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Alphabetical Index to Advertisers

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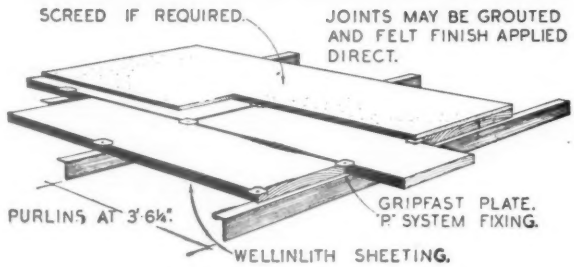

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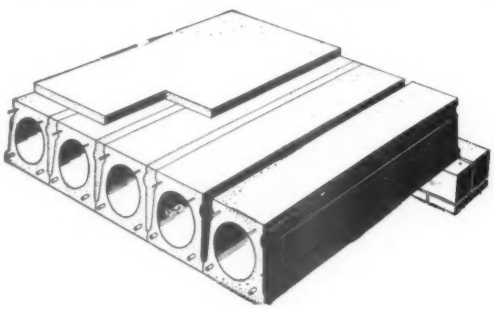

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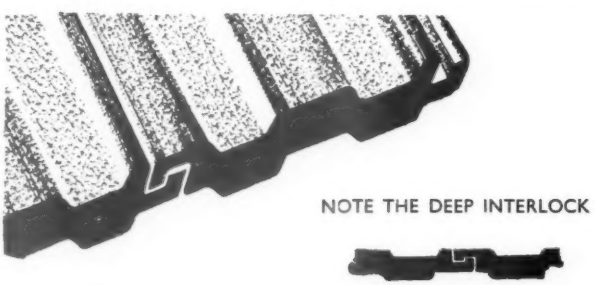

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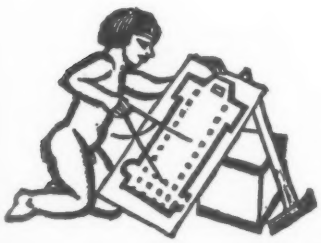
The Rhône Glacier

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. and Canada, £1. 3s. 10d. per annum; abroad, £1. 8s. 6d. Special combined rate for* ARCHITECTS' JOURNAL *and* ARCHITECTURAL REVIEW *in the U.K. and Canada, £2. 6s.; abroad, £2. 10s. Single copies, 6d.; post free, 8d. Special numbers are included in subscription; single copies, 1s.; post free, 1s. 3d. Back numbers more than 12 months old (when available), double price. Volumes can be bound complete with index, in cloth cases, for 12s. 6d. each; carriage 1s. extra. Goods advertised in the* JOURNAL, *and made of raw materials now in short supply, are not necessarily available for export.*



Journal Abbreviations

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974.
ABT	Association of Building Technicians. 113, High Holborn, W.C.1.	Holborn 1024-5.
APRR	Association for Planning and Regional Reconstruction. 32, Gordon Square, W.C.1.	Euston 2158-9.
ARCUK	Architects' Registration Council. 68, Portland Place, W.C.1	Welbeck 7938.
BC	Building Centre. 23, Maddox Street, W.1.	Mayfair 2128.
BINC	Building Industries National Council. 110, Bickenhall Mansions, W.1.	Welbeck 3335.
BCG	British Commercial Gas. 1, Grosvenor Place, S.W.1.	Sloane 4554.
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Temple Bar 9434.
BOT	Board of Trade. Millbank, S.W.1.	Whitehall 5140.
BPVM	British Paint and Varnish Manufacturers. Waldegrave Road, Teddington.	Molesey 1063.
BRS	Building Research Station. Bucknalls Lane, Watford.	Garston 2246.
BSA	British Steelwork Association. 11, Tothill Street, S.W.1.	Whitehall 5073.
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Abbey 3333
CDA	Copper Development Association. Grand Buildings, Trafalgar Square, W.C.2.	Abbey 2677.
CMC	Cement Marketing Company, Coombe Hill, Kingston, Surrey.	Kingston 2140.
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.1.	Sloane 4280.
CSI	Chartered Surveyors' Institution. 12, Great George Street, S.W.1.	Whitehall 5322.
DOT	Department of Overseas Trade. Dolphin Square, S.W.1.	Victoria 4477.
DIA	Design and Industries Association. Central Institute of Art and Design. National Gallery, W.C.2.	Whitehall 2415.
FGLMB	Federation of Greater London Master Builders. 23, Compton Terrace, Upper Street, N.1.	Canonbury 2041.
GG	Georgian Group. 55, Great Ormond Street, W.C.1.	Holborn 2646.
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Whitehall 2881.
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Sloane 3158.
IES	Illuminating Engineering Society. 32, Victoria Street, S.W.1.	Abbey 5215.
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172.
ISPH	Industrial & Scientific Provision of Housing. 3, Albemarle Street, W.1.	Regent 4782.
LIDC	Lead Industries Development Council. Rex House, King William Street, E.C.4.	Mansion House 2855.
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3767.
MARS	Modern Architectural Research Society. 8, Clarges Street, W.1.	Grosvenor 2652.
MICE	Member of the Institution of Civil Engineers. Great George Street, S.W.1.	Whitehall 4577.
MOH	Ministry of Health. Whitehall, S.W.1.	Whitehall 4300.
MOI	Ministry of Information. Malet Street, W.C.1.	Euston 4321.
MOLNS	Ministry of Labour and National Service. St. James' Square, S.W.1.	Whitehall 6200.
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.2.	Gerrard 6933.
MOTCP	Ministry of Town and Country Planning. Lambeth Bridge House, S.E.1.	Reliance 7611, Ex: 1519.
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611.
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041.
NFBTO	National Federation of Building Trades Operatives. 9, Rugby Chambers, Rugby Street, W.C.1.	Holborn 2770.
NT	National Trust for Places of Historic Interest or Natural Beauty. 7, Buckingham Palace Gardens, S.W.1.	Sloane 5808.
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245.
PWB	Post War Building, Directorate of. Ministry of Works and Planning, Lambeth Bridge House, S.E.1.	Reliance 7611.
RCA	Reinforced Concrete Association. 91, Petty France, S.W.1.	Whitehall 9936.
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 6927.
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1	Holborn 2646.
TCPA	Town and Country Planning Association. 13, Suffolk Street, S.W.1.	Whitehall 2881.
WLA	Wrought Light Alloys Development Association. Union Chambers, 63, Temple Row, Birmingham, 2.	Midland 0721.
ZDA	Zinc Development Association. 15, Turl Street, Oxford.	Oxford 47988.

NEWS

THURSDAY, MARCH 25, 1943
No. 2513. VOL. 97

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.

Five times as much paper is needed for the manufacture of various types of ammunition, with which to attack the enemy, as is required for any of the other purposes for which paper must be found. This striking figure was given by Mr. A. Ralph Reed, Controller of Paper at MOS, at the opening of the "PAPER GOES TO WAR" exhibition at Reading last week. He said that before the war less than 15 per cent. of the material used in making new paper and board was repulped waste. Now the waste paper content of new paper and board is 50 per cent. From Mr. Reed's figures it will be realized how great is the need for salvaged waste paper.

Mr. Bevin, Minister of Labour, announces the appointment of an Industrial Health Advisory Committee. The object is TO MAKE WORK MORE HEALTHY. It will include experts on factory safety, ventilation and lighting. The committee will be inaugurated at a three-day conference on industrial health in London next month. Mr. Bevin will be chairman and Mr. George Tomlinson, M.P., his Joint Parliamentary Private Secretary, vice-chairman.

from AN ARCHITECT'S *Commonplace Book*

TEMPERAMENTAL DIFFERENCES. [*From* Sir Edwin Lutyens, *by his son, Robert Lutyens.* (Constable.)] Popularity brought its tribulations, and successful practice many of the compromises he abhorred. Although he had served as Vice-President of the Royal Institute of British Architects in 1924, father found co-operation irksome, and the "trade unionism" of the Institute policy antipathetic—the antithesis of that exclusive absorption in sound planning, disinterested thinking and good craftsmanship, which he conceived to be the first duty of the architect, who was too often contented with well-expressed apology for the failure of good intentions. Temperamental differences were accentuated by personal jealousy. The ill-starred Charing Cross Bridge controversy came to a head with my father's resignation from the Institute. Seen in retrospect—now that Giles Scott's new Waterloo Bridge is nearing completion, and the Bressey-Lutyens Report in effect adopts the recommendations of the Waterloo Bridge Conference—the quarrel seems artificial and unimportant. But, at the time, it was symptomatic of the failure of the architectural profession to stand behind the man best able to establish its claim to a decisive voice in those deliberations with which it was most concerned.

Mr. E. Smith asked the Minister of Town and Country Planning in the House of Commons whether he is giving consideration to the EFFECT ON BUILDINGS AND ROADS OF MINING SUBSIDENCE; and what steps are to be taken to improve as soon as possible localities affected and to plan in the future to avoid building where subsidence is likely to take place?
Mr. H. Strauss: I am aware of the effect which mining subsidence may have on buildings and public services, and, in view of the fact that the remedy is difficult when damage has occurred every effort is made in planning an area to avoid the allocation for building development or road construction of land likely to be so affected. Where, notwithstanding the risk of subsidence, building development cannot be avoided, special provisions for the regulation of building may be included in the planning scheme to minimise possible injury.

Last week the WILL OF MR. WILLIAM HUNT, F.R.I.B.A., was published. He left £26,820, net personalty £22,326.

On March 17, Mr. H. G. Strauss, Parliamentary Secretary to MOTCPA, opened the EXHIBITION OF ILKLEY COMPETITION DESIGNS at the Building Centre. Lord Lytton presided.
On exhibition are the winning design of Captain Hubert Bennett, F.R.I.B.A., illustrated in our issue for December 24, 1942, and the designs of many other competitors. The competition was for the layout and replanning of a site lying on both sides of the River Wharfe and containing the remains of the Roman fort of Olicana, the parish church, cottages known as the Castle, which formerly constituted the Manorial Court and parts of which date back to about 1400, Ilkley Bridge, the New Bridge, and a large area of open space. This part has been allowed to grow shabby and has been disfigured by nondescript buildings, a caravan camp, and untidy trade signs. As an announcement at the exhibition points out, "Ilkley has no excuse for shabbiness. It is a small but prosperous community, and has been outstanding in its war savings campaign, in which it has already contributed some £2,500,000. . . ." It was the chairman of the local war savings committee, Mr. Percy Dalton, who promoted the competition which was judged by an expert committee of assessors, including two members of MOTCP, under the chairmanship of Mr. J. S. Allen, head of the Leeds School of Architecture and Town Planning, by whom the exhibition has been organized and designed. The exhibition will be open daily to March 27 inclusive.

MOW announce that Bitumen Roofing Felts and BITUMEN DAMPCOURSES WILL NOT BE RELEASED for merchants' stocks or for replacement of material sold from stock.
Merchants requiring roofing felts or dampcourses for stock will be able to obtain supplies of fluxed pitch materials. To obtain bitumen roofing felts and bitumen dampcourses, consumers or merchants must complete Form "C" in respect of each building or contract. This form can be obtained from any roofing felt or dampcourse manufacturer and when completed in duplicate should be returned to the manufacturer who will apply to the Roofing Felt Industry Executive Committee for a permit to supply. Certificate A and Declarations B or B/SS may now be used only in regard to the sale of fluxed pitch materials. The maximum quantity of fluxed pitch roofing felt a merchant may carry in stock at any one address is increased to 200—24-yard rolls or their equivalent. Merchants are asked to use every endeavour to ensure that any bitumen felts they now have in stock are sold only for work of national importance.

In the House of Commons, Mr. Denman asked the Prime Minister what Minister will be in charge of legislation, foreshadowed in February, 1942, for DISPERSAL OF INDUSTRIES AND POPULATION from congested areas and for encouragement of a reasonable balance of industrial development; when such legislation may be expected; and is he aware that great local authorities are having their plans for after-war building held up because the will of Parliament in such major problems of reconstruction is not yet fully expressed?
Mr. Eden: The consideration of general future policy in reconstruction matters is proceeding under the supervision of a Committee of Ministers. It will be for that Committee to consider what legislation is necessary for these purposes. Bills which relate to the control and use of land will be in charge of MOTCP. The decision as to which Minister will be in charge of any other necessary Bills will depend upon their nature. The Government recognize the importance to local authorities of Government decisions on major problems of reconstruction, and such decisions will be reached as soon as the investigations now proceeding and the exigencies of the war allow. Sir Herbert Williams: Will my right hon. Friend bear in mind the necessity for an early decision with regard to planning if builders and local authorities are to be in a position to start building houses when hostilities terminate? Mr. Eden: I agree. I tried to cover that in my reply. Mr. Denman: Does that mean that the Government have come to a decision and that Parliament is not to have a say? Mr. Eden: No, Sir, the constitutional practice will, of course, be followed.

In London last week a PRESENTATION TO MR. ROBERT WHITELAW CALDWELL, LRIBA, Chief Architectural Assistant to the Divisional Civil Engineer of the LMS Railway, who retired from the service on February 28, was made on behalf of the staff by Mr. A. H. McMurdo, Divisional Engineer.
Mr. Caldwell joined the Caledonian Railway in 1900 and was appointed Architectural Assistant in 1914. He was transferred to the LMS at the amalgamation in 1923. During his career he was responsible for the architecture of many important works throughout Scotland, including Gleneagles Golf Courses, the new Railway Offices at 302, Buchanan Street, Polmadie Engine Sheds—the largest in Scotland—and hostels for railway employees at various centres.

James Alfred Ewing Medallist, 1942

Dr. R. E. Stradling is the first man connected with building to be awarded the James Alfred Ewing Medal of the Institution of Civil Engineers. Since first originated in 1937 the honour has always been bestowed on electrical or mechanical engineers. Dr. Stradling is Director of Building Research in the Department of Scientific and Industrial Research and Chief Adviser on Research and Experiments to the Ministry of Home Security. He was educated at Bristol Grammar School and Bristol University. During the last war he served, from 1914 to 1918, as a Captain in the Royal Engineers, was twice mentioned in despatches and was awarded the M.C. He became a C.B. in 1934. The James Alfred Ewing Medal is awarded annually by the Council of the Institution of Civil Engineers on the joint recommendation of the Presidents of the Royal Society and the Institution for specially meritorious contributions to the science of engineering in the field of research. James Alfred Ewing, who died in 1935, was Professor of Mechanics and Applied Mechanics at Cambridge University from 1890 to 1903, and later Principal and Vice-Chancellor of Edinburgh University. The honour conferred on Dr. Stradling will give great satisfaction to every architect and builder. It is a richly deserved tribute, not merely to his personal achievements but also to the work of the Building Research Station, to both of which the profession owes so much.

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Since the inception of the RIBA PRISONER OF WAR SCHEME, some three months ago, the Royal Institute has sent out over 3,000 *books to prisoner of war Camps in Germany and Italy. At present, special consignments are in preparation for Hospital Camps.* There will be books on the lighter side of building and architecture. The parcels will also contain books of a non-technical nature. Amongst generous donors to the scheme are £100 from the head of the firm of Sir Robert McAlpine's and over £600 from the employees, to be spent on gifts of books for prison camps. Mr. R. Coppock, Secretary of NFBTO, has made it possible for these large consignments to be sent out, thus materially helping to stock camp libraries with books covering a wide field in the building and architectural spheres. If there are any readers who have no further use for their copy of *The Architectural Review* and *Architects' Journal*, and would like to feel that it would be put to excellent use by others, they should send their current copies to Miss M. Bromley, c/o RIBA, 66, Portland Place, W.1. Many copies are wanted and are being requested on behalf of study groups in the RAF, who have little chance of seeing technical magazines and journals of this kind and who are anxious to keep in touch with modern developments.

New regulations concerning SUNDAY WORKING have been issued by MOW. Last November, the Minister directed that work on urgent Government building contracts should proceed on certain specified Sundays. These Sundays have now passed and it should be noted that building and civil engineering work is not permitted on Sundays unless it is specially authorized by MOW, or comes within the exceptional circumstances set out in S.R. & O., 1942, No. 2293.

Mr. F. C. R. Douglas, chairman L.C.C. Finance Committee, said 100,000 *HOUSES WILL BE REQUIRED in London after the war, involving an expenditure of* £80,000,000.

As the result of a meeting on March 15 *a CIVIC SOCIETY HAS BEEN FORMED IN MAIDSTONE.* Amongst those present were the Mayor, Sir Garrard Tyrwhitt-Drake, and Town Council, representatives of the Bench, Education, South-Eastern Society of Architects, Builders' Federation, Rotary, Chamber of Commerce, Archæological Society, and large business concerns, in and around the town. The speakers were Messrs. Alfred C. Bossom, M.P., F.R.I.B.A., Sidney H. Loweth, F.S.A., F.R.I.B.A., and Cecil Burns, F.R.I.B.A.

WHERE ARE WE GOING?

Today we begin to see that the improvement of cities is no matter for small one-sided reforms: the task of city design involves the vaster task of rebuilding our civilization.

Lewis Mumford in *The Culture of Cities*

LET us review the steps that have led to the formation of the new Ministry of Town and Country Planning.

1 OW to MOWB. In October, 1940, Mr. C. R. Attlee explained in the House of Commons that a new ministry would take over the whole organziation of the Office of Works and would be responsible for the erection of all new civil works and buildings required by any other Government department, but not for highly specialized work at present carried out by Service Departments. The new ministry, so tardily formed, was to be called the Ministry of Works and Buildings and Sir John Reith was to be its chief.

2 MOWB to MOWP. In February, 1942, Lord Reith informed the Upper House of the Government's intention to introduce legislation to change the name of his Ministry to that of Ministry of Works and Planning. The Town Planning powers previously exercised by the Ministry of Health would form the basis of its authority, and it would set up a Central Planning Authority. Further legislation at a later date was promised to extend existing powers over the whole country, including both land remote from development and land already developed. Machinery was to be set up at once to secure co-operation between the different ministries whose opinions must affect planning decisions. Lord Reith was to be the new, and first, Minister of Planning. Twelve days later he was suddenly and unaccountably superseded by Lord Portal. With Lord Reith, Mr. Greenwood, Minister without Portfolio responsible for post-war reconstruction, was removed from office and his job handed to the holder of the Nation's money-bags, the new Paymaster-General, Sir William Jowitt, the post of Minister without Portfolio being abolished. The inevitable question was asked in Parliament: "Why were these men removed?" Government spokesmen remained silent, and the increasingly popular phrase, "Dead Hand of the Treasury," was murmured again in the Lobby.

3 MOWP to MOTCP. In December, 1942, Lord Portal announced in the Lords that a new Ministry of Town and Country Planning was to be created. Sir William Jowitt seconded the announcement in the Commons. The reason for the new Ministry is to maintain the "fullest measure of direct responsibility to Parliament" in relation to the use of land and the administration of town and country planning. On December 31st, Lord Portal was replaced by Mr. W. S. Morrison, and the King approved his appointment as Minister-Designate for Town and Country Planning. He is now responsible for land and planning in England and Wales, while Mr. Johnston, Secretary of State for Scotland, con-

trols similar administration in Scotland. Both now sit on the Ministerial Committee under the Chairmanship of Sir William Jowitt who has been appointed under the resuscitated title of Minister without Portfolio and has direct access to the War Cabinet. His new post is thus a change in name only, his main function being to ensure the unification of a national policy of land use and physical development in association with other departments. The chief job of the Ministry will be to consider post-war reconstruction especially in relation to the Uthwatt, Scott and Beveridge Reports. In this connection, the Government has declared that it is unable to accept the Scott and Uthwatt recommendations that the main responsibility for controlling town and country planning should be in the hands of a permanent commission. In preserving the amenities of town and countryside the new Ministry will co-operate with the Fine Arts Commission. Mr. H. G. Strauss, M.P., has become Parliamentary Secretary for Town and Country Planning and Professor W. G. Holford, who has been adviser to the Planning Division of MOWP for two years, has been appointed to the Royal Fine Arts Commission, doubtless as a result of the proposed co-operation with MOTCP. MOWP has now resumed the title of MOW.

The objectives of the new Ministry are no more clearly defined than those of its forerunners. What powers, if any, will the new Ministry possess to act on its findings (if any)? A cloud of steam arises from time to time. But where is the engine and what is its destination? As the war progressed the increasingly specific title of each new ministry roused hopes at every change that a policy of positive planning would emerge. These hopes soon waned, since positive planning is closely and inevitably linked with the wider issues of our general war aims and social-economic objectives, which have never been clearly defined, least of all in the Atlantic Charter. Here lies the root cause of the Government's patent unwillingness to move towards a definite plan of rebuilding or to invest any commission with executive powers. This view confirms Astragal's opinion that the appointment of Mr. Morrison gives further evidence of the Cabinet's apparent ruling that each step in preparation for reconstruction must be, first of all, uncontroversial.

The JOURNAL maintains its opinion first expressed as long ago as November 30, 1939, that a permanent Governmental Commission created to prepare and carry out plans for reconstruction *with full powers to act* should be recruited. Were such a body to be formed, the ineluctable question would still remain: "Where are we going?" We know what we are fighting *against*, but what are we fighting *for*? Until Mr. Churchill spoke last Sunday the Government had given no satisfactory answer to that question. Now, by his committal statements on post-war policy, the Premier gives us hope that we can expect the firmly directed large scale positive planning which must form the essential basis of the new civilization to come.

The Architects' Journal
War Address: 45, The Avenue, Cheam, Surrey
Telephone: Vigilant 0087-9

NOTES & TOPICS

THE GREAT PLANNING MYSTERY—ACT II

Town and Country Planning, in the Parliamentary sense, began as long ago as 1909, when John Burns, of revered memory, with his eyes on Utopia, made this field the province of the Local Government Board—which later became the Ministry of Health. Until the 1932 Act, planning as administered by MOH was largely negative. There was, it is true, a small amount of positive planning, in the shape of slum clearance schemes, the zoning system and in the encouragement given to the establishment of allotments. But all the Ministers of Health I have known have thrown the limelight on housing rather than town and country planning.

*

Now, shortly after he has had the planning functions taken from him and passed to MOTCP via MOWP and MOWB, Mr. Ernest Brown, the Minister of Health, makes a bid for a return pass. Speaking at the Connaught Rooms recently at a meeting of local authorities arranged by the National Housing and Town Planning Council (reported in the JOURNAL last week), he calmly says: "I am glad to announce, with the concurrence of the Chancellor of the Exchequer, that if the local authorities do not possess the sites and cannot purchase them out of funds, I shall be prepared to sanction the raising of the necessary loans. I am prepared to entertain compulsory purchase orders." Mr. Brown went so far as to tell local authorities not

to wait for the announcement of Government policy on the Barlow, Scott and Uthwatt Reports.

★

Now—who is administering the Town and Country Planning Acts? We are told that Mr. W. S. Morrison has been appointed at £5,000 a year to do just that and we are told that a staff of some 150 has been appointed to help him. We are told that Mr. Brown's planning staff has been transferred from him to the new Ministry via Lambeth Bridge. We are told that Mr. Morrison feels he cannot make any public announcement at this stage, because Government policy is not final. Yet here we have Mr. Brown who is no longer concerned with planning, giving instructions that Mr. Morrison cannot give because policy is undecided. MOH backed by the Treasury has taken the bit between its teeth, and has ignored all the other Departments concerned.

★

More power must be given to Mr. Morrison if he is to make a success of his Ministry. Every Ministry in the Government is concerned with Town and Country Planning to some degree and each should be given full opportunities to state its views round a table. But one Ministry must have overriding power to co-ordinate and sort these views, and to carry out a decisive policy. Under the present set-up, this power should obviously belong to MOTCP.

PARTURIUNT MONTES . . .

A typical result of the present confusion is the curious phenomenon of plans for farm cottages being produced by MOH and the elevations for the same cottages by MOW. Four Ministries altogether are sticking their fingers into this particular pie—Agriculture, Health, Works and Town and Country Planning. We certainly muddle through in this country. But through to what?

★

Quite pleasant, harmless and well-constructed within their limitations are MOW's type designs for the farm cottages, and I am glad to see that MOW prefers terraces of cottages to detached or semi-detached units. But since the whole of Hampshire is to have only 70 cottages, Lincolnshire 228 and Rutland no more than 12, we are not likely to see many of these terraces. A good deal of fuss has attended the production of the scheme. The mountains parted, and there was born this little mouse of just 3,000 cottages.

NEW USES OF GLASS

Those who had the chance of seeing the Glass Exhibition during the brief fourteen days it was open at the Building Centre must have been impressed by the extraordinarily wide range of new uses to which this ancient material can now be put. The exhibition was arranged by the Department of Glass Technology of Sheffield University (the only school of its kind in the world, I believe) in conjunction with the Glass Manufacturers' Federation.

★

Most of the exhibits concerned engineers and scientists rather than architects, but many of them would have delighted anyone with an eye for significant form. Exhibits ranged from huge mercury arc rectifiers of a sculpturesque and formidable beauty, to tiny *ballotini*, minute glass spheres used on cinema screens to increase surface reflection. Of direct interest to architects was the show of glass wool as a heat and sound insulator, and as a filter for air conditioning plant; also an exhibit of a piece of twin-polished plate glass, illustrating a new process of manufacture, which allows both surfaces of continuously produced plate glass to be ground and polished simultaneously. This process has resulted in the manufacture of glass plates up to 100 inches wide and of a length limited only by the present powers of handling.

★

Another exhibit was a new type of lamp which has only recently been developed as a practical light source and marks an important forward step in artificial lighting. The fluorescent lamp, now produced in 5-foot tube lengths, derives its light, not from a filament but from a coating of fluorescent powder on the inside of the tube which converts the invisible ultra-violet light of the electrically charged mercury vapour in the lamp into visible light. By varying the composition of the fluorescent powder you get a wide range of colours. The advantages of this lamp are that it has low brightness without glare, very little radiant heat, gives a diffused shadow-free and uniform light over a wide area. It also has great colour-rendering power. You can see these tubes in use over each screen at the RIBA Exhibition at the National Gallery.

VOX POPULI

Tom Harrison's *Mass Observation Report on the People's Homes* is published this week (John Murray, 10s.). It is full of meat for those who like a very meaty meal.

★

A few extracts from the Summary and Conclusion, which precedes (for the benefit of lazy reviewers) the full text of the catechism.

"Most people are broadly satisfied with their homes. Satisfaction is highest on the Housing Estates, lowest in the Old Houses."

"People want a room for best where the good furniture is kept; they want somewhere to sit in the evenings away from the children."

"Whether or not a house possesses a bathroom has become a major social dividing line."

"Very unpopular is the lavatory-bathroom combination, though nearly all the post-1918 houses possess this feature."

"Non-washable distemper, though widely used, is most unpopular."

"There is little correlation between transport facilities and neighbourhood satisfaction."

"Slightly more than one person in ten wants to live in a bungalow."

"Interest in the community as a whole is almost completely lacking among the housewives."

★

And then the authentic note from the body of the investigation.

"It's terrible the rows with these porches . . . she slapped her over the face with a wet flannel."

"It's no good owning one house. You need two so that the rent from one can pay for the repairs to the other."

"If the girls are at home having a bath, it's most awkward."

"I don't argue or grumble. I trust in One Above."

ASTRAGAL

PLANNING NOTES

WOMEN'S VIEWS ON HOUSING

The Electrical Association for Women has just published a report on Post-War Reconstruction analysing the results of some thousands of questionnaire study sheets sent to women all over the country. About half of the 28 chapters deal with electrical fittings, but these should not be idly dismissed as mere electric boosting. They show certain trends in the critical use of appliances which are helpful to any architect. The other chapters contain much useful information about general consensus of female opinion. For instance it is stated that it is universally agreed that children in town and country need a hot midday meal and should have it at their school for social and dietetic reasons.

★

Another point on which opinion was unanimous was the unpopularity of the kitchenette. In the chapter on the small house the voting suggested that two houses with one reception room, kitchen with dining recess, and wash-house or scullery should be built to every one with two reception rooms and a kitchen. There is a marked preference for the kitchen in which meals can be eaten, but, where this is provided, a separate wash-house or scullery is absolutely necessary.

★

Useful views are expressed on details of house and flat planning, particularly on the design of sinks, cupboard space and wall finishes. Finally no home can be considered adequate unless there is space for living, sleeping, bathing, cooking, washing, drying (a drying cupboard for wet clothes is considered essential), and for the storage of foodstuffs, personal belongings, prams, bicycles, fuel, etc., under healthy and labour-saving conditions.

ELECTRICITY DISTRIBUTION

The London and Home Counties Joint Electricity Authority has issued a report recommending the public ownership of electric distribution. At present there are 75 undertakings in the London and Home Counties District. The Authority uggests a similar scheme to the metropolitan water supply and transport services extending over some 200 square miles of the most urban area in the world. The transfer should take place as soon as possible and the new Authority would, they say, be able to supply current and fittings at rates that the poorest could afford. In the view of the Authority the scheme might be applied nationally with comparatively slight modifications.

LETTERS

A. E. Eberlin, F.R.I.B.A.
Noel D. Sheffield, F.R.I.B.A.
G. Breeze
(Director, Lewis's, Ltd.)
George A. Atkinson, B.ARCH., A.R.I.B.A.
Lilian King
(Sec., ABT Forces Committee)

Farm Workers' Cottages

SIR,—I read with interest the short article and plans published in the JOURNAL for February 25.

Excellent as these plans are, I claim that much increased floor area of all rooms except the parlour, without increase in the superficial area measured within the outer walls, can be got as per the enclosed sketch plan for a parlour-type house. This I have obtained chiefly by omitting the front entrance, which experience teaches me is practically never used by farm workers, who prefer to enter their houses via the scullery, where they can clean up before going into the living quarters of their cottages.

The stairs shown on my plan with winders are not as good as the MOH type plans, but I consider the increased size of rooms outweighs this slight disadvantage.

A. E. EBERLIN

Nottingham.

Architects' Pupils

SIR,—I have read with some interest Mr F. G. Yorath's letter in your issue for March 11 and my views are his views.

In April, 1936, after a lecture on Architectural Education, by Mr. W. H. Ansell, the present President of the RIBA, I wrote a letter which was published in the Institute's Journal, of which the following is an extract:

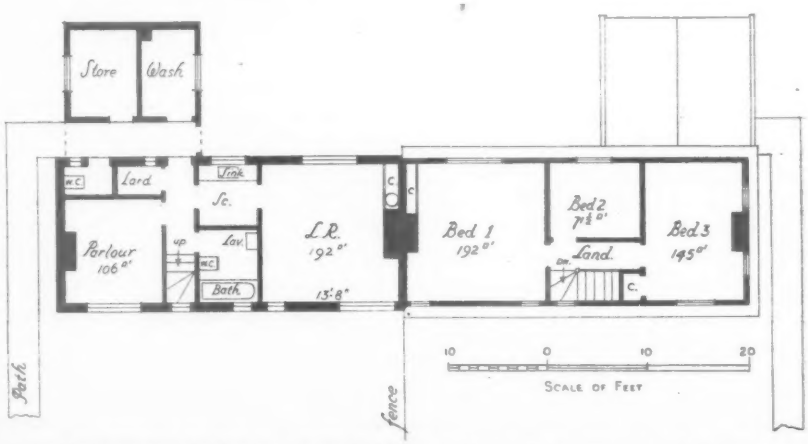
"... The five years' course consists of three University terms of about 24 to 26 weeks in each year, with an added negligible amount of vacation work that each student may himself fancy. During this scattered, lengthy and expensive training, he prepares no working drawings (which means drawings that have to be 'worked from') so that a feeling of boredom and carelessness is formed by the creation of fantasies.

"It is odd that a few marks and scratches on a piece of paper can convey one's thoughts to another and result in the building of a king's palace or a gardener's cottage; but these marks and scratches are prepared for two important persons, the quantity surveyor and the general foreman, neither of whom is impressed with the latest fashion in north points or border lines, but do require dimension arrow heads to stop at the precise spot intended and for drawings 'to work,' and upon the principle laid down in *Hudibras*.

'Still the less they understand,
The more they admire the sleight of hand.'

"Robert Louis Stevenson says, 'There is nothing more disenchanting to man than to be shown the springs and mechanism of any art; to pry below is to be appalled by the coarseness of the strings and pulleys.'

"The finished school product at the end of this loosely woven training, that has as many holes in it as a crotchet shawl, has ignored the essential coarseness of the strings and pulleys, and knows little of the practical side of his profession. His knowledge of the London Building Act and other Acts, that can only be learnt from actual use, is negligible; he could not make 'applications for consents' from the London County Council and other bodies, nor could he deal with a stubborn sanitary inspector or wily general foreman; he has no knowledge of quantities or of prices and could not supervise a job as clerk of works; he would be unable to enter a large, old-fashioned, dilapidated house and render a detailed report upon its condition with a plan and a test of its drainage, nor could he prepare a proper specification of the work to be done to put the house into a condition to satisfy moderns needs. In fact, at the end of his



Plan for increasing the floor area in the MOH Farm Workers' Cottages. See A. E. Eberlin's letter on this page; and plans on pages 206 and 208.

training in the schools, he is a theorist only.

"The young medical student, after one, or perhaps two, years in the schools, is put to real practical work, gaining experience in casualties, out patients, fevers, post-mortems and maternity work, and if, at the end of his five years' course he, perhaps, knows more about glanders, anthrax and bubonic plague than he does about measles, mumps and chicken pox, he can, nevertheless, be considered a well-trained man.

"The young qualified solicitor, accountant and quantity surveyor, each with his practical training, knows more of his profession, and is better able to give advice than is the young school-trained architect.

"Architectural training of the student could be improved by an *intensive* course of three years in the schools followed by two years pupilage in an office, and if this was followed fewer complaints would be made by practising architects of slick draughtsmen who cannot draw correctly, and with no knowledge of office practice, who have to start again as pupils at a salary in an office where trained men are wanted. . . ."

NOEL D. SHEFFIELD

London.

Post-War House Furniture

SIR,—I am writing on behalf of a retail business that can modestly be described as supplying the average needs of a large number of average people.

There is at present a considerable amount of discussion about the re-planning of our towns, but I wonder whether there is enough thought being given to the types of houses and flats which are going to be built on those re-planned urban areas. We are particularly interested because, as sellers of furniture and furnishings, we wish to plan ahead to meet the new demand for fitting out new houses in the post-war period.

I wondered whether any of your readers would care to indicate what kinds of houses are most likely to appear after the war. Will they be, for example, so standardised, with so much "built in," that house furnishers will merely have to supply, in the Far Eastern manner, a rug and a table? Alternatively, will our architects be so impressed by the Englishman's independent spirit that they will want to leave as much scope as possible inside the new houses for the expression of individual taste.

G. BREEZE,
Director, Lewis's, Ltd.

Birmingham.

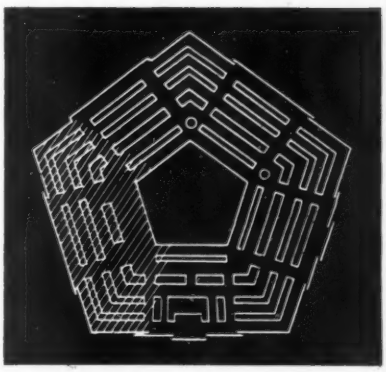
[*Lewis's have stores in Liverpool, Manchester and Birmingham and its associated companies in Glasgow, Leeds, Hanley and Leicester.—Ed., A.J.*]

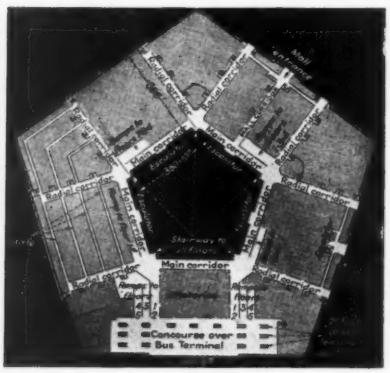
Training of Building Technicians

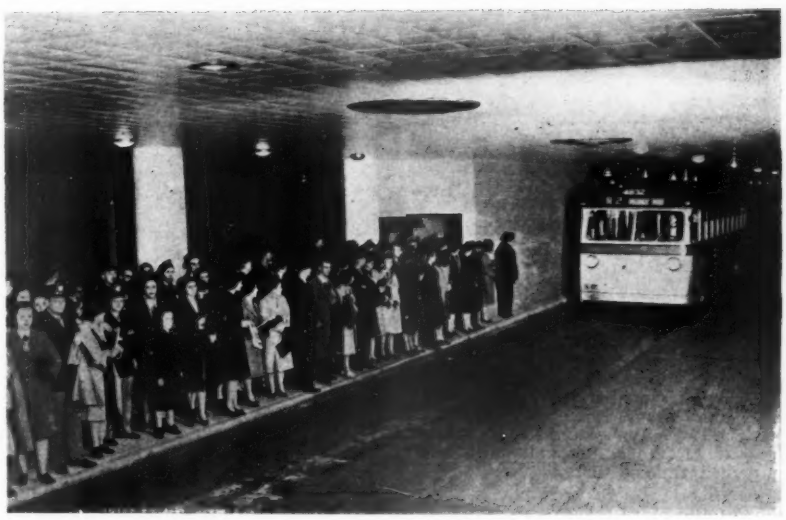
SIR,—It is unfortunate that the Government's White Paper on training for the building industry falls short of the excellent MOW report. Among other things it excludes from the Special Adult Training Scheme all technicians, including those on contractors' staffs. The report itself fails to pay sufficient attention to the training of architects, civil engineers, etc., though it admits that "the increase in the total demand for building implies a corresponding demand for men capable of filling efficiently all the various professional, administrative and supervisory posts. There is certain to be a dearth of men of these types and it will be necessary to provide special schemes of training for them also."

In a normal year slightly over 1,000 persons pass one of the various professional examinations and join the building industry in Great Britain. Some, mainly civil engineers and surveyors, join the staffs of contracting firms. The majority find work in local or central government, with consultants or in allied industries. Less than 50 per cent. receive a

WORLD'S BIGGEST BUILDING







To concentrate its workers the USA War Department has erected an office building that has 4,000,000 square feet of floor space. It is of reinforced concrete of five stories, with a pentagonal plan. Offices are laid out in concentric rings round a 6-acre central court. Pedestrian circulation within the building is by means of ramps leading from floor to floor and by radial corridors on each floor that branch out from the main corridors encircling the inner court. The facing of the outside walls is of 6 inches thick limestone with 8-in. brick back-up in two courses. Walls to light wells are of uncovered, rusticated concrete. The pitched roof is of concrete covered with slates. The building will provide working space for 40,000 workers. There are 16½ miles of corridor, 200 rest rooms, 1,500 clocks. Four cafeterias serve 15,000 meals daily and four more are being installed. There will eventually be parking space near the building for 8,000 cars. Ordinarily seven years would have been needed to erect such a building but a group of some 350 architects and engineers have completed it in 14 months. Top: A general view of the building. Centre Left: A plan showing the layout of light wells. Centre Right: The 2nd floor plan; other floors are very similar. Below: A bus station within the building. Buses carrying workers to and from Washington across the Potomac River enter the structure through two tunnels, while a third is reserved for taxis and official cars.

full-time education. Most qualify after hours of part time, mainly evening, study. Among the other 2,000 who are recruited annually for technical or managerial posts in the industry, if an organized technical training is received at all, it is at evening classes.

The MOW report points out the defects of this system. "The worker has to cram all his vocational, civic and cultural education into the few hours that remain after a full day's work . . . to attain a high degree of proficiency he must sacrifice all his leisure for several years in succession." No wonder only 16 per cent. last to the third year of their course. Among architects just over 25 per cent. of those sitting pass the whole RIBA Final (mainly for part-time students), 75 per cent. on an average pass the whole-time Schools finals. The question of improved facilities for training is a vital problem for all technicians, whether they intend to become architects, engineers, building managers or estimators. Much of the training covers the same ground. All should be regarded as specializations of one technology.

The Government must include in its Special Training Scheme the training of building technicians, candidates to be selected mainly from Servicemen who have had previous experience in the building industry. Training should be on the lines of the MOW report, but should cover all technicians. Similar training should be included in any Overseas training scheme.

I have recently returned from West Africa and believe the immediate organization of general building courses, including Refresher courses for technicians, would fill a vital need now in certain garrison areas overseas, Africa, the Middle East, India, etc.

Finally there should be no delay in setting up the Apprenticeship and Training Council. Its terms of reference must include the training of technicians. At every level, from junior trade school to the post-graduate department of the University, adequate grants and scholarships must be made available, so that a young apprentice craftsman with the necessary ambition and ability may receive training to University standard and become an architect, engineer or building manager. The scheme must include provisions for part-time day education side by side with practical training for all students in the industry. It is equally important that the University student receive proper practical training inside the industry as that the young worker receive adequate technical education.

I hope that the ABT will give serious attention to this problem, as it is the only organization that can review the problem from a general standpoint free from the naturally more sectional outlook of the bodies representing the various individual professions in the industry. Perhaps as it is now a member of the NFBTO it may be able to raise the problem of the education of technicians in the proposed Training Council.

GEORGE A. ATKINSON

Lowestoft

Journals for the Forces

SIR,—On behalf of the ABT, I should like to thank those of your readers who, during the past year, have so kindly sent us Journals to pass on to our members in the Forces.

These Journals receive a wide circulation among men serving in this country and overseas, and the activities of our Committee have now been extended to include such things as parcels to Prisoners of War and offers of hospitality from members waiting to welcome Forces in their private homes.

It will be appreciated that as more men are called to the Forces there is an ever-increasing demand for Journals and it is hoped that your co-operation will enable us to meet this demand and extend our circulation.

LILIAN KING

London.

Two thousand building contracting firms will be affected by the Government scheme for repairing 80,000 bomb damaged houses, further details of which have been given in statements made by MOW. Three Government Departments are concerned with the scheme—MOH, who select the houses to be repaired; MOLNS, who, with MOW, find the labour; and MOW, who administer the scheme.

Repair of BOMBED HOUSES

[*BY A SPECIAL CORRESPONDENT*]

War conditions have caused the severe and continuing contraction of the building and civil engineering industries and have raised in an acute form the problem of preserving the structure of the industries for the post-war programme. The Advisory Council has advised Lord Portal that, in its opinion, no concentration scheme, as adopted by other industries, is suitable.

The Government's policy has, hitherto, been directed to securing a spreading of the available work on the Government programme by :—

(*a*) restricting the load which any individual firm may carry ;

(*b*) the inclusion of a provision for compulsory sub-contracting at least 20 per cent. of the work in the larger contracts ; and

(*c*) grouping smaller builders to enable them to undertake contracts that would have been above the capacity of the firms individually.

This policy has been endorsed by the industries, while the Advisory Council has recommended that wherever practicable all larger works should be split into a number of separate contracts and that essential maintenance and local small works should be the function of the smaller and medium-sized builders.

The urgency of the contracts in the Government Building Programme and the practical difficulties of co-ordinating plans, labour, transport, housing, feeding, welfare, materials, equipment, plant and progressing for each contract have made it impracticable, in most cases, to split contracts among a number of smaller contractors, though the policy of sub-contracting has been widely followed.

Every *mobile* man employed by the small and medium-sized builders, whatever his age, has been held for work on priority contracts anywhere in the country and immobile men of any age have been held for priority work in their own areas. At the same time a Reserve of immobile men has been kept to maintain houses and buildings and to carry out essential works and services for the community. The demand for such labour will inevitably rise and still further restriction of private work of an unessential nature will be necessary.

Now, with this background in their minds, the Government have introduced a scheme for the voluntary grouping of that portion of the industry dealing with maintenance and small works. The policy and principles underlying these proposals (as being directed to the preservation of the structure of the industry) have been endorsed by the Advisory Council.

MOW is responsible for the arrangements necessary to implement the Government's decision to repair the selected 80,000 houses, 40,000 of which should be completed this year. These arrangements consist principally in the organization of contracting groups in the districts concerned. The Works and Buildings Emergency Organization is regarded by MOW as being an essential component of the scheme, which will be operated with its full co-operation. Through it, arrangements for the selection of leading contractors and the formation of their co-operating contractors into groups will be carried out. The houses will be divided into batches of not more than (about) 200, each of which will form a separate contract. Compactness in areas rather than numbers of houses will be the guiding factor, always bearing in mind that the work is to be treated on the basis of large-scale operations. Only in exceptional cases will there be batches of less than 50 houses. The EWO will be applied to the scheme, but it is unlikely that payment by results will be found practicable. The works will carry a high priority.

An outline Schedule of Works defining the standard to which properties are to be restored has been issued by the MOH to Local Authorities, details of which are given below.

The WBEO has already called a number of meetings in each centre to explain the principles of the scheme and to invite the names of contractors prepared to volunteer, together with names and details of their immobile workmen. The names of leading contractors suitable to be in charge of groups (and who are acceptable to the Local Authority) have been obtained prior to these meetings, at which contractors are given a chance to indicate with which of the approved leading contractors they are willing to work.

A form of contract, based on the MHS Form of prime cost contract, has been drawn up. Contracts will carry a flat 12½ per cent. on approved expenditure on labour and materials, of which the leading contractor will take a portion as management fee, which is expected to

amount to 2½ per cent. The balance will be divided according to the man-hours worked by the labour supplied by each group member. Allowance for the hire of small tools is included in the 12½ per cent.

On signing the contract the leading contractor will investigate the approximate quantities and types of materials required for the work, and will ascertain the position of supplies locally. Orders will be placed or reservations made immediately. The fullest possible use will be made of salvaged materials supplied through Local Authorities. Difficulties in obtaining supplies will be referred to the WBEO at once.

Meanwhile the Local Authority will agree a time/progress schedule with the leading contractor. MOW is responsible for ensuring the rapid progress of the scheme and will keep active watch on its progress through the WBEO. The contract for the work, it is stressed, is with the leading contractor who *alone* will be contractually responsible to the Local Authority. No leading firm may normally undertake more than one contract at a time.

The terms of the contract stipulate prompt payment, but this is in turn dependent upon the prompt submission of the accounts by the leading contractor. The fixed charge additional to the cost will be payable as work proceeds. It may be found after starting work on a property that unforeseen expenditure will be necessary, resulting in a much higher cost than was originally anticipated. In such circumstances the leading contractor must immediately ask the Local Authority for further instructions. It is intended that the average expenditure per house shall not exceed £250.

ADMINISTRATION OF GROUPS.

Other building contractors in the locality (known as co-operating contractors) will be invited to form a subsidiary group and to place their *entire* immobile labour resources, their transport and plant, in a pool at the disposal of the group. The group will also include firms which are normally entrusted with certain specific sections of the general building work, e.g., plumbing, plastering and slating or tiling. Specialist firms, e.g., electrical contractors, will also be included, the object being to make each group comprehensive for the type of work envisaged. Where any of these firms form part of the group they will work on the group terms, but if in the case of specialist firms individual terms are necessary, they must be arranged with the approval of the Supervising Officer. Such individual terms will carry 5 per cent. fixed charge only, to the group.

The leading contractor will draw upon the pool for the men, plant or transport required and such requirements must be met without delay. It is intended to draw on not more than one-half of a firm's labour, unless otherwise agreed. To spread work among a large number of firms, no firm will be allowed, as a rule, to have more than 25 per cent. of the actual working strength of a group drawn from its own employees. The leading contractor's agent and clerical personnel employed may be additional to the men actually employed on the works.

The following principles will be followed, in connection with disposition of personnel, wherever possible :—

(i) where individual firms have provided the services of sufficient men to form a suitably-sized and balanced gang they should be placed on a definite section of the work under their own foreman or leading hands, so as to preserve to the greatest possible extent their separate entity and organization.

(ii) the personnel of smaller firms or of those with unbalanced labour resources for the particular work, should also be kept together but may be attached to a larger firm, or grouped under a suitable foreman or chargehand.

(iii) Foremen and leading hands will be drawn from the pool, and should be kept in charge of, or working with, men from their own firms.

(iv) Minor resources from the pool will be distributed where they can best be utilized.

Every effort will be made to keep men continuously employed. While men drawn from the pool are engaged on the work they will be taken on the pay roll of the leading contractor and will be administered by him on similar lines to his direct employees. All materials required for the works will be obtained by or through the leading contractor. All transport and mechanical plant will be similarly obtained but the leading contractor may and should hire from co-operating contractors.

OFFICIAL OUTLINE SCHEDULE OF WORKS.

The aim of the works is to bring war-damaged houses back into use for living purposes and everything manifestly essential to secure this end must be carried out, but non-essential work, e.g., reinstatement of unnecessary outbuildings, is not to be undertaken. Work will vary with each house and the purpose of this Schedule is to indicate the general scope and character of operations.

All materials and workmanship are to be of good quality, including salvaged materials and fittings which are to be used wherever possible. Materials in short supply are to be used as sparingly and economically as possible and wherever practicable " alternative " materials suggested in *Ministry of Works Bulletins* should be used. Fittings and decorative finish must, in all cases, be of the simplest character.

The works are to be carried out under the direction and to the satisfaction of the Supervising Officer appointed by the Local Authority and this Schedule should be read in conjunction with any order or instruction issued by him with respect to any particular house or group of houses.

1. *Drains and pavings.*—Reinstate damaged drains, replace missing or broken gulley traps and manhole covers (using concrete covers in preference to lightweight cast iron), clean gullies and inspection chambers, flush and test drains.

Repair damaged paths as necessary to give reasonable access and repair damaged yard pavings to ensure satisfactory surface water drainage.

2. *Structure.*—Make good all damage to structure including external and internal walls, parapets, chimney stacks, roofs, framed partitions, floor and ceiling joists ; taking down and rebuilding sections of walling where necessary and replacing damaged timbers. Do all necessary temporary propping or shoring. Clear all chimney flues of obstructions, reset loose, and replace missing or broken pots, flaunching in cement mortar.

Where brick party walls are exposed—after careful repair to secure adequate bonding with front and rear walls—render exposed face with a brushed-on coat of cement slurry finished with ¼-in. rendering of cement and sand.

3. *Roof covering.*—Replace or renew battens and slate or tile coverings so as to provide complete protection against weather penetration. Where old roofs in weak condition are to be recovered, corrugated asbestos may be used if this will avoid replacement of structural members.

Repairs to zinc flats should be made with bitumastic solution or a combination of Hessian fabric and bitumastic solution.

4. *Gutters and fall pipes.*—Broken sections of cast iron gutters or fall pipes should be replaced. Where complete renewal is necessary asbestos may be used.

5. *Doors and windows.*—Reset windows and external door frames where necessary, bedding in hair mortar and pointing in compo. External and internal doors to be carefully overhauled, eased and adjusted, and where necessary repaired and rehung. Fix new deal frames or linings as necessary and salvaged or new deal architraves of minimum size.

Renewals should be from salvaged stock where possible or by new doors of stock pattern, hung on steel butts. Front doors to be fitted with Yale or night latches and 8 in. iron barrel bolt and back doors with rim locks and bolt. New internal doors to have rim locks with bakelite furniture. All existing door locks to be overhauled and provided where necessary with new bakelite handles.

Trap openings to roof space where trap doors are missing to be provided with light ¾-in. ledged batten panels.

Solid or cased window frames to be repaired wherever possible by the re-use of parts of more seriously damaged windows. Provide and fit new windows to match existing where necessary using casements wherever reasonably possible. Opening casements to be hung on steel butts and double-hung sashes fitted with cords and suitable sash weights. All broken sash cords to be reinstated.

Slightly damaged or warped steel casements to be straightened and repaired where possible, new steel frames being ordered only when neither repair nor the use of suitable salvaged frames is possible. Means other than reinstatement should be adopted in dealing with damaged leaded lights.

Reglazing.—Permitted use to bring the total area of glass in any one room or apartment up to but not exceeding the undermentioned percentages of glass space prior to the damage.

Bedrooms, bed sitting-rooms, halls, staircases, landings, larders	25 per cent.
Living rooms, public rooms, kitchens, sculleries ..	50 „
Roof reglazing.	None permitted.

No reglazing is permitted in rooms and apartments other than those indicated above.

6. *Floors and staircases.*—Repair or renew damaged or broken solid or boarded flooring. Repair wood staircases strengthening where necessary, and fit new staircases with handrails and simple balustrading in cases where stairs have been damaged beyond repair.

7. *Plaster.*—Cut away all damaged and loose plaster and clean backing so as to give a good key for new plaster. Cut out and stop major plaster cracks. Make good small wall and ceiling patches with two or three coats of plaster. Where most of plaster has gone from the wall or ceiling of any room, the whole should be cleaned off and either replastered or, where possible, replaced with plasterboard or similar material.

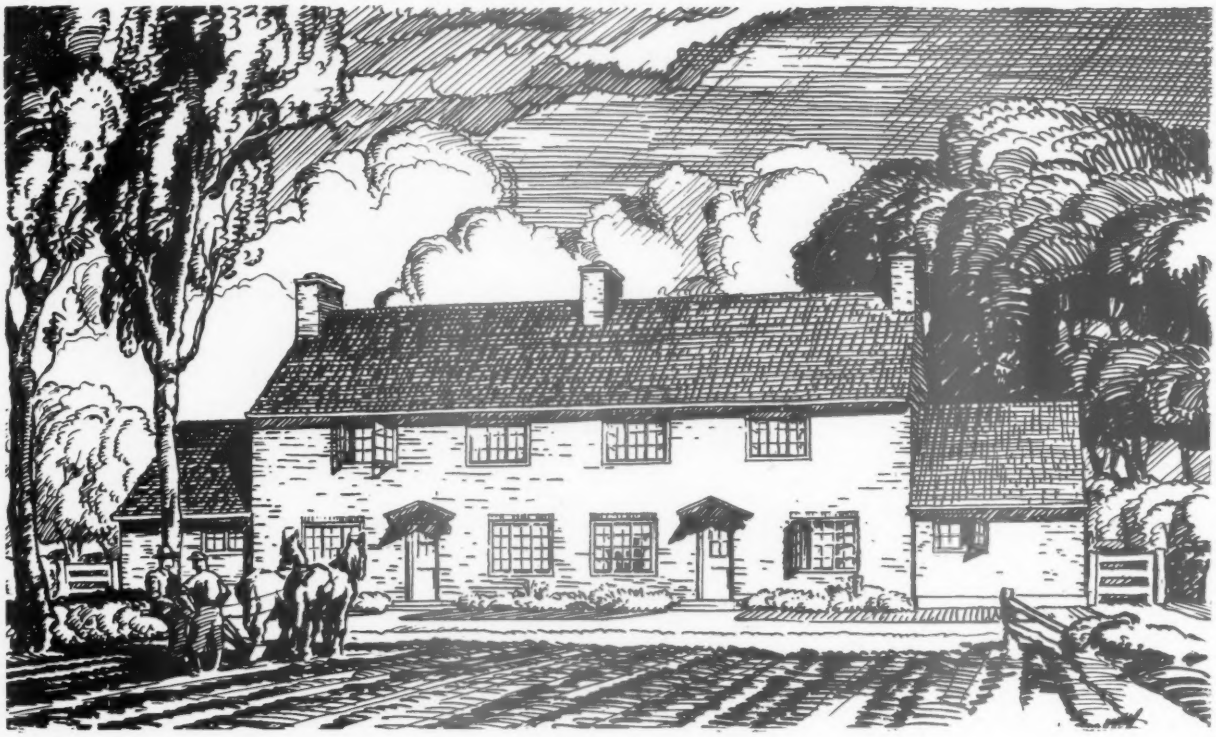
8. *Services and internal equipment.*—Generally the gas, water, electricity and sanitary services should be repaired or restored. Notify Service Companies where necessary and arrange for testing and connection to mains. Repair or renew damaged or broken sanitary fittings and plumbing services including any hot water circulating system. Damaged stoves and fireplaces to be repaired wherever possible or if beyond repair replaced by suitable salvaged fittings, new fittings to be provided only where essential.

9. *Joinery finishings and fitting.*—Cupboards should be repaired where possible but not renewed where beyond repair. Where walls have been entirely replastered and new skirting is necessary it should be out of 4 in. by 1 in. Reinstatement of picture rails should not be undertaken but patching may be done if salvaged rail is available.

10. *Painting and Cleansing.*—Only works sufficient to preserve materials and to make the premises clean, hygienic and occupiable are to be undertaken. All new iron and steel work should be two coats painted and new woodwork primed and two coats painted. Old internal painted work to be cleaned.

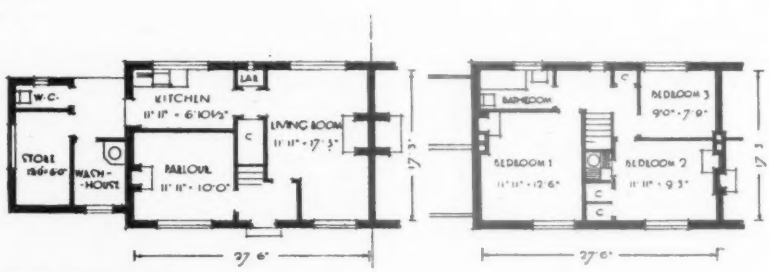
Loose and dilapidated wall papering is to be stripped and plaster which has suffered from exposure or contamination is to be cleaned and sized. Generally all plaster ceiling and friezes should be treated with a coat of ceilingite and other plaster wall surfaces distempered.

Remove all rubbish, do all necessary touching up required to plaster, painting, and wall and ceiling surfaces, clean glazing, scrub out floors and pavings, and leave the premises clean and habitable.



FARM WORKERS' COTTAGES

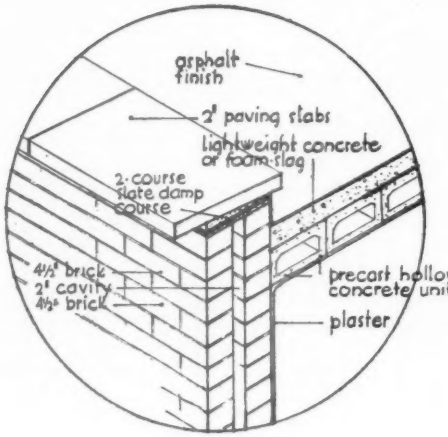
MOW DESIGNS FOR ELEVATIONS



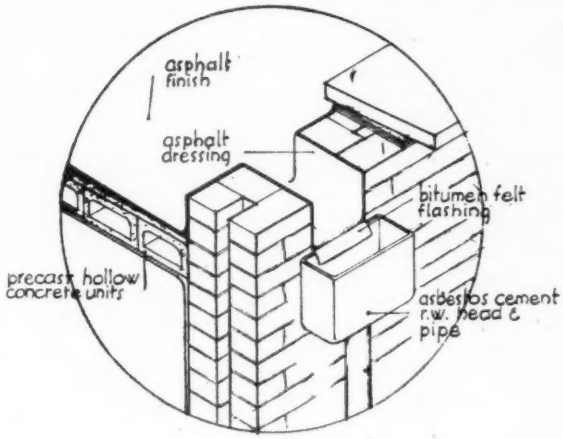
MOH PARLOUR TYPE PLAN

Above and top. MOW type designs of cottages with high pitched roofs. Facing page: constructional details of flat roof type.

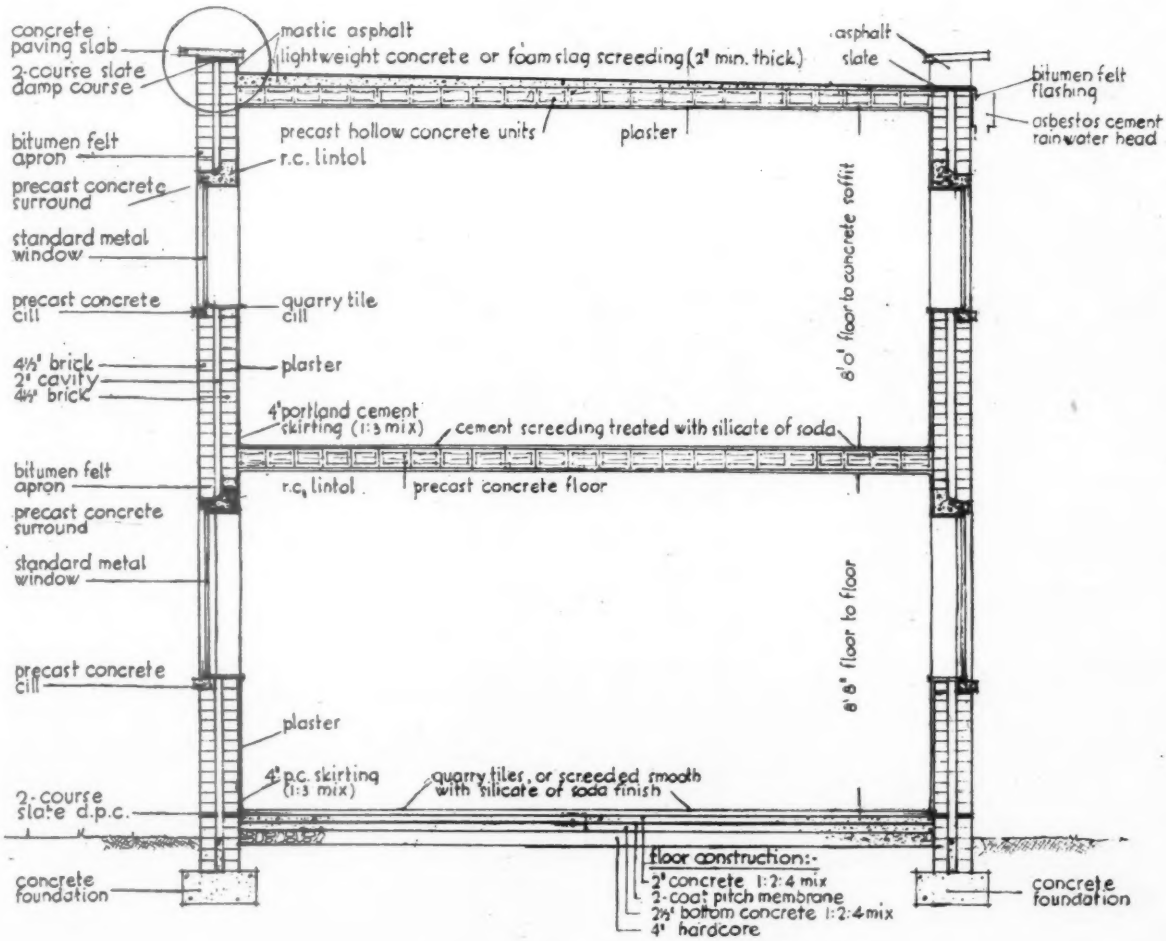
Arrangements have been made by MOH in conjunction with MOA for the completion of new cottages for land workers in time for the next harvest. Preparatory work is on the basis of 3,000 cottages and the aim of MOH is to start building the first batch in April. The houses are to be built by rural district councils. MOW is the central Department for all building matters. It is responsible for the country's building programme and for the supply of building materials. It has a vital interest in questions of design, particularly, but not only, from the point of view of economy of materials and labour, and in promoting good building in all ways, but MOH is responsible for housing policy and for the standards of accommodation. MOW has accordingly, in consultation with the MOH, MOA and MOTCP, prepared typical designs for the rural cottages to be erected this year. These designs with accompanying specifications have been issued for the assistance of the architects who, under the local authorities, will be engaged for the building of the houses.



EAVES DETAIL SHEWING
COPING & DAMP-COURSE

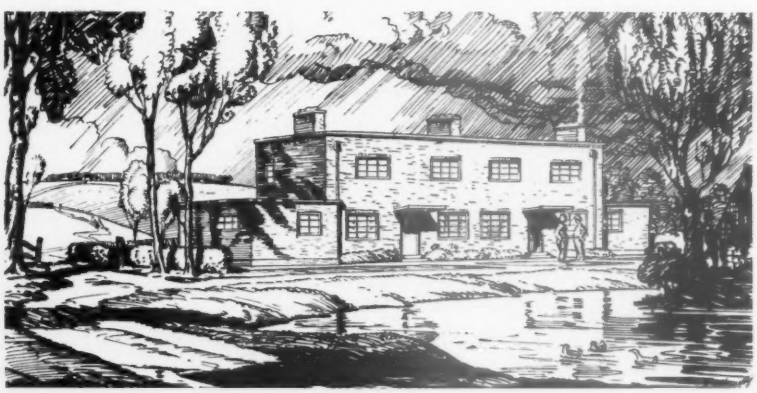


EAVES DETAIL SHEWING
RAIN-WATER OUTLET



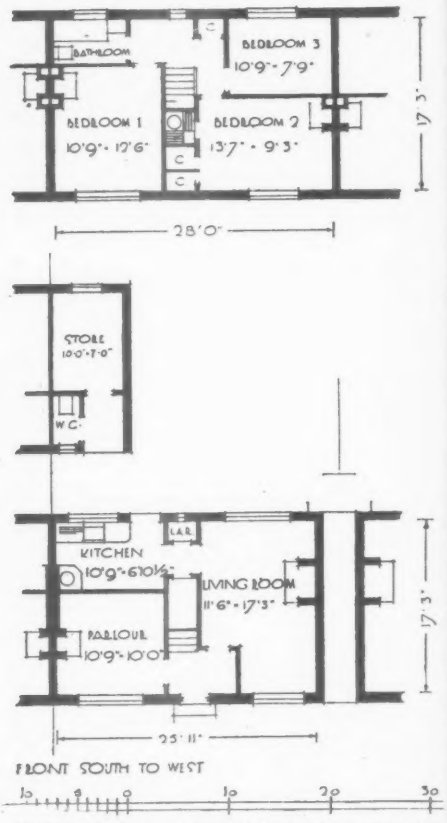
CROSS SECTION
FLAT ROOF CONSTRUCTION

MOW type designs of farm workers' cottages with medium pitched roofs.



MOW type designs of farm workers' cottages with flat roofs.

FARM WORKERS' COTTAGES



MOH PARLOUR TYPE PLAN WITH PASSAGE

Owing to transport difficulties as much as possible of the material used must be obtained in the neighbourhood. In some cases new methods and materials may have to be introduced; but it is emphasized that if modern materials are used with the same skill that the old craftsmen applied to theirs, modern buildings need not be inferior in quality or appearance. For use in suitable surroundings, a flat roof containing no timber is shown. In many places, however, the traditional tiled roof will be essential, and provision is made for both high and medium pitch roofs for houses to be built among old houses having similar roofs. All such roofs must be designed with the utmost economy and simplicity. Gables are preferred to hipped ends, and excessive spans are discouraged. Particular importance is attached to the arrangement of the houses. The colour of the materials also is being carefully studied and colour washes will be used where the colour of bricks is out of keeping with the surroundings.

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DETAILED CONSIDERATIONS OF DESIGN IN WELDED STEEL 20

BASE PLATES FOR CENTRALLY LOADED COLUMNS.

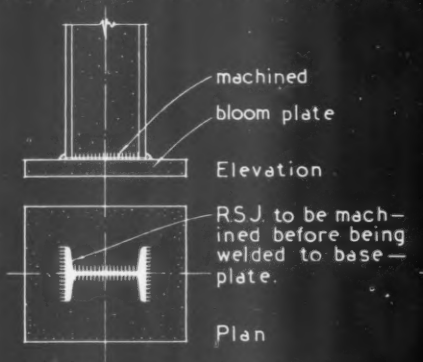

FIGURE 1a: WELDED BASE-PLATE FOR R.S.JOIST COLUMN.

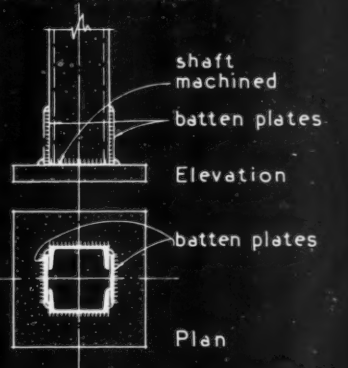

FIGURE 1b: BLOOM BASE-PLATE FOR COLUMN OF R.S.CHANNELS.

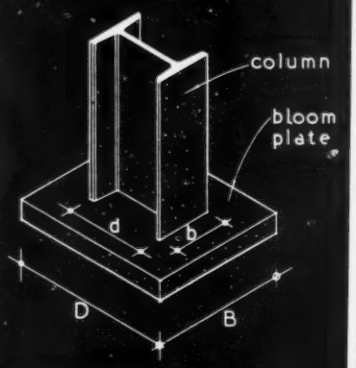

FIGURE 2.

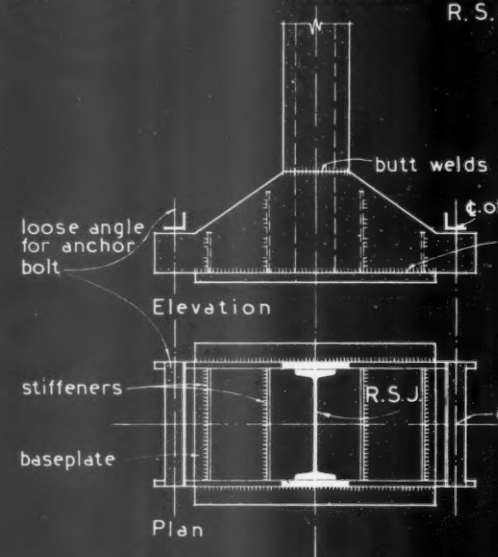

FIGURE 3: EXTENDED COLUMN BASE (extension plates at 90° to web of joist).

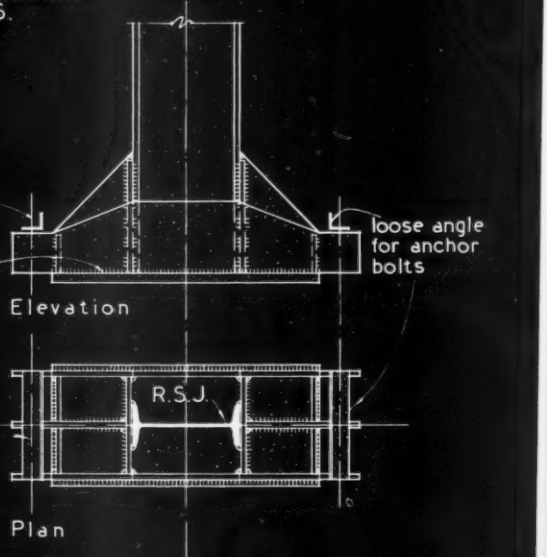

FIGURE 4: EXTENDED COLUMN BASE (extension plates parallel to web of joist)

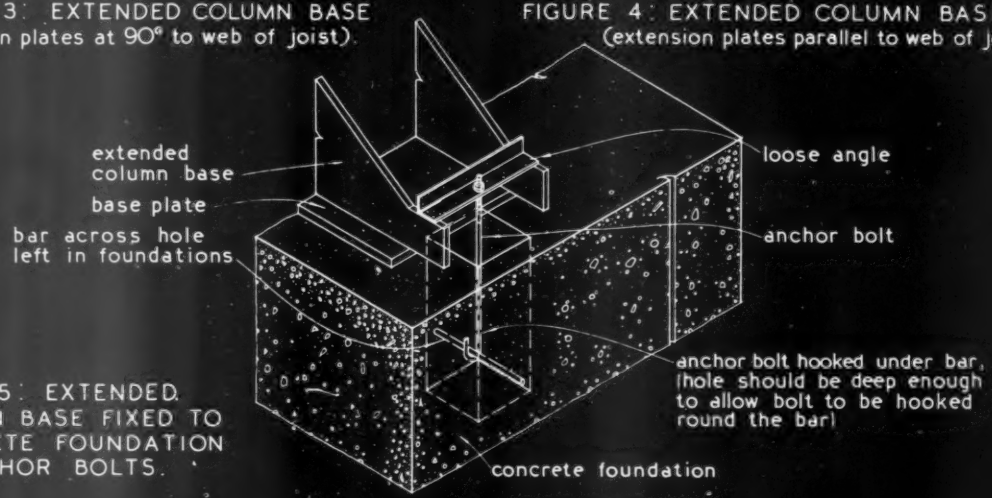

FIGURE 5: EXTENDED COLUMN BASE FIXED TO CONCRETE FOUNDATION BY ANCHOR BOLTS.

Issued by Braithwaite & Co. Engineers Ltd. Compiled by Samuely & Hamann, Consulting Engineers.

INFORMATION SHEET: STEEL FRAME CONSTRUCTION 91 WELDING 47
Sir John Burnet Tait and Lorne Architects One Montague Place Bedford Square London WC I

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INFORMATION SHEET

• 892 •

STRUCTURAL STEELWORK

Subject : Welding 47. Base plates for centrally loaded columns.

General :

This series of Sheets on welded steel construction is a continuation of a preceding group dealing with riveted and bolted construction, and is intended to serve a similar purpose—namely, to indicate the way in which economical design, within the limits imposed by general planning considerations, may be obtained.

Both the principles of design and the general and detailed application of welded steelwork are analysed in relation to the normal structural requirements of buildings. The economies in cover and dead weight, resulting from the use of lighter and smaller steel members and connections, are taken into consideration in the preliminary arrangement of the building components to obtain a maximum economy in the design of the steel framing.

This sheet is the twentieth of the section on detailed considerations of design in welded steel, and deals with the design of welded base plates.

Size of Base Plates :

The overall size of a base plate depends on the load and the permitted pressure on the concrete on which it rests. The size is given by the formula :

$$A = \frac{N}{s}$$

where A = the area of the plate, in square feet.
N = the total load transmitted by the column, in tons.
s = the permitted stress on the concrete, in tons per square foot.

With heavy loads it is usually more economical to use a high grade concrete (possibly reinforced with a mesh near the surface), and a small base plate, than a weaker mix and a larger plate.

Bloom Plates :

The simplest base plates are bloom plates, thick enough to transmit all stresses without the aid of stiffening ribs. Where they are used, the column is machined and welded to the plate under pressure.* In this case the weld need not transmit the actual load and can be therefore relatively light. This arrangement is shown in Figure 1a. Figure 1b gives a similar layout for a column made of two channels. Here batten plates are welded at the bottom and machined with the channels. The shape of the bloom plate should be chosen so that the corners of the column are at approximately equal distances from the sides. The thickness, in inches, of the bloom plate is given by the formula :

$$\sqrt{\frac{W(B-b)}{12D}} \text{ or } \sqrt{\frac{W(D-d)}{12B}}$$

whichever is the larger, W being the load in tons, and B, b, D and d measured in feet or inches. (See Figure 2).

Extended Column Bases :

The column base described above is very simple, but the base plate is relatively heavy and becomes uneconomical with heavy loads. In cases where the bloom plates become thicker than 1½ in. to 2 in., extended column bases with stiffening plates are preferable. Thinner base plates are then possible. It is simpler, however, to extend the base in one direction only. Figures 3 and 4 show some typical examples of extended bases. In every case the whole of the construction (except the base plate) is first machined and then welded under pressure to the base plate.

Column Anchorages :

It is usual to anchor long columns to the foundations even when there are no forces to make the anchorage necessary, since it simplifies erection. The best arrangement is to leave holes in the foundation, with a bar running through. If possible, the holes should not be covered by the base plate. (See Figures 3 and 4). The actual anchor bolts may be hooked to the bars running through the holes, and fastened to the column as shown in Figure 5.

Previous Sheets :

Previous Sheets of this series on structural steelwork are Nos. 729, 733, 736, 737, 741, 745, 751, 755, 759, 763, 765, 769, 770, 772, 773, 774, 775, 776, 777, 780, 783, 785, 789, 790, 793, 796, 798, 799, 800, 801, 802, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 816, 819, 821, 822, 823, 824, 826, 827, 828, 830, 832, 836, 837, 838, 839, 840, 842, 843, 845, 847, 848, 849, 850, 851, 852, 853, 855, 856, 857, 859, 860, 862, 863, 865 revised, 867, 869, 870, 871, 874, 875, 877, 880, 882, 883, 886, 887, 890 and 891.

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* At the moment, resistance welding machines are being developed by means of which it is hoped that in future base plates may be fixed to columns more economically than by the arc welding process.

The function of this feature is to record all developments in building technics throughout the world as reflected in technical publications, papers read before learned societies, official statements, reports of research institutions and building experiments. Lack of scientific data is a handicap both to the technician and to the planner. The ***Information Centre*** *attempts to remedy this deficiency and to keep all busy men, whether fighting or working, abreast of current developments in building technique. Items are written by specialists of the highest authority who are not on the permanent staff of the Journal. The views expressed are disinterested and objective. The Editors of the Information Centre would be very glad to receive information on all technical developments from any source, including contractors and manufacturers.*

Physical

PLANNING

1102 Health Plans

Society of Medical Officers of Health : THE MEDICAL OFFICER OF HEALTH PLANS. *A National Health Service pamphlet, November*, 1942. Reorganization of health services. Single health authority in Local Government. Health centres and hospitals. Health services free to all.

Chief among the environmental factors which will call for attention after the war are housing, overcrowding, atmospheric pollution and the working conditions of the people. Such circumstances and conditions have always exercised and will continue to exercise a profound influence on the national health. The medical profession must have constantly in mind their bearing on the health of the community, and the considered views of the medical profession should be of great importance in planning for social betterment.

1. At the present time several Government Departments have health and medical functions—e.g. the Ministry of Health, the Board of Education, the Ministry of Pensions, the Home Office, the Ministry of Labour, the Ministry of Supply and the Board of Trade. Their medical and health functions should be brought under one department with health as its sole function.

2. In local government areas there should also be a single authority for health purposes. This would include the administration of medical, health and allied services, and the provision of an adequate hospital service. Few existing local authorities are large enough to provide complete health services and new local government areas will have to be devised in which not only population but geographic and other considerations are taken into account. These enlarged areas should be able to provide efficiently and economically all the hospital and health services commonly required.

3. In the new organization of medicine it cannot be too strongly emphasised that it will be general practitioners or groups of practitioners who will be in the first lines of defence against the encroachment of disease and for the maintenance and improvement of health. The family should be regarded as the health unit, and practitioners should have the care in health as well as disease of suitable numbers of persons. In order to encompass this work, Health Centres should be established at which and from which doctors would work. These Health Centres, together with all necessary auxiliary services, would be located, provided, furnished, maintained and administered by the local authority. Health Centres should be linked up with the teaching hospitals in order that the medical student may get the necessary training to fit him for the improved type of medical practice envisaged. (With the development of Health Centres, out-patient departments of hospitals would be necessary only for emergency cases and for discharged patients requiring special supervision.)

4. A hospital service should be complete and able to deal with all forms and stages of invalidity. It includes hospitals both for the physically sick and for persons suffering from mental disorder and mental deficiency. There must be co-ordinated administration of all hospitals within the area of a local authority so that it may be possible not only to determine the functions of individual hospitals but how these hospitals may best be linked up with one another and with the work of health centres and domiciliary practice. The hospital service is in fact a necessary part of the health service. The function of the health services is to detect disease and to develop the hospital on its preventive as well as its curative side.

5. All hospitals, medical, health and allied services, including the environmental and personal health services, should be available to every member of the community without charge.

6. Private enterprise cannot provide and maintain complete hospital, medical, health and allied services, and such services conducted on a whole-time salaried basis have the dual advantages of administrative efficiency and the elimination of undesirable competition for patients. Hitherto the doctor has been mainly interested in the illness of his patients, but it is of the first importance that his attention should be directed to the maintenance of health. This means not only a re-orientation of outlook on the part of the individual practitioners but the provision of all services necessary to enable practitioners to study and investigate departures from health in their earliest stages. In these circumstances a national medical and health service should be established on a whole-time salaried basis with the complete facilities outlined in this report. The maximum freedom of choice should be given to patients in the selection of their doctors.

MATERIALS

1103 Cements

F. M. Lea : MODERN DEVELOPMENTS IN CEMENTS IN RELATION TO CONCRETE PRACTICE. *Journal of the Institution of Civil Engineers, February*, 1943, *pp.* 224 *to* 274. Development in cement manufacture in the last 25 years has resulted in a variety of cements, with different qualities to suit various requirements. Increased fineness which cannot be determined by usual method of sieve residues.

Modern developments in cements have influenced concrete work at low temperature, mass concrete work and shrinkage cracking and the resistance of concrete to deterioration under adverse condi-

PROPERTIES OF CEMENTS.

	Rate of strength development.	Rate of heat-evolution.	Drying shrinkage.	Resistance to cracking.	Inherent resistance to chemical deterioration.
Portland Cements					
Rapid-hardening	High.	High.	Medium.	Low.	Low.
Normal	Medium.	Medium.	Medium.	Medium.	Low.
Low-heat	Low.	Low.	Somewhat higher.	High.	Medium.
" Sulphate-resisting "	Low to medium.	Low to medium.	Medium.	Medium.	High.
Cements Containing Blast-furnace Slag					
Portland blast-furnace	Medium.	Medium.	Medium.	Medium.	Medium.
Supersulphated	Medium.	Very low.	Medium.	Inadequate information.	High.
High Alumina Cements	Very high.	Very high.	Medium.	Low.	Very high.
Pozzuolanic Cements	Low.	Low to medium.	Somewhat higher.	High.	High.

tions of exposure. From the time of its original production there was a steady and gradual change in Portland cement resulting from improved methods of manufacture and testing and this led, some 25 years ago, to the introduction of rapid-hardening Portland cement. Later developments abroad have increased the number of kinds of Portland cement, and among these the low-heat and Sulphate-resisting Portland cement are particularly to be noted. Cements containing granulated blast-furnace slag originated in the latter half of the nineteenth century, and from these there developed, in Great Britain, Portland blast-furnace cement, and abroad other similar cements. Within the past 10 years or so a new class of slag-containing cement appeared on the Continent, under the name of supersulphated cement. Other types are high-alumina cement and pozzuolanic cements. High-alumina cement is pre-eminently a material with a very rapid development of strength, a high heat evolution during hardening and a high resistance to chemical attack. Portland blast-furnace cement in general is similar in properties to normal Portland cement, compared with which it has great advantages in respect of resistance to chemical attack and often a somewhat lower heat-evolution, and certain disadvantages, associated with a greater falling-off in speed of hardening as temperature becomes lower. Pozzuolanic cements are a mixture of Portland cements and pozzuolana ground together. They have a lower heat evolution, and a higher resistance to chemical deterioration than the base Portland cement which they contain.

The heat evolved during hydration is of considerable importance in certain types of concrete construction. Shrinkage cannot be considered in isolation, since its practical effects are also conditioned by other properties of concrete, the tensile strength, modulus of elasticity, and creep.

Not all the properties desired can be obtained in any one cement. If special emphasis is placed on some one property, it must be, to some extent, at the expense of another property. The general properties of various types of cements are summarized in the accompanying table. This must be taken as a broad picture and individual cements in the various classes may show more favourable characteristics than those indicated.

A characteristic feature of modern cements is the increased fineness to which they are ground. An increase in fineness accelerates the rate of development of strength, the workability of concrete, its extensibility and susceptibility to shrinkage cracking. Fineness is at present determined in most specifications by sieve residues but such tests give no adequate comparative measure of the real fineness. A convenient characteristic, the influence of which cannot be neglected, is the specific surface, that is, the surface area per unit weight. This can be expressed in square centimetres per gram or square feet per lb. Much experience in very large projects in U.S.A. has shown the benefits of a control of the surface area. The result was concrete of higher density, greater impermeability and with a reduction in sand streaks on the surfaces in contact with the forms. It is more difficult to get such a clear picture from experience in this country, since the sieve residue by which the fineness of the cement is defined bears no close relation to the surface area and the essential information on the real fineness of the cements used is therefore lacking. It seems evident that vibration methods of placing would have encountered serious difficulties had not modern cements been much finer than their counterpart many years ago.

There are now available a range of cements from which can be selected one of that class which has the properties most favourable for any particular type of concrete construction. Selection of the cement alone does not ensure concrete with the properties desired which depend also on the proper choice and grading of aggregates and mixes, combined with the control of the water-cement ratio, methods of transport and placing, curing, design of shuttering, etc. Cement selection and concrete control must go hand-in-hand. For concreting at low temperatures a cement with a high rate of heat evolution, for Mass Concrete construction, such as dams, massive retaining walls and the like cement of low heat evolution is required. In this respect the present supply in this country is too restricted. The cost of high-alumina cement is very high and the manufacture of low-heat cements, of supersulphated and sulphate resisting Portland cements has yet to be developed commercially. The cost of low-heat cement in U.S.A. is 5 to 10 per cent. higher than that of normal Portland cement.

Regarding resistance to chemical attack, an essential condition is that the concrete itself be of high quality, whatever the cement used. A lean mix and a ballast aggregate badly graded will not result in a resistant concrete even though high-alumina cement is chosen.

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*

1104 Lantern Slides

Q *I have to give a short talk on the History of Architecture to the local Photographic Society and wish to obtain the use of lantern slides to illustrate it. Where can I apply for these?*

A Lantern slides dealing with the History of Architecture can be hired by anyone from the Courtauld Institute of Art, 20, Portland Square, W.1, and from Messrs. Newton, 72, Wigmore Street, London, W.1.

It may be possible for you to borrow slides on this subject from the Victoria and Albert Museum, South Kensington, London, S.W.7, and if you are a member from the AA, 34, Bedford Square, W.C.1. We would advise you to write to the Secretary stating the purpose of your lecture.

Cable-making History in the making

When William Thomas Henley commenced to manufacture insulated wires, over a hundred years ago, he probably was too engrossed with the task in hand to dream of the world-famous enterprise which he was founding. As he ingeniously designed and constructed his machines for covering wires with silk and cotton his aim was efficiency in production and reliability in the finished product. His endeavours and his ideals proved a firm foundation for future developments and in spite of set-backs and difficulties the name Henley now stands pre-eminent in the field of electric cable-making.

This machine made and used by W. T. Henley over a hundred years ago will still cover fine wires with silk and cotton with unimpaired efficiency.

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1105 Wear and Tear

Q *Is the requisitioning authority allowed "fair wear and tear" under Section* 2(1)*b of the Compensation (Defence) Act,* 1939, *in assessing dilapidations at the end of a period, as it would seem there is some difference of opinion on the interpretation of the words "no account being taken of fair wear and tear or of damage caused by war operations," as mentioned in that section?*

Under Section 17(1) *does "fair wear and tear as might have been expected to occur but for the fact that possession of the property was so taken" mean, in the case of a property that was* vacant *at the time of requisition, wear that would have occurred if the property had* remained vacant, *e.g., wear on external paintwork, defects in the structure, settlements, lamination of tiles and such like?*

It would seem that the rent is based on the assumption that the acquiring authority "bears the cost of the repairs necessary to command the rent" under Section 2(1)*a of the Act and we do not see how, under these circumstances, fair wear and tear can apply.*

A The compensation payable under Clause 2(1) (*a*) is a sum equal to the rent which might reasonably be expected to be payable by a tenant in occupation. No compensation for anything else but rent is laid down in this sub-clause, and the remainder of the paragraph merely helps to determine the probable rent by defining the type of lease under which the tenant might be expected to be in occupation.

The compensation payable under Clause 2(1) (*b*) is a sum equal to the cost of making good any damage, excluding fair wear and tear and war damage.

Fair wear and tear is defined in Clause 17(1) and under the definition given the Requisition Authority only avoids liability for such wear and tear as might have been expected to occur, if the property had not been so requisitioned. We do not think it can be assumed that the building would have remained vacant as it would then be inequitable to claim compensation for rent.

The wear and tear that might have been expected to occur is, in our opinion, that which might have been expected if a tenant of the class likely to rent the property had been in occupation.

According to our interpretation, if a first class house or block of flats were occupied by troops, the Requisitioning Authority could only avoid responsibility for the wear and tear which might have been expected if an ordinary tenant had been in occupation.

SOCIETIES AND INSTITUTIONS

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 contents page. Except where inverted commas are used, the reports are summaries and not verbatim.

RIBA

Julian Huxley

March 6, at the National Gallery. Lecture by Dr. Julian Huxley on *Why We Must Plan.* First in series of six lectures in connection with the RIBA *Rebuilding Britain* Exhibition. Chairman: Mr. M. Hartland Thomas, F.R.I.B.A.

J. Huxley: During the inter-war period our architecture has been characterized by a series of splits and cleavages. There has been the cleavage between fine architecture and the mere provision of shelter, the cleavage between those who believe in tradition and those who, looking forward to the future, are branded as revolutionaries by the traditionalist. Finally there has been the conflict between *laissez-faire* and planning. The result of all these conflicts has been architectural disaster. Order has been lacking in our building, but the present Exhibition will help to bring a unifying and ordering concept into it. The concept around which the Exhibition is planned is that of a scientific analysis of human needs to be met by building and architecture, and of the technical means for meeting them. There is the evidence of new ideas right through the Exhibition in the way the sociological viewpoint is approached. It is the work of architects trying to think out the intellectual concept on which they have to work.

We shall not get our full measure of order in the new architecture that we want, until that architecture is the expression of some general idea in society at large. Sir Kenneth Clark, at the opening of the Exhibition, said the unifying motive idea behind the society of the future was the provision of a standard of welfare for the common man, and that once this idea had seized hold of society it would involve the type of planning embodied from the professional angle in the present Exhibition. On this platform of material culture we must build an equality of opportunity for non-material things in the way of education, intellectual and æsthetic appreciation, recreation and so on.

We are passing from an age of scarcity to an age of potential plenty, when people will insist on using science to the full in architecture as in everything else. The present Exhibition is an important step forward; it may be said to provide the embryo out of which the new planning system can grow; but at present the architecture has no style. There is now going on a battle between past styles and the functionalism that is yet without a style. The architecture of the future will be based on functionalism: the framework will attach the building to the needs it is expected to satisfy, and will try to indicate the function of that building by modern methods and materials, irrespective of anything dictated by tradition. But this will be only the basis. More will be necessary if the building is to become architecture.

In the Tennessee Valley works you have a rare combination of the modern engineer, the modern architect and the modern planner. The result is extraordinarily satisfying; the great dams are not only terrific engineering works; they are also beautiful works of architecture, and so constructed as to form an organic part of the landscape. So also with the roads. This is real planning, in which the æsthetic side has its part as well as the engineering. In this country, also, whereas our concept of housing has been largely based on such human needs as shelter, space, air and light, we are now beginning to realize that there were other things beyond those, and that the ordinary human being will not be content with the nakedness of pure functionalism. He will demand æsthetic gratification. That we shall need to gratify by the colour and beauty of furnishings and fittings in the house, and by the placing of the house in the landscape. I hope that in the near future the RIBA, or some other body, will have a similar Exhibition on the whole question of good design, as well as scientific planning. In the Exhibition there are some remarkable pictures of a Czechoslovakian town so situated in the middle of the landscape as to form part of it. Many old towns grew out of the landscape, but here is one deliberately planned not to sprawl over the landscape but to enhance its beauty.

What we want is a real architecture with the design based on function, on the best scientific use of materials, on rational planning and also on gratifying the æsthetic emotions—an architecture that will be a true expression of the feeling abroad in society as a whole. Finally we must not forget that before this can happen, before we can have the basic idea strong enough to be the driving force of society, there must be a change of heart both in people and Government. At the moment in the field of architecture, in the broad sense from planning down to housing, we have curious contradictions. Just after the special Ministry of Planning had been appointed, we had the Scottish Hydro-Electric Bill which, instead of relating hydro-electricity to an overall plan, set it up as a one-sided development. Then we have the planning functions of housing separated from those of town and country planning in the broader sense. Town-planning functions are in the hands of the Ministry of Planning, whereas housing is in the hands of the Ministry of Health. That Ministry has just issued plans for agricultural cottages (very much out of date), but local authorities are being urged to buy sites, survey these and get on with the job of planning houses instead of waiting to see what overall plans there may be for the nation at large. In addition to the Ministries of Health and Planning we have Sir William Jowitt's reconstruction secretariat entrusted with other functions of planning, so that one never knows where the various authorities overlap, or where the unity or driving force is to be. The country must make up its mind as to what it wants, and the Government must make up its mind to carry out the will of the people. It should implement the recommendations of the Uthwatt Report. It should give the

Ministry of Planning an authority which would be really overruling, and a mandate to get on with the plans, and to get the local authorities to obey them. Unless this is done we shall once more drift into a period where we shall do a great deal of building but develop no real architecture.

DIA

H. G. Strauss

March 2, at Royal Society, Burlington House. Lecture by Henry Strauss, M.P., on *Design and Mass Production*. First in series of four monthly lunch-time meetings arranged by the Design and Industries Association. Chairman: The Rt. Hon. Lord Sempill.

H. G. Strauss: Please forget that I am a Minister: I am speaking as an old member of the DIA and as a layman.

I have been stimulated by such books as Lewis Mumford's *Technics and Civilization*, Anthony Bertram's *Design* but not least by interchanging ideas with Professor Holford.

There are pessimistic people who believe that design and mass-production are, if not mutually exclusive, at least unhappily married. The reasons for this traditional attitude are firstly, dislike of the machine on religious, moral and social or economic grounds. Secondly, that the scarcity value of things tends to confuse the æsthetic and market values. Thus great numbers of the population find it difficult to believe that if they pay a great deal for an article of which another example can be bought more cheaply, it must be a better article, and if you buy a very cheap article it cannot be of good design. There is of course no foundation for this belief as the most expensive things can be of atrocious design and some of the articles sold in Woolworths have been better in design than anything else on the market.

In nothing is design more important than in the article that is to be produced in thousands or millions. The machine has come to stay and it should be looked on as a challenge to the designer rather than as an enemy of good design.

Another common illusion is that standardizing has some merit or demerit apart from the thing standardized.

There is the other widespread illusion that some things must of necessity be ugly—as for example a petrol station—and that there is nothing to do but screen or camouflage it. Nothing could be more untrue. There is no good pretending that a petrol station is something else; the only thing to do is to design a good petrol station which could look quite as orderly and pleasing as some of the London Underground Stations.

What is it that makes an article good or bad? It is the fitness of the article for its purpose. Of course you may say that everything to-day is more or less fit for its purpose but if you look round you will see that this is not so.

Honesty is absolutely fundamental to good design. There are three forms of dishonesty that may be distinguished. The first is when an object pretends to be a different object from what it is—the electric light which is made to look like a wax candle and the electric fire that quivers are among the most popular and are a sad commentary on public taste.

The second form of dishonesty is making one material look like another, such as paper, imitation marble, linoleum or plastic which imitates wood. This is all the more regrettable as plastics have a great future and it is vital that materials should not be brought into discredit.

The third kind of dishonesty is where the material is what it appears to be but there is pretence about the processes by which it is made. For example, the case of silver, where in the manufactured process infinite trouble is taken to break the surface with hammer marks, a process which is not used and by which it is not made. In the same way the mock-Tudor house.

If an article is made completely honestly and is fitted for its purpose in every way, it will almost certainly be satisfying and may be beautiful. Beauty is not some extra-physical thing which is added to an object otherwise complete, it is an intrinsic grace and proportion that fulfils its purpose with precision and economy.

Beauty in machine-made articles comes from extreme economy, from accomplishing the purpose with the cleanest lines and fewest instruments possible. Is there then no place for ornament? Mumford says that modern technique strips from an object nearly every barnacle of mere decoration and ornament; think of examples like the Golden Gate Bridge or a great monoplane.

But there are obvious examples such as textiles and pottery where decoration is an improvement but it should be the work of someone familiar with the processes of production. I am sure it is necessary and most important for a designer of mass-produced articles, if he is to be responsible for decoration, to make himself familiar with and even live for a time among the processes of production of the thing that he proposes to decorate.

Another thing to be sure of is that while there is merit in honesty and efficiency there is none whatever in novelty for its own sake. New design springs from new needs, new inventions, new processes, therefore new design is demanded and obtained for wireless apparatus, electric fires, etc. No such conditions apply however to forks and spoons and the modern silversmith who discards the rat-tail, without having thought of anything better, shows a misunderstanding of the principles of design.

There is no reason why machine-made goods should not be admirable in design but if we examine the shops we find two things. One that about 90 per cent. of goods are not of good design (some are appalling). Two, that if we take the trouble to look we can find in nearly every branch of production two or more British firms producing goods of excellent design not surpassed anywhere in the world. We have Gordon Russell and Heal in furniture; Best and Lloyd, Troughton and Young in light fittings; Murphy wireless cabinets; Wedgwood pottery; and Ferranti fires to mention a few. Textiles are perhaps the most cheering section of any, there being a large number of manufacturers who produce materials of great beauty. Much of our printing, thank heaven, is admirable, too, with a glorious tradition of which many modern printers are worthy.

Who or what decides whether design should be good or bad? In this country things made for use are generally good and those made for adornment are generally bad. Does it depend on whether men or women are the principal buyers? There is evidence to suggest that the most atrocious things in any shop are in the women's departments.

However, let me say what I believe to be the main trouble. I am coming to some reasons for thinking that the public are not to blame or rather that they should not be held mainly responsible. It is the hopeless separation of the manufacturer and the consumer: they are separated by very inferior intermediaries. I have no doubt that there are good buyers, but there are also extremely stupid and prejudiced ones. The buyer has four characteristics, he thinks he knows what the public wants, he thinks that the public wants what is bad and he invariably informs the manufacturer that the public will not buy the good, while he informs the retailer that the manufacturer will not make them. Everything he says is false. The shopkeeper is also partly responsible for he does not display good articles. The responsibility of the public is negligible in comparison.

What circumstances produce good results? Well, you get them when manufacturers have a good standard of design. Wedgwood, Russell are examples and Keith Murray.

How can we improve things? By exhibitions or shows, I think. These should be annual but run not by a representative committee but by a ruthless tyrant. I should admit English and foreign articles but keep them separate and would not admit anything that is not excellent in design. There should be a Chamber of Horrors.

We have a superb tradition which is being swamped in vile follies. Let us not kill genius by the bogus and let us overcome the false, for the possibilities that then lie before us are unlimited.

TCPA

C. S. Orwin

March 13, at the Council Chamber, Moreton-in-Marsh. Conference on *Reconstruction and Country Life*, arranged by the Town and Country Planning Association. Speaker: Dr. C. S. Orwin, Director of the Institute for Research in Agricultural Economics, Oxford University. Chairman: Brig.-General R. C. A. McCalmont, Chairman of North Cotswold Rural District Council.

C. S. Orwin: A lot of people are thinking of nothing more than the preservation of things as they are. For the most part, rural England is pleasing to the eye, and many people would be content to prevent things being done to disturb it. They want to control the location of industry, for example, and some people want to keep it out of the countryside altogether. They want to restrict the use of land for non-agricultural purposes. The extremists would like to stop the further application of machinery in farming and rural industries, and would like to get back to a kind of Mid-Victorian self-sufficiency on each farm and in every village.

This is taking a very negative view of reconstruction. It suggests that we have reached perfection and that further progress is impossible. The countryside as we have got it represents a never-ending evolution from one generation to the next, each one making its contribution, and any attempt to stereotype things as they are to-day is contrary to the whole spirit of reconstruction.

We hear a lot said about getting a better balance between town and country, and about bringing people back to the land. In various ways it is suggested that we want to have more people working on the land. Here is a more positive policy, but have the advocates of putting more people on the land ever considered how it is to be managed without reducing the standard of the workers' living? The fundamental decision, therefore, in connection with rural reconstruction is—are we to have two men employed by traditional methods to do the work which one man can do with a modern machine?

Or take the question of the right of the individual to do what he likes with his own. Right up to the outbreak of the present war, the right of the owner to withhold land from the use of the community was freely exercised and hardly challenged. But it is fundamental to post-war planning that both ownership and occupation of land should be subject to a pretty rigid control in the interests of the whole community, and we have got to make up our minds how we are going to do it.

The basic aim should be, to give a better life, both material and spiritual, to those who live by the land. How can we improve their economic position, and give them the amenities which are conspicuously absent from their lives at present? It is assumed that if farming can be made to pay, everything else will follow I doubt if this is sufficient. Country life in the

olden days was made up of much more than farming. It included also almost all sorts of industries. Even in my day, any considerable village would have its blacksmith, its miller, wheelwright and saddler. Many of them would have also a maltster, tanner, roper, and so on. Many of them, too, would have a tailor who made clothes and a bootmaker who made boots and shoes, real tradesmen. In the last two generations, nearly all have disappeared. Factory-produced farm requisites and clothing have killed the village tradesmen, and with their disappearance the whole character of village life has changed.

I think most of them have gone for good, and if a mixed society, agricultural and industrial, is the ideal, as I think it is, then planning for reconstruction must encourage, not discourage, the migration of light industries into country districts.

I expect many of you know places where manufacturing industries are established in the smaller country towns and larger villages to the great advantage of both. It may be an old industry arising originally from the local agriculture, like the blanket factories at Witney and the beech furniture at High Wycombe. It may have nothing to do with existing local production, as the M.G. motor works at Abingdon. It may be nothing more than a brewery. Any combination, however, of agricultural and industrial life makes a healthier society and gives more opportunities for education and social life.

However, we have not finished planning when we have given piped water supplies and bathrooms, and when we have wired country cottages for electric light and power, or when we have improved the transport services and the opportunities for recreation and amusement. The rural worker has got to live and he wants a standard of living as good as other people's It is no good to say that this is mere materialism and we must think more of cultural values. We are a very long way from the point at which the mass of the workers are being corrupted by prosperity.

This brings me to a problem of rura reconstruction which I believe lies at the root of the matter. Are our farms and fields themselves designed to facilitate the greatest production by the most economic means? A man can milk ten cows by hand. A man and a boy can milk thirty cows with a milking machine. A man and a boy can milk sixty cows with a Hosier bail. Other things being equal, the man on the Hosier bail is worth about four times as much as the hand milker, and about twice as much as the man on the milking machine. But this sort of labour organization is impossible on many farms because of their size and layout.

Too many people think that little reconstruction is needed, and that all difficulties will be met by controlling the townsman when he ventures into the countryside, either for business or pleasure, and by subsidizing agricultural prices. On the contrary, there is a great piece of work to be done before we can begin to feel that we have exhausted the possibilities of reconstruction. The time has come for the organization of a great national survey of the countryside to find out what it needs, to give the people more both of the material and the spiritual values of life.

NCA

Diploma Course

The Diploma Course in the Department of Town and Country Planning of the School of Architecture of the Nottingham College of Art and Crafts has now received the recognition of the Council of TPI. To future holders of the College Diploma in Town and Country Planning, the Council is prepared to grant exemption from the Final Examination of TPI.

In the School of Architecture the Diploma Course in Architecture received the full recognition of the RIBA in 1941, with the subsequent recognition of the course by the Architects' Registration Council in the same year.

EJMA

Door Design

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OBITUARY

We regret to record the death of Mr. Evelyn Hurden, Chairman and Managing Director of The Universal Asbestos Manufacturing Company Limited. He occupied the position of managing director from the inception of the company and had combined that office with that of chairman since July, 1940. He was 58 years of age.

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal." War Address: 45 The Avenue, Cheam, Surrey, and should reach there by first post on Monday morning for inclusion in the following week's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal." War Address: 45 The Avenue, Cheam, Surrey.

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Six lines or under, 8s.; each additional line, 1s.

The Incorporated Association of Architects and Surveyors maintains a register of qualified architects and surveyors (including assistants) requiring posts, and invites applications from public authorities and private practitioners having staff vacancies. Address: **75 Eaton Place, London, S.W.1. Tel.: Sloane 5615** 991

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Applications are invited from qualified Architects not liable for military service for the temporary post of Education Architect. The post is vacant owing to the permanent Architect proceeding on military service.

Salary will be at the rate of £500 per annum, plus cost of living bonus.

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STANLEY MOFFETT,
Director of Education.

Education Offices,
Middlesbrough.
15th March, 1943. 874

GLAMORGAN COUNTY COUNCIL.

Applications are invited for two temporary appointments as architectural assistants.

Candidates should have had good general experience and be ineligible for military service.

Salary offered is at the rate of £300 per annum, plus the prevailing cost of living bonus which is at present 15s. per week.

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HENRY ROWLAND,
Clerk of the County Council.

County Hall,
Cardiff.
March, 1943. 873

Architectural Appointments Vacant

Advertisements from Architects requiring Assistants or Draughtsmen, and from Assistants and Draughtsmen seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice. Other "Appointments Vacant" and "Wanted" will be found under later headings, and are subject to the charges given under each heading.

Wherever possible prospective employers are urged to give in their advertisement full information about the duty and responsibilities involved, the location of the office, and the salary offered. The inclusion of the Advertiser's name in lieu of a box number is welcomed.

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Classified Advertisements continued on page xxxii.

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Further information may be obtained from
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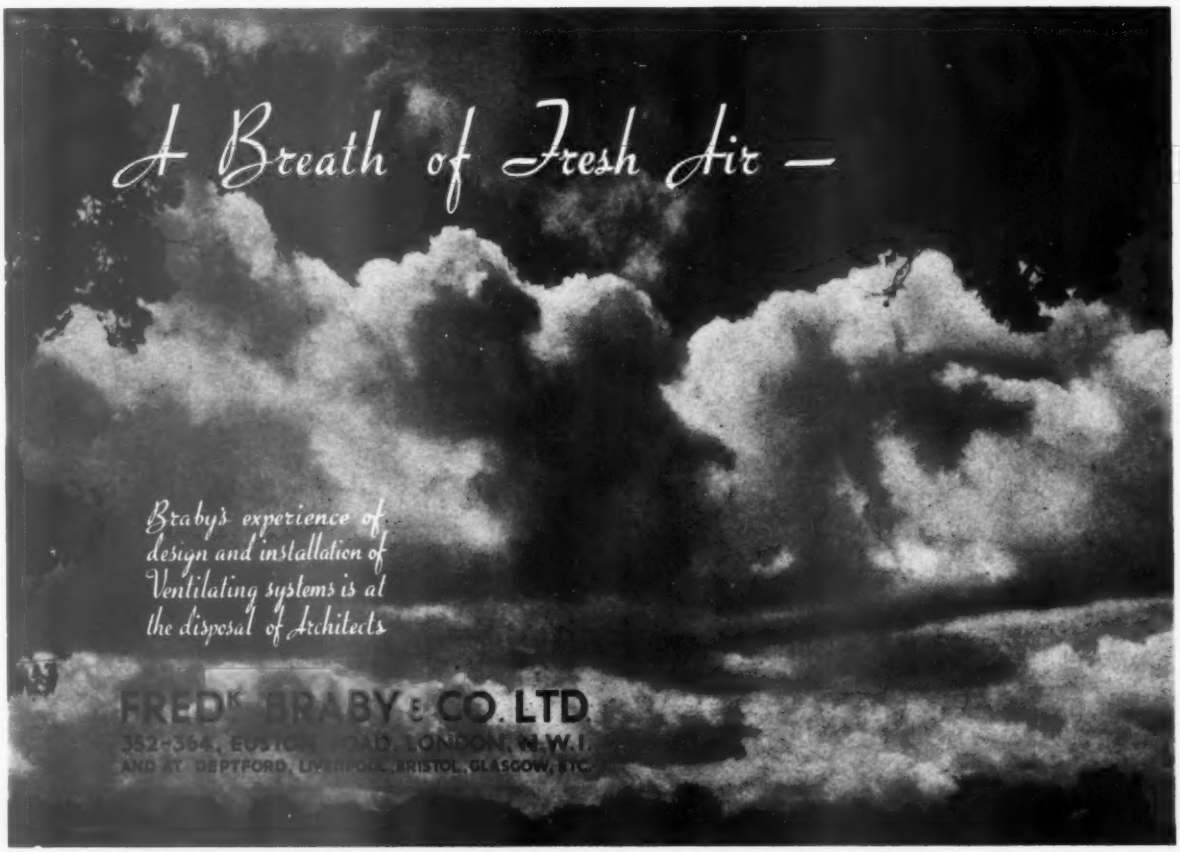

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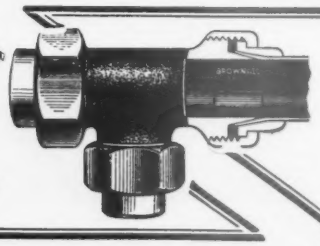

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