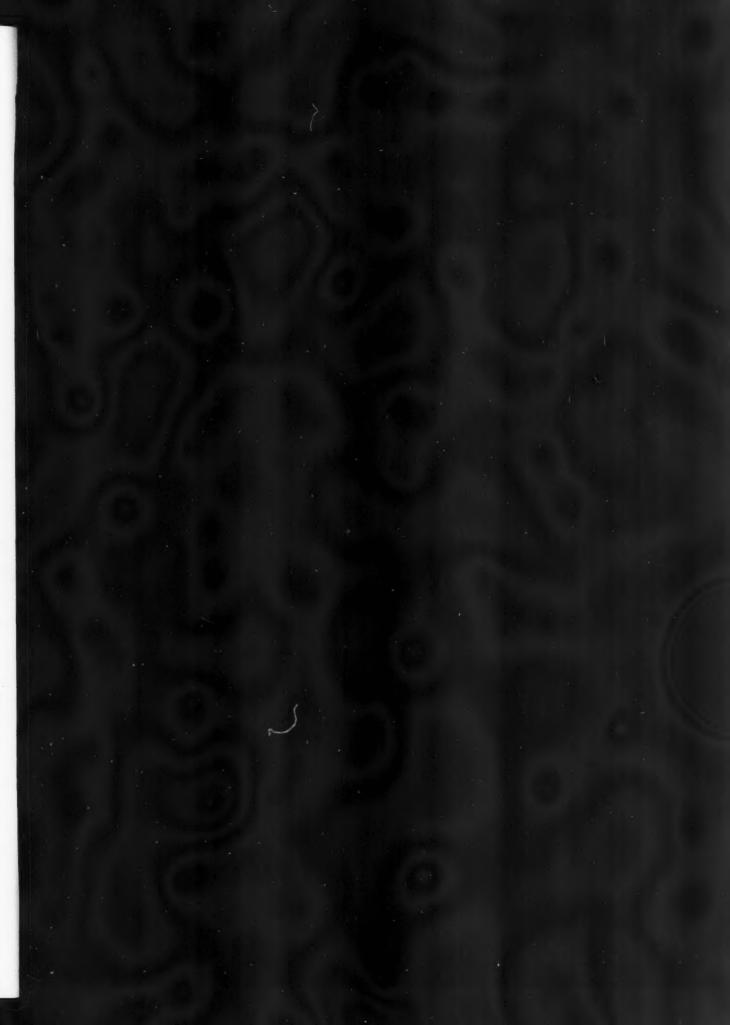
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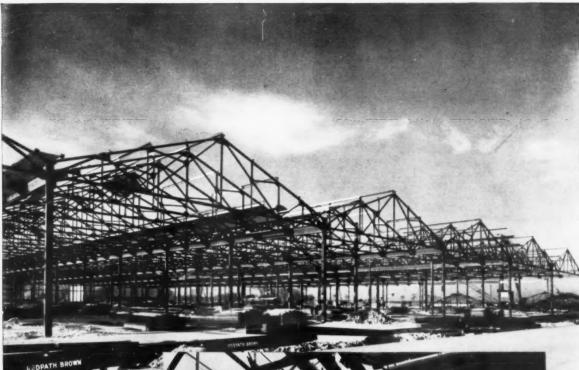
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THE ARCHITECTS' JOURNAL

April 5, 1956

No. 3188

VOL 122.

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ARCHITECTURAL STUDY IN CHURCH

Elsewhere in this issue there are some illustrations of the newly-restored church which is now the headquarters of the York Institute of Architectural Study. A colleague tells me that the opening of the headquarters went off very well, with the Minister of Works, Patrick Buchan-Hepburn, confidently stating his preference for modern architecture, and the Director of the Institute, Dr. Singleton, showing himself far from intimidated by the Gothic tradition.

The man responsible for the organization, which was excellent, was the secretary of the Institute, J. P. West-

Taylor. Burlington's Assembly Rooms proved a magnificent setting for the opening ceremony and the dinner, and at least one visitor was impressed by the flair for ceremony achieved by a relatively small provincial city.

ONE UP FOR DOWN UNDER

Australian architecture, which was recently on view at the RIBA in a special exhibition prepared by the Royal Australian Institute of Architects, has been described as Americaninfluenced. One wonders how accurate this is. There is naturally an affinity with English-speaking colonial architecture everywhere-in South Africa, Canada and New Zealand, for instance, but is there a more marked influence from that ex-colony, the United States?

ASTRAGAL was impressed by the standard of design shown in the exhibition and by the strict discrimination evidently exercised by the assessors. Someone has wisely pointed out that the Arts Council's exhibition of post-war architecture in Britain is far removed from what the RIBA would have chosen. The Royal Australian Institute has probably adopted the Arts Council's policy of "unity and conviction."

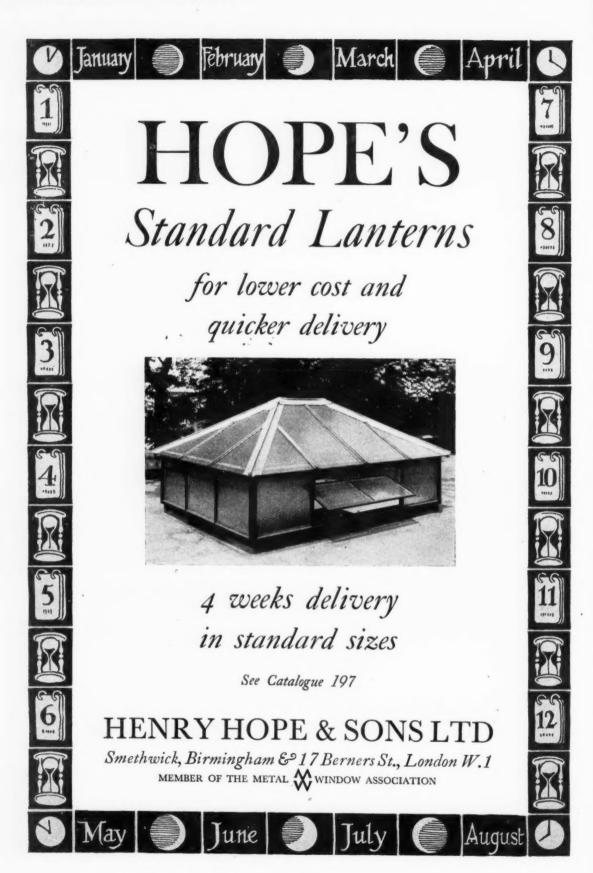
The buildings compare favourably with those designed over here, outside the largely London-based elite. Australian architects are at their best in housing work, as one might expect considering that their country has more owner occupiers per head than any other. Their flats, on the other hand, are dreary, and the Olympic village is as mundane as any second-rate English council estate—an extraordinary contrast to the Olympic swimming stadium, which promises well.

The exhibition was a simple affair, neatly presented (as RIBA shows always are), but shrewdly aimed to put us on our mettle. Imaginative touches by the RIBA were the provision of some smart, laminated wood furniture and the filling of the usual plant boxes with plants indigenous to Australia.

EVENINGS OFF

ASTRAGAL was privileged to attend two dinners recently. The first, and with all due respect the more important, was the annual dinner of the TPI. There is not space to do justice to the occasion, which was, needless to say, graced by the eminent of the land. But ASTRAGAL must find room to say how sorry he was that President Desmond Heap, in a witty speech, should imply criticism of the Royal Festival Hall, and how glad he is that Duncan Sandys, the Minister of Housing and Local Government, continues to show in his public speeches an enlightened and contemporary-minded attitude to planning. Once again the Minister demanded support for a green-belt policy, and once again he pin-pointed the major problems which face planners today-the need for relief of traffic congestion, and for the moving of offices and commerce (in addition to industry) away from London and other large cities.

The other dinner was a more modest affair, given by that recently-formed (1950) body, the Guild of Surveyors. The Guild, whose policy, ASTRAGAL



pro

the





As a foil to the Smithsons' House of the Future Astragal shows here the all-plastics house at this year's "Salon des Arts Menagers" in Paris (architect, Lionel Schein). The object of the exercise, which was sponsored by the French women's paper "Elle" and the Charbonnages de France, was to make the rather dubious point that we could construct virtually the whole structure of a prefab house out of plastics if we wanted to. The dark spots on the plan represent lighting fittings. (See also page 320.)

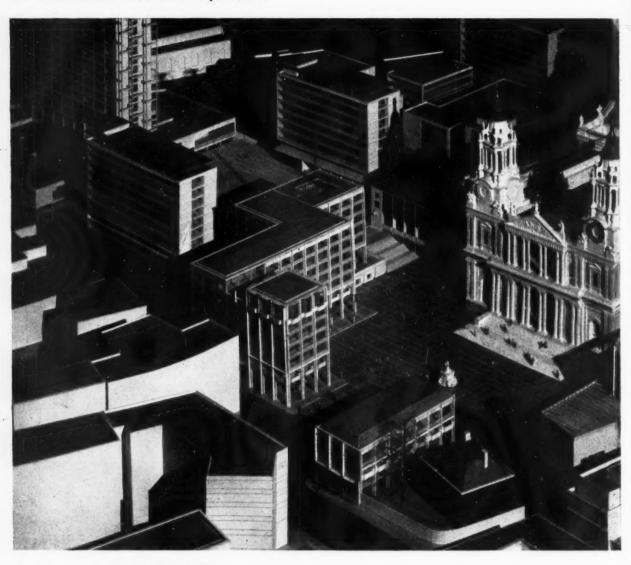
learns, is to press for the registration of surveyors on the lines of the architectural profession, is a small society with only a few hundred members. The president, however, is our old friend Professor Richardson. His speech, of course, outshone everyone's. He threw away his prepared remarks, as he always does, and gave another. And carried away by the exhilaration of the occasion he called for an extra toast—to England.

THE BEST BOOK ON F.L.W.

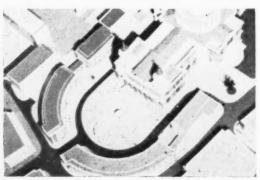
In the 20's it appeared to many that Frank Lloyd Wright's career had come to an end. His comeback, which has led to his present position as the grand old man of modern architecture, was partly due to Wright's clients, who extended their sense of patronage beyond the normal client/architect relationship and saw him through hard times. The most important of these clients was undoubtedly Edgar Kaufmann Senior, whose house, "Falling Water," clearly emphasized F.L.W.'s comeback as an architect. Edgar Kaufmann Junior, one of Wright's pupils at Taliesin became a great admirer of his teacher, and in "A Modern Architecture," he pays honour to him by editing his writings and infusing them with photos and drawings of buildings and projects. There has been a long-standing need for such a book, for Wright himself is verbose and diffuse in his writings. Mr. Kaufmann has done an excellent job and,

This illustration of Taliesin West, Arizona, by Frank Lloyd Wright (1938) is taken from "An American Architecture," a finely edited book of Wright's essays by Edgar Kaufmann. (Published by Horizon Press. New York. \$10.)









English Tradition or Beaux Arts for St. Paul's

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On the left is a sketch by Sir Albert Richardson showing what he imagines—in an obvious Beaux Arts manner—would be a suitable setting for St. Paul's. Below it is the first design by Sir William Holford, made, it is said, when he was under pressure from a high quarter to produce a formal essay in the Grand Manner. This design Sir William rejected as "wrong in principle. It offered no contrast to the Cathedral; it was too large for the site, but not large enough to make a really monumental open space—it had no function . . . the geometrical curve looked uncomfortable and pretentious in front of the very square lines and angles of the western half of the Cathedral . . ." A detail of the design Sir William finally put forward, which was illustrated in last week's JOURNAL, is reproduced above. We show this design again—as voices are being raised against it—because when compared with the formal scheme it demonstrates so forcibly the virtues of the English town-planning tradition over the Beaux Arts manner—a point which is discussed in this week's leading article.

apart from H. R. Hitchcock's official anthology, this is undoubtedly the most useful book to date on the master and his work.

FUTURE OF THE NEW TOWNS

The go-ahead TCPA, which is fully as active as the TPI, and probably even more influential than that official planning body, recently discussed the future ownership of the new towns. The room was packed, but the audience, if enthusiastic, was practicalminded and obviously determined not to show even a vestige of idealism. There are various ways of handling the new towns: the ownership of a new town may be transferred as a whole from the development corporation to the local authority, or, in an extreme case, the various buildings and services may be sold to private companies and individual firms, thereby possibly giving the Treasury a handsome profit. A more reasonable system, which was suggested at the TCPA meeting by Peter Self, a lecturer at the London School of Economics, is the formation of boards of trustees, the majority appointed by the Minister and others possibly elected by the new town inhabitants.

These boards, which could take over from the development corporations, might be composed of the calibre of men who could run disinterestedly such a large financial undertaking as a new town. It would surely be ridiculous to expect the kind of man who is prepared to stand for a local authority to have the time, disinterestedness and calibre to give a new town the guidance and leadership it needs. The new towns will almost certainly be profit-making ventures and the profits, which might at first be used to alleviate present high rent should, in the long run, be used to develop other new towns, expanded towns and other enlightened ventures of capital expansion.

It would be tragic if the ability to plan which is inherent in public ownership was thrown away for a short-term policy of making immediate profit. The new towns should be thought of as long-term investments in the country's future and as pace-setters for urban living everywhere.

ASTRAGAL

POINTS FROM THIS ISSUE

New headquarters for York Institute of Architectural Study

	pages 297 and 306			
Plastic house at the French "ideal home exhibit	ion'	pa	ages 30	01 and 320
Salaries: a plea for the unqualified		• •		page 303
LCC development near Lansbury	• •		• •	page 304
Brussels Exhibition: architects chosen				page 305
RIBA subscriptions going up				page 305
Sports Pavilion at Barnet				page 313
Mayfield School: a description of the finishes				page 321

The Editors

HOLFORD'S SCHEME FOR ST. PAUL'S

LREADY the progressive-minded of the nation's architectural leaders have spoken in favour of Sir William Holford's proposals for the St. Paul's Precinct. C. H. Aslin, Sir Hugh Casson and Sir Patrick Abercrombie in the Sunday Times, R. Furneaux Jordan in the Observer, Professor Myles Wright in the Manchester Guardian, and the architectural correspondent of The Times, to name but a few, have been quick to point out the good qualities inherent in Holford's proposals. There is, however, the inevitable voice shrilling in protest: that of the emotional irrational Sir Albert Richardson. His appeals for a "disciplined architecture" were eagerly taken up by that guardian of middle-brow taste, the Daily Telegraph; and that normally-balanced newspaper, The Times, went to the length of obtaining a special interview with Sir Albert Richardson in order to record such irrelevant criticisms as: "The contrast between the magnificence of St. Paul's and the commercial treatment proposed for the surroundings was very strong. It would not be tolerated in any other capital in the world: the French would writhe at the idea, and the Vatican would not permit it." In Sir Albert's view the correct solution would be "a wonderful framework that would be more than respectful to St. Paul's: it would be reverential." This is just unhelpful verbosity. The only proposal in terms of drawing by Richardson which we have seen showed threestorey buildings with classical colonnades forming a curved piazza round the west end. These, while posing as reverential, would in fact destroy the great romantic possibilities of the site and lose the wonderful vistas of St. Paul's which a landscaped design can achieve and which Holford's great imaginative conception has safeguarded. While professing reverence, Sir Albert kills St. Paul's, while professing function Sir William builds a stage set which brings out all its latent drama.

The Times, in a lamentable leading article asks for "a grandeur, grace, dignity and symmetry generally done by a formal

design." But these qualities do not come very naturally to the English, they are more readily associated—as Richardson said—with the French, or the Vatican. It is to be hoped that those who have to decide about Holford's proposals for St. Paul's will not be unduly influenced by people such as Sir Albert. The important quality of Holford's proposals, brought out in the illustration on page 300, is its Englishness. In the history of European town planning two influences have been at work. There is one which is monumental, axial and symmetrical, epitomised by the Grand Manner of Louis XIV. and still acknowledging its French origin in its present title: the Beaux Arts approach to design. The other influence is the informal, efficient-functioning, but infinitely varied approach most notably expressed by the English landscape garden tradition. It is the English desire for freedom and liberty, as opposed to the absolution and dictatorship of the French, which found expression in the art of the informal landscape, and in what Nikolaus Pevsner in his Reith lectures called the Picturesque Principles. The Beaux Arts approach to providing a precinct for St. Paul's would involve obvious symmetry, inefficient planning and pretentiousness. Sir William Holford's final design is rightly in the English landscape tradition. The efficient functioning layout, by juxtapositioning high buildings with low, and business houses with shops, schools and historic buildings, provides surprise, contrast, intimacy and drama. These squares and walks will unfold a visual scene to the onlooker infinitely more varied, subtle and effective than that created by the crude efforts of monumental planning.

"Official Architect" Sir Howard Robertson, P.P.R.I.B.A. A. Arden Wood, A.R.I.B.A. Rachel Wilson, A.R.I.B.A. Raymond Moxley, A.R.I.B.A. The Bishop of Hereford M. P. Floyd, A.R.I.B.A. "Architectural Assistant" Gordon Redfern, A.R.I.B.A. N. D. Melhuish

The Status of Architects

Sir.—I would agree with the conclusion, implicit in your editorial of February 9, that membership of a trade union such as NALGO, IPCS or ABT will produce no more than occasional pay rises, perhaps sufficient to keep level with the cost of

status of architects in society will never be raised by a union the majority of whose members are not architects or even professional people.

This has recently been emphasised by the recent Report of the Royal Commission on

the Civil Service. It proposes a lowering of pay and conditions for architects (and en-gineers and surveyors) while generally increasing them for the administrative and executive classes.

It is surely most important that the government first of all should be convinced of the usefulness and responsibilities of architects, and thus give a lead to other employers. Had the Royal Commission heard evidence from the RIBA instead of from a trade union whose membership is only partly pro-fessional and of which architects form only a small part, I am sure the profession would have been better served. I hope your editorial

lead will be followed up by the committee reporting on salaried employment.

"OFFICIAL ARCHITECT."

Coventry Cathedral

SIR,—I hope this letter does not come too late to support Basil Spence in his reactions to Henry-Russell Hitchcock's criticism of the Cathedral.

I was sorry to read the latter, because of its pre-occupation with date labels rather than actual achievement in meeting the conthan actual achievement in meeting the conditions of what was a competition with definite requirements. And also because I continue to feel that buildings cannot be truly judged till they are built, and weathered.

Meanwhile, the type of aspersion so frequently cast on architects' projects today is damaging to the architect, and discouraging to individuality of the type that does not

to individuality of the type that does not fall into one of the classified categories so indispensable to architectural commentators.

Basil Spence's cathedral is a highly personal work. It may likely be ahead of its time not the reverse. Who can judge today. time, not the reverse. Who can judge today with assurance?

Perhaps individuality is returning. Ron-champs Church and the Maison Jaoul by you-know-who must have come as a bit of a shock to those who felt they had their Corb all taped. Lloyd Wright is more and more a rogue animal; and both of these giants have clearly broken out of their comglants have clearly broken out of their com-pounds and are now doing what they really feel and love. What a shame it is for the art critic and historian, all the labels are torn off, and functionalism in its neatly accepted tenets is steam-rollered over. But accepted tenets is steam-rollered over. But so few new works are, in fact, functional; they are merely intended to look functional. Hence perhaps the deprecation of Basil Spence's point about cleaning windows of a great cathedral. But cathedrals are not exempt from the requirements of shelter that has to be practical for present-day needs. Heating, lighting and cleaning bills have to be met even in religious buildings. They can be frighteningly large, and the purses of the faithful are not bottomless. The Smithsons' design for Coventry was interesting. So were several others much less publicised but with a similar approach. They did not, incidentally, answer the programme. Some may argue that the

gramme. Some may argue that the programme was wrong; but it is too late now to make this point with any relevance. And

anyway it would have to be demonstrated.

Meanwhile, why not wait till Basil Spence's cathedral at Coventry is built, and then people can judge for themselves? Past experience shows that nothing is more fallible than assessments of art achievement; later on, the ones that got the knock so often survive, and the highly praised example's go down into the cellar. Yours faithfully.

SIR 'HOWARD ROBERTSON.

After Tees-side, Enniskillen

SIR,-Readers of an unhappily depleted SIR,—Readers of an unnapply depicted JOURNAL will have received an encouraging sign of the spread of progressive architecture to Northern Ireland via the Enniskillen Competition. With the JOURNAL issues illustrating architects' work in the West Riding, Plymouth and on Tees-side this is surely a heartwarming sign of a new spirit in architecture. The ingenious elevaspirit in architecture. The ingenious eleva-tions of the Enniskillen scheme (AJ, March 1) will, I feel sure, please the most discerning critic and the length of corridors cannot but delight the most enthusiastic planner.

A. ARDEN WOOD.

Yorkshire.

Co-ordinator of Many Skills

SIR,—A reference to a change in the architect's rôle in your Guest Editors' final costs article, "Architect-Builder Co-opera-

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tion" (AJ, February 23) could be mis-

I submit that the architect is still "concerned primarily with the appearance of buildings." Certainly nobody else is. Let there be no mistake about this. It is not the rôle that is altered, only the means by which an end is achieved.

Emphasis on certain aspects of an archiect's education must shift, and rightly so. That is all.

I may appear to be labouring an obvious point. Yet I am increasingly aware in this point. Tet I all increasingly aware in this age of the Technician that a confusion of thought exists on this matter which is by no means confined to those outside the

RACHEL WILSON.

Edinburgh.

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Builder v. Architect

Sir,—Why do some builders resent architects? One hears of builders who tell potential clients that they can build houses £1,000

cheaper without an architect. This near-blackmail must have its roots. Undoubtedly there is a race (fortunately diminishing) of architects who cause much unnecessary additional expenditure to the builder by not completing working drawings by the time the job goes out to tender, and by a muddling-through attitude to vital in-

formation when building is in progress. There are a few builders who need the policeman-architect to guard against the use of bad materials and workmanship. This causes some of the resentment. Many builders honestly believe that they can build as well, if not better, without an architect. Architecture — "firmness, commodity and delight"—is of little or no interest to them. Could not builders establish a code of conduct effectively administered, which would administered. reduce the need for the policeman-architect? Could not architects guarantee to complete working drawings at the tendering stage of each job, and have cost-control introduced as a subject in the RIBA final examination? RAYMOND MOXLEY.

Ledbury Churchyard

SIR,-Within the last three or four days my attention has been called to some comments in your Journal (issue of February 9, page 173) on the felling of four lime trees in Ledbury Churchyard, in my Diocese. I had already made careful enquiries about this matter and I write to protest against the exaggerations and inaccuracies in these comments. The writer states that "out of four trees condemned after expert advice' only one proved to be really decayed." Actually I have before me a letter from one of the directors of the well-known firm of timber merchants which carried out the work of felling these trees. In this letter he states explicitly that rot had set in in all four trees from the top of the butt length (where they had been pollarded) and not from the butt; that the branches were tall and heavy and constituted a danger to the public and to adjacent buildings; and that the accumula-tion of rot in the trees would have made further pollarding extremely dangerous and impracticable. Your informant should have made more careful inquiries into the facts and not drawn his conclusions only from the butts of the trees which he saw.

The writer of the article in your JOURNAL further assumed—admittedly on the basis of a mere rumour—that the trees were to be replaced by a "garden of rest" and made sarcastic remarks about the idea. As you have since been informed by Mr. Fletcher, the Ledbury parochial church council unanimously rejected the suggestion of a garden of rest and there is no intention of garden of rest and there is no intention of making one. It seems to me a strange thing that a JOURNAL as important and reputable as yours should allow one of its

contributors (not merely the writer of a letter) to indulge his sarcasm at the expense of Church authorities on no better foundation than a rumour which proved to be

I hope that you will see fit to publish this letter in your next issue or at least to correct the errors in the article to which I have referred. The rector and parochial church council of Ledbury acted with the utmost care in this matter and I entirely approve of their action, much as I and they regret the loss of trees which were an adornment to the churchyard.

T. HEREFORD (Bishop of Hereford).

RIBA Examination Procedure

SIR,—There are no means whereby an unsuccessful candidate in an RIBA external examination may gain from the examiners any indication of the reason for the failure. In fact, examination conditions clearly prohibit this by stating "No correspondence can be entered into regarding the results of the examinations." In some cases the examiner will state what in his view are errors, and these might be helpful to the errors, and these might be helpful to the examinee at his next attempt. But in a particular case with which I am personally acquainted, a student was told at an interview that his design subject had been very well handled, and was given a positive indication that he had passed. Similar enthusiasm was shown over his testimonies, which was not surprising as he had achieved considerable success in this field at his recognized school. Some weeks later, he re-ceived a laconic card indicating that he had failed. Candidates put a great deal of hard work and effort into the preparation for these examinations.

There should be an equal response on the part of the RIBA to organize some means whereby an unsuccessful candidate can learn something that might enable him to reverse the result at the next attempt.

reverse the result at the next attempt. The result card is stamped, where appropriate, and in emphatic red letters, "Not British Subject." Those who fall into this category have a suspicion that examiners tend to deal more severely with them than other candidates. This suspicion is, I trust, erroneous, but is there any point in increasing doubts by such tactless actions?

M. P. FLOYD. M. P. FLOYD.

Wanted: Rewards for the Unqualified

SIR,—Conditions of pay among staff members of the architectural profession are appallingly low, and despite the building boom, an overworked profession, and an increase in fees chargeable, many architects

increase in fees chargeable, many architects and partnerships seem reluctant to pass on any part of this increase to their assistants.

A glance down the "Situations Vacant" columns reveals the following pay examples for architectural assistants:—£400-£750; £560-£650; £507; £480-£570; £500-£600. Ignore the enticing £750 for the rough average of these figures is £570 and that is the sum an applicant of anything that is the sum an applicant of anything from thirty years of age upwards would most probably be offered. These figures, when compared with the financial remuneration received by the architect himself show too large a gap and a Scrooge-like attitude which unfortunately shows no signs of disappearing.

Further study of the "Situations Vacant" columns reveals another interesting factor. The majority of positions are for "Assis-Ine majority of positions are for "Assistants up to intermediate standard or above," i.e., unqualified. This classification is further resolved to embrace good draughtsmanship, a full knowledge of building construction and specifications and the ability to work up schemes from

sketch stage to final completion. This means: "we expect you to know as much as an Associate but you must not expect an Associate's pay," which no doubt explains the demand for this class of assistant. Thus we have the young associate and the older more experienced assistant receiving approximately the same pay and receiving approximately the same pay, and whilst I have no personal disregard for the RIBA fledglings, this state of affairs seems highly unjust, because undoubtedly the unqualified assistant is being taken politely for a ride. This is particularly exasperating in view of the fact that the competent man of experience is more useful to an office than

Please do not think mine is a lone voice crying in the wilderness. These things are, I assure you, quietly debated from time to time by the many who are affected. Certainly the pay question is a point of great anxiety to many, especially those unfor-tunate enough to have to keep children as

well as themselves.

There is, of course, one body in existwhom one would think would careful watch over these matters. Unfor-tunately, as far as I can make out, the RIBA exists only as a figurehead which its cobweb-impregnated holds its annual functions, censors the small and has as its main objective the gathering in of subscriptions—all executed with the careless rapture of a dictatorship which

knows no competition.

Certainly an organization is badly needed to formulate a salary scale for all members of an architect's staff. Some definite status should be given to the unqualified man of proved ability and experience who has for too long been taken for granted.

"ARCHITECTURAL ASSISTANT."

Birmingham.

Co-operation

SIR,-The general trend of the whole series of Guest Editor articles you have recently published might be summed up by the word co-operation.

It is possible that a further combination of snob professionalism on the one hand and naked commercial profit on the other will, to a small degree, produce more effi-cient building, but primarily only for the retention of the former and the extension

of the latter, not for architecture. It seems to me that patching up parts of a way of life so strained that it must produce for its final argument the hydrogen bomb is, in the long run, a waste of time. I quote from Lewis Mumford: "The age of the machine is already over. We cannot save our cunning inventions and our complicated apparatus of scientific research unless we save man, and when we do so, the human person, not the machine, will dominate the scene.

Co-operation is the method for this re-emergence, I see no other solution for living and working together; and here is the crux of the matter—must not the terms of reference be wider?—a re-appraisal of the whole direction with particular reference to architecture, a new way, not just more brick

Neither politics nor science can control, they can only help—one to show the need, the other to give the physical facts, collating and translating these things into a logical and coherent expression is work not for isolated bodies oscillating in a "free" economy but for balanced teams of specialist designers, each with a high level of general education, all working to one

I suggest that the answer might lie in comprehensively integrated building teams which could exist within a national building corporation—such an examination would certainly be a logical follow-on to your recent series. Failure of the USSR to produce nothing more than high technical achievements by similar methods in no way can invalidate such thoughts.

Could not your next Guest Editors consider such directions? It is vital that we effect change from within while there is still

GORDON REDFERN.

London.

[We think that "snob professionalism" and "naked commercialism" are rather [We think that "snob professionalism" and "naked commercialism" are rather harsh (and unjust) terms, but if they exist at all, only closer collaboration, surely, can mitigate them. Architects and builders appreciate each others' aims too little, because they work separately from each other. Mr. Redfern's suggestion for integrated teams working within a national building corporation is an attractive idea but would it not imply failure to adapt existing organizations (the architectural program). existing organizations (the architectural profession and the building industry) to present and future needs?—EDITORS.]

Blame The Church

SIR,-Mr. Berry is quite right to blame the Church for the present poverty of church architecture. It would also be right to blame the Church for the whole decline in Christian culture during the last two or three centuries. But Mr. Berry seems to speak of "the much hoped-for religious revival" rather in the manner of Mr. Micawber: church architecture, he seems to say, will be all right when the Great Revival turns up to save it. One wonders what is to happen in the meantime. Churches, after all, are still being built, and an architect cannot sit down and wait for a Christian renaissance before undertaking to design a church. On the Continent and in America the Liturgical Movement in the Roman Catholic

Church has inspired a very close study of the problems of religious architecture. The Movement first began to have an important influence on modern church design during the nineteen-twenties, when the group known as "The Shield Companions" was formed in Germany under the leadership of Rudolf Schwarz. Schwarz's ideas on church-building are of great importance, and his church at Aachen remains one of the most significant contributions to church architecture in modern times. Since the architecture in modern times. Since the war, the most notable achievements of the Liturgical Movement have been in France: many of the vital new churches in eastern

many of the vital new churches in eastern France (including those at Assi and Ronchamp) owe a great deal to the theories of the Liturgical Movement.

Rudolf Schwarz laid down two principles for church-builders: (1) To start from a reality based on faith, not from one based on art, this truth or reality being of such a kind as to produce a community and an artistic achievement. (2) To be absolutely truthful in our artistic language by saying nothing more than we honestly can say in our time, and nothing which cannot be understood by our contemporaries. If what understood by our contemporaries. If what we have to say is not much, compared with the Middle Ages and antiquity, it is still better to remain in our sphere and renounce all sorts of mystical theories which will not be understood by anybody.

N. D. MELHUISH.

London.

RIBA

Poaching?

The RIBA Council has been considering the undertaking of work for private clients by local authority architects' departments. by local authority architects' departments. Each case must be judged on its merits, says the Council, but in general it would only be considered appropriate for an offi-cial architectural department of a local authority to undertake work when it has a financial or operational responsibility for the completed work, or where a substantial proportion of the cost of the work is chargeable against public funds through the local authority

Representatives Appointed

The following appointments have been made:—

made:—
British Standards Institution, Building Divisional Council: Thomas Mitchell, in place of R. N. Wakelin. RIBA Architecture Bronze Medal: Nottingham, Derby and Lincoln Society of Architects: Jury to consider award: J. H. Lloyd Owen, president, Leicestershire and Rutland Society of Architects. Building Research Station:

Factory Research Group sponsored by Midland Regional Board for Industry: Advisory Committee: Harry Weedon. BSI Committees: BMB/Bituminous Products Industry Standards Committee, K.C. Evans; BMB/6 Pitch Fibre Drainpipes, J. S. Wyatt; PEB/- Builders' Plant and Equipment, F. M. Heaven; MEE/34/4, Heating Boilers, D. W. Aldred.

Hemel Hempstead Exhibition

From May 22 to 30 an exhibition at the RIBA headquarters will show the contribution made by both official and private architects toward the building of the Hemel Hempstead New Town.



This photo shows the LCC's proposed Tidey Street development from north-west. The site is in Neighbourhood unit 7 (East), of the LCC Stepney-Poplar Comprehensive Development Area, and lies immediately to the north of the Lansbury neighbourhood. The planning of the neighbourhood, which will be illustrated more fully in next week's JOURNAL, and the constructional work are under the direction of the Architect to the Council, Dr. J. L. Martin, assisted by the Housing Division (Principal Housing Architect, H. J. Whitfield Lewis), the structural Engineering Division

(Senior Structural Engineer, J. H. Humphreys) and the Planning Division (Senior Planning Officer, L. W. Lane). Neighbourhood 7 presents a difficult planning problem, being bounded on the south by the Limehouse Cut Canal, which divides it from Lansbury, on the west by the Bow Gasworks and on the north and east by railway lines and sidings. Also on the south side, bordering the canal, is a power station. By including 19-storey maisonette blocks, one of which is seen above, in the layout, the LCC has provided three large public open spaces within the new neighbourhood.

"All-in" Tenders Overseas

Approval has been given to the following memorandum of agreement between the RIBA and the Export Group for the Constructional Industries for architectural work in connection with "all-in tenders" for work overseas. The term "all-in tender" is defined as a comprehensive offer for design, specification and construction, including, if mutually agreed, supervision.

The application of the agreement is for the present to be limited to foreign countries and to India and Pakistan.

(a) The normal professional relationship between architects, clients and contractors is to be preferred and will continue except where prospective clients require an "all-

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blocks, rovided (b) Normally the members of the Export Group will select their own architects but, in the event of contractors requiring nominations for the purposes of this agreement, application should be made to the president of the Royal Institute who will make such nominations.

(c) Architects are prepared to do such work for contractors as will be necessary to enable the contractors to put in an "all-in tender." The services provided by the architect and the fee for these services will fall within, and be regulated by, the provisions of clause B.3 (Partial Services) (i) and (ii) of the RIBA conditions of engagement and scale of professional charges.

(d) The initial agreement between the parties in each case will provide for the retention of the architect's further services

as may be mutually agreed.

(e) There would be full consultation and collaboration between the architect and the contractor in the preparation of the design. The architect will undertake as far as is reasonable to prepare his design to suit the particular requirements of the team engaged upon the project, always provided that in his opinion the design is appropriate.

(f) The "all-in tender" to the client and

the provision of finance will be made by the contractor

Subscriptions Raised

Membership of the RIBA is to cost more. From January 1, 1957, fellows in the United Kingdom and Republic of Ireland United Kingdom and Republic of Ireland will pay £10 10s. per year, associates and licentiates will each pay £6 6s. and students (at home and abroad) will pay £2 2s. (Students abroad who were elected before January 1, 1953, will pay nothing for five years.) Retired members and subscribers will pay £1 1s.

and £4 14s. 6d. for associates and licentiates, "are calculated to restore the income and expenditure account to balance by the end

The RIBA gives several reasons for these not unexpected increases. There is, they say, an increase in the cost of all services. In addition they have to finance the com-pletion of the RIBA building. (The re-building of 68, Portland Place "will do very little to increase the floor area over very little to increase the floor area over that now available and the building of the upper storeys of No. 66 is urgently required"). The Institute also have in mind the need for financial assistance by some of the allied societies—assistance which "could not be given without a comparable increase in revenue."

Proposed Revision of Investment Procedure

The RIBA Council wants to revise Byelaw 43, which is concerned with investments. Their object is "to make possible some offset against the declining capital value of fixed interest securities by holding a proportion of equities." A special general meeting will be held on April 17 to consider the Council's proposal that it should "invest a proportion of both ordinary and trust funds in securities other than those trust funds in securities other than those customarily permitted by the High Court under the general heading of trustee securities."

BRUSSELS

Exhibition Architects

The architect for the UK industrial pavilion for the Brussels Exhibition, 1958. will be Edward Mills. John Lansdell will be the designer for the pavilion. The architects for the UK government pavilion and co-ordinating architects for the UK site will be Howard V. Lobb and John Ratcliff. James Gardner will be the designer for the pavilion and co-ordinating designer for the pavilion and co-ordinating designer. for the pavilion and co-ordinating designer for the site.

MOE

White Paper on Technical Education

At a Press conference to introduce the At a Press conference to introduce the Government's White Paper on Technical Education, the Minister of Education, Sir David Eccles, remarked that this was one of the few programmes for government spending which would be exempt from the "squeeze." To the present figure of £9 million already sanctioned for the building of technical leaves in 1056 57 of the ing of technical colleges in 1956-57, a further sum of £70 million is proposed for technical colleges to be started in the five years from 1956 to 1961 inclusive. Since technical colleges are large and complex. teducation authorities are to be released from the present obligation of presenting their programmes on an annual basis. Thus a programme for the first £15 million for 1957-58 and a provisional programme for a second £15 million for 1958-59 are to be approved this spring.

LCC

Steel and Labour Shortage

The LCC Housing Committee say there has been some delay in the earlier constructional stages of building in the last six months because of shortages both of steel and of

will pay £1 ls.

These rates, and those for overseas members* which will be £6 6s. for fellows

* RIBA members in the Trans-Oceanic Dominions who are also members of Allied Societies in the Dominions," and "members resident abroad outside the area covered by the Allied Societies."

Below, are some of the people who attended a party given recently to members of the IUA Schools' Committee by the Architectural Press, the JOURNAL's publishers, in their private pub "THE BRIDE OF DENMARK." Top pictures, left to right: Professor Paul Hedqvist (Stockholm), Mrs. Kenneth Campbell, Alfred Roth (Switzerland), Jacques Marmey (Tunisia) and Professor Robert Matthew. Bottom pictures, left to right: Oton Gaspari (Ljubljana), Professor Gunter Wilhelm (Stuttgart), A. Fares (Rabat), B. Schranil (Prague), J. Stasek (Prague) and Godfrey Samuel.









NEW TOWNS

The Planning of Household Work

Speaking to the Council of Scientific Management in the Home on "To what extentare the requirements of household work considered in New Town Planning," Sir Thomas Bennett, the Chairman of Crawley Development Corporation, remarked that over 95 per cent. of the people going to live in Crawley wanted a house and garden and less than 5 per cent. wanted a flat. 75 per cent, of the houses in Crawley had three bedrooms, a form of accommodation which was not only more economically provided in separate dwellings than two-and one-bedroom units, but also took into account the noted preference of young single people to lodge with a family instead of living on their own in bed-sittingroom flats. Sir Thomas suggested that it might be worth trying the Scandinavian solution of building bed-sittingrooms with separate entrances, so that the lodgers could enjoy a measure of independence while still sharing sanitary accommodation.

Discussing the question of what tenants would pay for added amenities, he said that an end house in a terrace was worth 1s. per week more than an intermediate flouse, a semi-detached house 2s. more, and a second water heater 1s. 6d. Although in the early days of Crawley the single living-room was popular, the old preference for the "front parlour" seemed to be returning.

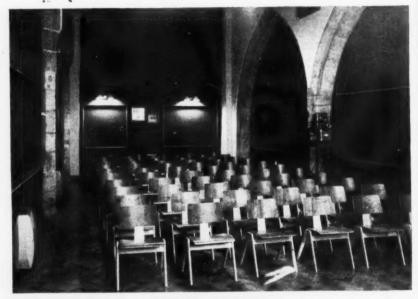
Sir Thomas remarked on the need to give room for facilities for installing certain pieces of equipment, which fell on the border line between luxury and necessity such as refrigerators and washing machines which the tenant would not wish imposed upon him by the landlord but might like to supply for himself.

YORK

York Institute of Architectural Study

Last month the Minister of Works, Patrick Buchan-Hepburn, opened the new head-quarters for the York Institute of Architectural Study. These headquarters have been formed in the church of St. Johns, Ouse-bridge, which has been empty and redundant for eighteen years. The ecclesiastical authorities had decided to demolish it and give it to the York Corporation for that purpose. When in 1951 there was a possibility of the demolition taking place, the York Civic Trust undertook to preserve the building, and received it for peppercorn rent from the City Council.

The restoration and conversion have been carried out by E. A. Gee and Dr. W. A. Singleton. The arcades on each side of the nave have been filled in to form a lecture room for between sixty and eighty people. The west wall is pierced to provide openings for a cine projector, worked from the base of the tower. The north aisle has been partitioned off to form a library and tutor's room; the south aisle has become the director's and secretary's rooms, and the bays each side of the tower have been made into an entrance hall and an exhibition area. The





Photographs of the church conversion described above. Top, the pinnacles have been restored and a paved and cobbled garden has been provided at the expense of the Joseph Rowntree Village Trust. Centre, the lecture room. Right, part of the library.

lags and such ledger slabs as have been found intact. The remainder of the floor is of opepe wood blocks. The partition walls of the lecture hall have been painted dark blue, the plaster work above the archives and on the external walls has been painted light blue, and the ceiling between the oak beams is dark red. The partitions of the offices and library are only 7 ft. high and are composed of wood studding faced with walnut veneered plywood. A West African hardwood, iroko, has been used for all face joinery work, cupboards and book-cases. Furniture and light fittings are contemporary, but the lighting could have been improved if a certain amount of light had been directed upwards to bring out the colour of the ceiling and to reduce contrast. It is creditable that the attempt has been made to retain the spaciousness of the church by keeping the partitions low, but the lack of sound-absorbent surfaces may prove a drawback. The admixture of bright colour and medieval tradition and of contemporary and gothic ornament is stimulating. The heraldic devices on the ceiling have been emblazoned, the structure has been entirely renovated and the peal of six bells re-hung and retuned. Some of the interesting details discovered during the conversion have been left revealed.

havs have been floored with plain York stone

Readers will be familiar with the work of the Institute, which has been established since 1953. It originated in a summer school for architectural students which has been held annually since 1949. At present the Institute's activities comprise:

 A series of general and specialized residential courses of up to a fortnight in length on the protection and repair of historic buildings;

Other courses on subjects of current interest;
 Summer schools for both students and

3. Summer schools for both students and laymen;

A. A six-monthly bulletin giving details of the Institute's activities and special articles. The York Institute is unique in the British Isles; it is the only post-graduate course which endeavours to study both the past and present in architecture, to quote the words of the Minister at York when he opened the building. The opening ceremony was carried out in York's magnificent Assembly Rooms, designed by Burlington, and the audience applauded the Minister when he said: "I must say that I am glad that what I call 'pseudo' or poor imitative architecture associated particularly with the 'twenties and 'thirties seems to be in decline, because I do not think that it was founded on a true understanding of the past. I must declare that I much admire what is called contemporary architecture, because it seems to me, unlike 'pseudo' to be a natural evolution arising from a combination of modern needs and of all the wonderful new materials and techniques which science has made possible." Other speeches at the opening ceremony were made by E. Milner-White, the Dean of York and Chairman of the York Academic Trust, Dr. Singleton, the Director of the York Institute of Architectural Study, and Alderman F. Brown, the Lord Mayor.

Alderman F. Brown, the Lord Mayor. The cost of the conversion was £15,000, and all save £1,800 of this has already been donated. The York Institute is run largely on funds received from Rowntree Social Service Trust, but it is hoped that over the next ten years the Institute can be fully endowed so that a whole-time director and research fellow can be appointed. Dr. Singleton is proposing that the York Architectural Society should have the use of the building and is proposing to lease the hall to outside bodies so as to ensure that the building is utilized to the full.

After the opening ceremony a dinner was provided by Messrs. W. J. Furse & Co., the general contractors, in the Assembly Rooms, and a party followed in the historic Treasurer's House, a property now belonging to the National Trust.



Entrance hall in the converted church.

MODULAR SOCIETY Number Patterns

At a meeting which took place recently at the Royal Society of Arts members of the Modular Society discussed a paper by Ezra Ehrenkrantz on "Development Of The Number Pattern For Modular Co-ordination: Flexibility Through Standardization." The text of this had been previously circulated in the winter issue of "The Modular Quarterly."

Ezra Ehrenkrantz was introduced by William Allen as a Fulbright Fellow in Architecture who had been working a

Tripling			Fib.	Doubling			
_	9	3	1	2	4	8	-
-	18	6	2	4	8	16	-
-	27	9	3	6	12	24	-
	45	15	5	10	20	40	-
-	72	24	8	16	32	64	-
-	-	-	-	-	t -	-	-

Renard series

Doubling series

BRS on the number pattern and who had contributed very substantially to the Station's knowledge of the subject. Readers may remember that William Allen referred to the work of Ezra Ehrenkrantz when he presented his own paper "Modular Coordination Research—The Evolving Pattern" to the Society last March (see AJ, March 211, 1955)

tern" to the Society last March (see AJ, March 31, 1955).

Ezra Ehrenkrantz opened the discussion by summarizing his paper. He began by commenting on the three main current approaches to modular co-ordination: the industrial, the proportional aesthetic and the mathematical, represented by the systems of Bemis and Le Corbusier and the Renard series respectively. Of the Bemis system, with its choice of a base module of 3 or 4 in., he remarked that it allowed insufficient choice in the small dimensions and that components of the large dimensions did not readily mesh together. Of Le Corbusier's Modulor, he remarked that the system did not take the additive nature of building operations into account and that it admitted only nine possible proportions, all being of the golden section type. Of the Renard series—which is an international standard for certain engineering purposes based on doubling, but modified to provide round figures in the larger numbers*—he remarked that the modifications made the series unmanageable. He went on to describe the development of the BRS number pattern which was the main subject of his

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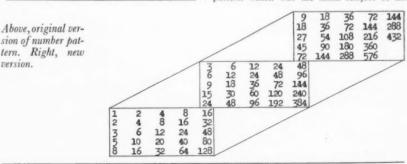
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500

512



paper. This, in the original form described by Mr. Allen, was "two-dimensional" in the sense that it could be fully described in single, two-dimensional table, with the Fibonacci series of numbers running down a column in the centre and with the doubling and tripling series flanking it on

either side. This pattern, said Mr. Ehrenkrantz, had the advantage that the larger numbers divided up into numerous smaller equal numbers which was useful in grid planning, and they divided up also into smaller unequal numbers, which was useful in façade design. A weakness of the pattern in this form was that only the original Fibonacci numbers were subject to both doubling and tripling. To overcome this a new "three-dimensional" version of the pattern should be used. According to this version the tripling columns were removed from the original table and second and third tables were produced by tripling all the numbers remaining in the first table and by tripling the products. The only new numbers to be added to the pattern by this means were the useful cross products 30, 36, 60, 90 and so on, but the new arrangement of the numbers gave a new aspect to the pattern and suggested new uses for it as a design tool. Its particular virtue to the architect was not merely that the numbers included were very manageable but that the form enabled him to notice quickly their properties. If he had two components which he wished to relate in a structure, he found the dimension of one of them, then discovered the nearest example of the second, remembering always that a move from one table to the same position in the next table was only a single move. Since a movement to the left implied halving, to the right doubling, moving for-ward from one table to the next thirding and backwards tripling; and that movement upwards and downwards implied adding and subtracting in the Fibonacci meshing series, it was possible to discover rapidly all the mathematical alternatives available.

Mr. Ehrenkrantz made it clear in his paper that he was not primarily concerned with the application of the number pattern to actual dimensions, but he showed a table illustrating how it would function if equated with 1 in. He also showed how fractions, such as the 4½ in. required in brickwork, could be interpolated and how, by the removal of irrelevant parts, the base pattern could be adapted to serve

modules of 3 in. and 4 in.

In the course of the discussion which followed, Bruce Martin of BSI commented on the value of the paper in establishing the case for a basic range of numbers. He then went on to talk about the purpose of the module in relation to such a number pattern. A module, he said, gave a number pattern scale. By themselves, numbers had no size, but a module gave size. Thus if the related numbers were multiplied by one inch, then the relationships take place over a certain range of size. If, however, the numbers were multiplied by 4 in., then the scale of the pattern changed and the relationships took over a higher range of size. We needed the relationships in the number pattern to take place over the range of sizes required for components, and this happened when the numbers were multiplied by 4 in. which was, of course, the 4 in. module. The module, in fact, was coefficient of size

which was applied to a co-ordinated range of numbers to give a range of inter-related sizes suitable for components. If the unit of size was too low, as for example 1 in., then there were too many sizes and the optimum relationships took place too low down in the scale of size. If the unit of measure was too high, for example 6 in., the sizes and their relationships were at the upper end of the component size range. The most suitable unit of measure, if the numbers in the pattern

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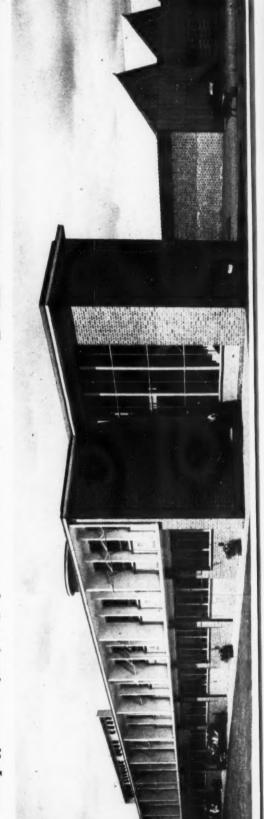
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RIA ST DO Z C Z 0 S U FFI 0 Z × 2 0

The two industrial schemes illustrated on this page and opposite are at Harold Hill, Essex. Both were designed

Alan W. Pipe and Sons, assistant-in-charge, Leslie A. Johnson.

centres and precast prestressed floor and roof units span 33 ft.

Portal frames.

precast-concrete

Ltd., manufacturers of sliding-door gear.

Below, the premises for P. C. Henderson

Load-bearing brick piers are at 15 ft.

On the left is the office block.

To the right of it is the production area, constructed

The office building is linked to the factory by the entrance hall (right) and

extreme right is a typical north-light bay in the workshop area. The total floor area is 50,000 sq. ft. and the cost

quantity surveyors were Mahon and Scears.

The

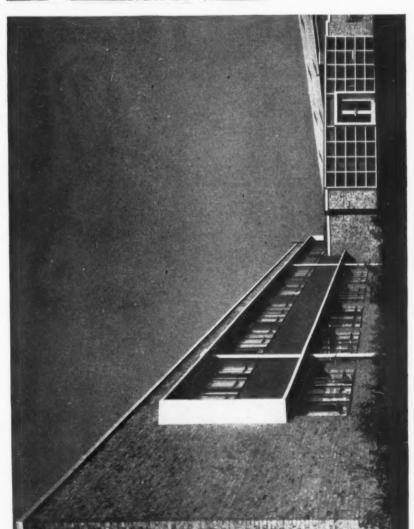
acres.

(Continued on page 310)

Fraser & Co. Ltd., chemical engineers, consist of a two-storey administrative block, on the left in the photograph below, and a large single-storey drawing office, to the right. In the general view from the gatehouse, right, the wing containing canteen and surgery is seen to the right of the tank tower. The site of approximately 7 acres, also contains parking space for forty cars and football and cricket pitches and tennis courts for the clients' social Owing to the slope of the site, the administrative building has a ground floor 2 ft. 6 in. below that of the drawing office, to which it is connected by ramps through the entrance hall (seen to the right of the picture below). The administrative wing is constructed of load-bearing brick piers and solid r.c. roof and floors; in the drawing office there are r.c. Portal frames and a corrugated-asbestos roof. External finishes include facing bricks, Tyrolean rendering in concrete surrounds on the two-storey block and precast concrete panels with large pebble exposed aggregate panels on the tank tower. These panels form a background to the firm's name in royal blue



lettering. Flat roofs are insulated with 3-in. vermiculite and in the drawing office and canteen there are ½-in. insulation board ceilings. The floor area is approximately 29,000 sq. ft. and the cost £114,000. The general contractors for both schemes were A. E. Symes Ltd.



News (continued from page 308)

were to suit the sizes of components, ap-

peared to be 4 in.

Ezra Ehrenkrantz disagreed with Bruce
Martin's views on the choice of a base
module of 4 in. on the score that although it was handy in the 3-5 ft. range it did not give He also pointed out that the new LCC window range was not in 4 in. multiples (though it was in dimensions found in the

number pattern).
William Allen then described the fortunes of modular co-ordination in other countries and suggested that progress hinged largely on whether or not the module chosen was in line with brick dimensions. In quoting other considerations which appeared to favour a base module of 3 in. as against one of 4 in. he remarked that the object of the number pattern was co-ordination and that its great virtue was that it made this possible without there being any need to make a hurried decision on the choice of a

base module. A number of speakers, among them E. D. Hinchliffe, of Hills (West Bromwich) Ltd., said there were too many numbers in the pattern, and some suggested that its acceppattern, and some suggested that its acceptance would annul any progress the Modular Society had made towards simplifying dimensions. The general reactions to the paper, however, were very favourable. In the course of the evening Ezra Ehrenkrantz told the meeting that students at Birmingham and Liverpool were trying out the use of the number pattern on the drawing board.

AA

Noise and Vibration: How to Suppress Sound with Shock-Absorbers

In a lecture given recently at the Architectural Association, J. H. A. Crockett, an tural Association, J. H. A. Crockett, an engineer engaged on acoustic problems, described a method of sound suppression in buildings by the use of shock-absorbing mountings. Mr. Crockett, writes our Specialist Editor for sound insulation and acoustics, has been instrumental in developing shock-absorbing (more commonly ing shock-absorbing (more commonly known as "anti-vibration") mountings, known as "anti-vibration") mountings, mainly in the form of very heavy duty rubber springs. He suggested in his talk that because the loads to be carried and the performance characteristics needed were similar, such mountings could be used to carry either rooms or entire buildings. There is no sound technical objection to this proposal; the difficulties that would be encountered in the mounting of a room in this way could be overcome. It would be difficult, however, to decide when the high

cost of such a technique was justified.

Vibration is not often so great that it causes physical discomfort, although it may frequently cause annoyance. But high sound levels which cause actual damage to hearing are not uncommon in industry and almost everyone experiences noise at annoyance levels. If all noise-annoyance annoyance levels. It all noise-annoyance problems could be solved by the mounting of buildings or rooms on rubber springs the widespread use of such a technique might well be contemplated, but unfortunately this is not the case. It is useful to know, however, that engineers have a ready and practical solution to the problems of and practical solution to the problems of suppressing excessive vibration or noise or virtually isolating a room from noise sources.

CHURCH MARGARETS OF ENGLAND

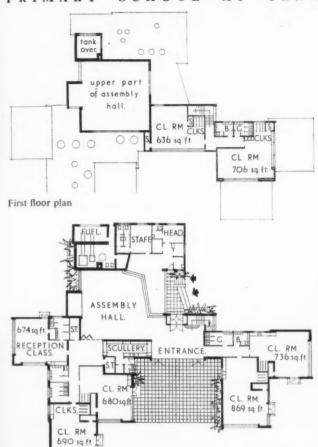


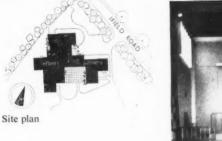


This one-form entry junior mixed and infants' school at Crawley was designed by H. G. Coulter of Woodroffe, Buchanan and Coulter; assistant architect, F. W. A. Bromage. Above left, the main entrance from Ifield Road; above right, from the south. Below, paved courtyard on the south side. Opposite page: top, the sanctuary and alter in a bay of the assembly hall, also seen in the photograph of the assembly hall beneath it. The sanctuary is curtained off when not in use. The construction generally is of 11-in. external cavity load bearing brickwork and precast, prestressed concrete floor and roof units. Cost was estimated to be £143 per place in 1953.



PRIMARY SCHOOL AT CRAWLEY, SUSSEX









Ground floor plan [Scale : $\frac{1}{48}$ " = 1' 0"]

AND

H. G.

Below, tar in a it. The external cost

BUILDINGS IN THE NEWS





Offices at West Molesey

These offices in Central Avenue, West Molesey, were designed for Sunbeam Anti-Corrosive Co. Ltd. by R. Jelinek-Karl. The construction is of brick load-bearing walls, rendered and precast concrete floors and roof.

BUILDINGS IN THE NEWS





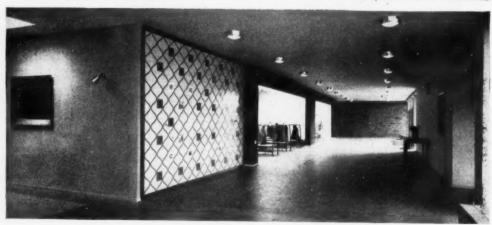
Fire Station at Gainsborough

Above and left, the Fire and Ambulance Service buildings at Gainsborough, designed by the County of Lincoln (Parts of Lindsey) Architects' Department: A. Ronald Clark, county architect, J. A. Miller, deputy county architect, and C. E. Vowels, chief assistant. The accommodation provided includes garages for four appliances and administrative and recreation rooms. On the left, above, are the station officers' house and the hose-drying tower. At the rear of the station is a parade and practice ground.

School at Widnes

The Oakfield County Primary School (at Widnes, Lancashire), which serves the Ditton neighbourhood, was designed by H. Nevile Player, borough architect. The top photograph shows the south facade of the assembly hall (left), the pupils' entrance and the south classroom wing. Bottom, the entrance hall and cloak space. In the centre is a panel of handpainted tiles.





SPORTS PAVILION

at STIRLING CORNER, BARNET, HERTS
for the FINSBURY BOROUGH COUNCIL
designed by SUDELL and WATERS

RICHARD SUDELL, landscape and executive architect; D. H. GILLIES-REYBURN and D. TENNYSON WATERS, architects; GORDON FANSHAW, quantity surveyor



From the pavilion balcony

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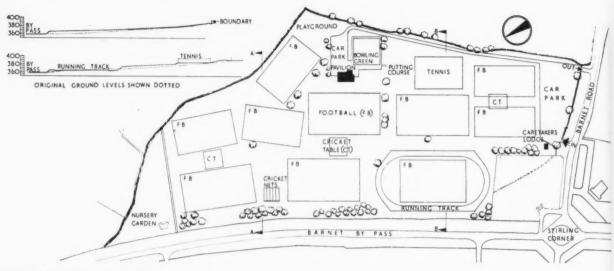
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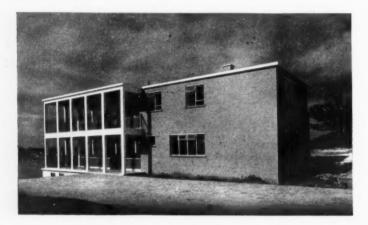
and the ing ade The borough of Finsbury's Memorial Sports Centre, on the Barnet By-pass between Mill Hill and Boreham Wood, is on an undulating site of 38 acres within the green belt. The borough, which has a population of 36,000, should have 90 acres of open space by the standards laid down in the County of London Development Plan, but only 15 acres are available to the public within the borough boundaries.

The sports centre and pavilion from the South-West

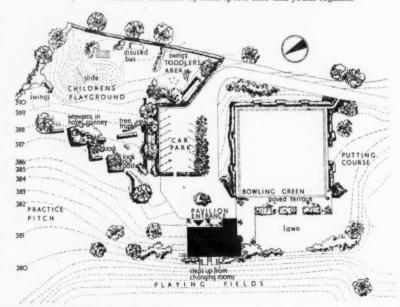




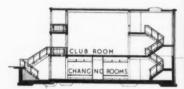
Site plan and sections A-A and B-B



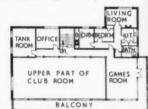
Before the opening of this sports centre Finsbury had a miniature football pitch and a tennis court, and these were the only facilities for outdoor sports within the borough. Insistent demands by local sports club and youth organisa-



Pavilion and playground area layout



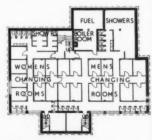
Section A-A [Scale: 18 " = 1' 0"]



First floor plan



Ground floor plan



Basement plan [Scale: 38" = 1' 0"]



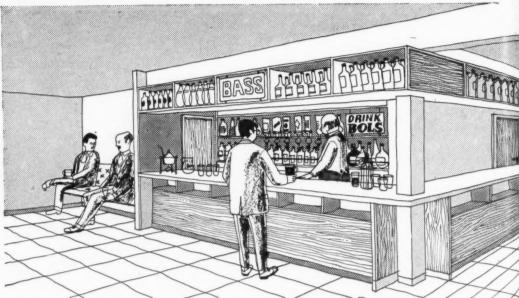




tions forced the council to look further afield and various potential sites, some of them nearer to Finsbury than Barnet, were inspected. The nearest site which proved suitable for the purpose was Stirling Corner. The photographs show, above and left, the club room and lounge in the pavilion. The smaller picture is taken from the first floor games room, which acts as a gallery to the large club room. On the opposite page is the pavilion from the south. The council intends to provide everything possible to encourage family use of the sports centre, and the pavilion, in common with the grounds, was designed to cater for the needs of those watching the sports as well as those taking part. Local youth clubs, business houses and other

SPORTS PAVILION

at BARNET, HERTS designed by SUDELL and WATERS



organisations are now able to have regular sports fixtures for the first time. The pavilion is sited on the high ground on the east side of the site to allow the best views of all the sporting activities; this arrangement necessitated the construction of an approach road from Barnet Road and a secondary car park on the entrance side of the pavilion. The slope of the site allowed the use of a semi-basement for changing rooms and showers. On the first floor there is a two-bedroom flat for the head groundsman. The pavilion has a reinforced concrete frame supported on r.c., asphalttanked foundations. Walls are of 11-in, cavity brickwork

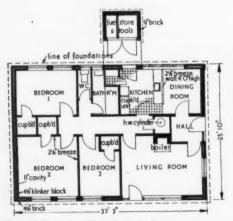
and floors and roof are of hollow tile construction. The roof covering is 3-layer felt with a spar finish. The sketch above shows the bar on the ground floor, which has not yet been fully equipped. Left and below, the caretaker's lodge near the main entrance from Barnet Road. The cost of the scheme was approximately £70,000. The contract price for the pavilion was £25,500 and for the caretaker's lodge, £2,300. The general contractors were Townsend & Collins Ltd. (building construction) and Doe & Sons Ltd. (landscape and sports fields). For sub-contractors see next week's Journal.



SPORTS PAVILION

at BARNET, HERT

designed by SUDELL and WATERS



Ground floor plan, Caretaker's Lodge

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



in VINE STREET, LIVERPOOL

designed by R. R. YOUNG and WILLIAM KNIGHT

of STEPHENSON, YOUNG and PARTNERS



Courtyard from the west

tion. The

has not yet

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caretaker's

Townsend be & Sons

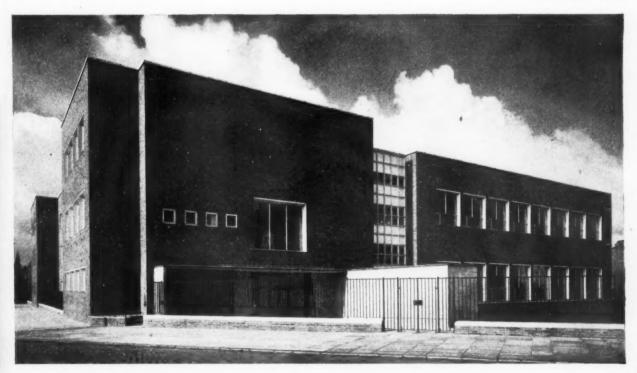
contractors

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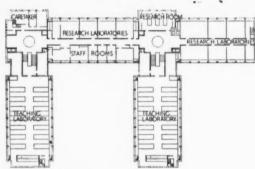
HERTS

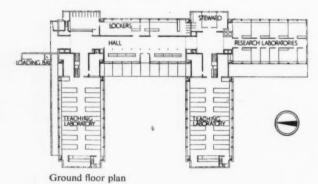
The Department of Inorganic and Physical Chemistry, which is one of the largest departments in the University of Liverpool, provides courses of training not only for students wishing to qualify as chemists, but also for those who study chemistry as a preparation for specialisation in medicine, dentistry, veterinary science, engineering and metallurgy. The general contractors were Humphreys Ltd.

From the south-east

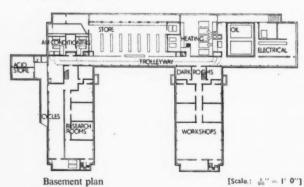








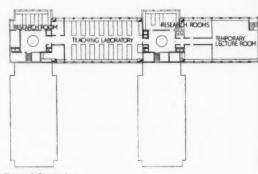
First floor plan





Left, the north-east corner of the courtyard; above, the east facade; below, fume room at the end of one of the teaching laboratories. Opposite page, top, the main entrance hall; bottom, a typical teaching laboratory. The building provides places for some 400 undergraduates and for 40 to 50 research workers. It is steel-framed with external columns at 10-ft. centres and reinforced concrete floors. External walls are of cavity brickwork. As the entire building is air conditioned the windows, which are framed in aphromosia hardwood, have relatively small opening lights for emergency use. The net floor areas are: teaching and academic rooms, 41,295 sq. ft.; service areas, 28,528 sq. ft.; circulation areas, 16,639 sq. ft.; total gross floor area, 94,332 sq. ft.; total cubic content, 1,405,600 cub. ft. The cost, based on final figures, was £530,888 for building and site works, £17,607 for furniture and equipment. Cost per sq. ft., 72s. 6d., and per cub. ft., 7s. 61d.





Second floor plan







ve, the of the main The tes and d with oncrete As the ich are small r areas service sq. ft.; ontent, es, was rniture cub. ft.,

ALL-PLASTICS HOUSE IN PARIS





This all-plastics house (architect, Lionel Schein) was shown at this year's "Salon des Arts Menagers" in Paris (for a plan and a general view, see ASTRAGAL, page 299). The main circular part of the house is made up of eight segments supported in the centre on a column (which is also a down-pipe) and round the edge by adjustable jacks. The floor and walls of each segment and of each bedroom unit are east in one piece, while

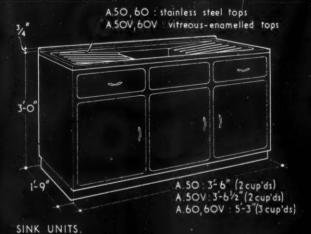
the main pieces of equipment are cast integrally with the walls which bound them. Transparent surfaces are of polymethal methacrylate, opaque surfaces of polyester resin. The area of the house is 968 sq. ft., the weight $8\frac{1}{2}$ tons.



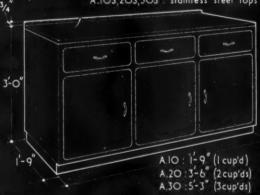




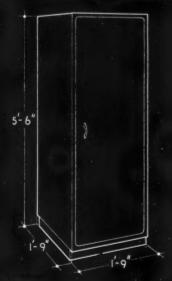
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floor cabinets

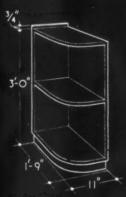


storage cupboard A.68 broom cupboard A.69 FLOOR UNITS.

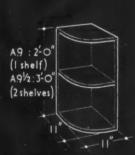




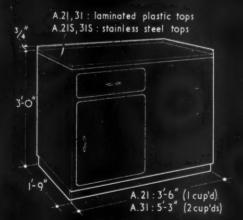
WALL CUPBOARDS.



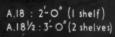
for floor cabinets END UNITS.

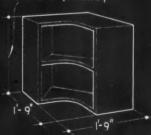


for wall cupboards



for floor cabinets CORNER UNITS.





for wall cupboards

43.E13 · ANEMONE · KITCHEN FURNISHINGS

This Sheet describes the Anemone range of kitchen furnishings from which any arrangement may be built up with interchangeable units in a variety of colour schemes.

Construction Generally

The floor units and wall cupboards are constructed without welding from steel sheet with rust-resisting zinc coating. All doors and drawers are flush with the front face of the unit. Doors are double-panelled, with pressed rounded corners, and are fitted with silent roller spring catches. Drawers are also pressed, with rounded corners to front panels: they run on plastic rollers and have rubber stops at front and rear.

Hinges: These are die-cast and are of the concealed type.

Handles: These are of moulded plastic.

Sizes

The sizes of the units are as given on the face of the Sheet. Sinks are either 20 in. by $15\frac{1}{2}$ in. by 8 in. deep (stainless steel) or 20 in. by $16\frac{1}{2}$ in. by 8 in. deep (vitreous-enamelled).

Floor Units

Each I ft. 9 in. section of floor units is fitted with one drawer and one cupboard having one shelf in addition to the base shelf. Storage cupboards have four shelves and base shelf; broom cupboards have three half shelves and base shelf. Doors to storage and broom cupboards may be right- or left-handed. All floor units have a $4\frac{1}{2}$ -in. high plinth, recessed for toe space along all front edges. There is also a $1\frac{1}{2}$ in. by $4\frac{1}{2}$ in. recess at the rear of all units to accommodate skirting or services. Holes are also provided at the back for fixing to walls.

Work tops may be in Formica laminated plastic or stainless steel, the latter being recommended for units installed adjacent to a cooker as it will withstand contact with heated utensils.

Sink Units

Sink units are structurally similar to the floor cabinets previously described except that there is no drawer and intermediate shelf in the sink section. Two types of sink top are available, nickel-chrome stainless steel, sound-deadened, and vitreous-enamelled. The drainer may be to the right or left of the sink. All sinks are supplied with waste connection, drain plug and chain; an overflow fitting is available for all sinks if required. Provision is made for mixing-valve or pillar taps. "Crumb-strainer" type waste (S.29) can be fitted, or provision made for it.

Wall Cupboards

The 2 ft. 0 in. high wall cupboards have two shelves in addition to the base shelf. The 1 ft. 0 in. high cupboards have the base shelf only. Fixing holes are provided at the back of all wall cupboards. One

row of wall cupboards may be installed above another as required.

Corner Units

For floor cabinets: These are identical to the floor cabinets previously described except that one 1 ft. 9 in. section is blanked off to be butted at right angles to the end of a range of units. The shelves are accessible from the adjacent door, which may be to the right or left of the blanked-off section, as required.

For wall cupboards: The 2 ft. 0 in, high units have two

For wall cupboards: The 2 ft. 0 in. high units have two open shelves and the 3 ft. 0 in. units, three open shelves. These units are fitted with supporting structure for fixing and they must be installed before the wall cupboards on either side.

End Units

These are available for finishing ends of ranges of floor or wall units. They may be obtained rightor left-handed.

Cover Strips

Cover strips (S.22) are available for sealing joints between units. For work tops, they are available in laminated plastic to match the colour of the tops: they are fitted with three fixing screws. For the gap between the fronts of cabinets at corners, cover strips in light steel, stove-enamelled to match the cabinets, are available (S.24).

Finish

All units have a chromate pre-treatment and stovedprimer undercoat and are finished in high-gloss hard stove-enamel. Plinths are vitreous-enamelled. All stainless steel sinks are highly polished and worktops have a polished satin finish.

Colours

Units are available in white or cream. Doors and drawer fronts may be to match the basic colour of the cabinet, or alternatively they are obtainable in the following range of colours: blue, green, lavender, pink, primrose. Plinths are black. Vitreousenamelled sink tops are in white or cream, as the case may be, to match the cabinets and have a black vitreous ground coat along the front edge to resist hard wear at this point. Handles are available in white, cream, red, black, primrose, lavender, pink, mid-green and sky blue. Plastic work tops are available in primrose, lavender, corinth pink, mid-green and sky blue.

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C.S.A. Industries Ltd.

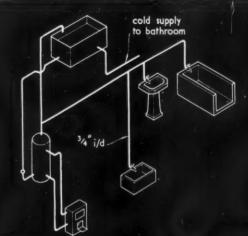
Address: Warwick, England. Telephone: Warwick 500. Telegrams: Conscrew, Warwick.

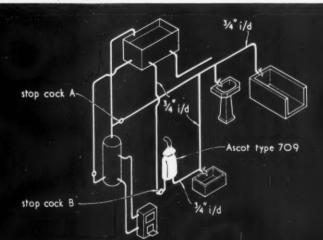




WATER HEATING UNITS GAS

The Architects' Journal Library of Information Sheets 562. Editor: Cotterell Butler, A.R.I.B.A.

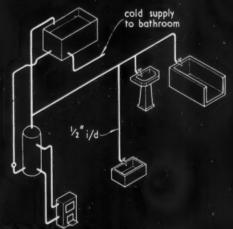


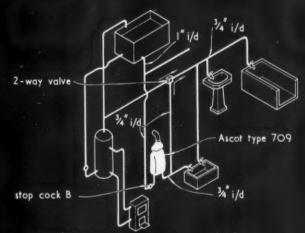


solid fuel boiler system

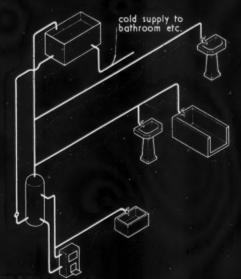
Combined Ascot and boiler system

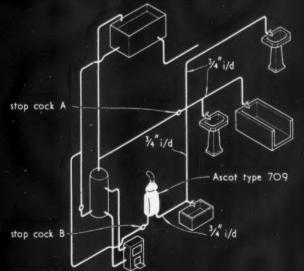
DIAGRAM 1: NORMAL INSTALLATION WITH 3/4" HOT WATER FEED PIPE TO KITCHEN SINK.





solid fuel boiler system combined Ascot and boiler system DIAGRAM 2: NORMAL INSTALLATION WITH 12"HOT WATER FEED PIPE TO KITCHEN SINK.





solid fuel boiler system

DIAGRAM 3: INSTALLATION WITH SEVERAL DRAW-OFF BRANCHES.

32.C23 ·ASCOT· ALTERNATIVE HOT WATER SYSTEMS

This Sheet describes alternative hot water systems combining the Ascot multi-point heater Type 709 with solid fuel boiler systems. This Ascot heater is particularly suitable for connection to a boiler system as an alternative and continuous source of hot water supply during the summer months, and is similarly available for immediate service whenever the boiler is inoperative.

The dual installation of water heater and boiler is simple, as the same hot water draw-off piping may be used for both units, the isolation of one system from the other being effected by the operation of one or more stopcocks or a 2-way valve. The Ascot heater should be installed close to the point of most frequent usage—normally the kitchen sink—and the cold water supply should be from a tank, preferably by means of a separate 3-in. down service.

All pipe sizes specified refer to internal diameter and relate to normal installations where the available head is 10 to 12 ft. measured vertically from the level of the water in the cold water tank to the highest draw-off point, and where sizes and lengths of all piping are in accordance with standard practice. (See Sheets 32.C20 and 32.C25.)

The heater is not suitable for operation as a booster and must therefore be supplied with cold water. Whichever cold water supply and hot water draw-off systems are employed, the expansion pipe must always remain open to the atmosphere, and to the hot tank when the boiler is in use, but must be capable of isolation from the Ascot when the latter is in operation. An isolating stopcock ("A" in diagrams) must therefore be incorporated and a second stopcock ("B" in diagrams) is required to cut off the supply to the heater when the boiler is in use.

Diagram 1: Normal Installation with 2-in. Hot Water Feed Pipe to Kitchen Sink.

The diagram shows the small amount of plumbing necessary where the solid fuel system was originally planned to accommodate an alternative form of hot water heating. The only additional piping required is a short length of 2-in. from the heater outlet to he hot tap at the kitchen sink.

Ascot operation—close stopcock "A" and open " B."

Boiler operation-close stopcock "B" and open " A." 2 ...

Diagram 2: Normal Installation with ½-in. Hot Water Feed Pipe to Kitchen Sink.

Where the flow is found to be insufficient to provide satisfactory service from all draw-off taps utilising the existing 1-in. hot water feed pipe to the kitchenby calculation of the water pressure losses against requisite flow and available head (see subsequent Sheet)—additional 3-in. hot water piping is necessary as shown in the diagram and described below. An independent 3-in. down service is preferable, but

not always practicable, and the cold water supply to the heater may be tee'd off a 1-in. cold service branched \(\frac{3}{2}\)-in. to the heater and \(\frac{3}{2}\)-in. to the bathroom. The outlet of the heater is connected by a short length of 1-in. piping to a second hot water tap at the kitchen sink. From this latter point an additional 3-in. hot water service is run to a 2-way valve situated between the expansion and the nearest draw-off branch, the 2-way valve being fitted to give the alternative flows as shown.

The use of a 2-way valve simplifies the change over from heater to boiler, or vice versa. In addition, a hot water supply from the heater is always available in the kitchen, as stopcock "B"-essential to facilitate maintenance of the Ascot-may remain open when the boiler is in use.

Ascot operation—Turn the 2-way valve to the Ascot position.

Boiler operation—Turn the 2-way valve to the boiler position.

Diagram 3: Installation with Several Draw-off Branches.

An independent 2-in. down service is preferable, but not always practicable, and the cold supply to the heater may be tee'd off the 3-in. cold feed to the hot tank at a point above this tank.

The outlet of the Ascot is connected by a short length of \(\frac{1}{2}\)-in, piping to the hot tap at the kitchen sink. The existing hot water services to the kitchen and bedroom basin are disconnected, and these points are reconnected by means of a new length of 3-in. piping to the lower draw-off pipe from the expansion. Ascot operation—Stopcock "A" is closed and "B" opened.

Boiler operation-Stopcock "B" is closed and "A" opened.

Mains Connected Heaters

A heater connected as an alternative should only be supplied from the cold water mains when:

1. It is impossible to obtain adequate head from tank

2. Permission is obtained from the appropriate water authority.

3. There is no connection between the outlet of the heater and the boiler system. (See Sheet 32.C25 for full details.)

Compiled from information supplied by:

Ascot Gas Water Heaters, Ltd.

Head Office

and Works: 255, North Circular Road, Neasden, London, N.W.10. Telephone: Willesden 1234.

Telegrams: Gascot, Phone, London.

Branch Offices and

Service Depots: Belfast, Birmingham, Bournemouth and

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TECHNICAL SECTION

Cleeve Barr of the LCC Architects' Department noticed one curious fact on his recent sponsored visit to Canada, namely that virtually all Canadian timber is dressed at the mills. The method of conversion is different from the Scandinavian, to which we are accustomed in this country. The Canadians convert their logs with high-speed band saws with very large teeth. The scantlings thus produced are much rougher than "unwrot" scantlings which we get over here, but they are then dressed on all four surfaces as part of the conveyor belt conversion. When the Canadians are exporting to Britain, however, they do their initial conversion by a chain saw of the Scandinavian type which works much more slowly and produces the "unwrot" scantlings we know. The interesting fact is that this "unwrot" timber is actually more expensive to convert than "wrot" timber converted the Canadian way. "Wrot" timber is much easier to handle and saves firring out and thicknessing. If only we could persuade our Scandinavian friends to follow the Canadian example.

This week's special article

19 CONSTRUCTION: DETAILS mayfield school: finishes

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.

It is nearly two years since we began work on our Technical Studies on Mayfield School, Putney (architects, Powell and Moya). In the first and second articles (July 1 and August 12, 1954) we discussed the cross-wall construction of the Classroom Blocks, in the third article (August 18, 1955) we described the structure of the Assembly Hall and Gymnasia, and in this, the fourth and last Technical Study, we describe the finishes. A general description of the completed job will be published shortly.

First appraisals of a completed building are usually concerned with the finishes, and in this particular school they suggest a luxury far in advance of run-of-the-mill post-war schools. The main reason for this may lie in the basic economies of the structure which have left money over to spend on good finishes. Most of these finishes are not

quantities, but improvements have been possible by spending most of the generous contingency sum which was included in the bills. It is, in fact, unlikely that, apart from the increased costs of labour and materials, the final cost will exceed the contract figure. This figure, inclusive of the contingency sum, showed a saving of as much varied from those specified in the bills of as £72 a place over the ceiling then laid



Fig. 1, layout plan of the school and its new extensions. Blocks A, B and C are three-storey blocks and the three gymnasia can be seen at the top of the plan.

down by the Ministry of Education for Secondary Schools, i.e., £178 a place as against £250 a place.

EXTERNAL FINISHES

Throughout the school Second Hard London Stock Facings are used, except on the crosswall ends which are faced with white glazed bricks to reduce moisture penetration and because a light-coloured precise brick is more suitable in this context. The ground floor to sill height was faced with dark blue-grey stable yard tiles which not only contribute much to the general appearance of the buildings but also form a hard plinth which does not mark easily. This point will be appreciated by those who remember the days of stone schools and how easily the play area walls mark and stain. (See Fig. 8.)

Part of the ground floor of the west three-

storey block (block C) is left open as a covered play space and the wall facing on to this play space is finished in a frost-proof lime-green glazed tile. In contrast to this the concrete columns supporting the cross walls above are left rough from the planked shuttering. Ducts formed in these columns are enclosed by cover plates of stainless steel-faced, external-grade plywood. The use of cedar boarding fascias (secret-nailed with Muntz metal nails to avoid staining) has already been discussed in the article describing the roofing of the classroom blocks (August 12, 1954). The same method has been used in the gymnasia block so that the visual effect of a timber capping becomes one of the characteristic features of the job as a whole when seen from outside. The æsthetic desire to contain the full thickness of a clerestory roof (including joists, woodwool slab, screed and a sufficient depth for flashing) within a total depth of 1 ft, 2 in. calls for and receives exceptionally neat detailing. The clerestory fascias are in aluminium and even the short length of downpipe discharging on to the roof at lower level has been contrived within the visual dimension of the adjoining wood pier, Fig. 9.

EXTERNAL CLADDING

The cross-wall structure of the three-storey blocks demanded the use of a non-load-bearing cladding system, but the architects found most proprietary systems then available (1952) were either too expensive or too inflexible for their purpose. A system was therefore devised consisting of African mahogany wood frames housing two metal framed opening windows. This arrangement did away with the necessity for a heavy



Fig. 2, main staircase in classroom block C showing the glass mosaic by Philip Suffolk.

epth for ft. 2 in. ly neat in aluf downt lower e visual d pier,

e-storey on-loadrchitects n availe or too em was African o metal arrangea heavy wood transom at the opening lights.

The 10 ft. by 5 ft. 9 in. frames fit four to a bay (except at the ends of each block when they fit five) and are simply plugged to the concrete floors top and bottom and side-screwed to metal fixing lugs. When turning a corner a 2½ in. by 2½ in. aluminium cover angle is screwed to the frames and where abutting the white glazed brick cross-wall ends the joint is covered with a 1 in. by 1 in. by 1 in. aluminium angle. Where frames butt each other a small hardwood cover strip is recessed over the joint front and back. For reasons of economy, the jambs retain the same nominal section throughout. External faces of woodwork were rubbed down and twice oiled, the internal surfaces being treated with alkyd rubber varnish. Below sill level the frames are filled with a double skinned opaque cladding. This comprises an outer skin of 4 in, rough cast glass and an inner skin of 1 in, asbestos cement sheet stove enamelled in four different colours on the side which faces towards the glass. To an observer standing close to the outside of the building and looking upwards the façade appears as continuous undifferentiated glazing of greenish hue: it is only when he is standing at a distance that the colours of the stove enamelled backing are visible. Behind this backing is a dwarf wall of 4 in. breeze rising to the height of the internal sill, which is of polished slate-coloured pre-cast concrete. No condensation channel was cut in the bottom member of the air space so formed and the removal of several panels during the defects liability period has shown them to be bone dry. The covering of the floor thickness with a 3 in. slate fascia fixed on an aluminium angle has already been described in the JOURNAL (July 1, 1954), but the original intention of putting a bitumen painted copper flashing to these fascias was changed to lead when the difficulties of bending the copper became apparent. This has undoubtedly been easier for the tradesmen concerned, but it has already brought some staining on the slate.

STAIRCASES

The staircases were of reinforced concrete the most interesting being the main staircase in Block C (see Fig. 2). Here there are no risers and the deep treads run through the depth of the string, the whole being finished in a white terrazzo with two lines of glass mosaic inset in the nosing. The walls on either side of this staircase are

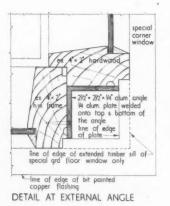
covered with two venetian tesserae mosaics by Philip Suffolk. One side wall is an abstract design and the other represents the Nine Muses. The other staircase in Block C is entered from the covered play area. Here the architects took the precaution of glazing between the narrow 6 in. spaced mullions in 4 in. Georgian wired glass. The staircase itself, like the other classroom staircases, is finished in granolithic with 9 in, by 9 in. black quarry tiles set in the treads.

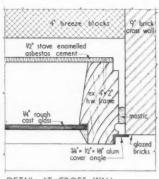
FLOORS

When the architects realized that they could improve on the finishes originally specified they decided first to reduce the build-up of noise by improving the finishes of floors and ceilings. The original flooring specification called for thermoplastic tiles throughout the classrooms and corridors and it was decided to substitute the more expensive 12 in. by 12 in. studded rubber flooring (except for ground floor classrooms, where thermoplastic tiles are retained). Another small innovation was the insertion of a mat well in the corridor outside the pottery rooms. This has successfully halted the passage of clay and plaster dust into the corridor outside. The thermoplastic tiles originally specified for the Housecraft rooms and

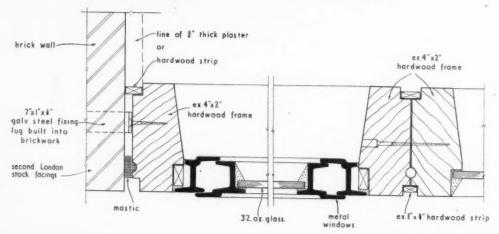
Below left, Fig. 3, detail of fenestration as seen from the inside of a classroom. Note the absence of a wood transom. Below centre and right, Figs. 4 and 5, and bottom, Fig. 6, plan sections through frame. Note, for vertical section through frame see drawing on page 325.





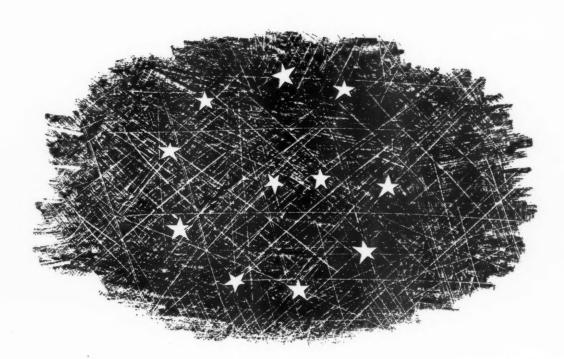


DETAIL AT CROSS WALL



mosaics l is an sents the Block C a. Here f glazing llions in staircase case's, is by 9 in.

ey could specified ld-up of oors and eification hout the decided 2 in. by cept for thermoer small nat well rooms. ssage of dor outriginally ms and



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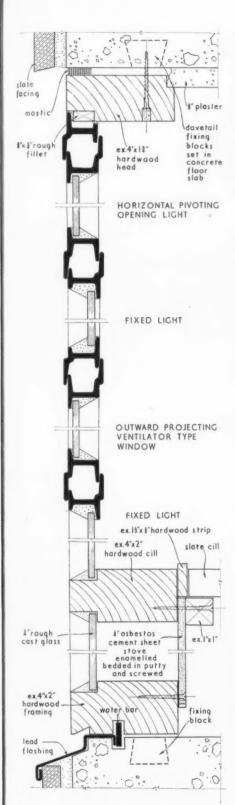


Fig. 7, vertical section through frame.

RDS

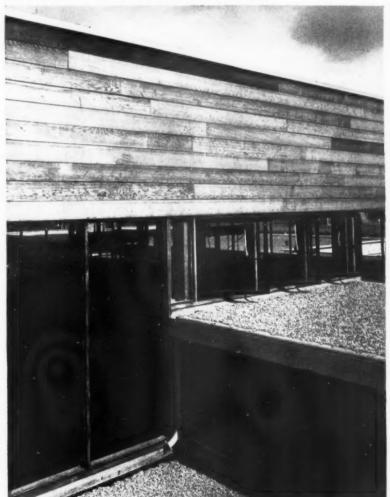
laboratories were replaced by a p.v.c. sheeting and the assembly hall floors were finished with 9 in, by 2 in, by 1 in, end-grip Missanda blocks. The architects were fortunate in finding some 2 in. Missanda strip flooring for use on the stage and all these



Fig. 8, finishes adjoining covered play space in block C. Left, "stable yard tile" plinth; right, glazed limegreen frost-proofed tiles.



Left, Fig. 9, secondary staircase on block C landing on covered play space. Note service duct built into the column on the right. Below, Fig. 10, detail of junction between monitor roof lights over changing rooms and clerestory of gymnasium.



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Right, Fig. 11, the biology pool bridge with its longitudinal oak battens. Centre right, Fig. 12, the gymnasia terrace, which is broken up into 18-ft. squares of concrete and tarmacadam. Bottom right, Fig. 13, diagram showing construction of "prestressed" plaster partitions.

wood floors were edged with cork as a precaution against movement occasioned by the under-floor heating. The cork is much the same colour as the wood and is hardly noticeable.

There is one element of the outside paving which calls for mention, namely the play surface adjoining the gymnasia. Appalled (as well they might be) by the conventional sea of tarmacadam, the architects have divided the area up into a chequerboard of 18 ft. squares of alternating tarmacadam and concrete pavings.

BIOLOGY POOL

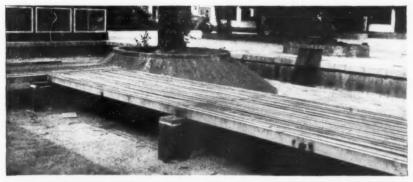
It has become the habit in post-war schools to include a biology pool, usually much to the advantage of the general architectural setting. At Mayfield the pool was given even more dramatic emphasis by bridging it with the main escape exits from the assembly hall. The bridge battens run longitudinally with the bridge, not laterally as might be expected, and are made from 4 in. by 2 in. oak at 3 in. centres, set on slate-capped brick walls. Aesthetically there is no denying the excellence of this arrangement, but the oak spans quite a distance and some warping can be seen in the photograph.

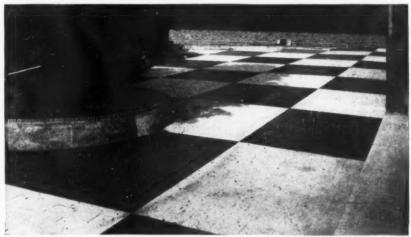
INTERNAL WALL FINISHES

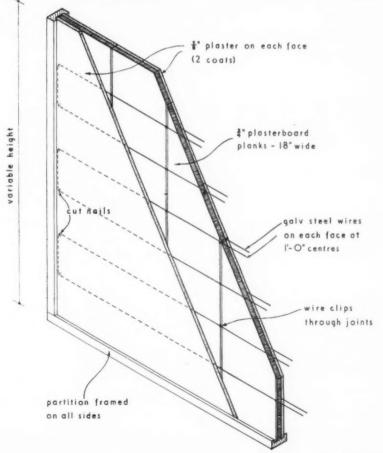
For appearance sake skirtings were not fixed to the walls, but the bottom 6 in. of the plaster was made of Keene's Cement to cope with knocks from brooms and to act as a general kicking plate. The walls are painted in two coats emulsion paint and all the internal mahogany received two coats of alkyd rubber varnish.

Solid panels in the classroom-corridor walls were made up of a reinforced plank plasterboard as shown in the exploded diagram. This is a very neat invention which has often been used by Powell and Moya and which was originally worked out by a Wiltshire builder, Mr. Chick, and first used on a pair of cottages at Highworth, built by Chick and designed by Powell and Moya back in 1951. The core of the wall comprises 3 in. plasterboard which is cut to lengths and secured top and bottom to a timber frame. When it is positioned, purpose made L-shaped nails are fixed into the vertical members of the frame at 1 ft. centres and galvanized metal wires are then stretched horizontally across each face and round the nails and are clipped together through the joint in the plank. The wires are then stressed by the simple expedient of hammering on the nails. \$\frac{1}{8}\$ in. plaster is then applied to each face giving a finished panel of 2 in. plaster thickness which, it is claimed, has an equal sound resistance to a 4 in. clinker block partition and which does not crack, as the plaster is reinforced against tensional stresses.

When approaching the problem of interior







TER



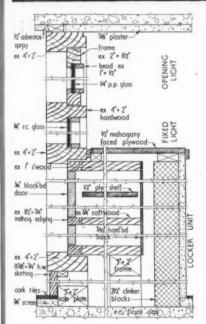
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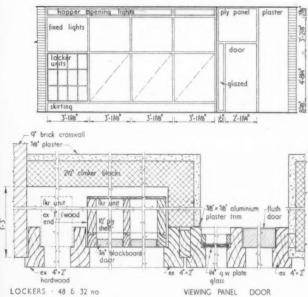
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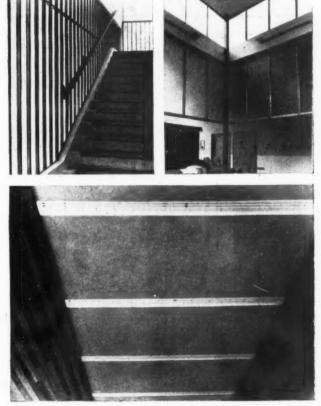




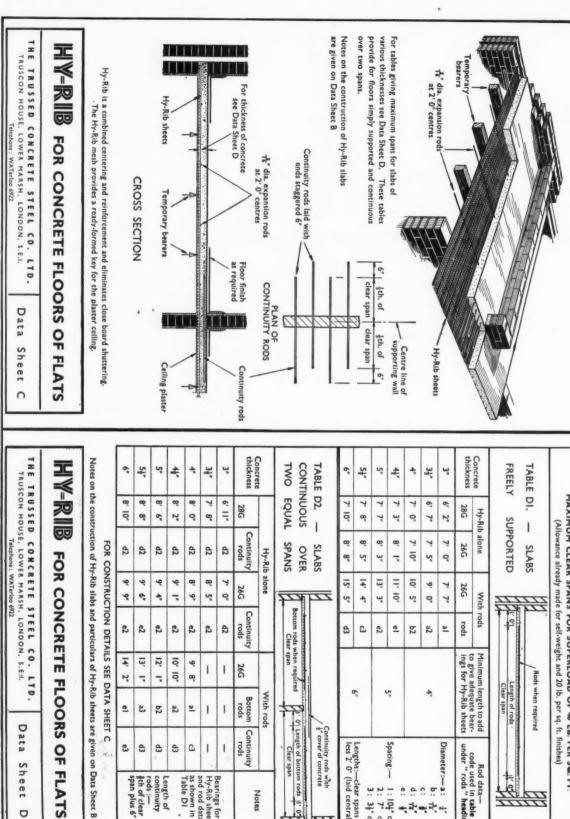
wall surfaces generally, the designers came to the conclusion that doors suffered most of all from wear. They therefore resolved to fit the toughest possible and faced the classroom doors with black and grey melamine plastic and a similar red and grey plastic, the latter being of German origin. Both are hardwood-tipped. Doors at ends of corridor spaces have aluminium push plates and aluminium framed wired-glass windows. Wall lockers are fixed in the mahogany framed



Left, Fig. 14, a top floor corridor in block C. Flooring is studded rubber, doors are faced with melamine plastic. Above and below left, Figs. 15, 16 and 17, drawings showing elevation, plan and vertical sections through a storage wall similar (but not identical) to that illustrated in Fig. 14.



Top left, Fig. 18, interior of secondary staircase in block C. Nosings to treads are 6-in. quarry tiles. Wall at side of stair formed of Georgian wired glass housed in mahogany mullions spaced at 6 in. centres. Top right, Fig. 19, kitchen ventilating hood and clerestory which is detailed in Fig. 21. Above, Fig. 20, cold cathode fluorescent tubes in the assembly hall fixed to asbestos sprayed ceiling.



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d2	d2	d2	d2	d2	d2	Continuity rods	Hy-Rib alone	SPANS	- SLABS	8, 8,	8, 2,	8′ 3″	8' 1"	7' 10"	7' 5"	7' 0"	26G	Hy-Rib alone	SUPPORTED		- SLABS	MAXIMUM CLEAR SPANS FOR SUPERLOAD OF 40 LB. PER 9 (Allowance already made for self-weight and 20 lb. per sq. ft. finishes)
9' 6"	9' 4"	9' "	8′ 9″	00, U,	7' 0"	26G	alone	774	<u> </u>	15' 5"	14' 4"	13' 3"	11' 10"	10' 5"	9' 0"	7' 7"	26G	Wit	77	Z	777	R SPANS eady made
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d3	d3 .	d3	a	1	1	Continuity rods		1. 0" Length of bottom rods Clear span	Continuity rods with	less 2' (Lengths		Spacing:-			Diameter:-	5				8	LB. PER SQ. FT
ith of clear	continuity		Table DI	Hy-Rib sheets	Bearings for	THORES	2000	tom rods II' 0"		less 2' 0" (laid centrally)	:clear spans	2: 7	- 0		ი . • •		under " rods " heading	Rod data—	72		111	2. FT.

Telephone: WATerloo 6922

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FOR CONSTRUCTION DETAILS SEE DATA SHEET C

14' 2"

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\$th of clear span plus 6"

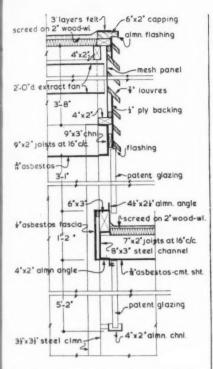


Fig. 21, section through extract fan casing, clerestory and ventilation hood in kitchen (see Fig. 19).

partitions between classroom and corridor wails as shown in Figs. 14 to 17 inclusive. The architects were of the opinion that much damage was caused to side-hung locker doors by children swinging on them and so breaking the hinges. The lockers at Mayfield were therefore top-hung, opening outwards with an aluminium pull handle and a ball catch.

Whilst on the subject of doors, we must mention two large sliding glazed doors used in the boiler house. These act as windows and give a sufficient opening to provide manœuvring space when renewing the boilers. Because of their size, they were specified of welded m.s. angle, box transoms and mullions and to be hot-dip galvanized and painted. So well indeed did the manufacturers construct them that no air could escape the welded box members when put in the hot dip—and most of the welding split with the exploding hot air. This was, of course, easily rectified at the second attempt.

FITTINGS

The classrooms themselves were furnished throughout by the LCC, but such fittings as cupboards remained within the architects' province. Late changes, however, were made with the chalkboards which were to have been hinged. The LCC required their own standard boards to be used and these were placed in rows of three, sliding between a top and bottom wall batten. Unfortunately, the bottom batten tends to collect chalk dust, with the result that the boards stick. A top-hung board might have

been better. Investigating present-day school requirements, the newcomer never ceases to be surprised by strange economies: for example, in the pottery rooms no hot water taps were called for in the sinks so none were provided, but it was later found that hot water was required and instantaneous gas heaters are now installed.

White venetian blinds are fitted to the classroom window walls where facing south or west. These are provided with grey tapes in place of the more usual white in the hope that they will not get grubby so quickly.

One feature (which might perhaps be better classified under 'services than under fittings' which calls for notice is the ventilation hood-cum-extract-fan-cum-clerestory in the kitchens. In so many school kitchens the ventilating equipment hangs artlessly in full view. Powell and Moya have struck on the idea of converting the ventilating hood over the cookers into a clerestory and of placing all the ventilating equipment above the ceiling, out of sight. The timber louvres (which were necessary on ventilating grounds on one side only) were carried round all four sides of this housing, and the effect, when seen from outside, is not unlike that of a tank room. Structural support for clerestory roof and hood is provided by four m.s. columns, each comprising two 3½ in. by 31 in. angles welded at their edges. The hood is made of wired glass set in conventional patent glazing with a 4 in. by 2 in aluminium condensation channel running round the base.

FINISHES IN THE ASSEMBLY HALL

Finishes in the Assembly Hall are mostly of the intrinsic colour type, so that the need for subsequent painting will not vary the acoustic conditions. The room is designed to produce a reverberation time, when filled to capacity, of 0.99 seconds, or when empty of 2.02 seconds at 500 c.p.s.

The high level ceiling is covered with natural colour acoustic asbestos spray, the low level ceilings with painted vermiculite plaster. The space frames in the roof are clad with African mahogany boarding shiplap jointed and finished with a matt varnish. Difficulty arose with the lighting in the high level ceiling. As this could only be reached with difficulty it was decided to use cold cathode fluorescent tubes as these have a longer life. The pattern chosen has concealed transformer boxes. (See Fig. 20.) In a Working Detail which appeared on November 11, 1955, we illustrated one of the ranges of three pivoting wood screens which figure on both sides of the stage and which enable the stage to be adapted to the many different uses it has to serve.

The space frames supporting the ceiling are themselves supported at the ends on four m.s. columns, built up of 15 in. by 3 in. channels. It is interesting to notice that these called for eight coats to bring them to the required finish: one of red oxide, one of brown oil primer, three of filler paint, a white undercoat, an obliterating undercoat and a gloss finish.

Buildings Illustrated

Offices at Harold Hill, Essex, for W. J. Fraser & Co. Ltd. (Pages 308-309.) Architects: Alan W. Pipe & Sons, F.R.LC.S., L.R.I.B.A. Assistant-in-charge: Leslie A. Johnson, Quantity surveyors: Rider, Hunt & Partners. Structural consultants: Harvey Young & Co. Ltd. General contractors: A. E. Symes Ltd. Sub-contractors:-precast concrete portal frame: Stent Precast Concrete Ltd. Heating and ventilating: G. N. Haden & Sons Ltd. Joinery: Symes (Joinery) Ltd. Windows: George Jennings-Hamer (Windows) Ltd. Asbestos roofing contractor and sanitary goods: B. Finch & Co. Ltd. Ironmongery: Yannedis & Co. Muhuhu wood block flooring and blinds: Horsley Smith & Co. (Haves) Ltd. Bricks: W. T. Lamb & Sons Ltd. Asphalt: Lawford Asphalte & Co. Ltd. Fencing: Peerless Fence Product Ltd. P.v.c. flooring: The Adamite Co. Ltd. Roller shutters: Shutter Contractors Ltd. Pebble panels: Precast panels: Precast Utilities Ltd. Glass domes: T. & W. Ide Ltd. Canteen and kitchen equipment: James Stott & Co. (Engrs.) Ltd. Staircase balustrade: The Morris Singer Co. Ltd. Electrical contract: Pulver & Co. Ltd. Flagstaff: Piggot Bros. & Co. Ltd. Lettering: The Lettering Centre. Cycle racks: A. A. Odoni & Co. Ltd. Acoustic ceilings: Burgess Products Co. Ltd. Fire hoses: The Lightning oonductor: Pyrene Co. Ltd. W. J. Furse & Co. (London) Ltd. Terrazzo: Diespeker & Co. Ltd.

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Please ask manufacturers to send further particulars to :—
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5.4.56

Announcements

PROFESSIONAL

The partnership between John Lacey, A.R.I.B.A., and C. F. Timothy, A.R.I.B.A., has discolved by mutual consent. C. F. Timothy will continue to practise at No. 1, Gower Street, W.C.1. (Tel.: LANgham 5161.)

Esther Yuen Todd and John Comrie Todd, A/A.R.I.B.A., have established a practice under the style of Yuen & Todd at 111, High Street, Kuala Lumpur, Malaya, and they will be pleased to receive trade catalogues.

W. C. Leslie-Carter, L.R.I.B.A., is retiring from his position as Chief Surveyor and Architect to British Road Services and will take up private practice.

C. Gurney Burgess, L.R.I.B.A., has changed his address to Beech House, 2, Cardiff Road, Luton, Beds. (Tel.: Luton 5685.) He will be pleased to receive trade catalogues.

David F. Tandy, A.R.I.B.A., requests that until further notice all his correspondence should be addressed to: Architect Technical Division, United Nations R.W.A., Maison U.N.E.S.C.O., Beyrouth, Lebanon.

C. J. Bourne, A.R.I.B.A., has commenced practice at Commercial End, Swaffham Bulbeck, Cambridge (Tel.: Bottisham 233), will be pleased to receive trade catalogues.

Wornum & Playne wish to announce the retirement of Grey Wornum, F.R.I.B.A., from the firm for reasons of health. Edward Playne, F.R.I.B.A., and John Lacey, A.R.I.B.A., are amalgamating practices under the name of Playne & Lacey, and will practise at 19, Queen Anne's Gate, Westminster, S.W.1. (Tel.: WHItehall 2552.)

Stirling and Margaret Craig, A/A.R.I.B.A., have moved to 30, London Road, Stevenage, Herts. (Tel.: Stevenage 1082.)

Norman & Dawbarn, Architects and Consulting Engineers, have closed their old of-fices at 5, Gower Street and 3, Bayley Street, W.C.1 and their new office, to which all correspondence should be addressed, is at 7, Portland Place, W.1. (Tel.: LANgham 8011)

T. F. A. Manning and Hugh Clamp, A/A.R.I.B.A., at present practising at No. 8, The Green, Richmond, Surrey, have entered into partnership. G. H. Blomfield and A. R. Osborne, A/A.R.I.B.A., have become associates in the firm, which will continue as Manning & Clamp at the same address.

W. H. Saunders & Son announce that their W. H. Saunders & Son announce that their London office has now opened at 18, Sackville Street, W.1. (Tel.: REGent 5580). They will be pleased to receive trade catalogues and technical data at this address. British Road Services have appointed T. Lancaster, Registered Architect, as Chief Surveyor and Architect in succession to W. C. Leslie-Carter, L.R.I.B.A.

Henry Gorst, A.R.I.B.A., lately principal assistant architect in the office of the County Architect, Worcester, has taken up private practice at 97, High Street, Worcester, formerly the practice of J. H. E. Hough, where he will be pleased to receive trade catalogues.

TRADE

Ajax Architectural Products Ltd. have a comprehensive range of their extruded aluminium alloy, shopfront mouldings, Jaxite facing materials and door and frame facing materials and door and frame assemblies on display at The Building Centre, Store Street, W.C.1. Federated Foundries Ltd. announce with regret the death of William Rennie, J.P., Chairman and Managing Director of Federated Foundries Ltd., Glasgow, since 1935.

The address of the Glasgow Branch Office and Stores of British Insulated Callender's Cables Ltd. is now 109, Douglas Street, Glasgow, C.2. (Tel.: Central 2151-4.)

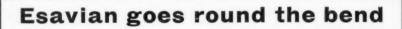
The Copper Development Association an-"Copper Flashings," demonstrating the ease of working of copper sheet and strip in building. The film is available free on loan on application to the Association at Kendals Hall, Radlett, Herts. (Tel.: Radlett 5616.)

W. Orr has been appointed Manager of The Spencer Wire Co. (Developments) Ltd., a subsidiary of The Spencer Wire Co. Ltd., which is now confining its activities to con-structional engineering design. He will continue to operate from their London Office.

Cooper Plumbing Co. Ltd., of London, Nottingham and Newcastle, regret to learn of the closing of the Nottingham firm of George Cooper (Builders) Ltd., but wish to assure their friends in the trade that the firm of Cooper Plumbing Co. Ltd., whose head office is also in Nottingham, are in no way connected or affected.

Dr. F. W. Gifford, B.Sc., has been appointed by Concrete Ltd., 16, Northumberland Avenue, London, W.C.2, to take charge of technical design.

The commercial, buying, drawing and design departments of Head Wrightson Aluminium Ltd. are now at: Head Wrightson Stockton Forge Division, Norton Road, Stockton-on-Tees. (Tel.: Stockton-on-Tees 65268.) The works remain at Thornabyon-Tees.



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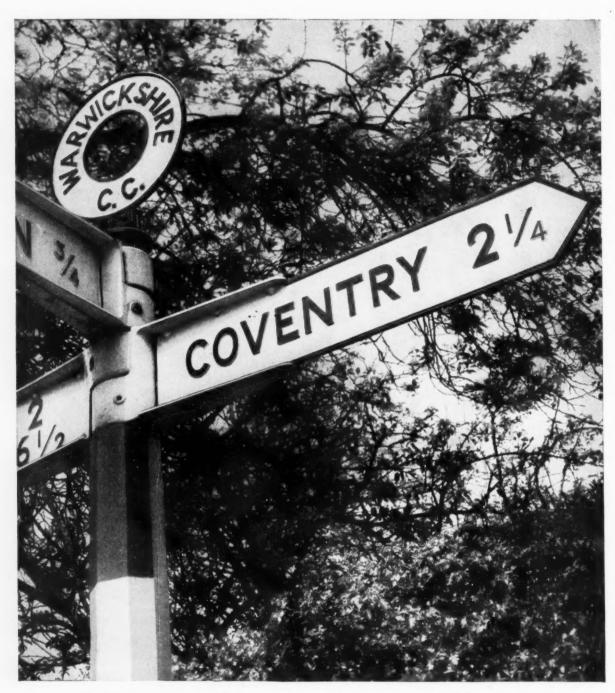
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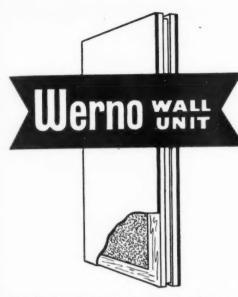


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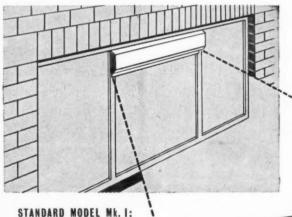
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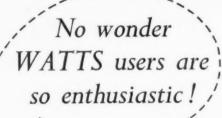


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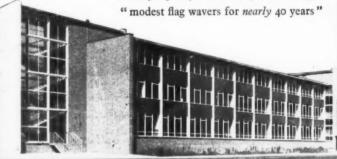
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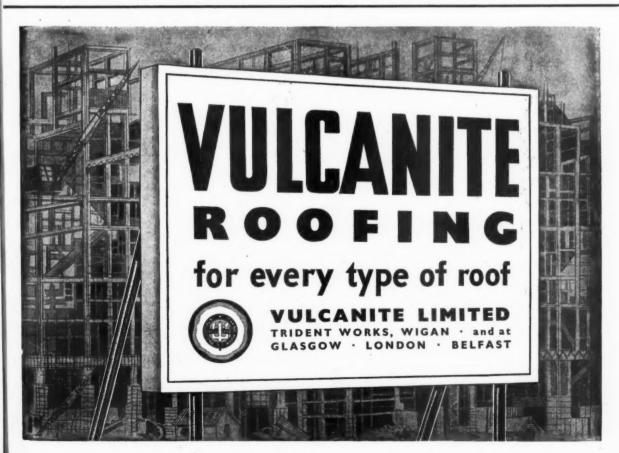
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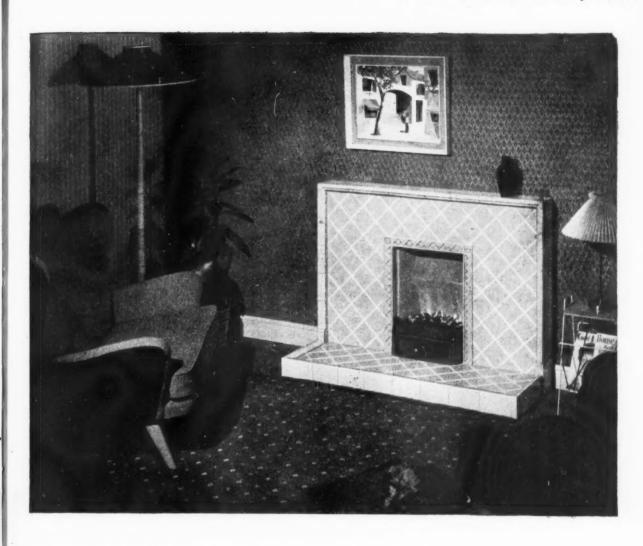
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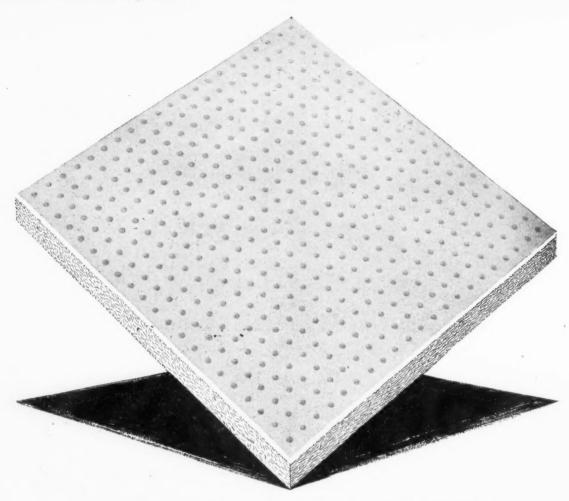




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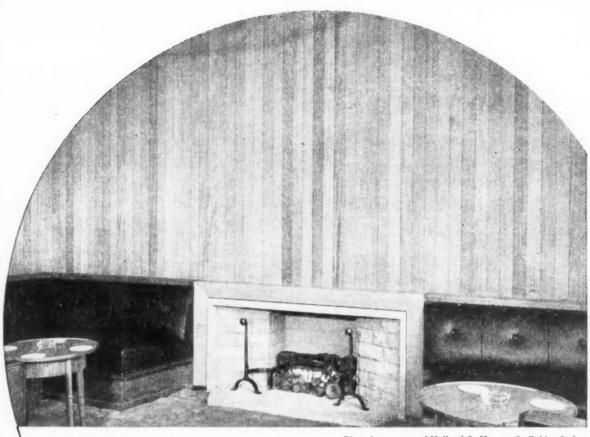
At Messrs. Allders Departmental Store, Croydon, J. & E. Hall Ltd. have recently installed two escalators which are believed to be unique in this country, in that they are provided with illuminated balustrade casings.

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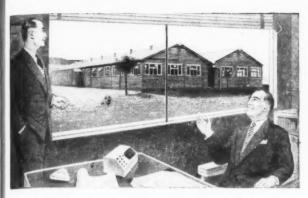
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This Technical Training Centre of 10,500 square feet was designed and erected in 8 weeks for a well-known industrial concern in the Midlands.

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TIMBER DECAY calls for

prompt diagnosis . . .

Whether caused by prolific insect borers or insidious fungal rot (some species of which have the destructive effect of a slow fire), timber decay should be accurately diagnosed by specialists and arrested before expensive replacement becomes inevitable. The experienced survey staff of Richardson & Starling Ltd. undertake inspections and tender detailed advice on remedial measures.

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"WYKAMOL" This unique insecticide requires only one application to effect the total extermination of Death Watch Beetle and other woodborers, and confers complete immunity against further attack.

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Unless the varying characteristics of beetle infestation or fungal rot are fully understood, successful eradication should be ensured by the employment of specialists. In the course of several years' reliable work, the services of Richardson & Starling Limited have been used in hundreds of important and historic buildings, including Cathedrals, Churches, Unlversities and ancient mansions. The careful treatment carried out by their highly trained team of expert operatives is covered by a ten-year guarantee of efficacy.

If you have a problem of timber decay, write now for full details of Services and prices of materials incorporated in our free technical brochure "The Control of Insect and Fungal Destrayers of Timber".

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MADE FROOFING TILES LAST LONGEST HAND

Despite the widespread use especially in towns and cities and their suburbs, of interlocking roof tiles, the English Pantile is still preferred by many. Especially in rural districts. To such we commend the C.S. No. 6 Pantile illustrated.

As with all other C.S. tiles, the C.S. Pantile is hand moulded from Bridgwater clay and can be supplied with sanded, smooth, or colour glaze finish, as required.

> We invite your enquiries and will send specimen tile on request. Ask for illustrated list of our various types of Clay Roof Tiles.

> > SIZE 131" x 91" COVERING CAPACITY 165 TILES per sq. approx. BATTEN GAUGE 101"

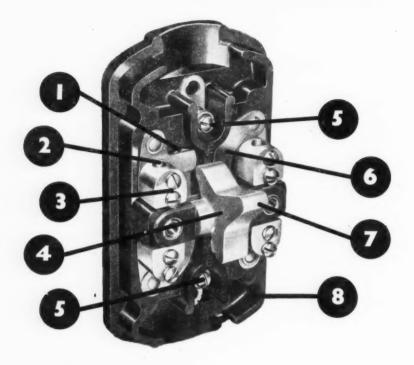


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A complete range of double pole switches for the reliable control of water heaters and similar appliances . . .

Designed for a variety of purposes where a heavy-duty unit from 15 to 30 amperes is demanded, these compact new AC switches incorporate the following important features

- I Subsidiary compression springs to maintain contact
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8 Heavy-section mouldings of urea formaldehyde for resistance to tracking











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Manager, "The Archifects' Journal," 9, 11 and
13, Queen Anne's Gate, Westminster, S.W.1, and
should reach there by first post on Friday
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paper.
Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address

Public and Official Announcements

Public and Ufficial 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 18-69 inclusive unless he or she or the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

mediate unless ne of an of the employment is excepted from the provisions of the Notification of Vacancies Order, 1952.

GOVERNMENT OF NÖRTHERN IRELAND Applications are invited for the permanent and pensionable post of ASSISTANT (STRUCTURAL) BNGINEER, Class II, in the Directorate of Works, Ministry of Finance.

Salary scale, 2675 × 225-2750 × 230-2960 × 290-21,000, plus Pay Supplement of amounts between 255 and 295 a year. Minimum of scale linked to age 26 with increase of one increment for each year above that age subject to maximum entry point of 2900. Officers of age 25 enter at 2650; those under age 25 are paid according to qualifications and experience.

Candidates must be Corporate Members of the Institution of Civil Engineers or (by examination) he Institution of Structural Engineers and have had experience of steel and reinforced concrete design applied to building structures.

Preference will be given to candidates who served in H.M. Forces during the 194-18 or 1899-46 wars, provided that such candidates are, or within a reasonable time will be, able to discharge the duties efficiently.

Application forms may be obtained from the Secretary, Civil Service Commission, Stormont, Belfast, to whom they should be returned, together with copies of two recent testimonials.

gether with copies of two recent testimonials.

HAYES AND HARLINGTON URBAN
DISTRICT COUNCIL.
Applications are invited for:—
(a) ARCHITECTURAL ASSISTANT (PER-MANENT). Grade A.P.T. II, i.e., £595—£675 p.a.;
(b) SENIOR ARCHITECTURAL ASSISTANT (TEMPORARY). Grade A.P.T. IV, i.e., £710—2885 p.a., plus London weighting in both cases, 21-25 years £20 p.a., 26 years and over £30 p.a. Candidates for (a) must have passed the B.I.B.A. Inter. Exam., good experience of housing work with a local authority; (b) must be a Begistered Architect, have good general experience in design and construction in relation to municipal housing and other works, and capable of supervising large building contracts. The Council is unable to provide housing accommodation for either of these appointments. Further particulars and form of application available from the undersigned, which when completed must be returned as soon as possible.

GEORGE HOOPER, Clerk and Solicitor.
Town Hall, Hayes, Middx.

Town Hall, Hayes, Middx.

THE LONDON HOSPITAL, Whitechapel, E.I, requires JUNIOR ARCHITECTURAL ASSISTANT, salary £440 to £650 p.a. according to experience, plus London weighting. Post superannuable. Applications, stating age, present salary and brief particulars of experience, to be sent to the House Governor. Accommodation is available in Kensington if successful candidate is a woman.

9156

UNIVERSITY OF OXFORD following

Applications are invited for the following appointment:—
ARCHITECTURAL ASSISTANTS, of about Intermediate standard, with some knowledge of modern building construction. Salary £530.
Varied and interesting work. Generous leave. Apply for further particulars, stating age, experience and training, to the Surveyor to the University, 5, South Parks Road, Oxford. 9366
GOVERNMENT OF UGANDA
ARCHITECT—MULAGO HOSPITAL PROJECT To assist in preparation of complete working details for building of Mulago Hospital (750 bed African Hospital) and supervise work in progress. Appointment on contract for one tour of 30-36 months, with probable renewal by mutual agreement. Salary up to £1,620 per annum according to experience, plus 10 per cent. cost of living allowance. 139 per cent. gratuity on satisfactory completion of service. Generous assistance provided in certain circumstances for children's education.

51

rectain. Free passages provided for officer and family up to total cost of either four air tourist class passages or three adult sea passages. Housing available on site. Five days leave for each month of resident service. Candidates between 30 and 45 years must be A.R.I.B.A. and familiar with construction of multi-storey reinforced concrete buildings. Experience upon large hospital projects an advantage.

Apply in writing to Director of Recruitment, Colonial Office, London, S.W.1, giving briefly age, gualifications and experience and quoting reference No. BCD.112/9/014.

ARCHITECTURAL ASSISTANTS and ARCHITECTURAL DRAUGHTSMEN required by the Kenya Government P.W.D. for one tour of 36/45 months in the first instance. Outfit allowance £30. Liberal leave on full salary. Free passages, Salary scales (including Inducement pay and temporary Cost of Living allowance): Architectural Assistants, £338 rising to £1,560 a year; Architectural Draughtsmen, £772 rising to £1,260 a year. Commencing salary according to experience, Appointment either on contract (with Gratuity of 134 per cent. of total basic salary plus Inducement pay drawn during contract), or on probation to the pensionable establishment. Candidates, over 24, must be capable of working-up sketch designs and preparing full working drawings for various types of Government buildings ranging from small domestic work to large multi-storied buildings. Candidates for Architectural Assistant must have passed the Intermediate examination of the R.I.B.A. and candidates for Architectural Draughtsmen must have had at least four years actual experience in an Architect's office and have a sound knowledge of buildings construction. Write to the Crown Agents, 4, Millbank, London, S.W.I. State age, name in block letters, full qualifications and experience, and quote M2B/46629/AE.

M2B/40529/AE.

HER MAJESTY'S OVERSEA CIVIL SERVICE
ASSISTANT ARCHITECT
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Appointment is pensionable, on probation for
three years in the salary scale 1675 to 11,441 per
annum. Free passages not exceeding four adult
fares provided on first appointment and not more
than three return adult fares on leave. Fourfive days leave in respect of each completed
month of resident service. Partly furnished
Government quarters may be available at low
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Government quarters may be available at low rental.

Candidates must be A.R.I.B.A. or hold equivalent qualification and have had two years post qualification experience.

Apply in writing to Director of Recruitment. Calonial Office, London. S.W.1. stating briefly age, qualifications and experience and quoting reference No. BCD 112/49/004.

GOVERNMENT OF BARBADOS ASSISTANT ARCHITECT

TO assist the Director of Public Works in design and preparation of plans for public buildings and institutions, and supervise construction. Appointment on agreement for two years. Salary £1,000 × £59-£1,250 p.a. Starting salary according to experience. Cost of living allowance £32 10s. p.a. Passages paid up to certain limit. 45 days leave for each year of service.

Candidates should be A.R.I.B.A. Apply in writing to Director of Recruitment. Colonial Office, London, S.W.1. giving briefly age, qualifications and experience and quoting reference No. BCD 112/28/02.

HER MAJESTY'S OVERSEA CIVIL SERVICE

and experience and quoting reference 9393
BCD 112/28/02.

HER MAJESTY'S OVERSEA CIVIL SERVICE ARCHITECT

PUBLIC WORKS DEPARTMENT. JAMAICA
To prepare designs, plans and working drawings, etc., under direction of Chief Architect.
Appointment is either permanent and pensionable or on contract for three years in first instance. Salary £620—£1200 per annum. Starting salary according to experience. Contract gratuity payable £100—£150 per annum.

Free passages for officer. his wife and children up to a total of 5 persons. 13 months leave for each completed year of resident service. Government quarters not provided.
Candidates should be A.R.I.B.A. Apply in writing to Director of Recruitment, Colonial Office, S.W.1, stating briefly age. qualifications and experience and quoting reference No. BCD 112/32/06.

GOVERNMENT OF ZANZIBAR
TOWN PLANNER
Duties include responsibility for the carrying out of Planning Surveys and preparation of Outline Plans for Zanzibar township and other towns: supervising planning control, preparing detailed plans and advising Government on planning matters.

Appointment

Appointment is on contract for 30-36 months. Salary £1,475-£1,775 per annum. Gratuity 133 per cent. of salary payable on satisfactory completion of contract.

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Free passages for officer and family up to asximum of three full adult fares. Five days are for each completed month of service. Furshed quarters at low rental.

Candidates should be A.M.T.P.I. and A.R.I.B.A. and possess nost-graduate experience in the prearation of Statutory Surveys and Development lans.

Apply in writing to Director of Recruitment. Colonial Office. S.W.1. giving briefly age, qualifi-cations and experience and quoting reference No. BCD 62/10/01.

ARCHITECT TO THE LONDON COUNTY
COUNCIL
Applications are invited for appointment from
October 1956 as ARCHITECT TO THE LONDON
COUNTY COUNCIL, at a salary of £4,500 a year.
The position is permanent and pensionable. The
Architect to the Council is responsible for the
design, erection and maintenance of most of the
architectural work required by the Council and
also advises the Council on town planning matters.
Full particulars and application forms (which
must be returned by Friday, 20th April, 1956) are
obtainable from the Clerk of the Council (CL/G)
County Hall, Westminster Bridge, S.E.1, (399) 9430

URBAN DISTRICT OF FELTHAM ARCHITECTURAL ASSISTANT ARCHITECTURAL ASSISTANT TO TEMPORARY ARCHITECTURAL ASSISTANT IN the Engineer and Surveyor's Department at a salary within A.P.T. Grade IV—£710×£35—£885 per annum, plus London weighting.

The engagement will be mainly in connection with the preparation of drawings for new Municipal Offices and Assembly Hall. Forms of application, obtainable from the undersigned, must be returned within 14 days of the appearance of this advertisement. Canvassing will disqualify and applicants must disclose, in writing, whether to their knowledge they are related to any member of, or the holder of, any senior office under the Council.

M. W. COUPE, Clerk of the Council.

Council Offices, Eathern

Council Offices, Feltham, Middlesex.

Feltham, Middlesex. 9418

COUNTY BOROUGH OF GATESHEAD Applications are invited from qualified and experienced persons for the following appointments, which are subject to N.J.C. Conditions:—SENIOR ARCHITECTURAL ASSISTANTS—A.P.T. V. (£795—6790).

Applicants must be Registered Architects and should be Corporate Members of the Royal Institute of British Architects. They should have had good experience in the design and construction of Public Buildings, Schools and/or Municipal Housing Schemes.

JUNIOR ARCHITECTURAL ASSISTANT—A.P.T. I-III (£550—6765).

Applicants should have had previous experience in an Architect's Office and must have passed the R.I.B.A. Intermédiate Examination.

JUNIOR QUANTITY SURVEYING ASSISTANT—A.P.T. I (£550—6610).

Applicants should have passed or be studying for the Intermédiate Examination of the R.I.C.S. or the I.Q.S., be not less than 21 years of age, and have previous experience of Quantity Surveying, including measuring up on site.

Posts pensionable, subject to medical examination and one month's notice on either side.
Applications, on forms obtainable from the Borough Surveyor, Swinburne Street, Gateshead, 8, must be returned to him within 14 days of appearance of this advertisement.

C. D. JACKSON,

Town Hall, Gateshead, 8.

Town Hall, Gateshead, 8. 7th March, 1956.

Town Hall, Gateshead, 8.

7th March, 1956.

NATIONAL COAL BOARD

Applications are invited for the following permanent and superanuated appointments at Headquarters in Edinburgh.

ARCHITECTS, Grade II (salary £700×£30—£1,000.

Qualifications required, A.R.I.B.A.

ARCHITECTURAL ASSISTANTS Grade I (salary £625×£25—£750 (exceptionally to £900). Qualifications required, Inter. R.I.B.A., with not less than 3 years' subsequent practical experience.

ARCHITECTURAL ASSISTANTS, Grade II (salary £200×£20—£15). The point of entry on the ability and experience of the successful applicant. In exceptional circumstances those applicants who have not passed the Intermediate Examination of the R.I.B.A., but have considered for the posts of Architectural Assistant, Grade I or Grade II.

The National Coal Board, Scottish Division, is engaged on a development programme which includes complete new collieries and Area Headquarters, embracing two- and three-storey office blocks, multi-storey composite buildings of framed blocks, multi-storey composite buildings of framed convertuction, laboratories, large workshops, stores, pithead baths, canteens, medical centres, winding towers and other new and unorthodox architectural compositions. The work offers scope to architects alive to contemporary design problems.

Applications, giving full details of age, educarder), present post and salary, should be forwarded to Staff Department, National Coal Board, 5, Eglinton Crescent, Edinburgh, 12, within 7 days, 9447

Applications are invited for the following additional appointments:—

(a) SENIOR ASSISTANT ARCHITECT, Grade APT. IV (4710-4885).

(b) ARCHITECTURAL ASSISTANTS, Grade A.P.T. II (4595-4575).

Candidates for position (a) must be Associates of the R.I.B.A., be competent designers with a contemporary outlook and have some experience.

Candidates for pushing the first R.B.A., be competent designers with a ontemporary outlook and have some experience I School building.

The successful candidate will be engaged on the exign and erection of a New Technical College. Applicants for positions (b) must have passed he R.I.B.A. Inter. Examination and will also engaged on school building projects.

The commencing salary for all positions will be ked within the Grades according to ability and whereince.

experience.

Applications. together with names of two referees, must reach the City Architect and Planning Officer, Mr. L. Hugh Wilson. O.B.E., A.R.I.B.A., Dist.T.P., A.M.T.P.I., not later than the 19th April, 1956

Canvassing will disqualify.

J. BOYLE.

Town Clerk

own Clerk.

Municipal Buildings. Canterbury

PEAK DISTRICT NATIONAL PARK Applications are invited for the undermentioned appointments under N.J.C. service conditions in the office of the Peak Park Planning Board at

the office of the Peak Park Planning Board at Bakewell.

(a) One PLANNING ASSISTANT, A.P.T. Grade III (£640-£765).

(b) Two JUNIOR PLANNING ASSISTANTS, A.P.T. Grade II (£595-£675).

(c) One JUNIOR PLANNING ASSISTANT, A.P.T. Grade I (£530-£610).

For appointment (a) experience in development plan research work is sought and applicants should be suitably qualified. For appointments (b) and (c) a varied experience in planning work, including draughtsmanship, is desirable and applicants for (b) should be of T.P.I. Intermediate standard. standard

standard.

Successful applicants will be required to assist in a wide variety of work including both national park projects and urban schemes for the areas outside the Park which are administered by the Board's office as an area planning office of Derbyshire County Council.

Applications on forms obtainable from the Planning Officer, Aldern House, Bakewell, Derbyshire, to be returned by 23rd April, 1956. Canvassing disqualifies.

COUNTY BOROUGH OF CROYDON
SCHOOL ARCHITECT'S SECTION
Applications are invited for an established application and the section (School Architect C. T. Ayerst, A.R.I.B.A.).
Salary commencing according

Salary commencing according to experience and qualifications, rising to a maximum of £870 per annum inclusive.

Application forms, with terms and conditions, obtainable from the Chief Education Officer, 19, Katharine Street, Croydon. Closing date 19th

April. 1956.

CITY OF WORCESTER
APPOINTMENT OF
SENIOR ASSISTANT ARCHITECT
Applications are invited for this appointment in the City Engineer & Surveyor's Department within A.P.T. Grade IV (salary £710-£885 per annum).
Candidates should be Registered Architects and Associate Members of the R.I.B.A. and should have had experience in general municipal work.
Housing accommodation will be made available to the successful candidate if required and a casual user's car allowance will also be available.
Applications, with the names of two referees, and stating age, qualifications and experience, are to be sent to the City Engineer and Surveyor, 22. Bridge Street, Worcester, by 16th April. 1956.

BERTRAM WEBSTER.
Guildhall,

Guildhall, Worcester.

Worcester.

9439

WELWYN GARDEN CITY AND HATFIELD DEVELOPMENT CORPORATIONS APPOINTMENT OF CLERK OF WORKS. Applications are invited for the appointment of CLERK OF WORKS on the salary scale £850×£25-£750 per annum.

Applicants should be practical tradesmen, with previous supervisory experience of all trades on substantial contracts, and be competent in setting out and levelling.

The appointment is superannuable and terminable by one month's notice on either side.

The successful applicant will be assisted in obtaining housing accommodation if required.

Applications, giving age qualifications, and full details of present and past appointments salaries and experience, together with the names of three persons to whom reference may be made, should be addressed to the General Manager, at 4, Wigmores South, Welwyn Garden City, Herts., and be received by 20th April.

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 the special grade for qualified assistants (£690—£840) of the National Joint Council's Scale and the following conditions:—

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

(2) Local Government Superannuation Acts, 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.

available.

Applications, stating age, qualifications, present appointment and salary, previous appointments and experience, together with the names and addresses of not more than three referees, should be sent to the Borough Engineer and Surveyor. Carr Bank, Mansfield, and should be endorsed "Third Architectural Assistant." The closing date is 16th April, 1956.

A. C. SHEPHERD. Carr Bank, Mansfield.

COVENTRY CORPORATION requires GROUP ARCHITECT, A.P.T. VII (£975—£1,200). Housing accommodation may be available. Application forms, etc., from Arthur Ling. Bull Yard, Coventry, returnable within 15 days of publication.

BASILDON DEVELOPMENT CORPORATION DEPARTMENT OF ARCHITECTURE AND PLANNING require:—

(a) ARCHITECT, Grade III (£975—£1,275).
(b) ASSISTANT ARCHITECT, Grade IVb

ASSISTANT ARCHITECT, Grade IVb (5-(960), ASSISTANT ARCHITECT, Grade IVa (5-(845), ARCHITECT, Grade IVa

ASSISTANT PLANNER, Grade IVa (£715-ASSISTANT PLANNER, Grade Vb (£580-

ASSISTANT PLANNER, Grade Vb (£580—£650).

Architects (posts (a), (b) and (c)) may work on Town Centre, Housing or Industrial projects, and must have experience and ability in contemporary design of buildings in one of these categories, together with preparation working drawings and supervision of contracts. Architect (post (a)) will control a Group and must have experience all stages contract management and ability to lead a team. Planners will assist in implementation of Master Plan and must have experience in planning design and survey. Building programme £5,000,000 annually. Excellent scope initiative and drive. Professional qualification and medical examination required. Appointments superannuable. Housing available for renting in approved cases.

Applications on special form obtainable from Chief Architect, to General Manager, Gifford House, Basildon, Essex, endorsed with the relevant appointment, within 21 days of appearance of advertisement.

CITY AND COUNTY OF THE CITY OF

CITY AND COUNTY OF THE CITY OF
EXETER
Applications are invited for the appointment
of SENIOR ASSISTANT ARCHITECT on the
establishment of the City Architect's Department: salary range between £69 and £885 per
annum, according to experience.
Applicants must be Associate Members of the
R.I.B.A. or hold equivalent qualifications, and
preference, will be given to those experienced
in the design and construction of schools and
civic buildings.

in the design and construction of schools and civic buildings.

The appointment will be subject to one month's notice on either side, and to the provisions of the Local Government Superannuation Acts, 1937-1935. The successful applicant will be required to pass a medical examination.

Canvassing will disquality, and applicants must disclose whether, to their knowledge, they are related to any member of the Council or to the holder of any senior office under the Council.

Applications, stating age, qualifications, previous and present appointments and salaries, full details of experience and the earliest possible date when available, should be sent to H. R. Rowe, F.R.I.B.A., A.M.I.Struct.E., City Architect, Municipal Offices, Exeter, within 14 days of the publication of this advertisement.

C. J. NEWMAN.

Town Clerk.

Exeter. March, 1956.

March, 1956.

MINISTRY OF HOUSING AND LOCAL GOVERNMENT. INVESTIGATORS. The Civil Service Commissioners invite applications for two pensionable posts for work in Wales, Lancashire, Yorkshire and the North Middands. Age at least 25 on 1st March, 1955. Duties include discovery, inspection, and reporting on buildings of architectural or historic interest, with recommendations as to preservation. Candidates should normally have University Honours degree, or an architectural qualification but other appropriate qualifications (e.g. active membership of appropriate learned society or wide experience of relevant work) will be considered. Ability to date buildings, especially 18th and 19th century domestic architecture, essential. Knowledge of medieval and later buildings and of English and Welsh architecture desirable. Own car or motor cycle essential but mileage allowance payable.

Starting salary for a 45th hour week for men and women about 2482 to £492, according to station. Inclusive maximum up to £332 (men), £855 (women). Women's pay being improved under equal pay scheme. Promotion prospects.

Particulars and application form from Scoretary, Civil Service Commission, 6. Burlington Gardens, London, W.1, quoting No. 4539/56/10. Completed application forms must be returned by 14th April, 1956.

1956.

LONDON COUNTY COUNCIL
ARCHITECT'S DEPARTMENT
Vacancies for ARCHITECT'S Grade III (up to
5957), and ARCHITECTURAL ASSISTANTS (up
to 5818), for widespread construction programme
which includes houses, blocks of flats, schools of
all types, and various public and industrial
buildings. Application forms and particulars from
Architect (AR/EK/A/2), The County Hall, S.E.1.
(1180)

SURREY COUNTY COUNCIL COUNTY ARCHITECT'S DEPARTMENT Applications are invited for permanent appoint-ents for ARCHITECTS and QUANTITY SUR-

A.P.T. IV-VI. Minimum £710, maximum £1,030, plus £30 London allowance, per

annum. (b) A.P.T. I-III. Minimum £530. maximum £765, plus London allowance £20-£30, according to age.

ge.
y range of appointment and commencing
will depend on experience and qualifica-

tions.
Applications, with two testimonials, to the County Architect, Surrey County Council, County Hall, Kingston-on-Thames, as soon as possible, 9446

THE UNITED NEWCASTLE-UPON-TYNE
HOSPITALS
Applications are invited for the post of CLERK
OF WORKS to the United Newcastle-upon-Tyne

OF WORKS to the United Newcastle-upon-Tyne Huspitals
The duties will include general maintenance and repairs of the hospitals, etc., within the group. It is desirable that applicants should be able to prepare drawings and specifications and bills of quantities.

Age limit: 45 years.
The salary will be at the rate of £650 per annumrising by annual increments to £750 per annumresing by annual increments to £750 per annumresing by annual increments and the National Health Service (Superannuation) Regulations.

Applications, stating age, qualifications and experience, together with the names of three referees, should be sent to the undersigned within two weeks of the publication of this advertisement.

A. W. SANDERSON,
House Governor and Secretary,
Royal Victoria Infirmary,
Newcastle-upon-Tyne.

9476
CRAWLEY DEVELOPMENT CORPORATION

Newcastle-upon-Tyne.

ORAW LEY DEVELOPMENT CORPORATION require an ASSISTANT ARCHITECT, Grade IY, 2715—4969 p.a. Applicants should be fully qualified with good general experience in design, construction and planning. Contributory superanuation. Apply on forms from Chief Architect (Vacancy), Broadfield, Crawley, Sussex, within 10 days of the appearance of this advertisement.

C. A. C. TURNER,
Chief Executive.

CIVIL ENGINEERS FOR DEPARTMENT OF
MAIN ROADS, NEW SOUTH WALES,
ADPlications are invited from graduates (or
undergraduates in their final year) in Civil Engineering of a recognised British or Irish University
for appointment to the staff of Department of
Main Roads, New South Wales, the State Road
Authority for construction of roads and bridges,
On appointment applicants may be engaged at
the Department's Head Office, Sydney, on the
design of reinforced concrete and steel bridges
or on main road construction and maintenance
either in the metropolitan area or the country.
Commencing salary according to qualifications
and experience will be within the range £A1,96
to £A1,299 per annum, with annual progression
subject to technical competence, to £A1,585 per
annum. Appointees will be eligible to contribute
to the State Superannuation Fund after six
Mapointee's full fare from England to Australia
will be met by the Department which the contribute
will be met by the Department which the state is the contribute of the state of the contribute of the state superannuation fund after six
months.

to the State Superannuation Fund after six months.

Appointee's full fare from England to Australia will be met by the Department, subject to a three years' service guarantee bond being completed. Appointment will be subject to satisfactory medical examination and preference will be given to applicants not more than 30 years of age.

Applications should be made on forms obtainable from the Agent General for New South Wales, 56, Strand, London, W.C.2.

4856

Vacancy for Area Officer (£1,184 to £1,353) to be responsible for the efficient running of an area of London in respect of maintenance, repair and small improvements of Council buildings other than housing. Work carried out partly through or AR.I.C.S. desirable.

Particulars and application form, returnable by 12th April, 1956, from Architect (AR/EK/OA/3, County Hall, S.E.I. (460)

by 12th April, 1956, from Architect (ÅR/EK/OA/3, County Hall, S.E.I. (460)

ARCHITECT'S DEPARTMENT
JUNIOR DRAUGHTSMEN required for Housing, Schools and General Divisions. Commencing rate of pay according to age and experience. Further particulars and application forms obtainable from the Architect, County Hall, S.E.I., quoting AR/EK/AD/I. (335)

STAFFORDSHIRE COUNTY COUNCIL EDUCATION ARCHITECT'S DEPARTMENT INSPECTOR OF BUILDINGS
Applications are invited for:—
Inspector of Buildings, South West Divisional Area, based at Dudley. A capable, experienced Inspector of Buildings required to supervise the maintenance of, Education properties in this area comprising approximately 140 properties. Grade A.P.T. III (£640—2765 per annum).

Forms of application, which must be returned within ten days from the date of this advertisement, may be obtained from the Education Architect, Green Hall, Lichfield Road, Stafford.

Clerk of the County Council.

A/Advert/201/SDW.

A/Advert/201/SDW.

OUNTY COUNCIL OF THE WEST RIDING
OF YORKSHIRE

OFFICE OF THE COUNTY ARCHITECT
Applications are invited for appointment in
the grades shown below, the salary ranges of

the grades shown below, the salary ranges of which are:—
A.P.T., III (£640-£765). Special (£690-£840).
A.P.T., IV (£710-£885).
A.P.T., V (£795-£970).
A.P.T., VI (£880-£1,080).
Applicants for these posts should be Registered Architects and Associate Members of the Royal Institute of British Architects, and have had good training and experience in the design and construction of modern buildings.
Extensive and interesting programme of first-class architectural work, with opportunities for taking responsibility and supervising work in progress.

HUBERT BENNETT, F.R.I.B.A.

Progress.

HUBERT BENNETT, F.R.I.B.A.
County Architect's Office, Bishopgarth,
Wakefield.

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I.B.A.

9453

SUDAN GOVERNMENT
The Ministry of Education requires lecturers in the following departments in the Khartoum [20] CIVIL ENGINEEDING

Technical Institute:

(a) CIVIL ENGINEERING
(b) MECHANICAL & ELECTRICAL ENGINEERING
(c) COMMERCE
A degree in Civil, Mechanical or Electrical Engineering or technical equivalent, e.g.
A.M.I.Mech.E., A.M.I.E.E., A.M.I.C.E.,
A.R.I.B.A., etc. is essential for (a) and (b).
Teaching experience in a similar appointment would be an advantage.
A degree in Economics or Commerce or equivalent qualification in Accountancy is essential for (c).

A degree in Economics or Commerce or equivalent qualification in Accountancy is essential for (c).

Applicants must be able to read, write and speak English or Arabic up to a standard which will enable them to carry out the duties of the post. Minimum age 30 years. Successful candidates for (a) and (b) will be required to teach their subjects up to Higher National Certificate and will also be required to supervise certain workshop and Laboratory activities. Successful candidates for (c) will be required to teach their subjects. Accountancy or Economics up to professional standards.

Appointments will be on Short Term Contract (with bonus) for a minimum period of three years. Salary scale ranges from ££1,075 to ££,1675 per annum. Starting pay will be determined according to age, qualifications and experience. A cost of living allowance which is reviewed quarterly is payable. Outfit allowance of ££.50 is also payable on appointment. Free passage on appointment.

Please write, preferably on a postcard, for application form and further information to Sudan Diplomatic Mission, Sudan House, Cleveland Row, St. James's, London, S.W.I, quoting "Senior Assistants 1027" and name and address in block letters.

9441

WELWYN GARDEN CITY AND HATFIELD

Sugan Dipolical States States

Section.

Application, stating age experience, qualifications and appointments, with names and addresses of two referees should reach the Borough Architect (Brian Bunch, A.R.I.B.A., A.M.T.P.I.). Guildhall, Northampton, within fourteen days of this advertisement.

C. E. VIVIAN ROWE.

C. E. VIVIAN ROWE. Town Clerk. 9437

NORTHAMPTON BOROUGH ARCHITECT AND TOWN PLANNING OFFICERS DEPARTMENT Senior Town Planning Assistant. A.P.T.V. (£795-5790), commen-ing salary determined by qualifications and experience. The person apnointed will be required to control the Town Planning Section and candidates sheuld be A.M.T.P.L. or equivalent oualification. Applications, stating age, qualifications and experience with names of two referees should reach the B-grough Architect and Town Planning Officer. Guildball. Northampton, within fourteen days of this advertisement.

C. E. VIVIAN ROWE.

C. E. VIVIAN ROWE. Town Clerk 9436

COUNTY BOROUGH OF OLDHAM
BOROUGH ENGINEER AND SURVEYOR'S
DEPARTMENT
APPOINTMENT OF JUNIOR ARCHITECTRAL ASSISTANT
Applications are invited for the above appointment at a salary within A.P.T. Grades I and II
(ESO-E575), commencing safary according to

National Conditions and Local Government Sunerannuation Acts apply. Housing accommodation will be available if

required.
Abolications endorsed "Junior Architectural
Assistant." together with the names of two
referees, should reach me not later than Tuesday,
24th April, 1956.
Borough Engineer and Surveyor.
75, Union Street, Oldham.

GOVERNMENT OF NORTHERN NIGERIA ARCHITECT—PUBLIC WORKS DEPARTMENT To prepare sketch plans, working drawings and detailed specifications for various types of buildings and carry out the general work of a busy Architectural Office.

ings and carry out the general work of a busy Architectural Office.

Appointment on contract for one tour of 18-24 months; possibility of permanent establishment. Salary scale £1,008-£1,824 p.a.; gratuity £150 p.a. on satisfactory completion of contract.

Free passages for officer and up to maximum of 2 adult passages for wife and children. Allowances of £72 to £120 p.a. payable for maximum of 3 children under 18 years. Government quarters, if available, provided at rental of 8½ of basic salary. 7 days leave for each month of resident service.

Candidates should be A.R.I.B.A. with wide general experience.

Apply in writing to the Director of Recruitment, Colonial Office, London, S.W.I. giving briefly age, qualifications and experience and quoting reference number BCD. 112/408/07.

MATIONAL COAL BOARD—NORTH-EASTERN

NATIONAL COAL BOARD—NORTH-EASTERN
DIVISION
Applications are invited for the following appointments in the Office of the Divisional Chief Architect, situated at Conisborough, near Doncaster, 1978

Architect. situated at Conisborough, near Doncaster:
ARCHITECTS AND QUANTITY SUR-VEYORS, Grade II.
(Salary scale: £700×£30—£1,000 per annum.)
Qualifications: A.R.I.B.A. and A.R.I.C.S.
ARCHITECTURAL AND QUANTITY SUR-VEYING ASSISTANTS, Grade I.
(Salary scale: £625×£25—£750 per annum (and up to £900 per annum in special circumstances.))
Qualifications: Intermediate R.I.B.A. and Intermediate R.I.C.S.
ARCHITECTURAL AND QUANTITY SUR-VEYING ASSISTANTS, Grade II.
(Salary scale: £520×£20—£615 per annum.)
Qualifications: Preferably as above or studying for such examinations.
JUNIOR ARCHITECTURAL ASSISTANTS.
(Salary scale: According to age, £4 5s. per week at 18 to £8 15s. at 25.)
Full details and application forms obtainable from Mr. J. A. Dewnster, F.R.I.B.A. Chief Architect, P.O. Box No. 4, Denaby Main, near Doncaster.

CORBY DEVELOPMENT CORPORATION

Architect, P.O. Box No. 4, Denaby Main, near Doncaster.

Gorby Development Corporation Architectural Draughtsman in the office of the Chief Architect.

Salary will be within the grade £490 to £575. Applications, stating age, qualifications, experience, present appointment and salary, together with the names of two referees, must reach the undersigned by 14th April. 1956.

The appointment is subject to superannuation under the Local Government Scheme, for which medical examination will be required.

R. F. BROOKS GRUNDY.

General Manager.

Spencer House, Corby, Northants.

DEVON COUNTY COUNCIL require THREE

DEVON COUNTY COUNCIL require THREE SENIOR ARCHITECTS (£795 × £35 - £970). Application forms returnable by 16th April. 1956, from County Architect, 97, Heavitree Road, Exeter. 9461

CAMBRIDGESHIRE COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
Applications are invited for the following appointments:—
(a) TWO OUANTITY SURVEYORS, Grade V
(£795 × £35—£970).
(b) ONE ASSISTANT OUANTITY SURVEYOR, Grade II (£595 × £20—£675).
(c) ONE ENGINEER, Grade IV/V (£710 × £35—£970).

(b) ONE ASSISTANT OUANTITY SURVEYOR. Grade II (£595×£20-£675).
(c) ONE ENGINEER, Grade IV/V (£710×£35£970).
(d) TWO ARCHITECTURAL ASSISTANTS,
Grade III (£5640×£25-£755).
For abusinthment (a) applicants should be
thoroughly experienced in the preparation of
Estimates. Bills of Quantities, Specification and
settlement of final accounts and should be
Associate Members of the R.L.C.S., and for(b) Abublicants should have had experience in
Abstracting, Billing and Site Measurement.
Preference will be given to applicants who have
passed the Intermediate stage of the R.L.C.S.
(c) Abublicants should be Associate Members of
the Institute of Heating and Ventilating Engineers or hold conviael to undifications, and should
have had experience in the design, specification
and supervision of contracts for heating, ventilating and lighting services in large public
buildings.
(d) Applicants should be Registered Architects,
and preference will be given to Members of the
R.I.B.A. They should have experience in the
design and construction of public buildings,
housing and modern schools, the preparation of
specifications and of site supervision.
The appointments are subject to the Local
Government Superannuation Acts, 1937 to 1953,
the National Scheme of Conditions of Service, a
satisfactory medical examination, and termination by one month's notice on either side.
Application, stating age, present salary, present
and previous appointments, details of training
and experience, together with one recent testimonial and the names and addresses of two
referees, should be submitted to the undersigned
not later than 18th April, 1956.
CHARLES PHYTHIAN,
Clerk of the County Council.
Shire Hall, Cambridge.

ARCHITECTS' JOURNAL for April 5, 1956

GOVERNMENT OF KENYA
ARCHITECTS. PUBLIC WORKS
DEPARTMENT.
To prepare sketch designs and working drawings for Government buildings, including Schools, Police Stations. Government Offices, Housing, Hospitals, Prisons, Agricultural Buildings, etc. To be in charge of a section dealing with one or more of such groups of buildings.
Appointment on contract for 24 to 45 months. Salary £1,032 to £1,520 p.a., plus 10 per cent. cost-of-living allowance. Gratuity of 13½ per cent. of salary payable on satisfactory completion of contract.

Free passages for officer, wife and children up to maximum cost of three adult passages. 4-6 days' leave for each month of resident service. Quarters provided, if available, at low rental. Candidates, not over 45 years, must be A.R.I.B.A., with 4 years' post qualification experience in an Architect's office. Administrative and practical supervisory experience will be an advantage.

Apply in writing to the Director of Recruitment. Colonial Office. London, S.W.1, giving briefly age, qualifications and experience Mention the reference No. RCD 1127/011.

3465

THE UNIVERSITY OF LIVERPOOL Applications are invited for a Leverhulme Postgraduate Fellowship in the School of Architecture or the Department of Civic Design. The Fellowship will be tenable for one year at a value of £500, but may be renewed for a second year at a value of £500.

Applications, in envelope marked "Leverhulme Fellowship in Architecture or Civic Design." The Fellowship in Architecture or Civic Design. Stating age, qualifications and experience and proposed field of research, together with the names of two refe

Registrar.

9452

DERBYSHIRE COUNTY COUNCIL.
COUNTY ARCHITECT'S DEPARTMENT
ASSISTANT COUNTY ARCHITECT (NEW SCHOOLS)

Applications are invited for this appointment from Architects with considerable experience in the design and construction of new schools.

The successful applicant will take charge of the new schools section of the department, and must have recent extensive experience in this class of work and in attending Committees. He must also be completely familiar with current ministerial procedure.

The salary will be on Joint Negotiating Committee, Grade "C" (£1,202 10s. × £52 10s.—£1,412 10s. per annum).

National Joint Council's Condition of Service. Superannuable post. Canvassing disqualifies. Application forms may be obtained from the Clerk of the County Council, County Offices, St. Mary's Gate, Derby, to whom they should be returned by 30th April, 1950.

D. G. GILMAN.

Clerk of the County Council.

Clerk of the County Council.

BUCKS COUNTY COUNCIL

Applications are invited for the appointment of two PLANNING ASSISTANTS (DRAUGHTS-MEN). Grade A.P.T. I (£530×£20—£610 per adnum), one to work in the Slough Area Planning Office, and one to work in the Bletchley Area Planning Office. The commencing salary in each case will be fixed within the grade according to the experience of the successful applicant. The appointments are sunerannuable, and subject to medical examinations.

A weekly allowance of 25s. and return fare home once every two months may be paid for six months to married officers of the Council unable to find housing accommodation.

Applications, stating age, experience, and the names of two referees, should be addressed to the Area Planning Officer at either the South-East Bucks Area Planning Officer at either the South-East Windsor Road, Slough, or the North Bucks Area Office, 24, Aylesbury Street, Bletchley, as the case may be, by 23rd April, 1956.

Clerk of the Bucks County Council.

March, 1956.

CORBY DEVELOPMENT CORPORATION
ASSISTANT ARCHITECTS.

County Hall. Aylesbury.

March, 1956.

CORBY DEVELOPMENT CORPORATION
ASSISTANT ARCHITECTS
Applications are invited for two appointments as Assistant Architects in the office of the Chief Architect. Salaries will be within the scale £720×£40 to £840 per annum.

The work of building the New Town of Corby from 23,000 to 40,000 population is mow reaching its most intensive phase, and during the next seven to ten years will offer exceptional variety of experience in the design and construction of houses, flats, shows and factories. Appointments are subject to superannuation under the Local Government Scheme, for which medical examination will be required.
Housing is available.
Applications, stating age, education, training, qualifications, experience, past and present appointments and salaries, together with the names of two referees, must reach the undersigned by Monday, 14th April, 1956.

R. F. BROOKS GRUNDY.

General Manager.

Spencer House, Corby, Northants.

Spencer House, Corby, Northants.

COUNTY BOROUGH OF NORTHAMPTON SENIOR TOWN PLANNING ASSISTANT Applications are invited for the above appointment in the Department of the Borough Architect and Town Planning Officer, in Grade A.P.T. V (£795-±970), the commencing salary being determined by qualifications and experience. The person appointed will be required to control the Town Planning Section, and candidates should be A.M.T.P.I. or hold an equivalent qualification.

Applications, giving details of configurations.

qualification.

Applications, giving details of qualifications, experience, and the names of two referees, should reach the Borough Architect and Town Planning Officer, Guildhall, Northampton, within 14 days of the publication of this advertisement.

C. E. VIVIAN ROWE.

Town Clerk

ARGYLL COUNTY COUNCIL
Applications are invited for the appointment of a Quantity Surveying Assistant for the County Architect's Department, salary scale A.P.T. I—III (4515-4630) with placing according to experience and qualifications. The post is superannuable, Applicants must have completed a five years' apprenticeship and be capable of taking off, preparing bills of quantities and re-measuring all trades.

trades.

Apply giving details of qualifications and experience along with copies of two recent testimonials to County Architect, County Offices,
Dunoon, within seven days of publication.

D. JACKSON,
County Cerk.

NORTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD

The Board are engaged on a number of new building projects, including a new hospital at Welwyn, and the following staff are required to fill new posts on the establishment created to deal with the increased work.

(a) ASSISTANT ARCHITECTS. Good experience of design and construction necessary, preferably in hospital work. Salary scale £640×£25 (4) × £30 (4) × £35 (2)—£950, plus £20—£40 London weighting.

225 (4) × £35 (2) − £950, plus £20−£40 London weighting.

(b) ARCHITECTURAL ASSISTANTS. To give technical assistance to professional officers. Salary scale £480 (age 21 and over) × £20 (7) × £25 (2)−£670, plus £20−£30 London weighting.

Applicants for (a) above must be Associate Members of the R.I.B.A. and for (b) must have Inter. R.I.B.A. Commencing salary above minimum may be paid to successful candidates, according to appropriate experience since qualification. Posts are subject to Whittey Council conditions and are superannuable. Apply, stating which post and giving age, qualifications (with dates) and experience, with names of two referees, to Secretary. North-West Metropolitan Regional Hospital Board, II.a, Portland Place, W.I, within 14 days.

NATIONAL COAL ROADD X W. 120-244

Hospital Board, tla, Portland Place, W.1, within 14 days.

NATIONAL COAL BOARD—N.W. DIVISION
BUILDING SURVEYOR required for No. 3 (St. Helens) Area. Commencing salary will be not less than £700 per annum. Candidates must be experienced in building construction, draughtsmanship and preparation of plans, maintenance and improvement of housing property. Preference will be given to applicants possessing recognised professional qualifications. Applications, giving details of age, qualifications and experience, to Area Secretary. Haydock Offices, St. Helens, Lancashire, within seven days.

METROPOLITAN BOROUGH OF HOLBORN SENIOR ASSISTANT ARCHITECT required in Borough Architect's Department, R.I.B.A. Final Standard, to assist in preparation of working drawings and details for new public buildings. Salary within A.P.T. V (£795—£970 plus London weighting) according to experience. Applications, with names of two referees, to Town Clerk, Town Hall, High Holborn, W.C.1. 9442

Architectural Appointments Vacant

Architectural Appointments Vacant 4 lines or under. 7s. 6d.: each additional line, 2s.

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

of Vacancies Order, 1982.

A RCHITECTURAL ASSISTANT required, up to Intermediate standard, Westminster Develop and Bonus Schemes. Five-day to Intermediate standard, Westminster
Pension and Bonus Schemes. Five-day
Write, stating experience, age, and salary
red, to Box 9271. Pens. Write, sta

required, to Box 9271.

A RCHITECTURAL ASSISTANT required in charge of small contracts, including supervision on site. Reply, stating salary required, with details of experience, to Box 9255.

COVELL & MATTHEWS urgently require ARCHITECTURAL ASSISTANTS. Salary range 6600—6750. Work is varied and interesting, including Hospitals, Churches, Housing, 5-day week. Apply in writing to 34, Sackville Street. Piccadilly, W.1.

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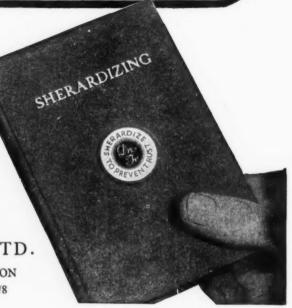
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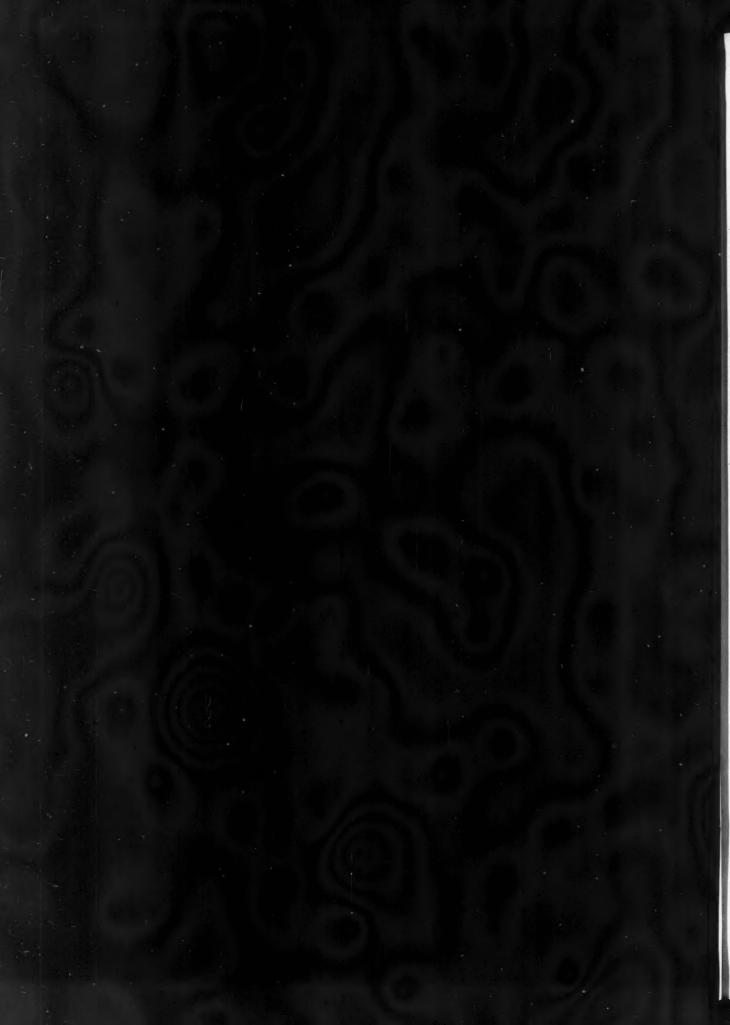
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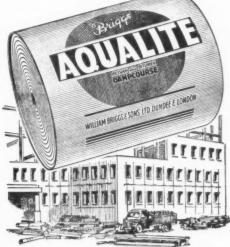
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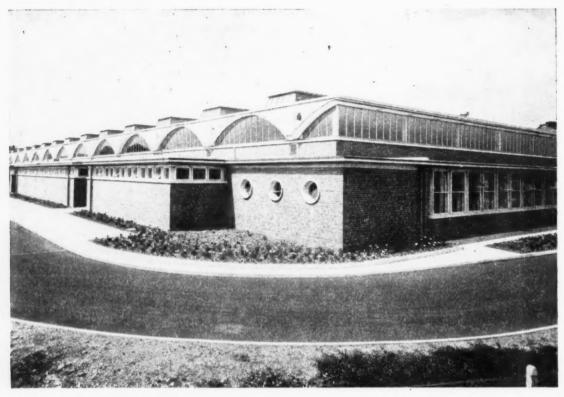
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