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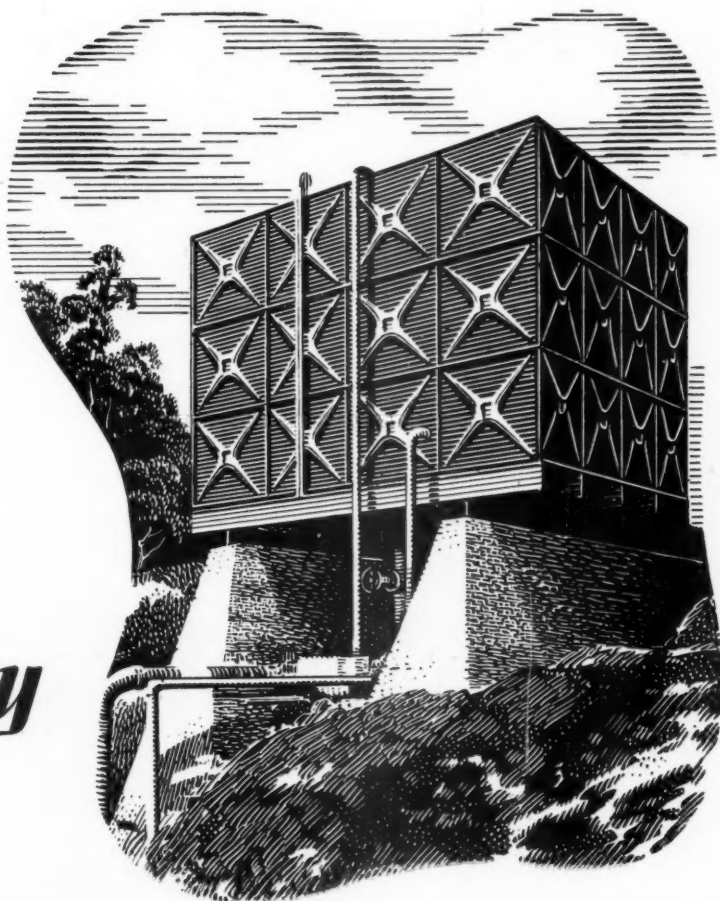
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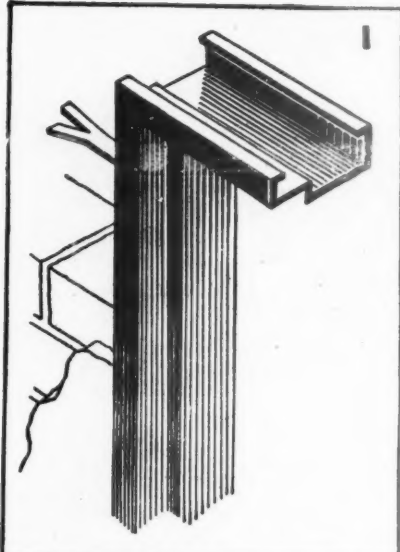


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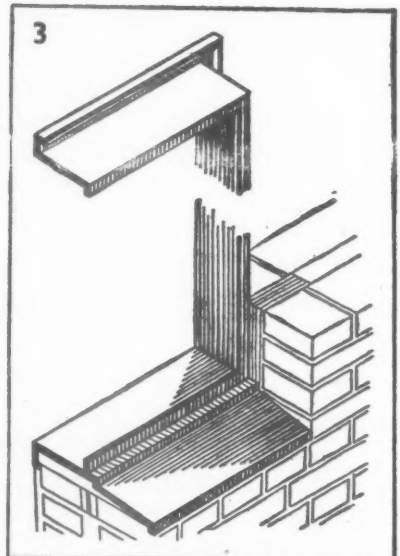


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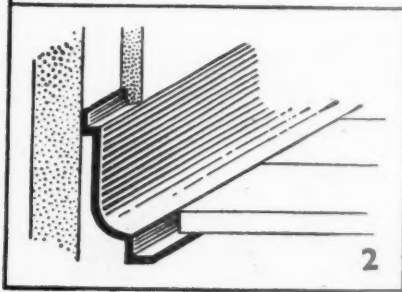
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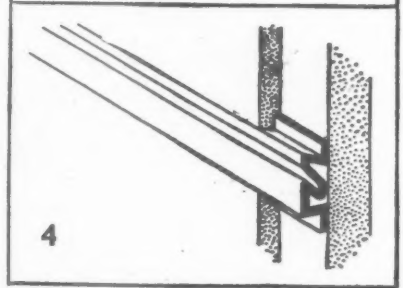
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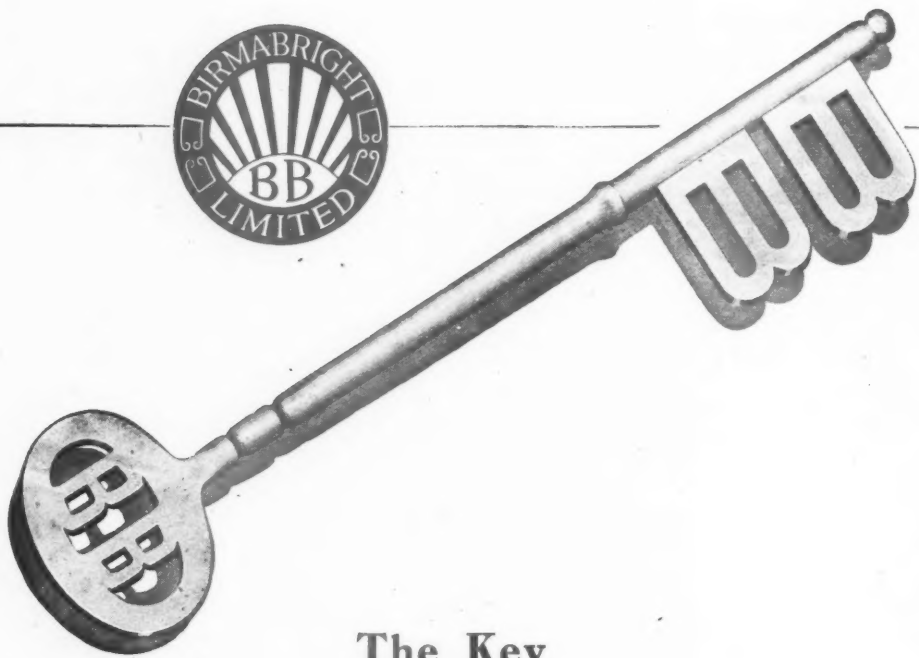
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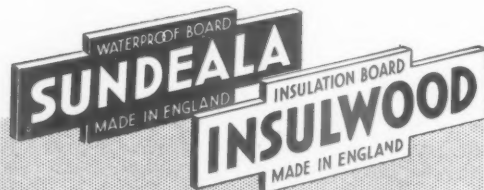


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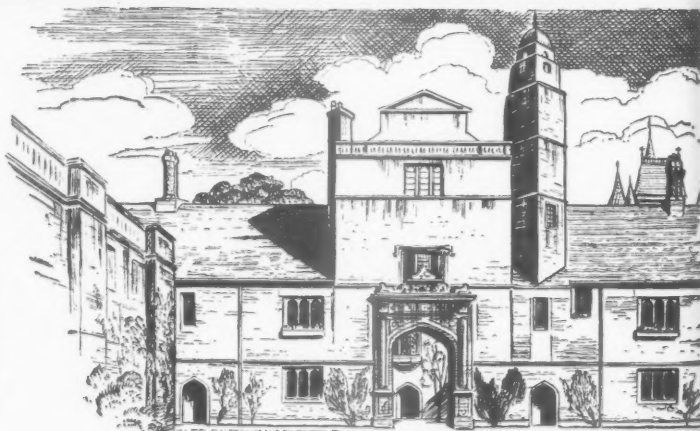
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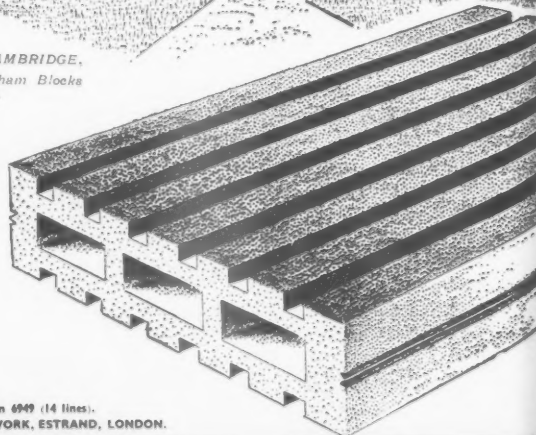
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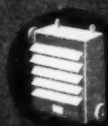
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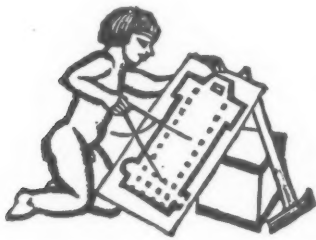
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In common with every other periodical this JOURNAL is rationed to a small part of its peacetime needs of paper. Thus a balance has to be struck between circulation and number of pages. We regret that unless a reader is a subscriber we cannot guarantee that he will get a copy of the JOURNAL. Newsagents now cannot supply the JOURNAL except to a "firm order." Subscription rates: by post in the U.K. or abroad, £1 15s. 0d. per annum. Single copies, 9d.; post free, 11d. Special numbers are included in subscription; single copies, 1s. 6d.; post free, 1s. 9d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 15s. each; carriage 1s. extra. Goods advertised in the JOURNAL, and made of raw materials now in short supply, are not necessarily available for export.



DIARY FOR JANUARY, FEBRUARY AND MARCH

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first. Sponsors are represented by their initials as given in the glossary of abbreviations on the front cover.

CARDIFF. *Rebuilding Britain Exhibition.* (Sponsor, BIAE.) JAN. 6-17

CLYDEBANK. *Housing, Town Planning and Reconstruction Exhibition.* At Janetia Street School, Clydebank. Includes detailed plans of planning reconstruction, scale model of the new town, done by William Crosbie, hall of housing, illustrating housing design of flats, cottages and prefabrication systems, model house, complete with equipment, all-electric kitchen, a prefabricated internal plumbing unit (working model) and a display of new building materials including: foam slag, wood wool, prefabricated brickwork, prefabricated briquettes and foam slag, special show of plastics and glass. Many prominent exhibitors from the building industry both in Scotland and England are showing components and materials to be used in post-war housing (See pages 7-15). JAN. 6-14

DERBY. *Rebuilding Britain Exhibition.* At the Museum and Art Gallery. (Sponsor, BIAE.) JAN. 6-8

LEICESTER. *Town Planning Conference.* Organized by the Leicester and Leicestershire Society of Architects, in association with the Leicester School of Architecture. At the College of Art, The Newarkes, Leicester. 10 a.m., the Lord Mayor of Leicester (Councillor C. E. Gillot) will open the proceedings. 10.15 a.m., *Post-War Housing Problems*, by L. H. Keay, City Architect and Housing Director to the City of Liverpool. 11.30 a.m., *Regional Planning and the Smaller Towns*, by W. Dobson Chapman, President of the Town Planning Institute. 1 p.m., Informal Luncheon in the Refectory. 2.15 p.m., *Town Planning and Problems of Industry*, by P. Sargent Florence, Ph.D., Professor Faculty of Commerce University of Birmingham. 3.30 p.m., *Leicester and Planning Problems*, by J. O. Thompson, President, Leicestershire Society of Architects. JAN. 8

LONDON. *Russian Ancient Buildings Destroyed by the Germans.* Exhibition of photographs. At 66, Portland Place, W.1. 10 a.m. to 6 p.m. (5 p.m. Saturdays). (Sponsors, RIBA and USSR Embassy.) JAN. 6-8

The Architect's Approach Towards National Planning. General Talk arranged by the RIBA Central Advisory Committee and Allied Societies, At 34-36, Bedford Square, W.C. 6 p.m. JAN. 11

Film Evening. Films selected by Paul Rotha, who will give an informal talk. At 34-36, Bedford Square, W.C.1. 6 p.m. (Sponsor AA). Postponed until March 14.

Colour in the Home. Exhibition at the Royal Academy, Piccadilly, W. There will be units representing dining, sitting, nursery and bedrooms, and colour in everyday ware, and some building materials such as paints. There will also be suggestions for the interior decoration of civil aircraft. (Sponsor, British Colour Council.) JAN. 15 to FEB. 26

Science in the Art of Lighting. Discussion at a joint meeting of the RIBA and the IES. The subject will be introduced by R. O. Ackerley, Past-President of the IES, and A. G. Macdonald, F.R.I.B.A., Chairman of the Architectural Science Board of the RIBA. At 66, Portland Place, W.1. 5.30 p.m. (Sponsors, RIBA and IES.) JAN. 18

Henry Berry, chairman, Metropolitan Water Board, on *London's Water Supply.* At Royal Society of Arts, John Adam Street, Adelphi, W.C.2. Chairman, Viscount Falmouth. 1.45 p.m. JAN. 19

Gilbert McAllister. *Wanted—a National Planning Policy.* Lunch-time meeting at 1, Grosvenor Place, Hyde Park Corner, S.W. (Sponsor, TCPA.) JAN. 20

LMBA Annual Meeting. At Connaught Rooms. JAN. 20

NFBTE Annual General Meeting. At Connaught Rooms. JAN. 26

John Glog, *The Selling Power of Good Industrial Design.* At Royal Society, Burlington House, Piccadilly, W. Buffet lunch 2/6 from 12.45 to 1.30 p.m. Talk and discussion, 1.30 to 2.30 p.m. (Sponsor DIA) FEB. 2

E. C. Goldworthy, on *Light Alloys in Post-war Britain.* At Royal Society of Arts, John Adam Street, Adelphi, W.C.2. 1.45 p.m. FEB. 2

John Dower, on *Planning and Landscape.* At Essex Hall, Essex Street, W.C.2. 2.30 p.m. (Sponsor, TPI.) FEB. 3

Nationalization of Land. Debate during an evening arranged by the AA Students' Committee. At 34-36, Bedford Square, W.C. 6 p.m. FEB. 8

WEST HAM. *When We Build Again Exhibition.* (Sponsor, TCPA.) JAN. 8

Conference on Planning for Living. At Town Hall, West Ham. Speakers: F. J. Osborn, Alderman Mrs. Elizabeth Gregory, chairman of the Extra Metropolitan (Essex) Post-War Reconstruction Standing Joint Committee; Councillor E. J. Fox, chairman of the Post-War Reconstruction Committee; H. C. Willig, president of the West Ham Trades Council. (Sponsor, TCPA.) JAN. 15

Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL's starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.

★ means spare a second for this it will probably be worth it.

★★ means important news, for reasons which may or may not be obvious.

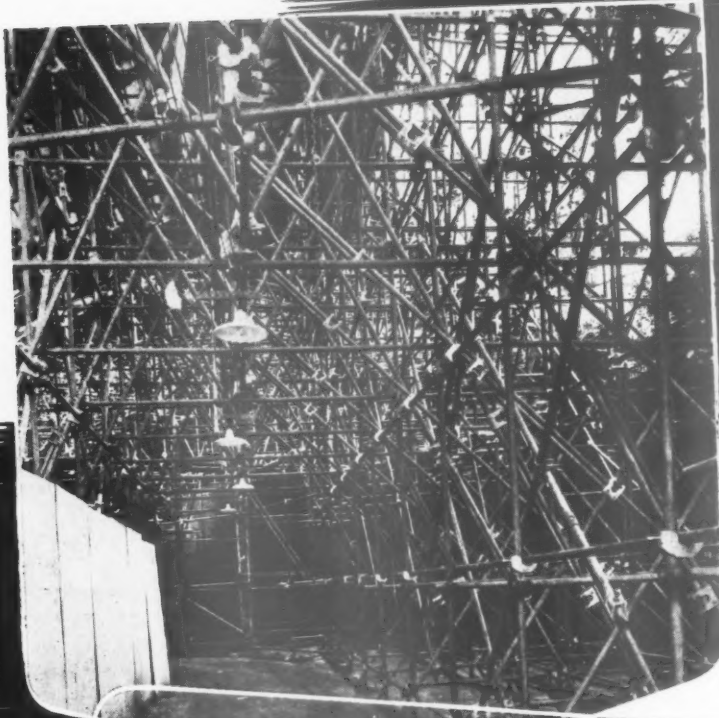
Any feature marked with more than two stars is very big building news indeed.

Plans for a SHORT-TERM TEMPORARY HOUSING policy are now being prepared as well as the long-term housing policy. As soon as conclusions are reached on the issues of policy, said Sir William Jowitt, Minister without Portfolio, in the House of Commons, all the industries concerned will be consulted.

Wing-Commander R. Grant-Ferris, M.P., has been appointed PARLIAMENTARY PRIVATE SECRETARY TO Mr. W. S. MORRISON, Minister of Town and Country Planning.

MOS has appointed Mr. Norman Iles as DIRECTOR OF PLANT PROGRESS in the Iron and Steel Control. He succeeds Mr. Frank Parr, who has been appointed to the post of Steel Commissioner by the Government of India.

INGENIOUS *but extremely* SIMPLE



Ingenious but extremely simple . . . that approximately sums up tubular scaffolding—and, as the inventors and pioneers, we should know. But 100% efficiency is dependent on many factors—a competent designing staff, highly skilled technicians, trained scaffolders, express transport facilities, and 'precision' organisation backed by the closest inter-departmental co-ordination. AND, above all, *experience* and we, as the inventors and pioneers, have the widest possible experience.

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from AN ARCHITECT'S Commonplace Book

A FOREIGNER ON SCOTLAND. [From Letters from England, by Karel Capek. (Geoffrey Bles.)] And now to the north, to the north! . . . An English friend of mine was almost right when he declared Edinburgh to be the finest city in the world. It is a fine place, stonily grey and strange of aspect. Where in other cities a river flows, there a railway runs; on one side is the old town, on the other side the new one, with streets wider than anywhere else; every vista showing a statue or a church; and in the old town the houses are appallingly high, a thing which exists nowhere in England, and the washing is flaunted upon clothes lines above the streets like the flags of all nations—and this also does not exist down in England. . . . Another land and other people. It is a province, but a monumental one; a poorer land, but a sturdy one; a russet and angular type of people, but the girls are prettier than down in England; beautiful and dirty-nosed children, a life ample and jolly in spite of all Calvinism. . . . And this short postscript deals with you, O Glasgow, city without beauty, city of noise and commerce, city of factories and wharves, harbour for wares of all kinds. What am I to say about you? Is there then any beauty in factories, docks and warehouses, cranes in the harbour, towers of steel-works, flocks of gasometers, clattering cartloads of goods, tall chimneys and thunderous steam-hammers, structures of girders and iron, buoys in the water and mountains of coal? I, miserable sinner, think and see that all these things are very beautiful and picturesque and monumental; but the life which is born from this is neither beautiful nor picturesque; but it is deserted by the breath of God, crude and grimy and sticky; noisy, reeking and oppressive, disorderly and burdensome, more burdensome than hunger and more disorderly than squalor; and there sank upon me the weariness of myriads, and I fled, O Glasgow, for I had no courage to behold and compare.

The following names were included in the NEW YEAR HONOURS LIST.

Knights Bachelor: Major A. I. Harris, Timber Controller, Ministry of Supply; *Civil Division, K.C.B.:* F. P. Robinson, Secretary, Ministry of Works; *Civil Division, C.B.E.:* W. A. Akers and W. H. Glanville, Directors of Research Department of Scientific and Industrial Research; *Royal Air Force, O.B.E.:* Acting Wing Commander W. W. Welles-Coates (F.R.I.B.A.)

Mr. K. Headlam-Morley has resigned from the position of Deputy Controller of Chrome Ore, Magnesite and Wolfram Control at the Ministry of Supply, and has accepted an honorary appointment in a consultative capacity with the IRON AND STEEL CONTROL. He will continue to act as Secretary of the Iron and Steel Institute.

The question SHOULD FRINTON HAVE A FRIED FISH SHOP has been debated in secret session by the UDC.

Frinton is the East Coast's most exclusive holiday resort. Deciding that "there appeared to be a definite demand" for a fried fish shop, the Council gave permission "on certain conditions" for one to be opened.

Mr. H. C. Harland, President of LMBA, said that MOH KNOWS ITS JOB, and is efficiently run.

It knows the capacity of the building industry. Together we can do the job of housing the people. He was referring to the statement

of Lord Woolton that the primary responsibility for housing policy will remain with MOH. This statement, said Mr. Harland, will be endorsed by all builders. He welcomed Lord Woolton's statement that there will be no further delays in the announcement of the Government's plans for settling the land problem. We builders, Mr. Harland said, have repeatedly urged the Government to announce its plans, so that we can proceed with ours. Lord Woolton says that post-war building must be based on a system of priorities. I agree. Priorities should be granted for essential schemes equally to local authorities, Government Departments, and private enterprise. If we are all to take our place in the rebuilding of Britain then we must all be given the opportunity of sharing in the effort. But let the other controls by which we are hampered to-day—the Essential Work Order and the payment by results scheme—cease as quickly as possible. In my view all that is necessary, so far as materials are concerned, is to fix maximum prices, and that for short periods at a time, and leave competition to bring prices down.

Mr. Thomas Johnston, Secretary of State for Scotland, estimates that SCOTLAND NEEDS 466,000 HOUSES to meet present requirements.

This figure, Mr. Johnston points out, is only an estimate, accurate figures being difficult to obtain. 121,000 are needed to replace unfit houses, 200,000 to deal with overcrowding, and 130,000 to meet the increased marriage rate since 1938.

From his church of St. Alkelda, the Rector of Middleham, Yorks, the Rev. C. A. Atherley, has dismantled and REMOVED THE GALLERY OF FOUR PRIVATE PEWS INTO THE CHURCHYARD.

He has the approval of the Bishop of Ripon (Dr. Lunt) for the removal. The Rector's opinion is that the days of gentry sitting in

boxes apart from the rest of the congregation is far removed from the principles of the Church, and that in these days of democracy such nonsense as private pews should be non-existent. The pews have not been used for some years.

Mr. Norman Keep has been APPOINTED HEAD OF THE DEPARTMENT OF ARCHITECTURE AND BUILDING in the Municipal College, Southend.

At the moment Mr. Norman Keep, F.R.I.B.A., is head of the Senior Day School and Evening Building Department, LCC School of Building, Brixton.

The Controller of Iron and Steel, MOS, has accepted with regret the RESIGNATION OF MR. ENOS SMITH, the Director for Wire Rods, Wire and Wire Products. Mr. A. Scott and Mr. N. Anderson of the same Department have been appointed Directors.

In the House of Commons Mr. Bossom asked the Prime Minister whether the announcement by the Secretary of State for India of the necessity to import READY-MADE HOUSES with all their fittings by the 100,000 to provide accommodation that may be needed after the war represents the policy of the Government?

Mr. Attlee: It is clear from the full text of my right hon. Friend's speech in which he referred to the possibility of importing ready-made houses that he was in no sense making an announcement of Government policy.



Sir Edwin Lutyens

On Saturday last the death was announced of Sir Edwin Lutyens, President of the Royal Academy. Born in London, seventy-four years ago, the son of the distinguished artist, Charles Lutyens, and educated privately, he designed his first house when he was nineteen, and in after years a house for sale could have no better recommendation than that it was a Lutyens house. Perhaps every man, woman and child knew him best as the architect of the Cenotaph. Designed in three weeks, he originally proposed that on its top there should be a brazier always aflame, but this was immediately rejected by the London Fire Brigade. Architect for the Government House and other buildings at the New Delhi, and the great archway through which they are approached, his works include the New British Embassy at Washington, the School of Art in Rome, the Somme Memorial at Thiepval, the Australian War Memorial in France, the George V Memorial at Windsor, Hampton Court Bridge, and the Queen's Dolls House. His design for a new bridge at Charing Cross some years ago was

severely criticised by fellow members of the RIBA and he resigned. Work upon his Metropolitan Cathedral at Liverpool—to have fifty-three altars and hold a congregation of 12,000—has been suspended owing to the war. The stairway between the upper and lower sacristies he called "my boon for boys," for down its unbroken circular handrail, he once said, the choir-boys could slide with impunity. An inveterate pipe smoker he will be remembered not only for his architecture but for his wit. Although he never exhibited he was a good painter and caricaturist. Out to dinner he would cover the menu and sometimes the tablecloth with caricatures and sketches. Sir Edwin who received the O.M. last January in the New Year's Honours, presided over the Royal Academy committee which drew up plans for rebuilding London after the war. He married Lady Emily Lytton, daughter of the first Earl, and has three daughters and one son—Robert Lutyens, an architect now serving as a Squadron Leader in the RAF. See leading article on facing page and A.J., Feb. 18, 1943.

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★ *The Practice Committee is considering THE REVISION OF THE RIBA SCALE OF CHARGES for local authorities' and public utility societies' housing work to make it applicable for post-war use.*

In the meantime the RIBA Council, on the recommendation of the Committee, has formally withdrawn the scale published in the 1939-1940 Kalendar. The last paragraph of Clause 3 (d) of the Code of Professional Practice at present reads as follows: "Auctioning and House and Estate Agency are inconsistent with and must not form part of the practice of an architect." On the recommendation of the Practice Committee the Council has amended this paragraph to read as follows: "Auctioning and House and Estate Agency are inconsistent with and must not form part of the practice of an architect. An architect must not be a member of or have any interest in a firm of auctioneers and/or house and estate agents or have any permanent working arrangement or partnership with any person who practises as an auctioneer and/or house and estate agent or who is a member of any body of auctioneers and/or house and estate agents. He may, however, be employed as an architectural consultant, adviser or assistant if paid by fee or salary." The amended paragraph will be incorporated in the Code and printed in the next issue of the Kalendar.

Mam Tor and the Winnats between Manchester, Sheffield, Derby and Ashbourne, just bought by NT, is likely to be ONE OF ENGLAND'S FIRST NATIONAL PARKS.

Mam Tor, or the shivering mountain, is crowned by an ancient British camp. It will be held as a permanent memorial to Miss Marples, Sheffield, who left a legacy of £1,000 for the property. Mam Tor and the Winnats are about the two most important holdings of NT. The Trust has also announced the protection of two properties in the Lake District. Hazel Head Farm, 203 acres, in the Duddon Valley, has been protected by restrictive covenants, and Major F. R. G. Chew has given restrictive covenants over an intake at Hunting Sly, Grasmere.

Mr. William Collard, who for thirty years PLANNED A TUNNEL UNDER THE CHANNEL to provide railway services between London and Paris, has died at Storrington.

He was 75. Planning the tunnel was only a hobby; Mr. Collard was head of Collard, Parsons & Co., Ltd., woollen merchants, of London. But he had worked out in detail the costs of his scheme, down to time-tables, fares, and probable passenger and freight receipts. Shortly before the war he estimated that construction would cost £190,000,000. His table of fares between London and Paris included, for third class travel, monthly return tickets for £3 15s.; week-end tickets for £3 10s.; and day return tickets on Saturdays and Sundays for £2. Though a Government Channel Tunnel Committee, before whom he gave evidence in 1918, turned down his scheme, Mr. Collard never wavered in his belief that some day Britain and France would be linked by a tunnel.

EDWIN LANDSEER LUTYENS (1869—1944)

SIR EDWIN LUTYENS died on the morning of January 1, and his buildings became history. Up at Ilkley, down in Sussex and Kent, at Drogo, at Holy Island and on St. Michael's Mount, in the Streets of London and Manchester, in Washington and Delhi, there is architecture which became, at an indefinable instant on Saturday morning, the memorial of a dead genius. Nothing more symbolic of finality has happened in the architectural history of our time. *Plaudite, amici: comædia finita est.* And it is the whole long pageant of an architectural period, not only the career of one great man, which is finished. Almost audible is the stir on Parnassus: Blomfield, Voysey, Newton, George, Prior and Richard Norman Shaw; Stevenson and Somers Clarke; Belcher and Brydon and Mountford; Collcutt and Thomas Jackson Nesfield and Philip Webb—all the names which impale a tradition crowd to the mind as the name of Lutyens is enrolled among them. Did he outshine them all? Perhaps not. Webb's feeling was deeper; Shaw's versatility more extraordinary. But Lutyens, by sheer capacity of mind, towers above the group. None of them had his absolute mastery of the architectural game, his fabulous dexterity in every conceivable situation.

There is, of course, no successor to Lutyens, and his death brings grim clarity to the architectural situation. Others will succeed to his honours but architecture does not now proceed dynastically. The Great Academician no longer represents leadership in the profession. Even Lutyens, great as he was, had long ceased to be in any sense a leader; the younger half of the profession prefers to look in any direction but towards Burlington House for inspiration and encouragement, and now the rift is more distinct than ever.

Yet there is not the slightest doubt that Lutyens' achievement will retain the precedence accorded to it even by the most radical. There are things about it which no designer can ever afford to ignore. There is that sense of *control* in a Lutyens building which is born of the architect's vivid appreciation of the simplest workings of geometry. Lutyens the geometrician is quite as well worth attention as le Corbusier and his *tracées regulateurs*: not because there are recipes to be learnt, but because that intuitive intimacy with geometrical form which both possess, is to some extent communicable.

Then there is Lutyens' passion for completeness and finish and perfect co-ordination of detail. Never in a building of his do we find a gutter or a lead flashing, a string course or a return cornice which has got lost—which was not *felt* in the working drawings. Here is a standard—an exacting standard—which all architecture must strive to reach,

especially if it is the kind of architecture which does not have cornices, string courses and lead flashings.

And there is the quality which is wonderful but quite incommunicable—Lutyens's art. He was as fastidious in the modelling of a façade as Beerbohm in an essay or William Nicholson in a still-life. He knew how one minute touch of strangeness can colour a whole design and make magic out of the trite. A hand-writing expert once wrote of his mind that the "centre of its power lies in its ability to combine ideas and forms of complete neutrality into new shapes of vital and individual interest." That is the ability which made Lutyens an irresistible personality, with his Itma-like humour; but in his architecture, the same ability achieved something for which there is only one word—greatness.



The Architects' Journal

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N O T E S
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A BUILDER ON PREFABRICATION

I have received some interesting observations on the prefabrication of houses from Mr. W. Greville Collins, who is actually associated with a building firm specialising in the making of prefabricated huts. Unlike the JOURNAL's leader writer of last week, he believes that "in the United Kingdom it is expected that for years timber will be scarce, so the prefabricator of buildings will have to use concrete, lightweight concrete, pressed or rolled steel or other metals or perhaps plastics for his framework."

★

"The meaning of the word 'prefabrication,'" says Mr. Collins, "should not be misunderstood. It is a vague definition, the implication of which is the assembly of certain component parts in units of increased

size and the number of components in this case for housing which can be and are factory-produced. In fact, this is no fresh development and is already done in numerous fittings such as windows, door-frames, kitchen equipment. The only new thing to be accepted is the extension of this idea to the outside shell of the house, walls, floors, roof."

★

On the important question of finance, he says: "There is no doubt that a well-produced factory house could represent as solid a security to investors as its comparative brick and tile opponent. In the event of the demountable house being moved a definite value would be assessable to its components, and in this case the land could be mortgaged or rented and could be held as a separate security at a separate value. In the same way the collapsed sections of the house would have a definite exchange or second-hand value. Communities buy neighbourhoods as much as they buy houses, and the creation of a desirable neighbourhood must be an accepted responsibility of the early prefabricators. Control of districts where houses of this nature will be developed must be a foremost thought in all minds occupied with the new industry as a whole."

★

"Before prefabrication can be put into effect in the United Kingdom," he goes on, "the existing bye-laws must be overhauled and enlarged. Political factors encourage the view that this could be undertaken, but

to meet the major problem and to encourage large industrialists to entertain and prepare ideas, the changes should be immediately commenced and the necessary facts and advice passed to local authorities. A sample standard specification must be drawn up of the requirements. Domestic accommodation should conform to a national scale and any building which meets such requirements should be automatically acceptable. It would appear that the Burt Committee is at the present time employed on such work, and it is to be hoped that their findings will be made compulsory upon local authorities and not purely optional. Post-war planning cannot exclude the multitudinous use of new materials, and a new code to control domestic structure should not take long to draw up and should not tax the ability or brains of those responsible."

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"The production of ready-assembled large units is bound to affect the builder, as he will have to carry out less work in the construction of properties, and no doubt some opposition will be made by him, but when it is considered that the total development and financial turnover will be far greater due to the increased speed, in a given period of time, and the provision of roads, sewers and site works correspondingly increased, he will easily be able to make good any loss in profit which the manufacturer acquires."

★

"The industrialization of building would mean the setting up of three separate enterprises, the manufacturer, the distributor and the erector. The manufacturer would be the present prefabricator of aeroplanes, ships and cars. The distributor would be one of the three groups or all. Sales could be promoted through departmental stores, through a sales distribution agency direct to the consumer or erector—by Government or local authorities through large-scale development, who would distribute as part of their own housing scheme or policy on a rental or purchase basis."

A.A. PANTO

The A.A. Panto of the last two or three years has appealed chiefly to one's sense of the ridiculous; the 1943 brand, *Bang! Or What Goes Up Must Come Down*, was a mixture of the topical and the absurd. As the latter is easier to put over with a shortage of time and materials, it was perhaps more successful. The first scene, *Exhibitionism*, interesting as an idea, done entirely in silhouette, was rather too long, and too quick, and the audience was generally a crack or two behind. *Lord Ullin's Daughter* was good foolery with the narration well spoken by George Messervy. Allure was provided by Sheila Phillips, by Lilian Sims as an angel, and by the Can-Can girls. The lighting and the stage-managing went remarkably smoothly.

HOUSES AT CLYDEBANK

A problem which has bothered me since student days is why so many fine plans and buildings are executed on paper and so very few are ever carried out. You can, for instance, see far more good contemporary architecture in one year's work at almost any architectural school than is carried out by the whole architectural profession during the same year. Why is it?

Take the case of Sam Bunton's houses at Clydebank, a few of which are now actually being erected. He and his staff have

produced some charming schemes on paper both for terrace houses and flats. These are simple, human and alive both on plan and elevation. (A flat design is illustrated below and a terrace house type on page 12.) And yet the actual flats and houses now being built (these flats are also shown below), are, to say the least, uninspired.

One wonders with a sinking feeling if this is the sort of thing we are going to get all over the country after the war. Why is it that the worst design is always the one that is finally decided upon? One cannot entirely blame individuals as such, for this kind of thing is too universal.

What is the real trouble? One can only conclude that—apart from the obvious fundamental trouble lying in the present diseased state of Western culture, which is so clearly reflected in the ubiquitous architectural chaos—the teaching of the appreciation of architecture and design is badly needed in general school education. It is encouraging to see that steps are now being taken in this direction, notably by the Council for Education in Appreciation of Physical Environment. Architects, too, are beginning to take a hand, as witness the RIBA conference being held to-day on the Teaching of Architectural Appreciation in Schools.

ASTRAGAL



LETTERS

- (A. G. Chant, F.R.I.B.A.
(Secretary, County Architects' Society))
- Dr. Hajnal-Konyi
- Bernard Lowe

Sir Ian MacAlister:
Changing the Pilot

SIR,—In paying tribute to Sir Ian MacAlister, who now, under the penalty of *anno domini*, is retiring from his position as Secretary to the Royal Institute of British Architects, it is perhaps fitting that what is probably the youngest of the Societies should record its own appreciation of his work.

The County Architects and County Education Architects have only recently formed the County Architects Society, which has been recognised by the County Councils Association, and during the formative months of its creation it greatly benefited by Sir Ian's sympathetic interest. For whilst its members are free to own allegiance to any professional body, they are predominantly members of the RIBA, and the Institute, whilst seeking to impose no conditions nor restriction on its functions, has offered it a hospitality and an honoured position as representing one of many interests within a uniting profession.

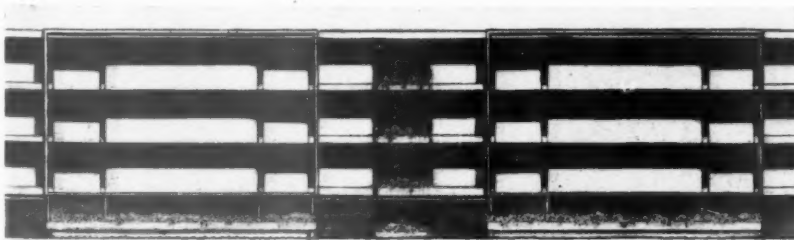
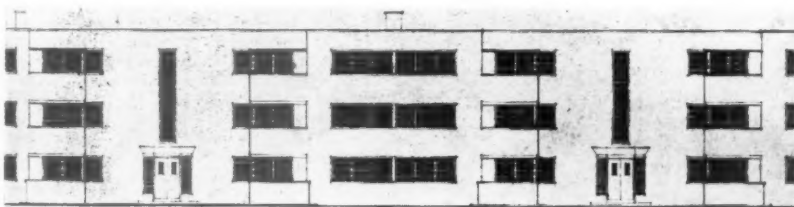
Sir Ian's own attitude has been a contributing factor to mutual help and regard between the venerable Institute and a young Society, and that unity within the profession which is the hope of every architect of goodwill has found both inspiration and expression under his guidance. The founder members of the Society, which has a large body of opinion behind it, will not forget the courteous reception they received from Sir Ian nor his wide outlook and kindly understanding in its early days.

Now the Society, preparing for its post-war problems, would pay its own tribute to Sir Ian and express the wish that he may be spared for many years of activity and further service in his retirement.

Shrewsbury. A. G. CHANT

Advertising versus Research

SIR.—Mr. Percival's remark on p. 392 (ARCHITECTS' JOURNAL of November 25, 1943): "It has been said hundreds of times before, but it must here be repeated, that the industry would benefit infinitely more if it cut out competitive advertising, and spent its money



Top, elevational drawing of flats now actually being erected in Clydebank, designed by Sam Bunton (see pages 8-15). Below alternative elevations by Mr. Bunton not carried out. See Astragal's note above.

on research," deserves the greatest attention and publicity.

As far as the building industry is concerned, very few firms are research minded, and most of them are more willing to spend £1,000 on advertising than, say, £10 on research. It will require much scientific training to make the great majority of firms realize that expenditure on research may well be justified by the improvement of the quality of their production and the resulting expansion of their sales, and that sound factual information thus gathered about the advantages of their products should be the basis of good advertising.

However, I do not wish to deal here with this psychological problem, but only with the financial aspect of the question raised by Mr. Percival. His suggestion is based on the assumption that a firm is at liberty to spend a certain amount either on advertising or on research. This is not so.

Owing to the present method of taxation, the expenses on press advertisement are partly or wholly covered by the Exchequer, whereas the cost of research has to be spent entirely out of the profit which remains after income tax has been paid.

The cost of advertisement is looked upon by the Inland Revenue as current expenditure and is, therefore, deducted from the gross income before the profit is assessed. On the other hand, money spent on research is considered as "capital investment" (apart from exceptional cases which need not be discussed here) and must be covered entirely from profits. Research, by its very nature, sometimes gives negative results and becomes a dead loss, but this is not recoverable from the tax.

Let us consider the position of a firm (a) not liable to E.P.T.; (b) liable to E.P.T.

(a) If a firm not liable to E.P.T. wishes to spend £100 on research, it must make a profit of £200 out of which £100 are paid in income tax. On the other hand, if £100 are to be spent on advertisement, the taxable profit is reduced by this amount, i.e. the tax is reduced by £50 and the actual cost of the advertisement is only £50 for the firm, while £50 are paid for by the Exchequer.

(b) If a firm is liable to E.P.T., the position is even worse for research and more favourable for advertisement. Research is to be paid as under (a) but the eventual financial result of the research is entirely paid over to the Exchequer as E.P.T. The cost of advertisement, however, is entirely covered by the Exchequer, since it is deducted from the excess profit, i.e. from the E.P.T. Even if a director of such a firm were very keen on research, he could hardly face his shareholders in justifying expenditure under this heading.

Mr. Percival's suggestion is not applicable in this case, because the money spent on advertisement is not the firm's money, but entirely that of the Exchequer's and the cost of advertising is nil.

I think it is very important that both the public and the authorities should realize this paradox because it has a detrimental effect on technical development especially in the building industry. In other industries, where production is intimately connected with work in a laboratory (e.g. chemical, electrical industry) the taxation is not such a rigid obstacle, but in the building industry it kills any initiative for research.

In the ARCHITECTS' JOURNAL of December 2, p. 410, the amount spent on commercial

advertisement in 1938 is given as £28,500,000, in addition to expenditure on other media. The amount spent on research is only a negligible fraction of this sum. Even if it were multiplied by two or three and made free of income tax, the direct "loss" to the Exchequer would be insignificant, and the tax obtained from the financial results of research would exceed the "loss" many times.

I would therefore rewrite Mr. Percival's sentence to read:

"The Inland Revenue would benefit more if it did not consider money spent on research as capital investment, but allowed its deduction from profit."

As long as expenditure on research is taxed in the present unreasonable fashion, it is unlikely that an expansion of research will take place and prevent the British building industry from falling behind its American and continental counterparts in providing housing of the best quality and quantity at the least cost in materials and labour. The lesson for post-war planners need not be stressed.

London

K. HAJNAL-KONYI

Rural Houses

SIR,—Whilst living in the country during the past two years, I have made it my special job to investigate the housing requirements of the average land worker and in particular to understand the different planning required for country council cottages as opposed to those in urban areas. Having talked to shepherds and cowmen, foresters and farm labourers, certain salient features seem worth passing on to fellow architects.

Dirt is one of the greatest problems of the country housewife; not airborne soot, but dirt carried in on boots and clothes. In haymaking time her husband brings in millions of bits of hay and straw, and after threshing he is smothered with dust and cavings. He wants a bath, but if he must go upstairs, he deposits some of this in the living-room and on the stairs. The place for the bathroom is downstairs near the back door.

An agricultural labourer often returns from work with wet clothes and it should be possible for him to change without entering the living-room. A small "utility room" as suggested by the RIBA to the MOH would be a great boon. This would contain a drying cupboard on the hot water circulation. Here working boots, gumboots and working clothes could be removed.

The kitchen should be large enough to allow breakfast and midday dinner to be eaten there in working clothes. This economises in fuel and keeps the other room clean. Anyone who has lived in the country knows that a "parlour," i.e. a second reception room is seldom used and except where there are large families, a non-parlour house with a large kitchen is more acceptable to rural folk.

People who argue that all meals should be eaten in the living-room and that a larger kitchen tends to create slum conditions should see the country-woman's despair when the inevitable dirt is carried on to carpeted floors.

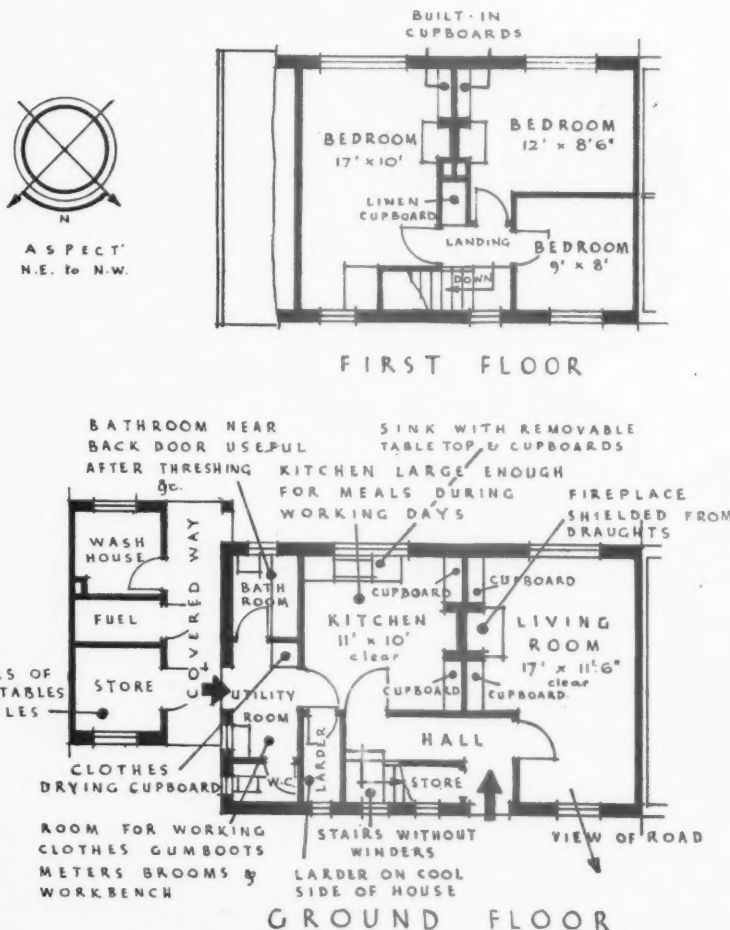
The larders in the MOH houses are ridiculously small. Country-women usually go to the nearest market town once a week or the tradesmen's vans deliver fortnightly, so supplies are bought in larger quantities than in towns where the housewife can go round a corner to shop. In this respect the MOW plan is better.

Outside, a store should be provided for cycles, sacks of vegetables and garden tools but a good-sized fuel store is necessary in addition (a point which the MOH architects seem to have disregarded).

The accompanying plan is the result of these observations. It must be emphasized that an urban authority's standard house sited in a country village is far from satisfactory and that what farm workers want is a plan for country living.

Birmingham

BERNARD LOWE



Plans of houses for rural workers by Bernard Lowe. See letter on this page. 3]

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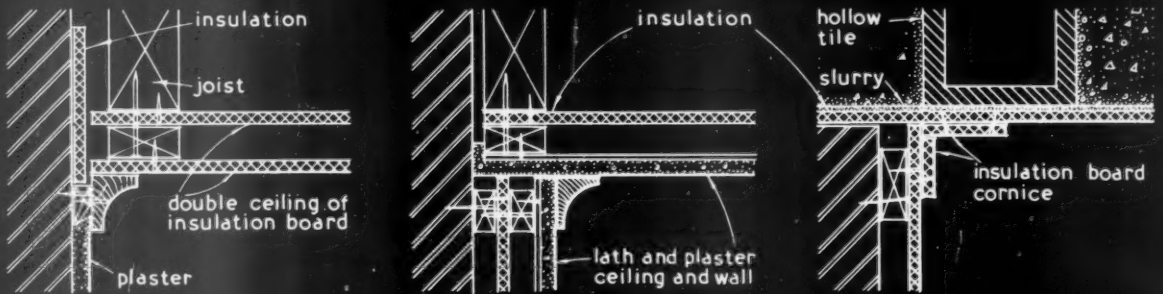
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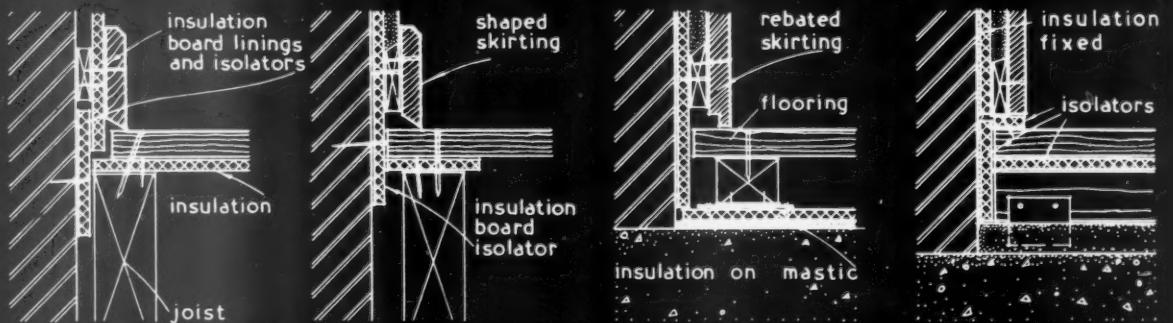
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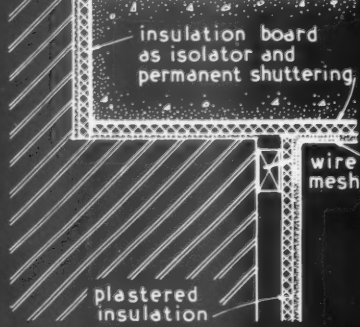
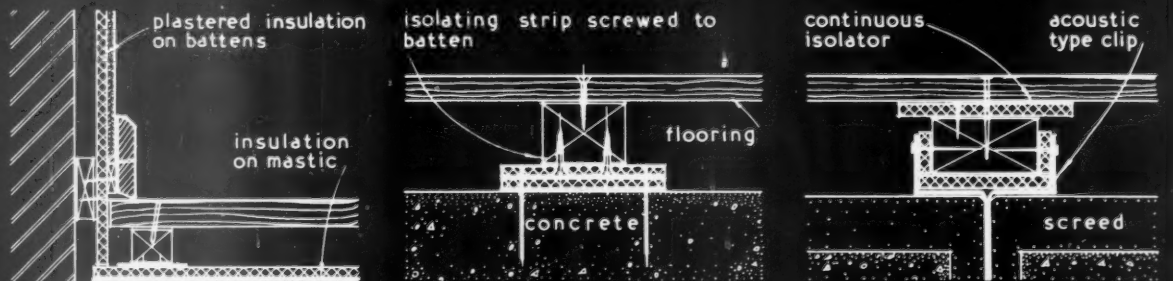
SOUND TRANSMISSION REDUCTION BY STRUCTURAL ISOLATION: PRACTICAL DETAILING I.



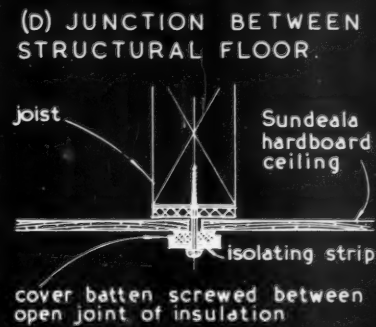
(A) JUNCTION BETWEEN CEILING AND WALL.



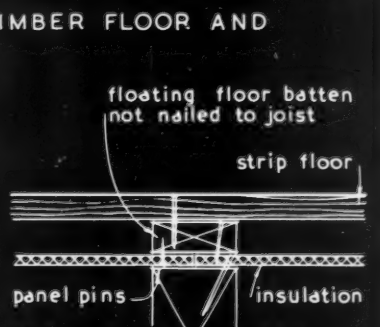
(B) JUNCTION BETWEEN TIMBER FLOORING AND WALL.



(C) JUNCTION BETWEEN SOLID FLOOR AND WALL.



(E) CEILING FIXING BY ISOLATED COVER STRIPS.



(F) FLOATING FLOOR ON TIMBER JOISTS.

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INFORMATION SHEET: FIBRE BUILDING BOARDS 14: SOUND ISOLATION. Sir John Burnet Tait and Lorne Architects One Montague Place Bedford Square London WC

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INFORMATION SHEET

• 923 •

BUILDING BOARDS

No. 14

Subject : Sound Transmission Reduction by Structural Isolation. Practical Detailing I.

General :

This Sheet is the third of the group dealing with sound insulation, and illustrates practical applications of the principles of sound insulation by structural isolation outlined in Sheet 12 and 13. The structural details shown indicate solutions to the more common problems which arise in connection with floor construction, e.g., junction between ceilings and walls, junction between skirtings and flooring, and the detailing of floors generally.

The principles of structural discontinuity are carried out by interposing resilient pads or a complete resilient layers between adjacent structural members, to reduce the efficiency of the mechanical transmission of vibrations.

As far as practicable all fixings between one

structural element and another should be continuous only via the isolating medium, and where direct fixing between two elements is unavoidable, this should be as light as possible.

The efficiency of the detailing employed will depend largely upon the resilience of the isolating medium, but however satisfactory the isolator may be the insulation as a whole will not be satisfactory if considerable structural continuity is present due to bolts, screws or nails.

Insulwood :

This grade of board belongs to the low-density range, and is suitable for use as an isolator to reduce structural continuity ; it has a sound reduction figure of 20 decibels at a frequency of 500 cycles per second.

It is available in various thicknesses and in sizes up to a maximum of 12 ft. by 6 ft. Further technical data, methods of working, fixing, etc., are given in other Sheets of this series.

Previous Sheets :

Previous Sheets of this series on wallboards are Nos. 893, 895, 896, 898, 900, 902, 904, 909, 911, 912, 913, 916, and 920.

For Pimco systems of metal ceiling and partition fixing see Sheets Nos. 854, 858, 861, 864, 868, 872, 879 and 884.

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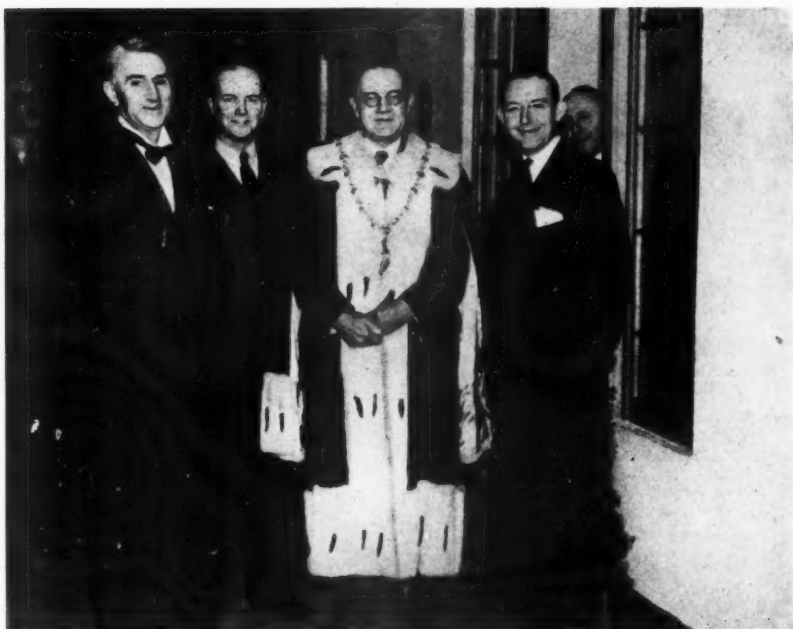
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The Clydebank Housing and Town Planning Exhibition, the first of its kind to be held in Scotland, was opened by Mr. Tom Johnston, on December 23rd. The photograph on the right was taken at the opening outside the small home for ageing or single persons which is illustrated on page 15, and shows from left to right in the foreground: The Rt. Hon. Thomas Johnston, M.P., Secretary of State for Scotland, Provost David Low, J.P., and Mr. Sam Bunton, L.R.I.B.A., A.R.I.A.S., Town Planning and Consultant Adviser to the Burgh of Clydebank.



SCOTLAND PLANS

A Foreword to the Architects' Journal's article on the Clydebank Exhibition from the Secretary of State for Scotland

As the Minister responsible to Parliament for housing and planning in Scotland, no problem in the whole field of reconstruction gives me more concern than the provision of new homes for our people and that with all possible speed.

Scotland's special difficulties are well known. Overcrowding is rife, and thousands of our houses are unfit for human habitation. Many more thousands are cramped, congested and devoid of essential conveniences and amenities, and both in town and country there are blighted areas which clamour for rehabilitation and replanning.

The destruction of war has been less in Scotland than in England and Wales, but Clydeside, and Clydebank especially, has endured the full fury of the enemy's onslaught. In Clydebank, as in so many other towns in Britain, the ravages of war

are the opportunities of peace. It is therefore specially appropriate and symbolic of the Scottish purpose to rebuild and reconstruct that the Town Council of Clydebank should be the first local authority in Scotland to present to the public their provisional proposals for the replanning of their area and for the rehousing of their people.

In the immediate transition period from war to peace many difficulties will have to be surmounted, and the co-operation of all interests will be required in the essential task of housing the people and of shaping plans for the rehabilitation of our blitzed areas.

By this Exhibition the Town Council of Clydebank have put before us a great and worthy purpose.

Thomas Johnston



On December 23, Mr. Tom Johnston, Secretary of State for Scotland, opened a Housing and Town Planning Exhibition, the first of its kind to be held in Scotland, which has been sponsored by the Town Council of Clydebank, and designed by Mr. Sam Bunton, L.R.I.B.A., A.R.I.A.S., Town Planning and Consultant Adviser to the Burgh of Clydebank. The Burgh is in the County of Dunbarton and on the outskirts of Glasgow. It suffered a severe blitzing in 1941 when practically every house was damaged and 40 per cent., about 4,500 houses, were totally destroyed. Since then 7,500 houses have been made habitable; a draft plan and housing proposals have been drawn up, and construction has started on a preliminary scheme for 200 houses. The speed with which the work has got under way and the fact that this is the first post-blitz reconstruction scheme in Britain to be started during the war, with planned objectives in view, makes it a subject of extreme interest to all planners and architects. The model above, which was made by Mr. William Crosbie, shows Mr. Sam Bunton's proposals for the replanning of the Burgh.

DRAFT PLAN FOR CLYDEBANK

DESIGNED BY SAM BUNTON

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The draft reconstruction plan drawn up by Mr. Sam Bunton for the Town Council of Clydebank has already received official preliminary approval, and has now to be submitted for approval to all those who are in one way or another affected by it; the people themselves are having their opportunity during the exhibition of the proposals at the local Janetta Street High School. The plan suggests a new town centre at the highest point of the burgh, where there will be the municipal buildings, concert hall, library, technical school, religious centre, and the main central shopping area. These buildings will be within what is called a parkway, separated from through traffic, and connected to the houses by service roads. The new neighbourhood units will themselves be provided with central shopping areas, new community centres, recreational spaces for adults and children, and nursery schools. The elementary and secondary schools are sited so as to be easily and safely accessible from the areas they serve. The overflow satellite garden city, about a mile from Clydebank, is felt to be necessary partly as a result of replanning the burgh at a density of 12 houses to the acre, and partly in order to provide for future expansion without disorderly spread.

The photograph above shows the Burgh of Clydebank in 1935, and makes an interesting comparison with the model on the opposite page. It is an area primarily dependent on heavy industry and has thus suffered the full measure of trade slumps. The new plan proposes the introduction of light industry, which it is suggested might be the mass production of house-parts, to counteract this tendency. The photograph below expresses the degree of force with which the blitz hit Clydebank in 1941, when 40 per cent. of its houses were destroyed. The new plan provides for the rehousing of the population in eight neighbourhood units of four to five thousand people each, with an overflow satellite town for 15,000 people.

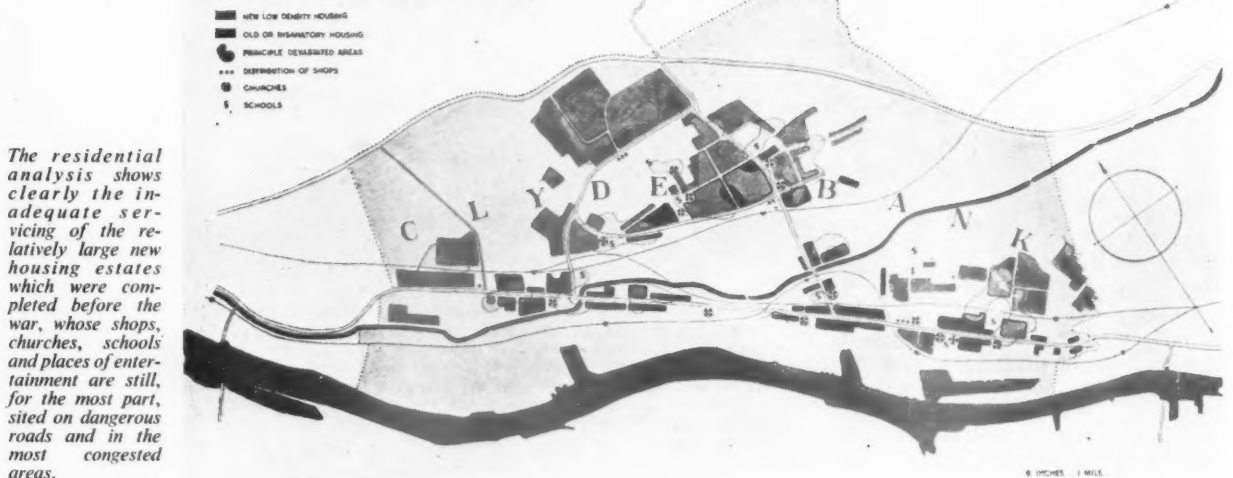


analysis of undeveloped land



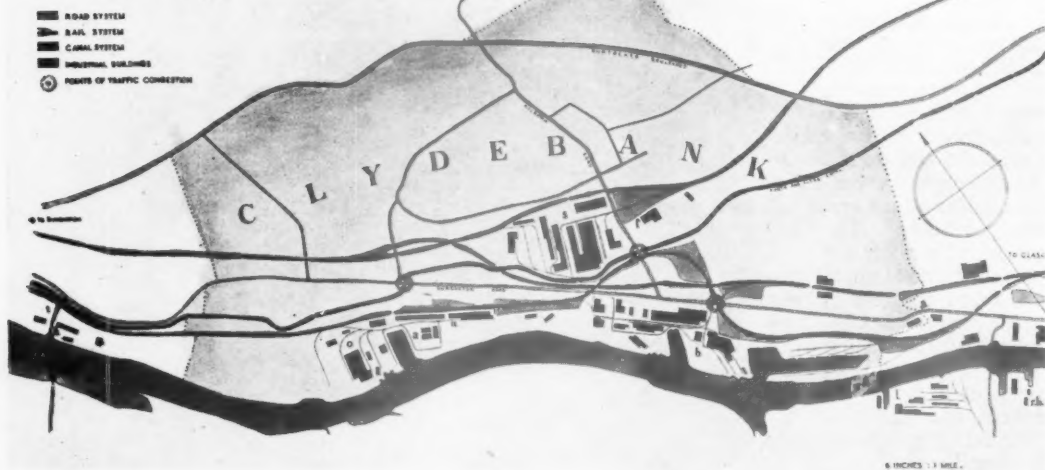
The analysis of undeveloped land indicates the large proportion of open space of different kinds in the burgh. This factor has made the task of replanning very much simpler than it would be in a district nearer the centre of a large town.

residential analysis

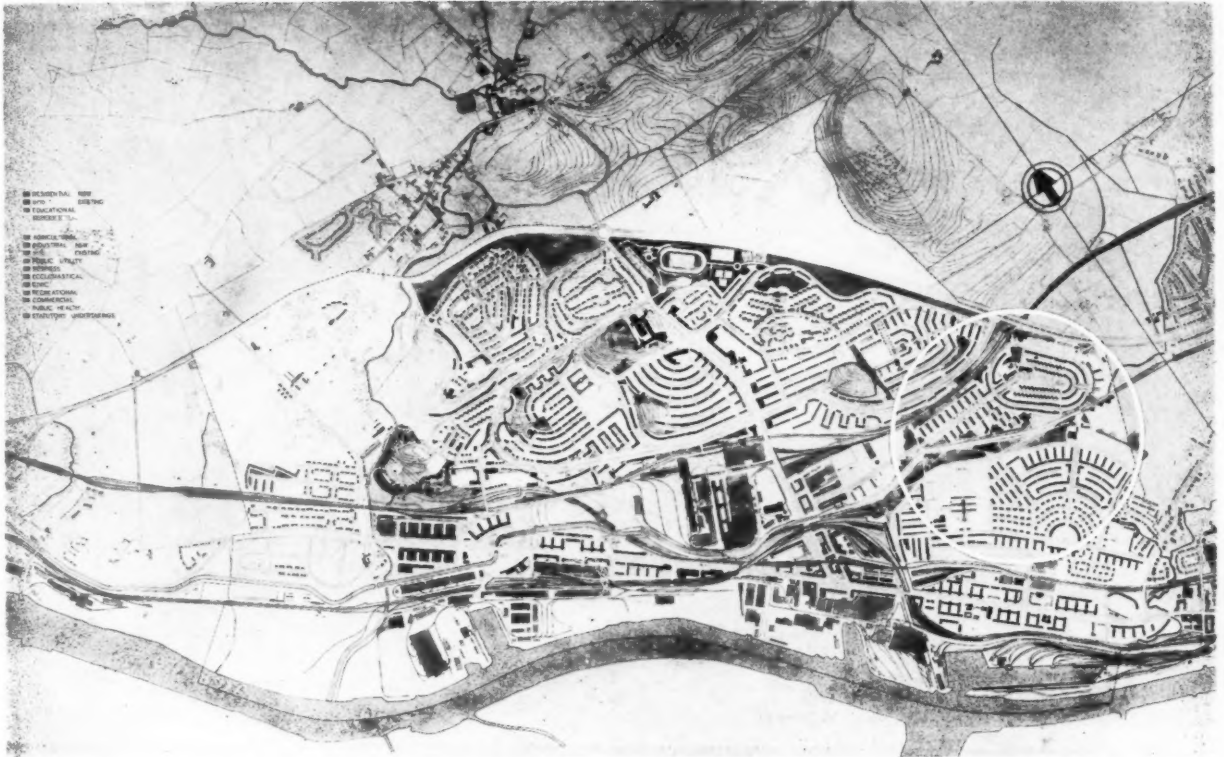


The residential analysis shows clearly the inadequate servicing of the relatively large new housing estates which were completed before the war, whose shops, churches, schools and places of entertainment are still, for the most part, sited on dangerous roads and in the most congested areas.

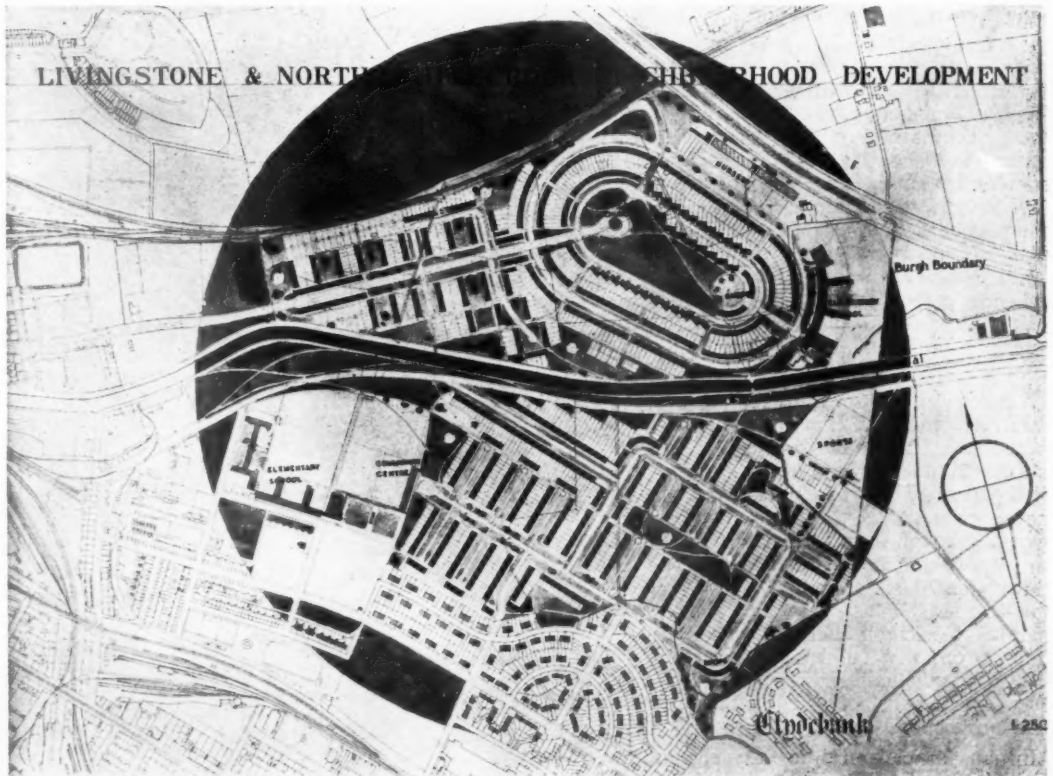
industrial analysis

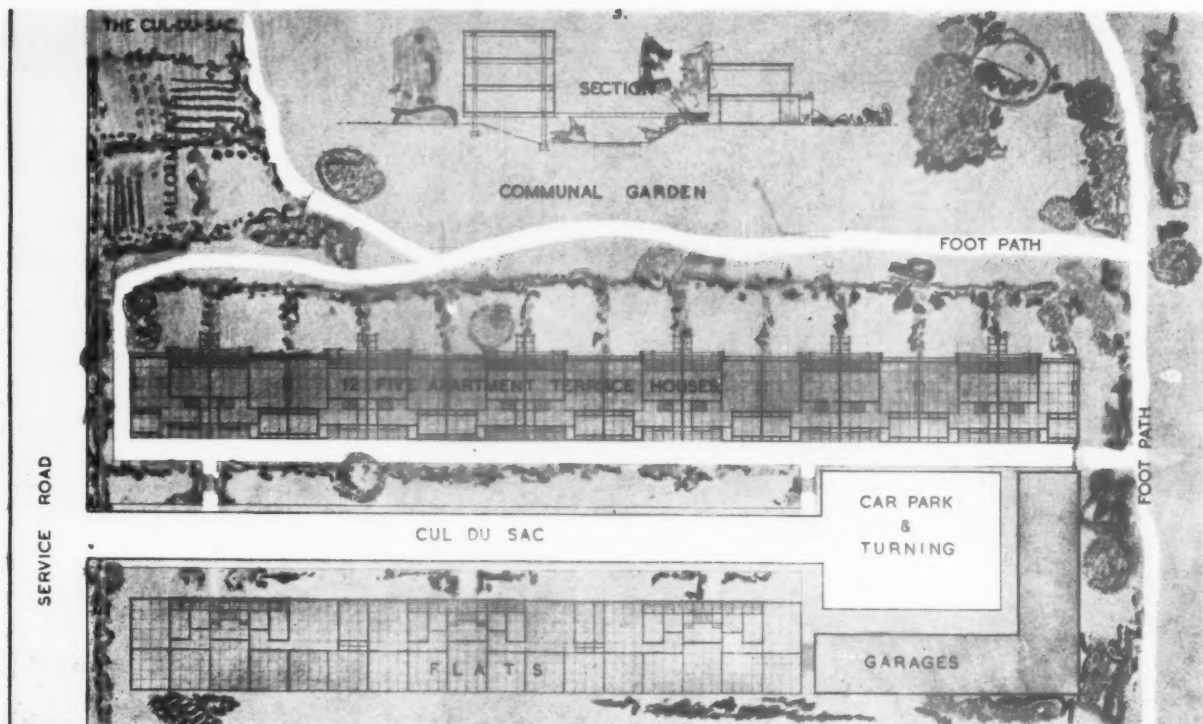


Clydebank is an example of naturally grown linear development which has arisen along the line of communications provided by the River Clyde, the Forth and Clyde Canal, and the road and railway. Industry is sited along this line with a belt of housing—bounded by open country—parallel to it.



Above is the draft advisory plan for the Burgh of Clydebank by Sam Bunton. The Town Council have zoned a complete industrial belt, situated on either side of the Glasgow-Dumbarton road, for three-quarters of its length. This new industrial highway will be substantially widened. Immediately adjacent to it are railway lines with marshalling yards, the Forth and Clyde Canal, and, for import and export, the river Clyde. It is pointed out that since the land in this area is entirely flat, the most economical building and simplicity of factory lay-out is ensured, which is particularly important where mass-production and line-assembly methods of manufacture are contemplated. The housing proposals for the Livingstone and North Whitecreek neighbourhood unit are indicated in the circle which corresponds to the area illustrated in the more detailed plan below. The section south of the Forth and Clyde Canal, which runs through the centre of the neighbourhood unit, has been revised in the plan below, and it is on this scheme that construction has already started and where it is hoped to complete 200 houses by next summer. Details of the cul-de-sac planning, which is a feature of the scheme, are given on the following page.





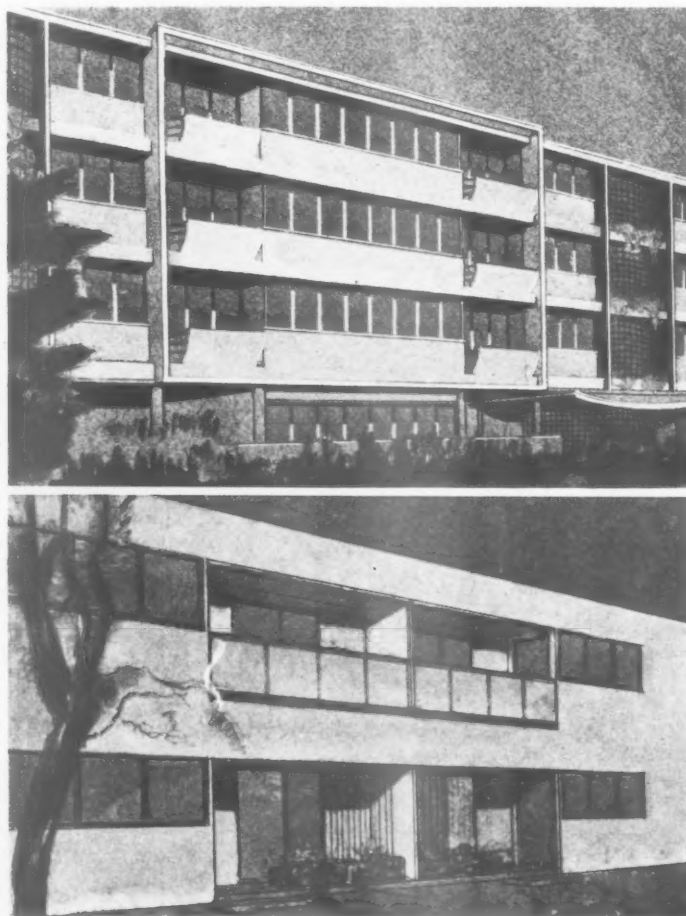
The Town Council of Clydebank in its first layout of 1,000 houses, a number of which are under construction already, has approved the cul-de-sac parallel block idea, which prevents through traffic and provides quietness, privacy and safety in the housing area. The cul-de-sacs are designed with three-storey blocks of flats on one side and two-storey terraced cottages on the other. This is done in order to provide variation in building height and eliminate the monotony of continuous rows of two-storey buildings. The plan above and perspectives below are selected from a number of preliminary designs shown in the exhibition.

H O U S I N G

The Hall of Housing in the Clydebank Exhibition shows a number of the preliminary plans and constructional methods considered in addition to those for the houses finally approved by the Town Council, and now in the process of construction. A section is devoted to new materials and constructional methods; another illustrates the principles of building by standard units to show that dimensional standardization does not restrict variety of design; and another illustrates the possibilities of prefabrication. The plans cover permanent, transitional, and temporary housing. There are also full-size models of a living-working unit of a modern flat, an all-electric kitchen for a family of four and a house for ageing or single persons.

A selection from the preliminary schemes, and the finally approved houses and flats and their layout, is illustrated on this and the following two pages. The predominant type of house proposed is the terrace-cottage block, although there is a proportion of two-storey terrace-flatted houses and three storey flats. The final layout for the first 1,000 houses is designed with parallel blocks of alternate flats and houses on the cul-de-sac principle, providing quietness, privacy and safety as well as a satisfactory effect of scale and proportion.

In an article on the Clydebank Exhibition in *The Glasgow Herald*,



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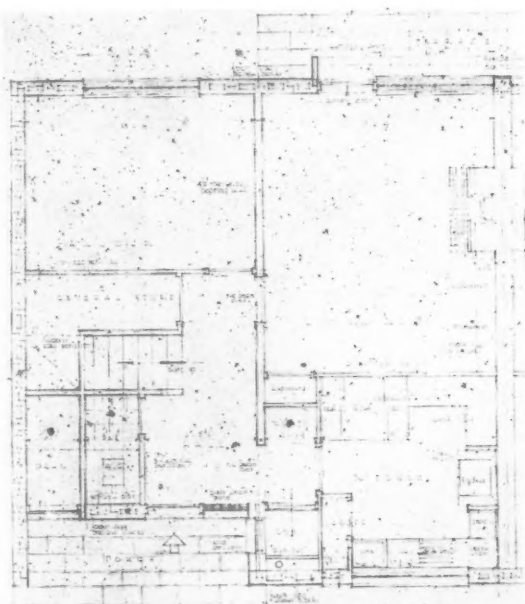
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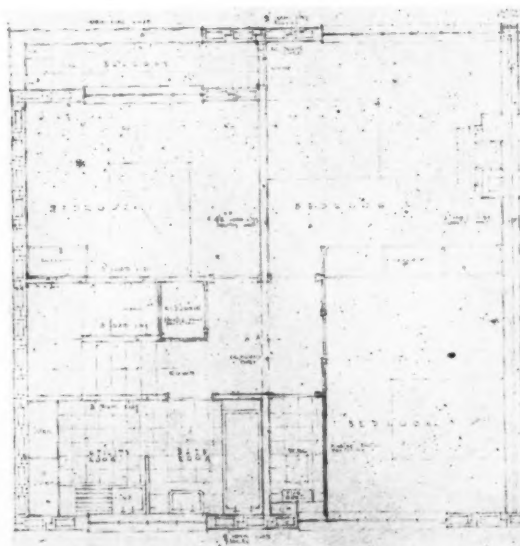


The sketched aerial view above shows the layout finally approved by the Town Council for the 1,000 houses and flats in the Whitecrook Scheme. Construction on the first batch of 200 has been started already. The layout, in common with the finally approved designs for houses and flats illustrated on this and the following page, shows a disappointing falling-off in design after the standard set by the preliminary schemes. Although the number of garages provided in the preliminary schemes is obviously optimistic in view of the living standards in the burgh, these low blocks would be very much more successful as ends to the cul-de-sacs than the isolated house or flat blocks in the final scheme, and there seems to be no reason why such a space as this should not be reserved for a building to house such communal facilities for the flats and houses, as a heating plant, communal laundry, small clubroom or play centre, which could be built when post-war circumstances make this possible.

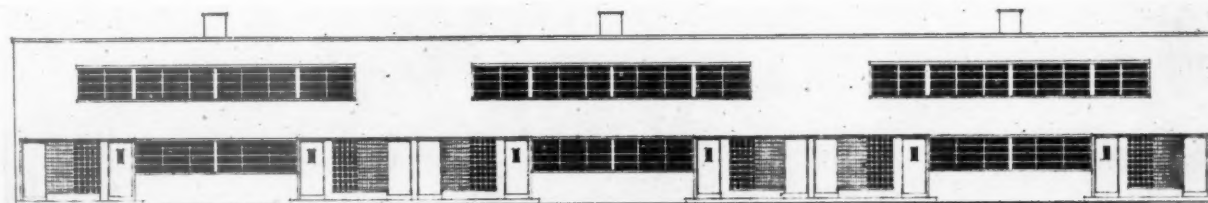
HOUSES UNDER CONSTRUCTION



GROUND FLOOR PLAN

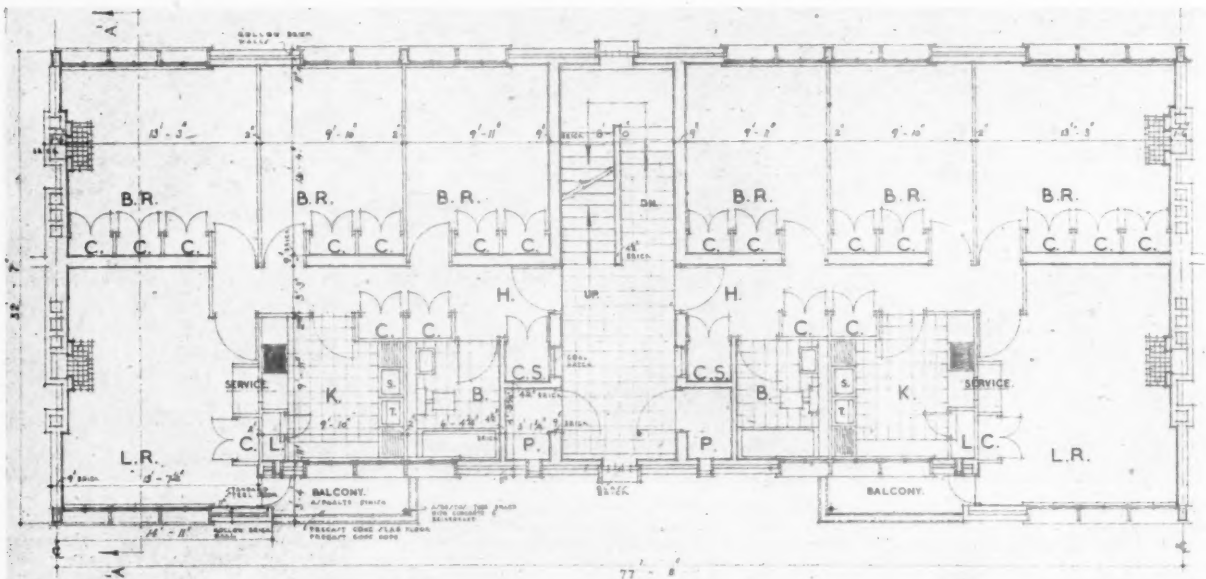


FIRST FLOOR PLAN

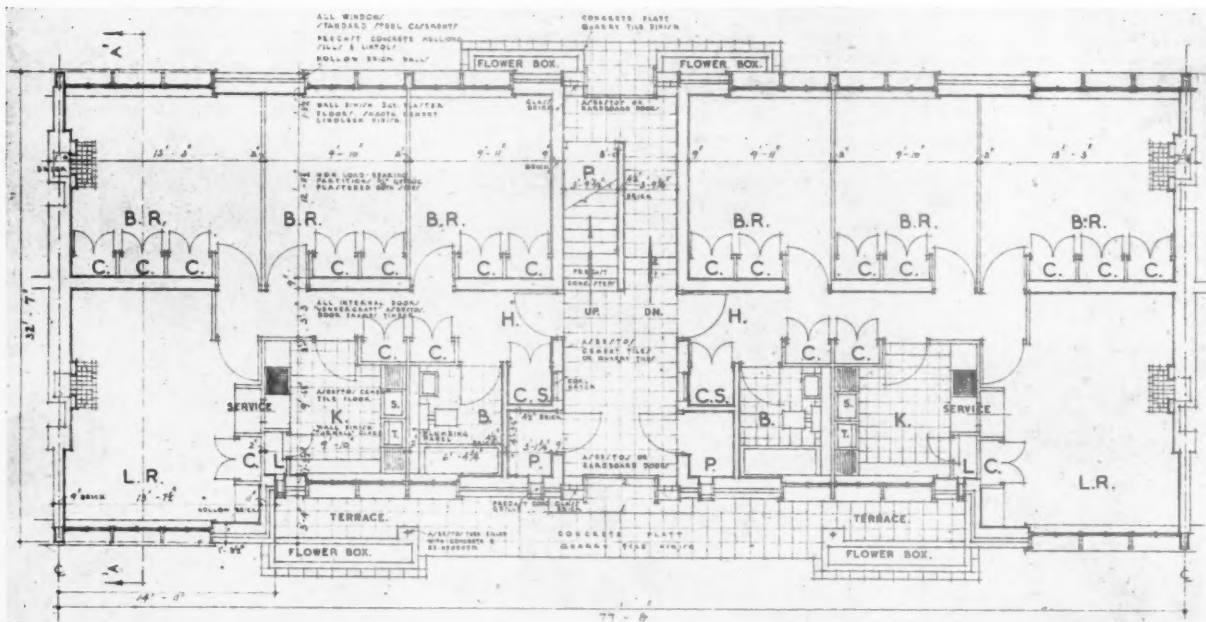


ELEVATION TO ROAD

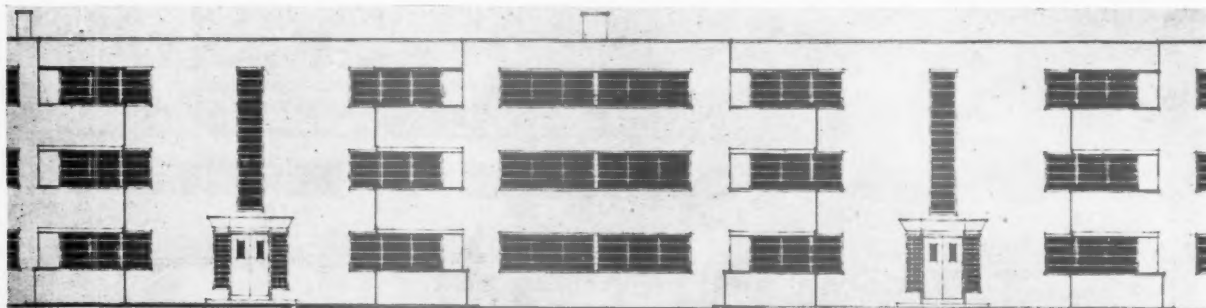
The plans and elevations are given below of the four apartment flats finally approved by the Town Council for construction in the Whitebrook area. These three-storey blocks of flats will be sited on one side of each cul-de-sac opposite the houses which are illustrated on the previous page.



FIRST FLOOR PLAN



GROUND FLOOR PLAN

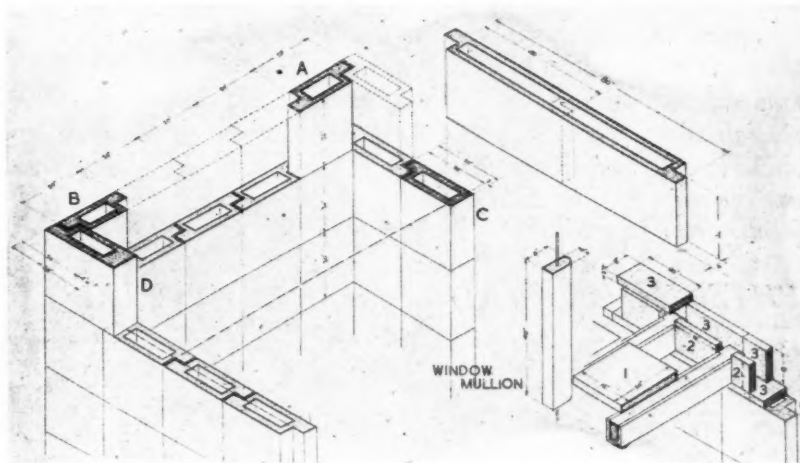


ELEVATION TO ROAD

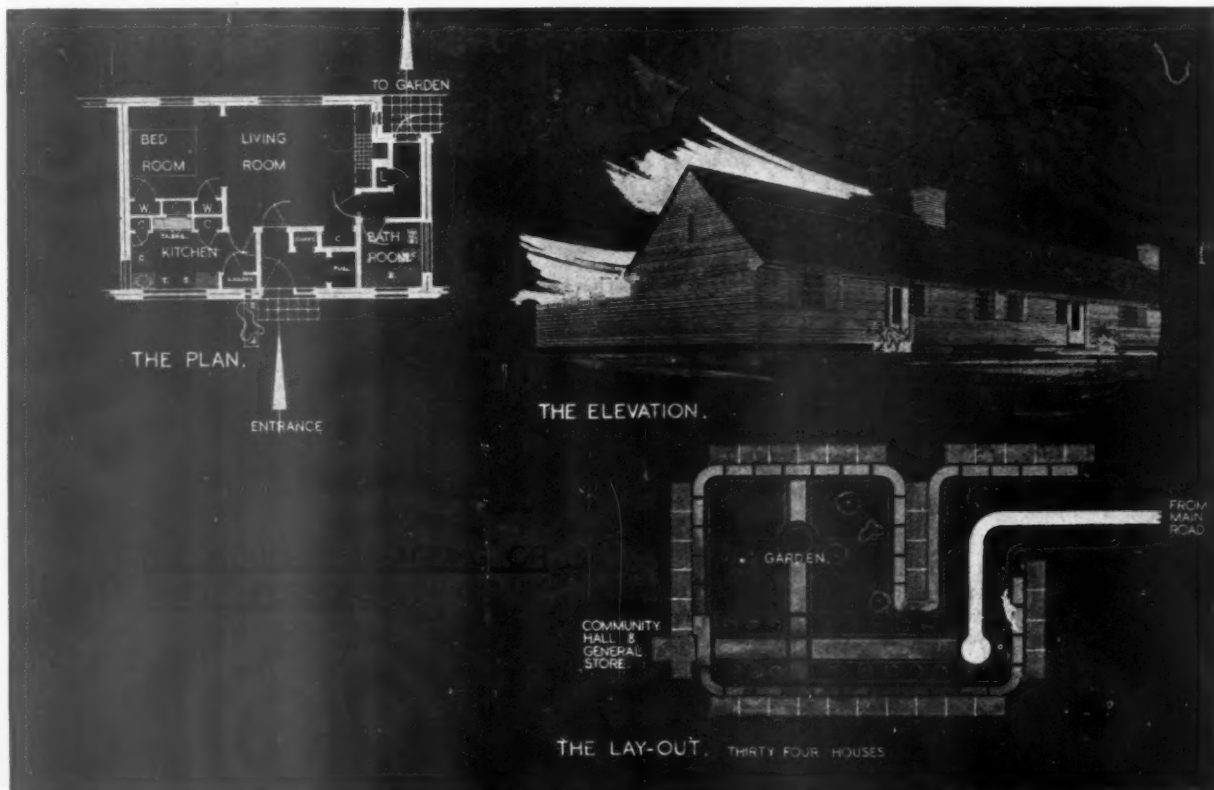
December 17, 1943, Mr. Sam Bunton states: "The types of houses so far approved by the Town Council provide high standards of habitable floor space and accommodation. Despite wartime restrictions the Council—for houses in course of construction—have managed to attain greatly improved standards of cupboard accommodation, the provision of tiled-surround electric fireplaces in rooms without coal fires, a planned space for a perambulator, internal plumbing on the one-stack system, more generous electric installations, and superior types of sanitary fittings." A full-size model of the prefabricated internal plumbing panel on the one-stack system, made entirely of copper, was also shown in the exhibition.

On page 5 Astragal considers some aesthetic problems the housing proposals raise, and there is need to stress the importance of such consideration generally, for the possibility to forge ahead with the construction of schemes like this one at Clydebank may come upon us with little warning; controversy on these problems will then prove a serious obstacle. The exhibition which was opened to the public on December 25 will close on January 8. Those associated with Mr. Sam Bunton in the preparation of these schemes are listed below: A. Bryce (deceased), J. A. Coia, B. McCulloch, K. Frazer, R. Harrison and R. H. Webber.

A detail is shown below of the construction of the cellular, light weight aggregate blocks which are to be used in a group of four experimental houses to be built as part of the Whitecrook scheme this spring.



Below are the designs of the houses for ageing and single people, one of which was built and shown in the exhibition. The houses comprise living room, bedroom annexe, bathroom and all-electric kitchen. They will be built in one-storey groups and will contain recreation rooms for men and women, which can be extended into one space for joint entertainment. The layout of these houses was determined by the decision of the Council that old people must be accommodated within the framework of the whole community, and not be housed in particular areas which, although providing a home, savour somewhat of institutional principles.



INFORMATION CENTRE

The function of this feature is to supply an index and a digest of all current developments in planning and building technique throughout the world as recorded in technical publications, and statements of every kind whether official, private or commercial. Items are written by specialists of the highest authority who are not on the permanent staff of the Journal and views expressed are disinterested and objective. The Editors welcome information on all developments from any source, including manufacturers and contractors.

PHYSICAL PLANNING

1347 *New York Plan*

FROM PLAN TO REALITY. *Regional Plan Association. (New York, December, 1942).* Third report of progress on development of Greater New York Regional Plan.

1. It has become apparent that under peace-time conditions the New York region is approaching a stable population.

2. The forty-year programme outlined in 1929 continues to be carried out.

3. Improvements in new road construction include flatter curves, longer sight distances, separation of opposing traffic lanes.

4. Considerable acreage has been added to the city parks by the reclamation of marshlands. Means for active recreation have been provided for all age groups.

5. 68 Railway crossings were eliminated during 1940-41. This greatly facilitated the safe movement of road traffic.

6. One new produce market for poultry has been completed; another, for farm produce, is under construction; a third, to substitute Washington Market, is under discussion.

7. It is realized that aviation will create new problems through post-war inheritance of aircraft production plant, and flying and ground personnel.

8. Local zoning practices have increased control of population densities, outdoor advertising and provision for off-street parking and loading of motor vehicles.

1348 *Measuring Housing Quality*

A NEW METHOD FOR MEASURING THE QUALITY OF URBAN HOUSING. (*American Journal of Public Health, June, 1943.*) System by which existing staff of local housing authorities can collect and assess data necessary for policy making.

LIGHTING

1349 *Lighting To-day and To-morrow*

ILLUMINATING ENGINEERING TO-DAY AND TO-MORROW. *W. Harrison. (Trans. of Illuminating Engineering Society of America, July, 1943, p. 369.)* Retrospect and prospect in intensities, sources and practice in illumination engineering.

Mr. Harrison gives a very level-headed analysis of the position to-day and the trends that can be seen.

On intensities, he reminds us that in 1913, 5 f.c. of illumination was regarded in much the same way as 50 f.c. to-day. That is a ten-fold increase and is accomplished to-day for about the same expenditure as was necessary for the 5 f.c. in 1913. He believes

that this order of improvement will continue for some time to come—and there is every evidence that this is so—in which case, as he says, by 1973 we should be nearing the 500 f.c. mark, again for the same cost. One piece of evidence he gives is the fact that even the best of our light sources is still only about 20 per cent. efficient, so that there is 80 per cent. scope for improvement.

Comparing hot and cold cathode fluorescent tubes (cold cathodes have had several recent references in these columns), Mr. Harrison points out that much more current can be put through hot cathodes than through cold, and that this ultimately enables one to get much more light per foot run of tube from the former. Therefore, the present trend to hot cathode sources, in his opinion, is confirmed.

The most important point in the paper dealt with glare. The two natural obstacles to high intensities are glare and heat.

Fluorescent bids fair to reduce the heat, but glare has not been tackled properly. Mr. Harrison believes a concerted study is needed.

His last remarks deal with small wattage fluorescent lamps for local lighting. The great characteristic of light from fluorescent sources is its quality, which in some curious way gives good strong lighting without the feeling of high intensity.

Mr. Harrison thinks this justifies experimenting with these low wattage sources as soon as possible.

1350 *Lighting and Production*

LIGHTING AND WAR PRODUCTION. *W. C. Darley. (Trans. of Illuminating Engineering Society of America, June, 1943, p. 307.)* General propaganda for better lighting to boost war production.

The most useful part of this note consists of suggestions for lighting different general types of industrial work. For instance, it is recommended for critical precision work and close assembly that large-area low brightness sources, such as fluorescent lighting or tungsten lighting in large dome reflectors, be used at eye level, whereas in high open-shed factories a mixture of tungsten filament and mercury lamps are said to be most suitable.

The remainder of the paper deals with "smashing production bottlenecks," or the fact that waste time due to bad lighting is enough to build 4,000 big bombers. One gets the impression that a good case is being forced with second-rate statistics.

1351 *Lighting and Labour*

LIGHTING AND LABOUR. *E. B. Sawyer. (Electrical Review, October 8, 1943, p. 465.)* A review of factory lighting in relation to labour problems.

Mr. Sawyer discusses the need for immediate improvement of lighting in establishments which have delayed bringing their equipment up to date, and suggests particular types of industry where lighting improved now could make a useful contribution to the war effort. The extent to which light aids production is mentioned, and suggestions regarding bright-

ness and colour in factories are made. Maintenance and group replacement (see JOURNAL, October 21, 1943) are reviewed.

HEATING and Ventilation

1352 *Natural Ventilation*

OBSERVATIONS ON THE NATURAL VENTILATION OF DWELLINGS. *T. Bedford and C. G. Warner (Industrial Health Research Board, Medical Research Council), assisted by F. A. Chrenko (London School of Hygiene and Tropical Medicine). (RIBA Journal, November, 1943.)* Summary of results of observations of natural ventilation of rooms in houses and flats. Ventilation rates in closed rooms; effect of cracks round doors and windows; wall ventilators and effect of wind speed; the influence of heated and unheated flues of varying sizes and with varying height of chimney.

If for post-war dwellings a set of minimum basic requirements is laid down for the purpose of achieving reasonable health and amenity, one may assume that ventilation will be one of the factors included. A set of standards will, however, be of little value until some reasonable method of attaining them is found. The present paper goes a considerable distance towards this end by giving a great deal of information regarding the results of a large number of observations of actual ventilation rates achieved under certain conditions. From these observations some very useful conclusions can be drawn.

Ventilation in closed rooms is first investigated. The rate of ventilation is larger than might be expected, the actual amount apparently depending upon the type of construction and age of the building. The degree of fit of doors and windows has an important effect. The addition of small air gratings produced an increase in ventilation rate of approximately 50 per cent. Up to free areas of 50 sq. in. the rate of ventilation appeared to increase proportionately to increase in size of ventilator. The speed and direction of wind have a very marked effect on rates of ventilation through wall ventilators, and graphs are given showing this.

Flues are, of course, well recognized as a means of providing ventilation to a room, but this paper now gives a useful amount of information as to the actual performance of flues, both unheated and heated, and with varying sizes of entry to the flue. With unheated flues of 9 in. by 9 in. size, the rates of ventilation obtained are appreciably higher than found with a 50 sq. in. wall ventilator, except under wind conditions especially favourable to the wall vent. The wind speed has quite a marked effect on flue ventilation owing to the aspirating effect of wind passing over the top of the flue. With flues having smaller openings the ventilation rates fall, flues of 20 sq. in. giving rates something like 30 per cent. below that of 50 sq. in. flues. With unheated flues the higher the stack the less ventilation is obtained owing to the increased resistance.

Ventilation rates with heated flues of normal size are greatly in excess of anything recorded otherwise, but with restricted flues the rates are sometimes very low.

This paper is important and should be noted by architects and others.

1353 *Coal Research*

THE FIRST FIVE YEARS. (*Report of work 1938-1942 of British Coal Utilization Research Association.*) General



L. E. Walker. Photo.

TUESDAY MARKET PLACE, KING'S LYNN.

It is plain that the architect for this building was not constrained by any undue regard for the niceties of Palladian architecture. His boldness in decision matched the vigour of his details for, although the front between plinth and parapet is of porous cherry-red bricks, the plinth itself and the parapet wall are built of

hard burnt, darker-coloured stocks. He thus anticipated, by a hundred years, the practice of providing horizontal damp-proof courses the lack of which plagued our ancestors with dampness—fortunately cured, nowadays, with no great trouble and little expense, by the use of 'PUDLO' Brand cement waterproofer. Ask for Specification 4A.

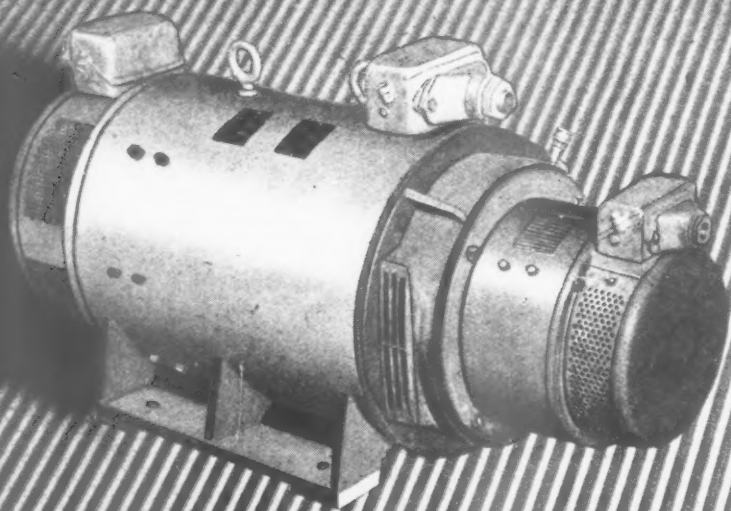
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outline of start and growth of BCURA, including reference to research on domestic solid fuel appliances. Development of space-heating units, combined space-heating and hot-water units, and combined space-heating, hot-water and cooking units.

The volume of work of this Association is growing apace. As a new concern, starting only in 1938, the first task was to build up an experienced staff. Now the time should be coming when at least some results may be expected. The present publication includes references to work on domestic heating appliances and claims for the "convector fire" considerable improvements over normal open fires resulting in big increases in efficiency. Work on smoke reduction also appears to be promising.

Minimum performance specifications have been drawn up for various types of domestic appliances and work is proceeding on the design and trial of units which are expected to conform.

Some formidable attack on old and unscientific types of domestic heating apparatus is long overdue. We may be wedded to a coal fire but at least there is no reason why we should not have as efficient a one as possible. This work of BCURA is, therefore, of urgent importance for post-war housing.

It is of interest to note that one of the assistant directors of the Association is an architect. Presumably therefore the recent trend towards better design of stoves, fires, etc., will be still further encouraged.

QUESTIONS

and Answers

THE Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential, and in no case is the identity of an enquirer disclosed to a third party. Questions should be sent to: THE ARCHITECTS' JOURNAL, 45, The Avenue, Cheam, Surrey.

1354 Kitchen Planning

Reference back (Q. 1322. December 9, 1943).

In reply to this question enquiring for information on kitchen planning, we failed to mention a booklet called *Kitchen Planning*, obtainable from Ascot Gas Water Heaters, of Ascot Works, North Circular Road, Neasden, London, N.W.10 (2nd edition, July, 1943). It is an extremely useful and informative publication.

1355 Farm Workers' Cottages

Q In connection with the current competition for agricultural workers' cottages, can you tell me of any reports that have been published giving the domestic requirements of agricultural workers?

A The following have some bearing on the matter:—

Rural Housing, by P. Morris, F.R.I.B.A., published by the Council for the Preservation of Rural England, 17, Great Marlborough Street, London, W. 1, March, 1932.

Housing in Rural Areas (Internal Planning Section). Reprinted from *Housing*, July, 1942, published by the Institute of Housing, 52, Lionel Street, Birmingham, 3.

The Evidence of the Federation of Women's Institutes, on Rural Housing, by the National Federation of Women's Institutes, Avenger Hall, Dorking, Surrey. Price 4d.

A Report on Domestic Housing Requirements, which deals in part with agricultural cottages, by the Women's Housing Advisory Council, Room 244, 2, Bloomsbury Street, W.C.1.

1356 FWI Demands

Q Referring to the issue of the JOURNAL, dated May 27, 1943. On page 348 reference is made to the Demands of the Federation of Women's Institutes. Would you kindly inform me as to whether these "demands" have been published and if so, from whom I can obtain a copy?

A The Demands of the Federation of Women's Institutes have been published by the Federation in a leaflet on *The Evidence of the Federation of Women's Institutes on the Ministry of Health's Dudley Committee*, and can be obtained from The Federation of Women's Institutes, Avenger Hall, Dorking, Surrey, price 4d.

1357 Radiator Paint

Q Would you please inform me what precautionary measures I should take in the painting of a radiator the same colour as a distempered wall, so that the radiator maintains the same colour and shade as the wall. I am afraid that the heat of the radiator will affect the colour.

A In painting a radiator the same colour as a distempered wall, if the wall is of a dark colour, such as brown, no precautionary measures need be taken, as the darkening of the colour due to the heat, will not affect the colour to a great extent. But if the distemper is of a light colour, such as cream, ordinary paint should not be used, since it will become noticeably yellowed by the heat. Instead, a synthetic enamel paint should be used, as this does not yellow. An alternative paint would be Nitro-Cellulose, but this would necessitate the use of a spraying machine. Both these types of paint are in very short supply, and it is doubtful if either of them can be obtained.

1358 Repointing Chimneys

Q Many steeplejacks in the North of England advise and use red lead and oil mastic for repointing tall factory chimneys, and give periodic dressings of linseed oil over the whole of the brick or stonework. What particular merit is there in this as against ordinary mortar pointing? Is it considered to be good practice?

A We submitted your enquiry to the Clay Products Technical Bureau of Gt. Britain Ltd. A copy of their reply is given below:

"Many chimney stacks in the north are built up of relatively impervious bricks in which the adhesion between the mortar and the brick is not great, and in which there is little or no interstitial space between the particles of the brick. If the chimney is in intermittent use, water may penetrate the joints and subsequently freezing causes breaking of the bond and eventually loosening of the brickwork. This is not necessarily dangerous, at any rate until a fairly late stage, but, particularly when the chimney has ultimately to be climbed, it is very troublesome.

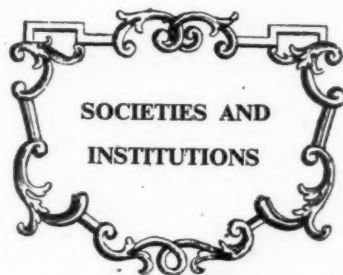
"A further difficulty is that under some circumstances soluble salts derived from the atmosphere or the products of combustion or other sources, and particularly in chemical manufacturing areas, may be washed into the joints and held there in solution by capillary attraction at the interface between the pointing or bedding and the brickwork. Free atmospherically carried acids can also act on the jointing material itself, and on drying out it is possible that these salts may crystallize between the jointing and the brickwork, and so cause a breakdown of adhesion much as does the frost.

"The use of mastic pointing and linseed oil is designed to prevent the entry of moisture and so overcome all these sources of failure. Objections to it are that linseed oil, or any other so far known waterproofer, has a

limited life and as a result a false sense of security may be given. Further the actual mastic pointing is expensive, difficult to apply, and unless very well done may not succeed in its objective.

"In our opinion, the correct approach would be to continue with the treatment where it has been done in the past, and in the event of further stacks being built, to use a brick having a satisfactory porosity which would give good adhesion and a mortar the density of which does not greatly differ from that of the brick.

"The custom was applicable originally to dense brickwork, but has subsequently been applied to the more porous type of brickwork without appreciation of the differences. In the case of dense brickwork, there is always the risk that water will find access through an inevitable fault in the waterproofing coating, and once brickwork is wet, water cannot then evaporate through a coating mainly impervious and there is a likelihood of greater rather than less damage resulting from the treatment."



Speeches and lectures delivered before societies, as well as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economise space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front cover. Except where inverted commas are used, the reports are summaries and not verbatim.

CLYDEBANK

Reconstruction Exhibition

December 23, at Janetta Street School, Clydebank. Opening of a HOUSING, TOWN PLANNING AND RECONSTRUCTION EXHIBITION by the Right Hon. Thomas Johnston, M.P., Secretary of State for Scotland. Provost David Low, J.P., received Mr. Johnston. Bailie Braes, Convener of the Housing Committee, entrusted with the arrangements for the exhibition, presided. Speakers included Sir A. Steven Bilsland, Bart., David Kirkwood, M.P., Sam Bunton, Town Planning Consultant to the Town Council. Coun-

cillor Robert Fleming, ex-Convener of Housing, proposed a vote of thanks to the speakers.

T. Johnston : There are possibilities—I put it no higher than that—of a comb-out of building craftsmen from some of the Civil Defence organizations on a temporary basis to help the housing situation in Scotland. The tragic housing condition of Scotland is well known to most of us. Overcrowding is six times greater than in England. That of Clydebank was particularly bad in pre-war days. 25 per cent. of the houses were without separate lavatory accommodation, overcrowding was 40 per cent. of their total, and on top of that came the Luftwaffe and the blitz.

What can we do about it? There are two aspects on which attention must be directed. There is the long-term aspect visualized by the planners, as exemplified in this exhibition, and short-term planning, which aims to build more houses now, even during the war.

The difficulty in the way of the latter is not land, for 99 per cent. of local authorities have succeeded, as a result of urging from Edinburgh, in being ready with at least one year's supply of building land, while some have even two, three, four or five years' land already earmarked and purchased for building purposes.

It is not money. The Government have never shown during the war that money stands in the way either of health or successful defence. We have actually provided 100 per cent. of the cost of converting shops, offices and so on into houses, and handed them over to local authorities.

The difficulty of building houses now is not, by and large, materials. Some materials, it is true, are in short supply, such as timber, but we can make shift with others of a temporary character. It is labour, and nothing else, that is short.

We cannot take men out of the forces and restore them to the building trade without harming the war effort. Therefore the maximum use must be made of the men who are in the trade now to build houses, to adapt existing houses, and to find the maximum amount of temporary or emergency accommodation available that is in our power.

In Clydebank, 588 houses have been completed since the outbreak of war and there are now 579, including Clober Estate, now under construction. I can assure you that the Government and the Scottish Office have done, are doing and will do everything in their power to see to-day that the maximum emergency housing is provided.

B. Braes : Prior to the war 3,020 houses were required in Clydebank to abate overcrowding. With the blitz many houses were destroyed and there has been a big influx of people since the war; 4,500 houses were destroyed by bombs and nearly every house was damaged. It is estimated that at the present time the town needs about 8,000 houses. The Council hopes that with the assistance of the Government and the Scottish Office, it will have plans prepared so that as soon as the war is finished, it will be able to get ahead with the reconstruction of the town. We shall probably need six years to rebuild.

D. Kirkwood : I am sorry to strike a jarring note. I have seen aerodromes, factories, and tens of thousands of emergency houses erected all over the country. The workers are there. We do not need to take them out of the Army. The Government has power to organize these men and bring them into this constituency to fulfil a legitimate demand.

I appreciate what Clydebank has done through the appointment of a young architect to show what the younger generation can do. Our forebears have by their rotten housing bled Scotland white. But Clydebank has gone. We must now build a town where people can live as well as work. I think of

my folk who are drifting away all over the country, who have to get buses from 30 or 40 miles away, and who cannot even live in their own homes. There are thousands of them.

This is my suggestion. I have been with every Minister of Supply all over Britain and seen emergency houses erected everywhere for war workers in new factories and aerodromes. I want the men who built them to be brought into my constituency to build houses now. What is the good of homes in six years. We want them now. My people have been treated as criminals, during the blitz and now. I refused to support the recommendation of the Scottish Office that my people should be rehoused in Glasgow, which is admitted to be the worst housed city in Britain.

S. Bunton : The whole exhibition here was carried out in three weeks and five days, and I have had splendid co-operation from my assistants.

Clydebank is conscious of the need for emergency houses and long-term planning. The two should be brought as close to one another as possible. The Town Council will follow up this exhibition with one on new housing proposals.

A very high standard of houses and equipment is possible economically if the Government makes full use of industry and technical efficiency in this country.

TCPA

A. C. Bossom

December 9, at 1, Grosvenor Place, S.W.1. Lunch-time meeting, Town and Country Planning Association. Talk on MODERN BUILDING METHODS, by Alfred C. Bossom, F.R.I.B.A., J.P., M.P. Chairman: Mrs. Mavis Tate, M.P.

A. C. Bossom : In 1939 it was estimated that no less than 500,000 houses or flats were still required to house those living either under slum conditions or in a state of over-crowding. This, as well as looking after the general building programme then in hand, was to be done with a labour force of approximately 1,250,000 men with an additional 2,000,000 in the ancillary trades. The position to-day, however, is very different. We are faced with:

- (1) The need for between four and five million homes;
- (2) Repairs, replacements or fresh treatments for bombed areas; a gigantic task in itself;
- (3) Providing an additional 20 per cent. in school buildings to provide for the raising of the school-leaving age; and
- (4) Providing new municipal and commercial buildings, churches, museums, great shopping districts in many towns, industrial districts with factories and flattened factories, places of amusement; in fact, there is no type of building that will escape the critical eye of those moulding our post-war plans.

From the construction point of view, it is the most gigantic task ever faced in this country.

To-day, we have available about 400,000 building operatives. If all the mechanics were turned over to handling only the blitzed areas, it would take 18 months to straighten out this item alone for it must be realized that one in every five structures in this country has been damaged.

Or, on the other hand, if every operative was turned over to meet the demands for housing, it is very doubtful whether there would be sufficient men to meet immediate demands—even with the additional numbers that might be released from the forces.

It is estimated that there may be anywhere from 20-25 thousand sites assigned to local authorities, upon which houses can be constructed when hostilities cease. Yet, this is but a drop in the ocean compared with the vast responsibility that will descend upon the building industry the moment war ends.

Foreseeing this, the Prime Minister wisely divided the reconstruction period into:

- (1) A four-year interim period immediately following the declaration of peace. During this time, on account of price instability, it would probably be necessary for the Government and municipal authorities to carry out all large housing schemes. It will be remembered that after the last war, a period of about five years elapsed before the private builder came into his own again; and
- (2) A long-term period. By this time, according to provisions already made, there will have been established a building force of at least 1,250,000 men.

Before 1939, our annual building bill was approximately £400 millions. Since then, it is estimated that general commercial building has increased by 85 per cent., and that housing work has increased about 105 per cent. Lord Portal hopes, however, after the war to reduce this figure so that it is not more than 50 per cent. above pre-war costs.

Therefore, on an estimate of £600 millions, if we apply the same old pre-war methods, we can only do about the same amount of work we did prior to 1939. But, for the reasons already stated, new homes, repairs and replacements, additional schools, and new municipal, commercial and industrial buildings, this figure will be totally insufficient.

Of course, it is sincerely hoped that much damaged property will be repaired before the war ends, and also that much temporary accommodation provided which might later even be used on the Continent or elsewhere in places where the war has destroyed existing habitations.

Houses or Flats

There is a good deal of controversy as to how our housing problem should be met. Whether by houses or flats? But no doubt the great majority, in fact, the overwhelming majority, are in favour of houses. There will, however, be a need for some flats in our large towns. In some instances these will have to be constructed much higher, even up to ten storeys—which is higher than the average height to-day—and supplied with lifts which will be fool-proof against all contingencies.

Where the buildings are higher, it is desirable that the heights should vary and not be constructed on a grid-iron plan. They should have character, interest and charm, with plenty of air-space around them to provide good light and, if possible, a view. Playing grounds, padding pools, shopping centres; in fact, all the accessories which make such developments a living unit and not just a housing estate should be provided.

It is quite obvious that our housing problem cannot be met by just allocating a few houses to the acre, detached or semi-detached; neither is this desirable. Some of the houses should be in short rows with spaces at the end of each row; some should be in terraces; some in squares or crescents; each with their own piece of ground at the front and a larger piece at the back. Let houses vary in design and type. Let them be designed in the way our forefathers met similar situations and led the world in so doing. The squares of London and the crescents of Bath form a good example from which we can get much inspiration for future designs.

It is also essential that in any of these developments they should be so situated that they are either adjacent to existing communities or have themselves all the essentials of a complete community development.

In the past, a man's working day has been gradually reduced until it is now only ten or eight hours, or even less. But, little has been done to reduce the working day of the house-

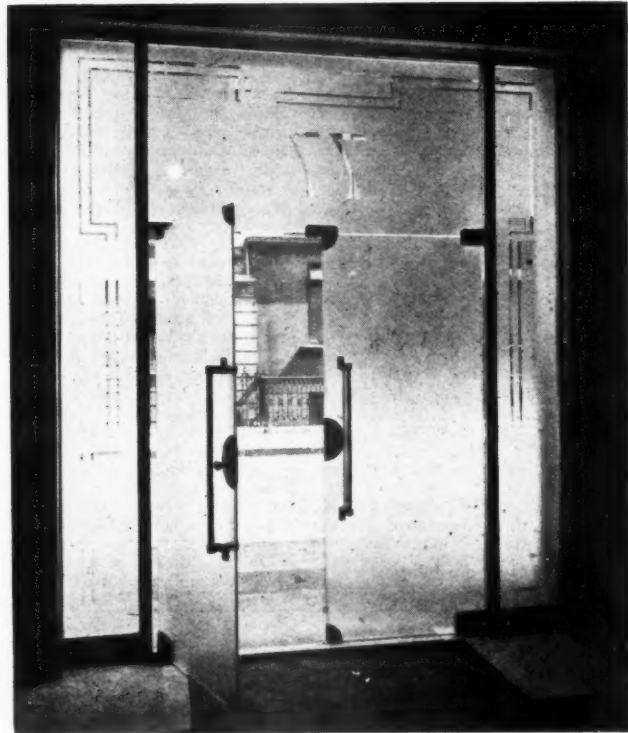
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wife, and it is not at all uncommon for women to do sixteen hours a day. Surely in the great housing drive to come, the opportunity for reducing this labour must not be lost. Household drudgery to-day, although very common, is avoidable. Invention has made it possible to so equip a house by means of electricity or gas, that labour-saving devices can in a few hours do the work which formerly took the whole of a working day or days. This is really possible and is already being done in other parts of the world, so that we cannot allow England to be behind-hand in this. Particularly so, when it is remembered that a most curious situation is developing in this country, i.e. our older people are increasing very rapidly in numbers. At the rate of something like 200,000 a year and, it is for these older people, who will not be able to do all the hard housework that might be required of them, that some provision will have to be made, as well as for our newly weds. The planning for all this construction work should allow for sound-proofing to a far greater extent than has ever been the case before.

Research

To get the benefit of all these advantages, much of the most valuable research which has been done by the Government, private individuals and larger organizations must be made available which, in turn, will mean amending our laws in order to make it possible for new inventions to be incorporated into new structures.

New materials, economies in space, modern building methods, all must be included in the reservoir of information and, where the system for obtaining permission to build is complicated, greater simplification must be brought in.

It is not to be expected that all sorts of changes will be ready at hand, or ready to be adopted the moment the opportunity to build again presents itself.

We have got to face the fact that, though in

the past we have endeavoured to make our buildings capable of enduring for a century or longer, we cannot and must not this time attempt to prescribe for our grandchildren and their children. Not only will they have ideas of their own, but in addition new inventions will continually be coming along which will in their time make the house that we are producing to-day quite out of date for them. Therefore, these new houses that are to be built should only have a span of life, say, of 25 to 50 years, or else should be capable of having added to them entirely new equipment from time to time, rather than over-doing their period of permanency. Our imperative housing needs will compel the adoption of systems giving the greatest speed and highest output.

This means that whole kitchens, whole bathrooms, whole staircases, in fact, possibly 75 per cent. of these houses can with advantage be factory-assembled, leaving about 25 per cent., which will include the whole exterior of a house—whether it be of brick, stone, timber, tile-hung or some new material.

The introduction of dry construction is of the utmost importance. Much of the time now taken up in building is occupied by the slow evaporation of water from the structure. Many new methods and materials have been devised which care for this condition, and can be set up dry—thus avoiding the delay which has always in the past been one of the main disadvantages and hindrances to speed and good building.

Internally, there is no objection to having much of the work of a repetitive nature and, equally, it is desirable that all interior work and fittings should be replaceable. In this respect, standardization has arrived and can be adopted.

Our manufacturers have given much study and there is no doubt that within the next ten years—which is the time of the long-term programme the Government has in mind—great advances in this particular direction will

be made; more, in fact, than have ever taken place during the last 40 years.

RIBA

New Members

As Fellows (4).—Blake, John Patrick (Hounslow), Bradbury, Ronald, B.A., M.Sc., Ph.D., A.M.T.P.I. (South Shields), Scott, Robert Duncan (Guildford), Smith, Harry Hirst (Manchester).

As Associates (15).—Booth, Raymond Richard (Barking, Essex), Caro, Miss Rachel Alice (University of London) (Churt, nr. Farnham, Surrey), Carvill, Louis, Dip.Arch.Dist. (Liverpool) (University of Liverpool) (Dublin), Clerk, Theodore Shealtiel (Edinburgh College of Art) (Edinburgh), Docherty, James (Glasgow), Eastwick-Field, Mrs. Elizabeth (University of London) (Cambridge), Hammond, Horace Gael (Camberley) Surrey), Johnson, Francis Anthony, B.Arch. (University College, Dublin) (Dublin), MacKenzie, Alan (London), Mitchell, John (Oldham, Lancs.), O'Farrell, Miss Maureen J., B.Arch. (University College, Dublin) (Dublin), Paynter, Miss Rachel Mary (University of London) (Alnwick, Northumberland), Trigg, Geoffrey Howard (Bromley, Kent), Weed, Charles Harold (Croydon, Surrey), Wilson Smith, Roy Seaton (Nottingham).

As Licentiate (13).—Angus, Joseph Middleton (Newcastle-on-Tyne), Banks, John Thomas (London), Booth, Laurence Gordon (Leeds), Bullman, Arthur (Nottingham), Clarke, Ernest William (Ely, Cambs.), Evans, Edward T. (Beaumaris), Findlay, George Anderson (Glasgow), Fish, Frederick James (Liverpool), Haskings, Brunel Frederick George (Watford, Herts.), Hornsey, Kenneth (Trowbridge, Wilts), Roberts, Haworth Owen (Leamington Spa, Warwickshire), Ross, Melville (Menston; nr. Leeds), Smith, Reginald George (London).



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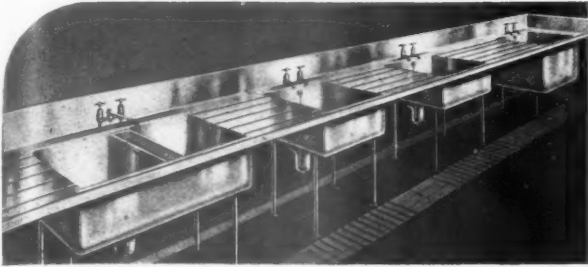


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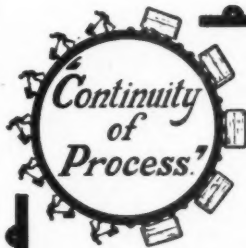


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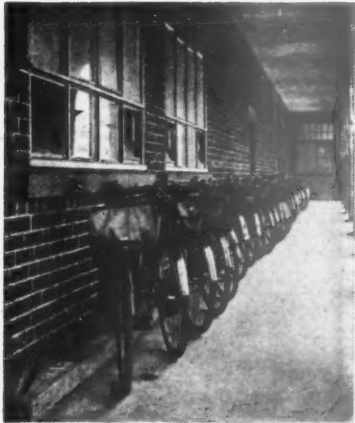
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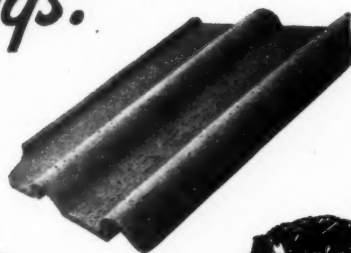
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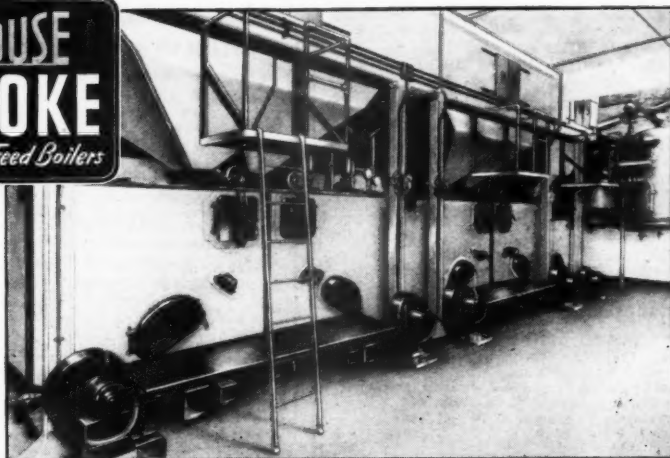
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