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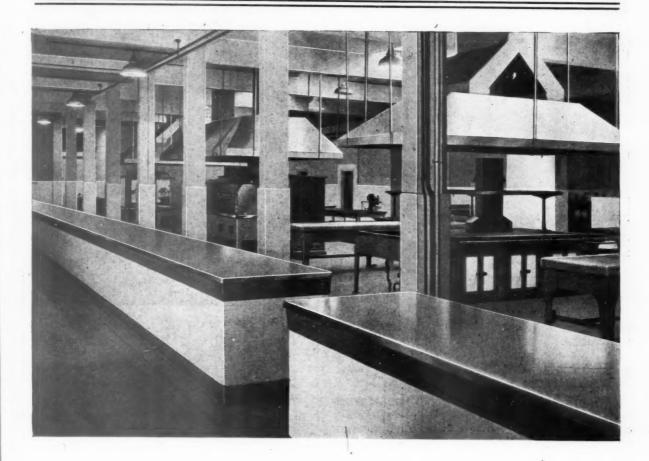
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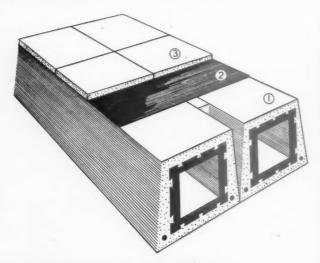
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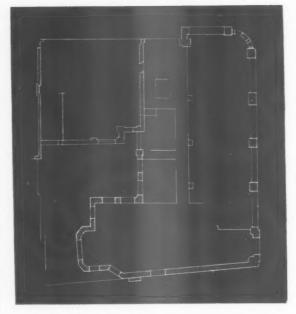
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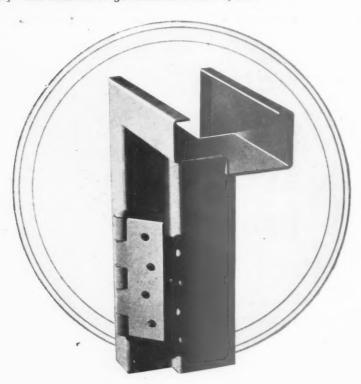
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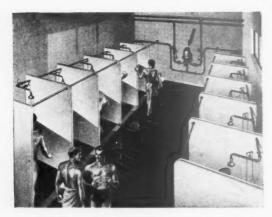
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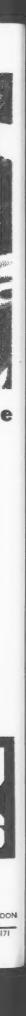
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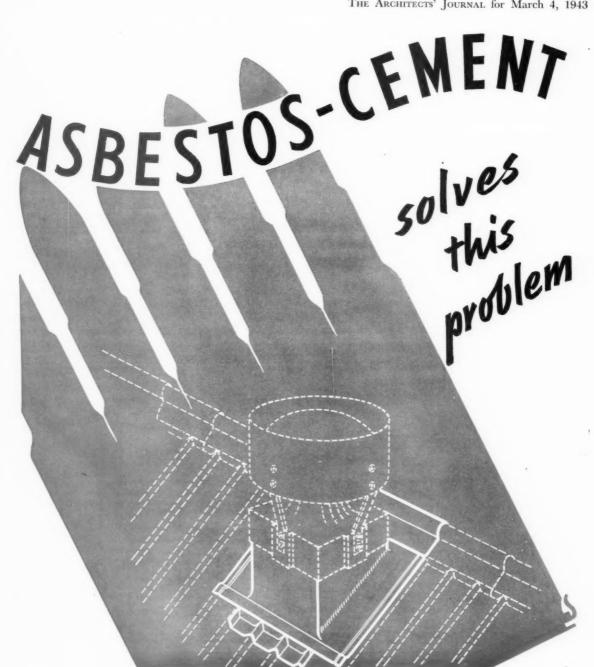
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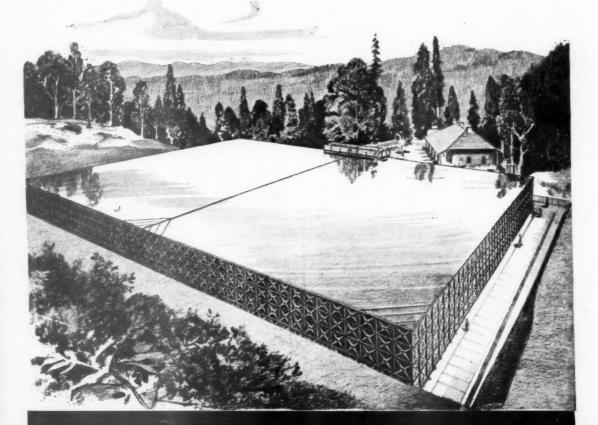






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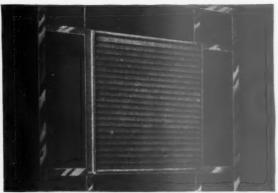


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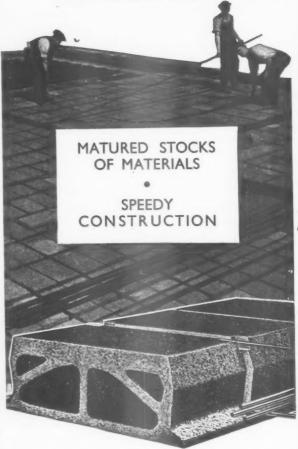
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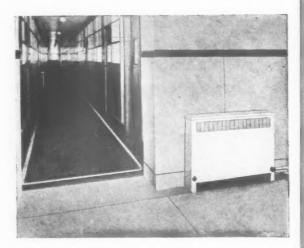
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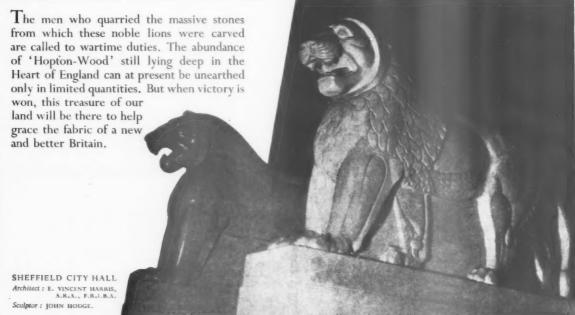


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Abbreviations ournal

AA ABT APRR	Architectural Association, 34/6, Bedford Square, W.C.1. Museum 0974. Association of Building Technicians. 113, High Holborn, W.C.1. Holborn 1024-5. Association for Planning and Regional Reconstruction. 32, Gordon
ARCUK BC	Square, W.C.1. Architects' Registration Council. 68, Portland Place, W.C.1 Building Centre. 23, Maddox Street, W.1. Euston 2158-9. Welbeck 7938. 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 BOT	British Electrical Development Association. 2, Savoy Hill, W.C.2. Temple Bar 9434. Board of Trade. Millbank, S.W.1. Whitehall 5140.
BPVM	British Paint and Varnish Manufacturers. Waldegrave Road, Teddington.
BRS	Building Research Station. Bucknalls Lane, Watford. British Steelwork Association. 11, Tothill Street, S.W.1. Molesey 1063. Garston 2246. Whitehall 5073
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.
CMC	Cement Marketing Company, Coombe Hill, Kingston, Surrey. Abbey 2677 Kingston 2140
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.1.
CITCL	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, Nationa 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. Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1. Holborn 2646 Whitehall 2881
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.
IES	Sloane 3158 Illuminating Engineering Society 22 Victoria Street S.W.1
IRA	Illuminating Engineering Society. 32, Victoria Street, S.W.1. Abbey 5213 Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172
ISPH	Institute of Registered Architects. 47, Victoria Street, S.W.1. Abbey 6172 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 285
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1. Museum 376
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.
MOU	Whitehall 457
MOH MOI	Ministry of Health. Whitehall, S.W.1. Whitehall 4300 Ministry of Information Malet Street W.C.1 Fusion 432
MOLNS	Luston 152
MOS	Ministry of Supply. Shell Mex House, Victoria Embankment, W.C.2.
11200	Gerrard 693.
MOTCP	Ministry of Town and Country Planning. Lambeth Bridge House, S.E.1.
MOW	Reliance 7611, Ex: 1263, 141 Ministry of Works. Lambeth Bridge House, S.E.1. Reliance 761
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street,
	W.1. Langham 404

National Federation of Building Trades Operatives.

Row, Birmingham, 2

Street, W.C.I.
National Trust for Places of Historic Interest or Natural Beauty.
Palace Gardens, S.W.I.

Town and Country Planning Association. 13, Suffolk Street, S.W.1

Bridge House, S.E.1.
Reinforced Concrete Association. 91, Petty France, S.W.1.
Royal Institute of British Architects. 66, Portland Place, W.1.

Zinc Development Association. 15, Turl Street, Oxford.

Political and Economic Planning. 16, Queen Anne's Gate, S.W.1. Whitehall 7245. Post War Building, Directorate of. Ministry of Works and Planning, Lambeth

Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1

Wrought Light Alloys Development Association. Union Chambers, 63, Temple

THURSDAY, MARCH No. 2510.

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Though every news item is news to someone, it doesn't follow that all news has the same value for everyone. The stars are used to draw attention to the paragraphs which ought to interest every reader of the Journal.

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 paragraph marked with more than two stars is very hot news indeed.

The RIBA has awarded the PRIZE ASHPITEL to L. A. Butterfield, A.R.I.B.A. The Prize is books to the value of £20, and is awarded to the candidate who, taking the Final Examination to qualify as an Associate, shall most highly distinguish himself among the candidates in the Final Examinations of the year.

Old receipts form a large part of the PAPER ACCUMULA-**TIONS** STILL BEING **HOARDED** by private individuals and business concerns. In most cases these receipts could safely be disposed of, but people are loth to part with unless they are convinced that they are not storing future trouble themselves. for This is where firms with regular customers This is where firms with regular customers or clients can be of great assistance, when issuing receipts for payments in full settlement of accounts. If the words Arrears Nil or Account Paid in Full are written on the current receipts or, better still, if a note to the effect that it is unnecessary to retain past receipts in added then the autopres will feel receipts is added, then the customer will feel he can safely send his previous receipts to salvage.

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from AN ARCHITECT'S Commonplace Book

GIANT SQUALOR. [From the speech by Sir William Beveridge at the opening of the RIBA Exhibition (National Gallery.)] In the Report on Social Insurance and Allied Services of which, I am afraid, some of you may have heard, I urged that organization of Social Insurance should be treated as one part only of a comprehensive policy of social progress. Social insurance is, or should be, an attack on Want. But Want is one only of five giant evils which have to be attacked and, so far as possible, destroyed in the making of New Britain after the war. The other giant evils are Disease, Ignorance, Squalor and Idleness. I am delighted as well as honoured at having been asked to open this Exhibition to-day because it gives me the chance of saying a few words about one of those other Giants—the giant Squalor. They won't be quite so many words as the 160,000 words which I wrote recently about Want. By Squalor I mean the conditions under which so many of our people are forced to live—in houses too small and inconvenient and ill-equipped, impossible to keep clean by any reasonable amount of labour, too thick upon the ground, too far from work or country air. This Exhibition is really a declaration of war on Squalor; it points to the things which have to be done in planning town and country, and in building more and better houses, so as to make it possible for all citizens to live in an environment that is healthy, clean and pleasing to all the senses, clear of offence to sight, hearing and smell, giving easy access to work and to recreation alike. That giant Squalor is a formidable giant—far harder to attack than Want—a true Goliath. We shall not bring Goliath to the ground unless we carry all the necessary stones in our sling.

As the result of excavations made possible by the Nazi bombing of the City of London NEW PLANS OF ROMAN LONDON are to be made, which will be an important addition to those already in existence. Remains uncovered go back to the first and second centuries. The largest discovery is a bastion of the wall which the Romans built round London and some fragments of the wall itself. The bastion is near Barbers' Hall, in the Cripplegate area.

MOWP officially announces that from February 10 the Ministry BECAME THE MINISTRY OF WORKS. This change has been made in accordance with the provisions of the Town and Country Planning Act, 1943.

Sir William Beveridge opened the REBUILDING BRITAIN EXHIBITION at the National Gallery on Thursday last. The exhibition has been designed by RIBAand sponsored by the whole building industry. The aim is to show general principles of reconstruction to the public. It emphasizes our needs for work, homes, health, education, and recreation, and suggests an approach to planning by means of which these needs could be satisfied. The argument for planning is given first on screens, emphasizing good houswithout overcrowding, parkland within walking distance of home, easy transport to work, good schools with plenty of light, air, and space, preventive hospitals and clinics, our inheritance of good buildings and natural scenery. The separation of industry from housing so that each may expand without mutual interference, as well as transport and the amenities of the countryside, are dealt with. The problem of existing towns and the

16

need for a master plan flexible enough to meet changing conditions, and based on a national survey, is shown to be an urgent necessity. The exhibition is dealt with in our leading article on page 151, Astragal's notes page, and elsewhere in this issue.



One of the screens at the RIBA Rebuilding Britain exhibition opened by Sir William Beveridge, at the National Gallery, London, on Thursday last

Following criticisms of his speech Mr. J. Gibson Jarvie, the banker, and chairman of United Dominions Trust, Ltd. who said we must WATCH THE PLANNERS, has resigned the presidency of the Thames-side Development Board, which represents industrialists and inhabitants on Thames-side. He said he would remain connected with the board. The resignation, according to The Daily Telegraph, followed criticisms of a speech made at a meeting of the Board at the Middlesex Guildhall, but Mr. Jarvie denied afterwards that it was because of it. "We must watch the planners," said Mr. Jarvie in his speech. "It is difficult to see on what foundation or experience writers and fleedgling politicians seek to base their economic theories. It is still more difficult to understand why the Church should seek to put its oar into these troubled waters." After referring to the "nostrums so glibly offered" by most planners, he said: "Is anyone to suggest that men like Carnegie, Rockefeller, Nuffield

—a man to whom this country will be eternally indebted—and Ford were or are other than a blessing to humanity? Let the workers realize that we cannot take more than a pint from a pint pot." Ald. Ross Wilde, Walthamstow, said that it was an abuse of the privilege of a president for Mr. Jarvis to air his private political convictions, which were not endorsed by the board. A proposal that the board should formally dissociate itself from Mr. Jarvie's views was not accepted by the chairman, Ald. J. T. Sanders.

We regret to record the DEATH OF GEORGE GEE, the millionaire head of Gee, Walker, Slater, Ltd., building and public works contractors. He was 54 years of age. Born in the Derbyshire village of Ripley, where his father was a small builder, he came to London in his twenties and laid the foundations of his fortune. Notable buildings that he made for London include the new Adelphi (in the ownership of which he retained a big interest), the Saville Theatre and the new Lansdowne House in Berkeley Square.

Claimants entitled to WARDAMAGE COMPENSATION for land and buildings, and their professional advisers, are generally aware that a value payment (which is the kind of payment normally made in cases where the property is a "total loss" within the meaning of the Act) is not made at present and is unlikely to be made until after the war. The War Damage Commission now state that an exception can be made to meet the building requirements of persons engaged on work of public importance, and also, in certain circumstances, to assist

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Sir William Beveridge opens the RIBA Exhibition

Sir William and Lady Beveridge viewing the RIBA Exhibition, which Sir William opened at the National Gallery on Thursday last. In the photo with Sir William is a representative of the great British public, of whom he said in his opening speech: "The drive for dealing with the giant squalor must come from the people of this country. What they really demand they will get because they themselves will provide it, but they

must demand it. In rebuilding Britain physically as in rebuilding it economically, socially, spiritually, let us try to carry on into the peace the heroic mood of war." His speech, together with those of Mr. W. H. Ansell, President of the RIBA, and Sir Kenneth Clark, Director of the National Gallery, who also spoke at the opening ceremony to a large audience, are reported in full on page 161.

a claimant who is in need of funds to secure alternative housing accommodation or business premises.

Consideration has recently been given to the question of authorising, subject to appropriate safeguards, advances of value payments in other types of case. The Commission has now received from the Treasury a direction that it may at its discretion make an advance of the value payment where it is satisfied that persons entitled in due course to such a payment have incurred expenditure which was necessary or expedient and not contrary to any

statutory regulation, bye-law or other restriction, on works for the demolition, clearance, or repair of war damaged buildings, or for the construction, on the old or on a new site, of a new building to be used in substitution for the damaged building. This direction will enable an advance of the value payment to be made where, for example, an owner of an extensively damaged building has carried out at his own expense demolition in order to protect surviving parts of the property or to recover materials and fixtures for use later in the permanent rebuilding; or, again, to an owner who has been able to repair a dwelling house which is a "total loss" so as to make a part

of it habitable; or where the owner of a destroyed property has been able to construct some other building for use in its place, provided that the works were legally executed, i.e., were not contrary to some statute or statutory regulation or bye-law. The proviso bears a particular relation to Defence Regulation 56A, under which no building work (including the repair of war damage) costing more than £100 on any property in any year can be carried out except under licence from MOW and to Section 7 of the War Damage Act, under which, in certain publicly-specified areas, the public interest with respect to town and country planning is safeguarded.

Major F. G. Sainsbury, of Reading, has been elected PRESIDENT OF THE IAAS. Mr. C. H. Taylor, of Lincoln's Inn, and Mr. Vincent Burr, of Gower Street, London, have been elected chairman and vice-chairman respectively of the council.

Mr. J. A. Steers has accepted the invitation of MOTCP to act as adviser to the Ministry on scientific matters connected with the PRESERVATION OF THE COAST LINE. Mr. J. A. Steers is Dean of St. Catharine's College, Cambridge, and University Lecturer in Geography.

In the House of Lords Viscount Samuel asked the Government whether the legislation to amend and extend the TOWN AND COUNTRY PLANNING ACTS will be presented to Parliament at an early date. Lord Snell: The Government have not completed their examination of all the matters in regard to which legislation to amend the Town and Country Planning Act, 1932, may be necessary, but hope at an early date to introduce a Bill dealing with certain matters on which early action is desirable.

Standing Committee National Parks, in a memorandum circulated to all members of both Houses of Parliament, OBJECTS TO THE HYDRO-ELECTRIC (SCOT-DEVELOPMENT LAND) BILL. Objection is made on the ground that the Bill sacrifices to a large-scale industrialism areas which it is widely desired to have reserved by the State as national parks, and that it does not provide for any positive plan for giving to the highland population as a whole the economic and social betterment which the Committee deems so necessary. The memorandum states that the whole advance of orderly planning which has culminated in the creation of a special Ministry of Planning for England and Wales, with equivalent powers for Scotland, is vitiated by the principle of giving a single interest or public will be proved to the cover riding. utility, however important, the over-riding control with all appeal against one-sided development directed to the exploiting power itself. This can be avoided by the creation of a regional authority devoted to the positive task of overall planning for the general welfare of the area. The scheme embodied in the Bill is an integral, but by itself an unbalanced, feature of such a plan.

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RIBA REDIVIVA

TWO main factors make the RIBA Exhibition at the National Gallery an event of importance, not merely as a first-rate exhibition in itself but as a herald and a portent.

The first factor concerns the method of approach to physical planning which the Reconstruction Committee has adopted; the second, the new and adventurous spirit which has suddenly and unaccountably infused the Institute. This spirit is shown partly in the initiative of organizing such an exhibition at the present time, but partly also in the manner in which the Committee has tackled the problem.

"The practical liberation of what Mr. Wells calls the world mind did not begin with the noble remarks of Buddha and Confucius and their successors on the beauty of freedom and truth and the equal brotherhood of man but with the invention of printing from movable type. Invention and discovery are the true liberators," write the authors of the new Penguin Special, Science and World Order. It is precisely the practical attitude of mind expressed in these words that the Rebuilding Britain Exhibition displays. The planning problem has been approached in a new and sensible way—the sociological and technological way, as opposed to the purely æsthetic.

Compare the RA Replanning London Exhibition recently shown at the Academy with that at the National Gallery. The approach of the former was primarily æsthetic. The sociological background was there, of course, but only by assumption, the assumption being that a society based on a Kiplingesque imperialism will continue after the war. would now disagree, however, that such a society is at this very moment being wiped off the blackboard of time for ever by the inevitable duster of circumstances. Thus the error was made in the RA Exhibition of dealing with London as a separate entity instead of in a logical way as part of a wide national plan based on definite social objectives. was a Haussmanite patchwork which was, at least according to contemporary standards, neither practical nor beautiful. The RIBA Exhibition has been tackled in a far wider and more humane manner. Its object is to show how planning can be carried out for the benefit of the whole of the people. Moreover it deals wisely with general principles rather than with actual finished plans for reconstruction. The end in view is always broadly speaking to bring "the greatest happiness to the greatest number" by dealing with first things first with that generosity which modern organization, planning and technique allow. Sir Kenneth Clark, in his speech at the opening of the Exhibition, said that we were passing through "the winter of architecture" and he implied that it was not regrettable, but necessary, to begin replanning by dealing with purely practical essentials, the "hedging and ditching" of the winter months. Why is it not regrettable? The right answer lies in realizing that beauty is a result, not a cause; it is a flower which can grow only from a healthy root planted in nourishing soil. In a sense the Exhibition applies to planning the principles of Functionalism, which has had so valuable a purifying effect on individual building over the past decades. Though Functionalism might have ended in a dull sterility if it had not developed, willy-nilly, its own æsthetic, it did bring architecture back to the reality that the first purpose of any building is not to provide a tailor's dummy on which to hang meaningless "architectural" trappings but to provide shelter for human beings in their varied activities as efficiently as possible. In the same way the new sociological approach to planning brings us back to the reality that man is a social animal who must plan his towns and countryside first of all to facilitate co-operation in providing his primary needs and so-called luxuries. The primary needs are food, warmth and shelter whose satisfaction forms the essential foundation of any culture however highly developed. Essentials first. Beauty will follow.

The Exhibition, however, does not avoid the æsthetic question. It suggests that now a new æsthetic homogeneity throughout all contemporary design is possible in the technological culture of a revitalized and whole society, which fully, consciously and gladly accepts the Machine and its

tremendous implications.

The second factor which makes the Exhibition so important an event is that the RIBA has taken a really progressive initiatory step. We hope that it has created a precedent from which it will venture further and ultimately take a firm directive hand in post-war planning. We hope also that MOTCP will be wise enough to encourage and cooperate with the RIBA in its future plans, for the future belongs as much to the technician as to the bureaucrat.* Owing to the sociological approach, as opposed to the purely æsthetic, co-operation between architects of differing generations has been possible in the RIBA Reconstruction Committee. Clearly the younger generation have had strong representation. Nevertheless the Committee forms a good cross-section of the profession, containing as it does members of all ages and specialities.

Now the public is at last receiving the complete and unanimous

message of the whole profession.

The new spirit in the RIBA was born in March 1941 when the Reconstruction Committee was formed and organized in a number of specializing study groups. It is to the credit of the Committee that it had the courage to look steadily ahead and to begin its work in those dark depressing days.



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

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OTHER PEOPLE'S MONEY

"A fine job of work" is the verdict of the Industry on the Report on Training for the Building Industry by the Central Council for Works and Buildings (Ministry of Works parenthood), the principal recommendations of which have been accepted in a White Paper. Here, the problem of finding the personnel for the post-war task is tackled with boldness and vision, just as the long-term problem of regulating the flow of men into the Industry to the prognostication (it can be nothing more than that) of work to be done is tackled with Equally, the Government is to be congratulated upon its ready acceptance, not only of the Report in principle (after all, the Government went that far with the Beveridge Report!), but on seeing the necessity for action right away.

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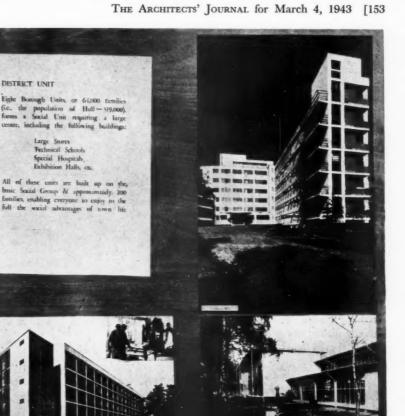
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Having thus acknowledged with gratitude the splendid work accomplished, we now have to ask a leading question. The pivotal proposal of the whole fifty-six pages of the Report, the proposal for a Guaranteed Week, particularly needs discussion. It is all contained in fifteen lines. These fifteen lines tell us that the benefit of a guaranteed week, conferred during the war, should remain, and should be made compulsory by law. "Discontinuous employment" or "wet time" should cease. A man should be paid, rain or shine. Only fifteen lines out of

^{*} If the radical planning proposals of the RIBA are to become a reality many problems will have to be faced. The first is the provision of sufficient skilled and semi-skilled labour. It is a happy chance that MOLNS and MOW have presented at this moment a White Paper dealing with the question. This receives attention on page 157 of this issue. Another problem which will have to be faced is that of dealing with property owners. NFPO, who have issued a Memorandum on the Uthwatt Report, are on the war-path (see page 164). The first shot in the War of the Land has been fired. A third important problem emphasised by Sir Kenneth Clark in his speech reported on page 163 is the training of the designer for machine production.



One of the RIBA Rebuilding Britain Exhibition screens, dealing with local unit planning. It contains one of Leon Underwood's symbolic woodcuts.

three thousand cover this vital The Government's view in the White Paper on the Report, is that it would favour the idea, and leaves it to the negotiating machinery within the Industry as to nature and scope of the guaranteed week.

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The architect asks: Who pays? The architect puts the question because his first duty is to his client, the consumer. The Government does not offer to pay. Even if the Government does pay, the money comes from the taxpayer's pocket. The Treasury will not fall for that. So the consumer pays. Therefore, post-war building, already certain to cost a good deal more through higher wages and probably higher costs of materials and transport, will be (as he sees it) even more expensive. Next, the architect would ask, what does my client get in return? Better build-The operative is naturally happy about this guaranteed week, and the employer is happy, too, since a great load is taken from his shoulders. But what does either offer the customer?

To avoid passing on the cost of wet time to the taxpayer, the architect will have to adapt wartime methods of building structure and roof before the infilling. Perhaps, too, the war will solve such problems for us by teaching us at long last that all costs can and must be related to real physical wealth and not to fictitious financial debt.

RIBA EXHIBITION OPENS

Sir Kenneth Clark was right in advising the great audience that had gathered at the opening of the Rebuilding Britain Exhibition to delay inspecting the show itself for another The exhibition rooms were as compact as a tube train at 6 o'clock. Craning my neck at intervals I was able to see the stars in their discourses. Whirled from room to room, I was carried at last to those five screens I most wanted to see. These form a highlight of the exhibition, and spring from the sociological attack on the planning problem which the Reconstruction Committee has adopted. They illustrate a new basic, pyramidal structure for town-planning by means of local units. The aim of these units is "to encourage social life and local interest by making each unit of a town to some extent complete in itself."

At the foundations of the pyramid is the Family, the basis of social Then comes the Residential Unit of, say, 200 families possessing the following buildings grouped in a centre: nursery school, small shops, pub, club or café, communal green. There follows the Neighbourhood Unit of some 1,000 families having its own centre containing school, shopping centre, church, community centre, treatment centre, branch library and restaurant. The third floor of the pyramid represents the Borough Unit of, say, 8,000 families having a centre containing secondary and central schools, civic, cultural and entertainment centre, hospital, main shopping street, railway station, building yards, coal depots, local industry and administration. At the peak of the pyramid is the District Unit of, say, 60,000 families whose centre contains a technical school, education offices, exhibition hall and galleries, market hall, special hospitals, goods station and secondary industry.

This idea of town-planning units could only be expressed by symbols. The most obvious method would have been by means of diagrams. But the danger would have been that the diagrams would be translated too literally by many people as actually intended plans. Hence the clever conception of depicting these planning units by means of symbolic drawings in the form of five large coloured wood-cuts by Leon Underwood, which recall William Blake. Apart from telling their symbolic tale, they are valuable in breaking the monotony of the monochrome photographs bright spots of colour.

The exhibition is a fine one. May the new flame which has produced this RIBA phœnix grow and flourish.

PLANNING VERSUS PROPERTY

I was impressed with the statement published by the National Federation of Property Owners to which reference was made in the JOURNAL leader of February 11. In a memorandum, extracts from which appear on page 164, it gives us an insight into its reactions to the Uthwatt Report. How lucky we are that the Federation is so ill-advised in its publicity. By publishing this memorandum now it gives all rightthinking people time to lobby M.P.s to get legislation passed to implement those Uthwatt recommendations that the Government has already accepted in principle. Chief of these is the stabilization of the value of land to that prevailing in March, 1939.

The memorandum assumes that John Bull is fighting this war for the property owners. "National planning, yes, by all means," says NFPO. But with how much sincerity? Is national planning for the ultimate good of all really possible without the power to bring the purely sectional interests of property owners to heel? ASTRAGAL



LETTERS

P. L. Garbutt, A.I.C. (Principal, Good Housekeeping Institute) W. Carter, A.I.A.A. Vincent Burr, F.I.A.A. N. C. Stoneham S. R. Badmin Erno Goldfinger C. J. Cragg (Builder) Charles Read

Field Experience

SIR,—A few months ago an architect writing on the necessity for what he called "field experience" as being the final test of new materials and methods, said:
"Laboratory tests will never suffice alone.

Climate and conditions of wear and tear upset the most careful prognostications and promising new materials can misbehave in the most startling and disconcerting manner to the great concern of the architect and builder "—unfortunately he did not add, " and the houseowner.

He then goes on to urge the establishment of something like the Frankfurt "Weissenhof" and a national mark.

For nearly twenty years the Good House-keeping Institute has been carrying out field tests on new materials, methods and appliances under conditions as closely resembling those of a home as it was possible to devise.

For instance, new floor composition and coverings have been laid and subjected to ordinary cleaning and polishing methods, and their colour retention, staining reaction, and wear have been carefully noted under accelerated weathern conditions. These these standards are subjected as the standard transfer of the standard ated working conditions. Those that stood up were given the Institute's Seal of Approval. In cases that have not stood up to test, the Institute has often been able to make sugges-

tions to manufacturers which resulted in improving the product.

Stoves, sinks, draining boards, grates, wall coverings and panels, door and window furniture, bathroom fixtures and innumerable other components, fixtures and appliances have been tested. Some have been

approved; others have been found wanting. We feel, therefore, that we can offer a very real advice service to architects. We also feel that, with all the new materials and designs of appliances that reconstruction will bring, we can usefully extend our efforts to cover the whole of the house.

We should, therefore, greatly appreciate suggestions from architects as to how we might usefully work to their advantage and we should welcome any who care to visit the Institute to see what we are at present doing.

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P. L. GARBUTT, Principal, Good Housekeeping London. Institute.

Continuity in Structures

SIR,—As an architect who is a very keen student of continuity in structures, I noted with interest the remarks in your issue of January 28 under the heading Structure Item

It is true that the war-time allowable stress increase to 10 tons will not ensure a maximum saving of steel, especially as this allowable in-crease only applies to beam members, and column members must still come within the allowable B.S.S. stress relative to the L/K ratio. It is universally appreciated that the treatment of structural members as separate units, however, is in many cases not compatible with economical design, either from a labour or material standpoint.

The introduction of continuity with a steel frame, especially if it is unsymmetrical, faces the designer with many new problems in the analysis as distinct from statically determinate structures, and if the designer attempts to make the analysis by classical methods, for instance, using the three moment theorm, he will be faced with mathematical complications which are out of all proportion to the problem judged by modern methods of analysis even to obtain a trial design.

Apart from considerations of special available plant for the fabrication of continuous structures it does seem that in this country there has not been anything like the same effort as is evident in U.S.A. to promote interest in continuous frame design if one sets as a comparison the work done in this respect by Professor Hardy Cross, of Yale University, and other American structural engineers, who have provided the commercial designer, assuming that he has a full knowledge of statistics with souther for the state of contact of the state of the statics already, with methods of analysis for all contingencies relating to continuous frames which he can use with confidence, knowing that they are as exact as classical methods and that he can complete the calculations from trial to final in reasonable time.

Moreover, if column and beam members are acting together in a group, the stresses can be more equalized, it also seems logical that a structure should be considered by the designer, from the commencement of design, as being monolithic rather than considered as separate small units each having its moment and re-actions from load calculated and passed on as a basis for the design of its supporting

W. CARTER.

Kingston-on-Thames.

Pulling Together

SIR,—This letter is written to call the attention of all in the architectural profession, whether members of Council of the various architectural bodies or individuals, to this very vital matter of complete unity in the profession.

A series of conferences has been held to

which all architectural bodies were invited.

AT THE NATIONAL GALLERY

These conferences were attended by repre-These conferences were attended by representatives of the Council of the Incorporated Association of Architects and Surveyors, of the Council of the Faculty of Architects and Surveyors, and of the Council of the Institute of Registered Architects, and representatives of the Unattached Architects on the Architects' Registration Council

Registration Council.

This is the first time such a series of conferences of architectural bodies has ever been held, and it represented over 50 per cent. of

the profession.

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At the conferences, which were held in the most friendly atmosphere, it was the unanimous view that it is of paramount importance to the profession, and most certainly in the public interest, that for all matters of negotiation with Government departments and other authorities affecting the architectural profession as a whole, particularly where public interests are involved, there should be set up a joint central council (to be named either the Architects' National Council or the Architectural General Council). This joint council would be formed by each existing architectural body, together with the unattached architects, sending an agreed number of representatives to sit on the council.

It is obvious that the existence of such a council would enable the architectural pro-

fession as a whole to discuss any matters affecting it as a whole. It cannot be denied that all existing architectural bodies share a common object in desiring the advancement of the profession and the fullest possible protection of the interests of the public in relation to building and town planning matters, but the existing means of negotiation must of necessity leave an impression of dispatch in the profession where impression of disunity in the profession, where in fact no disunity of purpose exists.

Of the importance of architects in the post-

war era there can be no doubt, and in placing this letter before the profession, I am actuated only by the desire to see the profession united in the architectural matters of vital importance to it and to the public in general.

VINCENT BURR, Chairman of the Conference.

London.

Plastics

SIR,-Recently a young architect was showing Sir,—Recently a young architect was showing me some drawings that he had done for a competition. He had worked out an extremely ingenious method of partition wall construction and I asked him what material he was going to use. He replied plastics.

For some while I have been conscious of a danger in the bandying about of this word plastics. People seem not to realize that there is no substance called plastics, but that it is a

is no substance called plastics, but that it is a

generic term of the same sort as metals, minerals, textiles, and so on.

It occurs to me that a number of progressive minded architects may fall, like my friend, into the trap of thinking of plastics as one particular form of material, and having only a little knowledge go airily to work designing in plastics, to find that when they come to the point of turning their designs into something specific they can find no plastic material suitable for their most ingenious design. Should this happen, there may well then be a Should this happen, there may well then be a tendency to go to the other extreme and have a revulsion against plastics as being no good.

The case in point that I have already cited may possibly be repeated innumerable times in the future unless there is some very drastic straight thinking done in the matter, and I very much recommend anybody who is thinking in terms of plastic materials to read a book called "Plastics," by Plastes. He will then get some idea of the infinite variety of plastic materials made from synthetic regist that already. made from synthetic resins that already exists.

The same danger also threatens the use of ready-made building units which has become garbled in the horrible word prefabrication.

N. C. STONEHAM.



Sir Wiliam and Lady Beveridge



Prof. Holford and Mr. Clough Williams Ellis



Mr. Rodney Thomas, designer of the RIBA Exhibition



Sir Edwin Lutyens and Prof. Holford



The PRIBA, Mr. W. H. Ansell



At the National Gallery. Left to right, Mrs. Frederick Gibberd, Mr. Frederick Gibberd (Principal of the AA), Mr. Anthony Cox, Miss Jane Drew (Mrs. Max Fry) and Mr. Ove Arup, the famous engineer.

Village and Town

SIR,—I have just come across, in your January 7 issue, what seemed to me an January 7 issue, what seemed to me an unnecessarily bitter criticism of my Puffin Book Village and Town. I should have thought that a book which obviously only sets out in the most simple way to develop the beginnings of interest in building in children's and other lay minds, would have deserved a more sympathetic approach by any reviewer who is sympathetic approach by any reviewer who is interested in the progress of architecture and its better understanding by the man in the

In the diagram of Roof and Arch, which seems to worry your reviewer so much, I set out to explain, what is to a child a very difficult idea, the outward push of arch and roof and the two buttress methods of counteracting it. To add details of tie beams, king posts, struts and trusses would have caused the diagram to fall under your reviewer's second criticism that practically all the diagrams are too complicated. Your reviewer, Mr. Goldfinger, seems neither

to be aware of the exigencies of the arrangement of B. & V. pages with colour pages, which is necessary if the book is to be produced at the price it is, nor with the difficulties of reducing the evolution of English building to 29 pages Partly because of this general make-up of the book, but mostly to show the growth of interiors at a single glance, it was necessary to have the barrel vaulting slightly out of its historic position.

Mr. Goldfinger also levels criticism at the

sudden cessation of the history of windows, after what he calls my lengthy description (one page including four drawings) of the evolution of the ogival window. Here I admit a gap but should like to point out that modern window

openings are mentioned on page 29.
The Penguin Pool, which Mr. Goldfinger seems to think is irrelevant, is chosen because it is a good specimen of modern work, but, more important from the educational angle, is the fact that it is an obvious and simple example of the new forms possible with reinforced concrete and also that practically the entire design of the example can be seen without recourse to plans which are anathema to most children.

Finally, I should like to add that Village and Town has been pronounced excellent by wellknown architects, some of whom have a great deal of knowledge of educational problems which may not be available to the ordinary practising architect.

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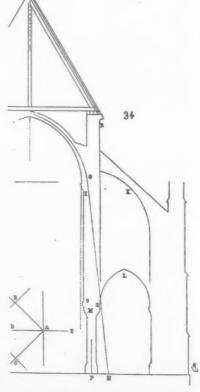
London.

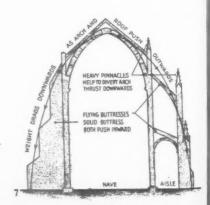
This letter has been submitted to our reviewer whose reply is printed below.

It is a pity that Mr. S. R. Badmin takes

reception to my rather lenient criticism which he considers "unnecessarily bitter."

The fact that a subject is difficult to explain is no excuse for the author to include drawings which may mislead his readers. For instance, by making an imaginary drawing of a Gothic church and placing its elements in





Section through Gothic Church, by Viollet-le-Duc, (left), and from Village and Town, by S. R. Badmin. See letter on this page.

This special article deals with the new White Paper, presented to Parliament last week by MOLNS and MOW, laying down Government Policy on Training for the Building Industry, which contemplates the most revolutionary changes the Industry has ever undergone.

the wrong position he obscures the matter. The roof in a Gothic church adds to the downward thrust and is placed above the vaulting. The buttresses are too small in proportion as may be seen on the drawing by Viollet-le-Duc. It isn't necessary "to add tie beams, king posts, struts and trusses ... '' to make this correct although this would be quite possible. This is only one of Mr. Badmin's architectural fancies.

Mr. Badmin's excuses about the technical difficulties in treating the history of English architecture in 29 pages are understandable though hardly defensible, as he has added so many irrelevant details to his story. One page and four drawings to explain what he calls "the evolution of the original window"—in fact the Gothic arched window is a lot

Gothic arched window—is a lot. Mr. Badmin's statement " plans. are anathema to most children " corresponds in no way to facts. Children, given the oppor-tunity, are quick to grasp plans and enjoy

drawing them.
Though I am an admirer of Tecton's charming Penguin Pool I think that it adds nothing to the comprehension of reinforced concrete as shown in this book.

In this book.

I am glad that Village and Town in the words of Mr. Badmin "has been pronounced excellent by well-known architects." I only regret that I cannot join their ranks. Although I think Mr. Badmin an excellent draughtsman and lithographer and the book charming (as I said before), I still think the architectural liberties he has taken are regrettable in view of the large circulation these books have.

ERNÖ GOLDFINGER.



Before the War

SIR,—The experience of Mr. Edward Banks, in your issue of February 18, should prove to the gentlemen of his profession that the much abused speculative builder has more brains and experience than they realized.

This one has been a subscriber to your JOURNAL for twenty years, and thanks you for a most amusing and instructive article in these dark days.

C. J. CRAGG.

Nottingham.

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After the War

SIR,-In his letter Mr. Brandon Jones asks how could post-war work be distributed over the whole profession; I suggest the MOW Licensing Officers could well be the media for this without in any way making necessary the "monstrous bureaucracy" Mr. Jones envisages. Naturally there would be teething troubles, but with goodwill these should be

In my opinion most architects—being individualists—would prefer to work alone rather than in a group as suggested by Mr.

CHARLES READ.

Chorley Wood.

APER

TRAINING for the

Building Industry

Steady employment for 5,000,000 workers in the building and allied industries is guaranteed for a period of from 10 to 12 years under a Whitehall Charter for the Building Industry issued last week by the Minister of Labour and the Minister of Works. The Charter is contained in a White Paper — Training for the Building Industry—published by the Stationery Office, laying down Government policy following the presentation of the Report on Training for the Building Industry by the Education Committee of the Central Council for Works and Buildings (Ministry of Works). This Report is also published by H.M. Stationery

When commenting on the White Paper Mr. Bevin indicated that the Government has agreed that the Minister of Works shall be responsible for the co-ordination of the post-war building programme and forecast the continuation of priorities and controls and the institution of price regulation. This, he added, would enable a proper estimate of the flow and organization of raw materials to feed the men of the building industry, and would thus be an antidote to inflation, for the establishment of a balanced and regulated building industry working to a set plan would enable the hundreds of thousands of war savings investors to transfer their cash capital into capital goods in the shape of the houses to

The Government has accepted all the major recommendations of the Central Council's Education Committee, thus vindicating Lord Reith's policy of selecting a body to advise him on special problems. At the time of the appointment there was an apparently justified outcry against this policy. It

*Training for the Building Industry (H.M. Stationery Office, 1d.)

was said that the Central Council should have been *elected* by the Federations, Associations and Institutions. Once again the fruits of Lord Reith's work are well worth eating.

The White Paper may be summarized as follows:

- A rapid but orderly expansion of the building industry will be necessary if it is to discharge the heavy responsibilities that will be imposed upon it.
- 2. This expansion must be related to a long-
- on the basis of all the facts at present available, it is considered that a post-war construction programme designed for 10-12 years will require the labour force in
- the building industry to be built up over a period to 1,250,000 men.

 4. Recruitment into the industry must be regulated to correspond with the estimated future demands of the construction prozramme.
- 5. The aim will be to maintain stability in the industry for the period of the programme.
- 6. There must be established, under adequate guarantees, conditions of work which will eliminate the casual form of engagement which was formerly the most unsatisfactory characteristic of employment in the
- The industry itself must determine the nature and scope of any guaranteed payment in the industry.
- The Government favours the adoption by the industry of measures for a guaranteed period of employment, and, if requested, would consider favourably the continuance at least during the immediate postwar period of the present statutory provisions controlling registered building and civil engineering contracting, underand civil engineering contracting under-takings which require all such under-takings to observe the terms and conditions of employment agreed in the industry.
- Special action must be taken to secure the expansion of the force of craftsmen in the industry in the first three or four years after
- 10. Despite the return of trained men from the Services, it is clear that there will be a large deficiency which cannot be made good by normal methods of recruitment and apprenticeship of boys and must therefore be met by the special training of adults on a large scale.
- 11. There will have, therefore, to be two training schemes to be carried out: (a) a short-term scheme for providing intensive courses of instruction to selected men who are likely to become reasonably efficient craftsmen and to take their places as permanent workers in the industry. It is
 - permanent workers in the industry. It is estimated that such training will have to be provided for 200,000 men during the first three or four years of the programme.

 (b) A long-term scheme for the recruitment and education of boys for the industry, which has already been stimulated by the Education Departments, at the request of the Ministry of Works, in encouraging Local Education Authorities to increase substantially the number of to increase substantially the number of full-time junior courses in Technical Schools prior to employment.
- 12. To give effect to 11 (a) the Government propose to make the following arrange-

(a) Headquarters Arrangements.

A Building Industry Advisory Panel is to be established with the Minister of Labour as President, to cover all relevant labour as President, to cover air relevant fabour questions arising out of the building pro-gramme. Under the Panel there is to be a Special Training Committee to consider:— (1) The number of persons to be admitted to training over a given

period.
(2) The proportion between different occupations (3) The methods to be adopted in

selecting persons for training and the considerations affecting selection.

- (4) The curriculum of training.(5) The nature of the trade test to be applied.
- (6) The standard of proficiency to be attained to qualify for admission to the industry.
- (7) The development of "retaining" schemes, for men already in the industry, to meet requirements of new processes and techniques.
 (b) Local Arrangements.

Local Advisory Committees, attached to the Employment Exchanges, are to be set up to assist in the selection of applicants for training. These committees will assist in facilitating the entry of trainees into the industry and, in the areas where the Training Centres are located, will be looked to for advice on methods of training, for help in publicizing the Centres and similar matters.

- 13. It is the Government's intention to establish this Headquarters organisation in the near future and to proceed with the local organization at the appropriate time.
- 14. It will be necessary to consider the training of men in the forces overseas and there will be consultation between the industry and the Government Departments concerned, when the Advisory Panel has been established and the training plan has been further advanced, to cover this point.
- 15. To give effect to 11 (b) the Government are prepared to establish without delay an Apprenticeship and Training Council for the Building Industry, primarily representative of the industry, presided over by an independent Chairman to be appointed by the Ministry of Works.
- 16. This Council will be responsible for observing and advising on all matters concerning the recruitment, education and training of young persons for the industry, both for craftsmanship and management.
- 17. It is agreed that the existing facilities for technical education, from the junior school level to the University, need to be carefully surveyed in the light of the demands to be made by the post-war expansion of the industry, and it is hoped that the Council will make a valuable contribution to this work.

Throughout the White Paper the Government stresses that its policy is to consult the industry at all stages. In fact the Government is deferring to the industry and, as evidenced in paragraph (8) above, will act only "if requested" by the industry.

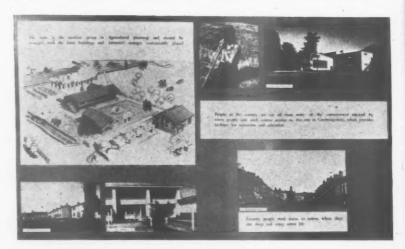
The Report of the Education Committee contains an excellent summary of recommendations. The most important paragraphs in the whole report, however, are 14 and 15, which are quoted:—

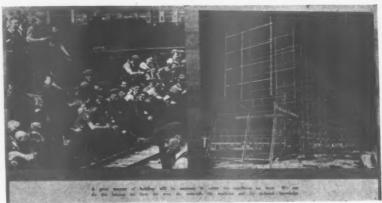
"14. Necessity for guaranteed week.

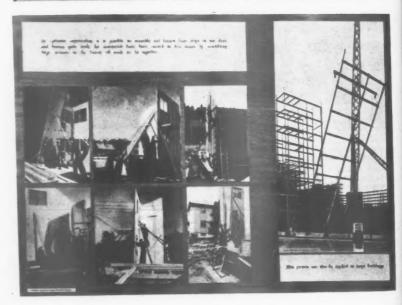
—The proposed guarantee of a long-term programme should not stand alone. In the past, the building industry has suffered not only from unemployment in the ordinary sense, but also from the special form of discontinuous employment known as 'wet time.' During the war the building workers have experienced, at least on public contracts, the benefit of a guaranteed week. Such continuity of employment ought, in our judgment, to be maintained after the war, and should, indeed, become a regular term in contracts of building employment.

'15. The working time for which

AT THE NATIONAL GALLERY







payment would be thus guaranteed may need to be a matter for negotiation within the industry itself, but the success of the guarantee is dependent upon its compulsory application by law to the whole industry. Otherwise those who observe the agreed minimum

will legitimately complain of the unfair competition of those who do not. The statutory enforcement of agreed minimum conditions of employment in the Road Transport industry affords a precedent for legislation along these lines."





FIGURE 1: WELDED CORNER OF ARCHED FRAME OF R.S. J. SECTION

FIGURE 2: FLANGE PLATES USED TO STRENGTHEN CORNERS OF ARCHED FRAMES

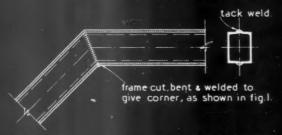
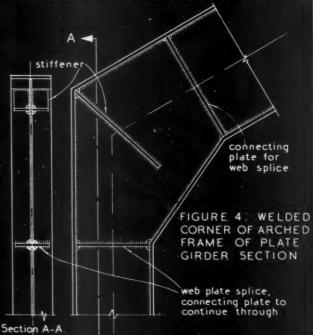
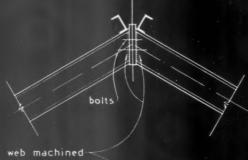


FIGURE 3 WELDED CORNER OF ARCHED FRAME OF CHANNEL SECTIONS





bolts

FIGURE 5. ALTERNATIVE DETAILS OF APEX HINGE OF THREE-HINGED FRAME

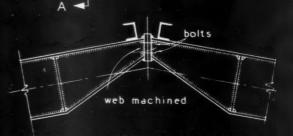


FIGURE 6 ECCENTRIC HINGE . used to improve bending moment distribution.

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STRUCTURAL STEELWORK

Subject: Welding 46. Rigid Corners for Rigid Frames.

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, as affected 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 in order to obtain maximum economy in the design of the steel framing.

This Sheet is the nineteenth of the section on detailed considerations of design in welded steel, and is the fourth of a series dealing with connections and splices—Rigid Corners.

Arched Frames:

Arched frames are used mainly for one storey buildings with large spans, and are often more suitable than the more traditional column and truss construction. See Sheets Nos. 14, 15 and 16 of this series. Such frames have more corners than those shown on Sheet 45 of this series, but they are usually of an obtuse angle. If the frame consists of an R.S.J. section, the corner can sometimes be formed by cutting out a Vee shaped piece and re-welding the R.S.J., as shown in Figure 1. This construction is similar to that shown in Figure 2b on Sheet 19 of this series.

Strengthening Corners:

In many cases, the maximum bending moment in a frame occurs at the corner, thus necessitating local strengthening by means of flange plates, as shown in Figure 2. Actual haunches should be avoided as they very rarely improve the stress distribution. Where lateral stiffness is necessary, the frames can be made up of two channels, but there is no point in arranging them back to back as in riveted construction, when used as arched frames they should be placed toe to toe, and Vee cut out as for the R.S.J., see Figure 3.

Plate Girders:

Figure 4 gives the corner of a frame of plate girder section. In this case the construction is particularly simple. The web plates are cut to shape, and the flange plates are carried round the corner. A sharp corner can be stiffened by a haunch, as shown in Figure 4, and in this case two stiffeners must be added.

Three Hinged Frames:

For erection purposes, and to simplify the design, three hinged frames are to be preferred as the corner at the apex need not then be rigid, although it must be capable of transmitting compression and shear forces. Figure 5 shows a typical arrangement of apex hinges connected by means of bolts. A cross plate is welded to the web on each side in order to distribute the compression stress and to accommodate the bolts. It is sometimes possible to improve the bending moment distribution by means of an eccentric hinge, either in the line of the top flange or even higher up. This construction is illustrated by Figure 6.

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 and 890.

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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

1082

Motorways

Norman Bel Geddes: MAGIC MOTORWAYS. Stratford Press, New York 1940, \$15. Book advocating automatic control of motor traffic by electrical road mechanism.

Car speeds westwards at 50 m.p.h. Driver can feel control mechanism of highway keeping car in line. Nearest other car in his lane is 150 feet away. One one side is wide right-of-way strip beautifully landscaped. On other, beyond three more lanes of cars, is strip of grass. Beyond this two more lanes of cars for 75 m.p.h. travel. Beyond that, with another grass strip intervening, is single 100 m.p.h. lane. Foliage of trees and shrubs conceals similar eastbound highway.

Mr. Bel Geddes' thesis is that:

1. Safety and speed must be provided by the engineer—not by legislation. The car and the road must be considered together.

2. Four factors retard smooth flow of traffic:

- (a) Intersectional friction at cross-roads.
- (b) Marginal friction at road edges.
- (c) Medial friction—between cars moving in opposite directions.
- (d) Internal stream friction between cars moving in the same direction.
- 3. Obligatory automatic devices in both road and car are necessary:
 - (a) To prevent cars turning from one lane into another until

their speed has reached that of the new lane.

- (b) To maintain a constant prescribed speed within each lane.(c) To maintain safe distances be-
- tween cars in the same lane.
 (d) To enable safe and speedy travel at night.
- 4. The method of control could be from an electric conductor embedded within the road surface and creating an electro-magnetic field. Cars would have to be provided with reception
- 5. Separate lanes within the highway would be designed to permit low, medium and high speeds. Drivers would choose their lane and the specified speed would then be automatically maintained—short of an emergency. At intervals the grass verge would widen and cross-over channels be provided long enough to permit adjustment of speed before entering the other lane.
- 6. Each lane would have its own speed, its own gradient and its own curve radius. At the approach of a hill each lane would take its own line.
- 7. Roundabouts would serve for minor country junctions. Major junctions would have direct fly-overs linked by curved and ramped approach roads.
- 8. Bottlenecks, in particular bridges, would be eliminated by double or triple tiers of roadway, each approached by ramped curves from different approach roads.
- 9. At night no headlights would be used. The approach of a car would cause continuous tubular lighting on the surface of the road to switch on for a prescribed distance ahead.
- 10. Highways would be laid on a direct course between the environs of cities. They would not themselves traverse the centres.
- 11. City streets would be double

tiered, the pedestrian walking along galleries at first storey height; cars using the whole of the road and pavement space at ground level and parking and unloading entirely within the buildings.

MATERIALS

1083

Shock Absorbent

Anon.: Resilitex SHOCK-ABSORBENT MATERIAL. Engineering, January 22, 1943, pp. 67 to 68 also The Engineer, February 19, 1943, pp. 159 to 160. New material made of animal and vegetable fibres to replace sponge rubber for absorb-

ing shocks.

In view of the restricted supply of rubber, the development of a new material, called Resilitex, which it is claimed possesses similar properties, is of importance. It is manufactured from a combination of animal and vegetable fibres and is composed of sheets of stout textile fabric connected face to face by intervening fibres. The new material is manufactured by Messrs. Lister, Bradford, in sheets 54 ft. long by 4 ft. to 4 ft. 2 in. wide, and normally about 0.3 in. thick. It is rarely employed in a single layer, but is generally used in a number of sheets bonded together by a fireproof cement. The sheets are produced in five different grades of resilience. This, in conjunction with the variation of the number of different layers, gives a very wide range of resiliency. Test results show an immediate recovery of thickness of 90 to 97 per cent. Regarding the permanence of recovery, tests carried out by the LPTB afford some evidence. The object was to determine the endurance of the material under a vibratory load such as that to which the passenger seats of an omnibus are subjected. Pads of Resilitex received 150,000 strokes in the testing machine at a rate of 63 per minute and at the end of the test showed no measurable set.

Resilitex is stated to be unaffected by damp, petrol or oil, and to have excellent heat insulating properties. Its standard colour is, at present, black.

1084 🛨 Cable Insulation

Anon.: PLASTIC CABLE IN-SULATION. Polyvinyl Chloride for House Wiring. Electrical Times, February 11, 1943, p. 165. New cable insulation likely to replace rubber now and in future. Early in the war mention was made of

polyvinyl chloride, a tough and flexible plastic, as a material to replace rubber for cable insulation largely because it is unaffected by oxygen and some

reagents inimical to rubber. Its insulating properties were considered only moderate at that stage in development, but its general indestructibility in normal circumstances was felt to be an attractive feature of the material. Events have moved rapidly since then, and now cable with this covering is being advertised with the likelihood that its production will develop rapidly in the immediate future. Its insulation has been raised to a satisfactory standard and the author of the note in the Electrical Times feels that the change will come, not merely as a war-time measure, to save rubber, but as a permanent measure because the new covering is superior to the old. He visualizes it particularly in connection with house wiring, and points out that it would not then be absolutely necessary to have waterproof conduits, for a close-jointed conduit, or even simple channels made or inserted during construction, would be adequate protection.

STRUCTURE

1085 * Unit Construction

Sam Bunton (designed by): UNIT CONSTRUCTION HOUSES, KIL-MARNOCK. The Architects' Journal, January 28, 1943, pp. 75 to 78. Also The Builder, January 22, 1943, pp. 85 to 88, and The Architect and Building News, January 22, 1943, pp. 87 to 91. Walls and roofs composed of 80 in. by 40 in. prefabricated units made of Gypklith. Load bearing columns and beams: cast in situ reinforced concrete. Elevible design

concrete. Flexible design. Although in the diagrams showing axonometric section, elevation, plan, etc., the house is described as prefabricated, it is, in fact, not prefabricated but a happy medium between traditional building methods (i.e. the use of in situ concrete) and a theoretically 100 per cent. prefabricated building. The main difficulty of prefabrication is the satisfactory connection of the various members on the site. This difficulty is reduced if prefabrication is combined with the construction of certain parts of the building on the site. The present system, called Unit Construction by its architect, is a framed building. The framework consists of reinforced concrete beams and columns cast on the site within conveniently shaped prefabricated units. These are made of Gypklith, a woodwool and cement composition, and form the wall and roof panels in the finished house. The external wall units are 80 in. by 40 in. by 8 in. thick, composed of an outer and an inner face of I in. thickness with a cavity of 6 in. between. Both faces are finished with

a different type of rendering in the factory, and the 6 in. space is used for the accommodation of the reinforced concrete columns. The function of the prefabricated units is therefore insulation, weatherproofing, etc., but not load bearing (except between beams and columns). The description of the eaves beam as "Gypklith beam unit" as compared with "Gypklith wall unit," "Gypklith roof trays," etc., is misleading, since the wall and roof are actually formed by such units, whereas the beam is an ordinary cast in situ reinforced concrete beam, lined with the "Gypklith beam unit," which is a permanent shuttering and no beam.

This method of construction results in a sound monolithic structure of reasonable stiffness in all directions, and is not restricted to single-story buildings. Within each panel "the structure is plentifully supplied with expansion joints," i.e. joints treated with cold setting bitumen, but not covered with in situ concrete inside the cavity. Only experience over a longer period can prove whether this arrangement is satisfactory for weatherproofing and appearance.

In spite of the large size of the units, which is an advantage from the structural point of view and simplifies the erection, the system allows a great variation in layout, height and elevation and can be adapted to suit various requirements.

1086 Concrete

Victor S. Wigmore: Concrete SIMPLY EXPLAINED. Journal and Transactions of the Society of Engineers, Vol. xxxiii. No. 1, January to June, 1942. 2nd reprint October, 1942; 48 pages; price, 1s. 6d. Deals with ingredients of concrete and methods of making good concrete.

According to foreword, this book is intended for the men who handle concrete (including the man at the mixer) as well as for students of Structural and Civil Engineering.

The Author should have included architects too. In the work of reconstruction after the war there will be a demand for men who know how to make concrete of first class quality. With the introduction of scientific methods for producing strong, watertight concrete, it has become essential that all those engaged in concrete work should know, and understand, the material they use. This knowledge is of the same importance to architects who are in charge of jobs where concrete is used. The book is written in simple language so that it can easily be understood and no knowledge on the part of the reader has been assumed. The ingredients in concrete, namely, Cement,

Sand, Coarse Aggregate and Water are dealt with separately, and are followed by a chapter dealing with concrete practice. Each chapter contains data for testing the respective materials and instructions to be followed in order to obtain satisfactory results on the site.

The gist of the book is summed up in the concluding paragraphs:—
"It does not matter how good the

cement is or how well graded the sand and coarse aggregate: if too much water is used in the mix, the concrete can be spoiled.

Your aim, therefore, should be to use the smallest quantity of water necessary to give the workability required for the job in hand. Act as if the water used in mixing the concrete cost as much as the cement. For curing purposes, however, imagine that it is given away and be very liberal with it."

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Megohm: DOMESTIC WIRING INSTALLATIONS. Electrical Times, January 28, 1943. Wiring to be by builder or contractor?

The question is raised whether or not the relatively simple wiring required for domestic work in the post-war period will fall to a sub-contractor or to the builder himself. The writer seems to assume that the architect has no place in these problems, for he is not even mentioned; it is a question which does, however, concern those practitioners who may enter the mass housing field. Megohm merely raises the question of who is to do the work, because he is troubled as to how well or badly it may be done. The answer, however, may be given shortly in a discussion at the Institution of Electrical Engineers, on The Future of Domestic Wiring Developments (March 11, at 5.30 p.m.). Of the several technical sides to the problem, not least in interest to the architect is the allowance to be made for future lighting and heating loads. With the increase of higher values of illumination and greater general efficiency, present wiring may be inadequate for the future. The coming discussion at the IEE will probably enter closely into post-war building types. Meetings such as this receive too little attention among architects, perhaps because little notice is given of them in the architectural world. Could not the Architectural Science Board, for instance, take steps to see that contacts between representafive architects and technicians are made at such discussions? The Directorate of Post-War Building should be concerned as well. If representatives of all the professions concerned attended meetings such as this, the development of co-ordination in building would be more rapid than it is.

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

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Linoleum

Corticene (a type of linoleum) has been laid on a 4 in. ground floor of concrete, screed finish, using as an adhesive one coat of Synthaprufe. Under varying degrees of foot traffic the Corticene has, in all cases within a few days, "bubbled" or lifted. A few days of fairly heavy wear then caused holes in the material and its general condition has become deplorable. Generally the concrete was laid several weeks before the covering was applied but it was not executed in waterproof cement. The linoleum had been laid out to stretch for a day or so before being fixed. There is evidence of dampness when the canvas base to the Corticene is exposed in the worn holes. Can you suggest a remedy without going to the expense of laying asphalte?

The trouble is almost certainly due to the expansion of the linoleum under wear. Laying out linoleum for a day or so is seldom sufficient; it should preferably be laid out for a fortnight and should be subjected to wear during that period.

Once the linoleum has buckled and the adhesion has been broken, damp is liable to appear and if the underside of the linoleum is not protected by Synthaprufe, it will tend to rot. This does not indicate that failure would have occurred if the linoleum had not buckled; Synthaprufe will adhere to both the linoleum and floor under normal conditions and will prevent the linoleum from rotting.

We can only advise drying out the linoleum and the surface of the floor and relaying the linoleum after adequate time has been allowed for stretching.

1089

£100 Limit

I am architect for a country hotel with about 40 bedrooms. The account for repairs has to be passed by me. Do the following items come under the heading of repairs, i.e. the £100 limit?

Renewing sash cords.

Weekly cleansing of drains, traps, etc. Attendance on and fixing blackout

Attendance on and cleaning out boilers. Slight repairs to roofs, renewal of a few slates, etc., occasionally.

Occasional attendance on electric pump, renewal of washers to taps and cisterns.

In normal times many of the items noted would be done by one of the staff, consequently the charges would not appear in builders' accounts.

The restrictions on building without a licence apply to all building and maintenance work (except in the case of work for Government departments, etc.), and we consider that all the items mentioned should be taken into account in calculating the £100 limit, with the exception of the daily fixing of blackout screens. It would seem that the latter does not in any way constitute building or repairs and is merely part of the normal running costs, such as cleaning windows, etc.

If it appears that the total building costs in connection with the building are likely to exceed £100, for any one year, we would advise you to apply for a maintenance licence, and you should write to the Regional Licensing Officer, Civil Building Control Division, Ministry of Works, 51-54, Grace-church Street, London, E.C.3, for the appropriate application form. You will find that the authority concerned is quite ready to issue a maintenance licence for necessary work either for the purpose of keeping the premises habitable or to avoid the risk of more extensive repairs being incurred in the future owing to neglect. A licence will only be refused if repairs are unnecessary at the present time or if they are required for appearance rather than for protection.

1090

ARIBA and IAAS

Is the Incorporated Association of Architects and Surveyors of the same status as the RIBA, and is it recognized by local bodies for a member of same to be equal in proficiency and examination standard as an ARIBA; in short, which of the two societies is the best to join?

The status of the RIBA is superior to that of the IAAS in one way. The RIBA examinations are recognized by the Architects' Registration Council whereas those of the IAAS are not. This is important, as before being allowed to practise as an architect it is necessary to register with the Architects' Registration Council, and before being allowed to register it is necessary to pass one of the recognized examinations, such as the RIBA



Speeches and lectures delivered before societies, as well 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 the hazy or lazy reader can look up their meaning in the list of Journal abbreviations on the contents page. cases where the abbreviations are not shown there the name of the association is given in brackets Except where inverted commas are used, the reports are summaries and not verbatim.

RIBA

Exhibition

On Thursday last Sir William Beveridge opened the REBUILDING BRITAIN EXHIBITION at the National Gallery. He was introduced by Mr. W. H. Ansell, President, RIBA, who explained the objects of the exhibition and the way it came about. Sir Kenneth Clark, Director of the National Gallery, welcomed on behalf of the Trustees of the National Gallery, both Sir William Beveridge and the RIBA Exhibition.

W. H. Ansell: "I am to-day in the pleasant position of having an easy and delightful task to perform, that of introducing one who needs no intro-duction, whose name indeed has become a household word among us: none other than Sir William Beveridge, who has most generously consented to open officially the Exhibition of Rebuilding Britain. But before I ask him to address you, there are a few things I must say about the Exhibition and the way it came about.
When the Reconstruction Committee of the

RIBA had been working a couple of years or so, it was suggested that an Exhibition should be arranged to give visual expression to the Committee's views on the Britain which was possible in the future. It was clear that the cost of such an enterprise was far beyond the means of the RIBA.

We therefore called a meeting of the Building Industry, Federations of Master Builders, and of Operatives, specialists and manufacturers of everything from the concrete of the foundations to the felts, asphaltes and tiles of the roof. At that meeting, which was largely attended by representatives of the associations, I put the project before them as fairly as I could. "Here," I said, "is a proposal that you should give financial backing to, a scheme which I can guarantee with the utmost confidence will bring in no tangible profits or dividends whatever. It will not even be a good advertisement for any individual association or firm, for the whole thing will be anonymous." One might have thought, from the unruffled calm of those hard-headed business men, that this kind of proposal was a daily Nobody blenched occurrence with them. There was even enthusiasm for the somewhat quixotic idea of shouldering this burden, and the immediate result was that the building industry guaranteed the very considerable cost of such an exhibition. The final result you see here to-day.

The difficulties, however, were not over even

share with every other section of the nation in determining the general shape and ideals of life, but when those have been determined, then the designing and the physical creation of the environment of the life should be the work of the Building Industry. The nation is entitled to the finest plan and design, the best practicable construction, and the highest quality craftsmanship, whether of the machine or the hand, in all its replanning and rebuilding work. The Exhibition, I am sure, will show you how high ideals may be combined with intensely practical factors for the good of the community.

And this explains the presence of Sir William Beveridge this afternoon. As the exponent of a great scheme for the provisions of some of the freedoms for which we are fighting, freedom from want and freedom from disease, freedom from squalor, he is intensely interested in the surroundings which shall make a reasonable and healthy life possible, and we, for our part, wish to impress on the planning, design and construction of everyday surroundings, that inherent orderliness and beauty which make for the creation of fine building and fine architecture, so that the higher needs of mankind shall be ministered to as well as the material ones."

Sir William Beveridge at the microphone when he opened the RIBA Exhibition at the National Gallery on 26th February. Behind him is Sir Kenneth Clark.

when the financial obstacles were overcome. Where was the Exhibition to be held? The ideal place was obvious, but could it be hoped for? The National Gallery. Here Sir Kenneth Clark proved a friend indeed. His good offices with the Trustees and his powers as Director were freely exercised on our behalf, and these rooms were placed at the disposal of the Exhibition Committee. Sir Kenneth did more than that. He joined the Committee and his knowledge and advice have been of the greatest possible help to the enterprise. To those who provided the funds and to Sir Kenneth Clark who provided the accommodation, our grateful thanks are due. The Exhibition, when you see it, will, I am sure, speak for itself. The book which has been published will explain some of the underlying principles governing its design.

I would ask you to bear in mind that the Building Industry, in which the architects are included, does not set itself up as an Olympian power to tell the nation the kind of life it ought to live. The industry is a part of the nation—it is its own life that is concerned—it takes its

Sir William Beveridge: "In the Report on Social Insurance and Alled Services of which, I am afraid, some of you may have heard, I urged that organization of Social Insurance should be treated as one part only of a comprehensive policy of social progress. Social insurance is, or should be, an attack on Want. But Want is one only of five giant evils which have to be attacked and, so far as possible, destroyed in the making of New Britain after the war. The other giant evils are Disease, Ignorance, Squalor and Idleness.

I am delighted as well as honoured at having been asked to open this Exhibition to-day because it gives me the chance of saying a few words about one of those other Giants—the giant Squalor; they won't be quite so many words as the 160,000 words which I wrote recently about Want. By Squalor I mean the conditions under which so many of our people are forced to live—in houses too small and inconvenient and ill-equipped, impossible

to keep clean by any reasonable amount of labour, too thick upon the ground, too far from work or country air. This Exhibition is really a declaration of war on Squalor; it points to the things which have to be done in planning town and country, and in building more and better houses, so as to make it possible for all citizens to live in an environment that is healthy, clean and pleasing to all the senses, clear of offence to sight, hearing and smell, giving easy access to work and to recreation alike. That giant Squalor is a formidable giant—far harder to attack than Want—a true Goliath. We shall not bring Goliath to the ground unless we carry all the necessary stones in our sling. What stones must we have?

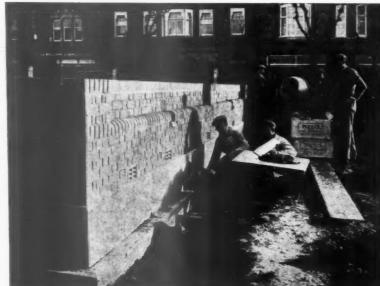
The first stone is the planned use of land. We must be in a position to ensure that the use of all land in the country is determined according to a national plan, and not just by individual bargaining between two citizens, one owning and one meaning to use a particular piece of land. The use to which any one piece of land is put affects all the neighbours and may affect the lives of citizens over a large stretch of country. Most important of all is the use of land for the setting up of places of paid employment, whether factories or offices: population will go—must go—where employment calls it. Allowing factories and offices to be located without consideration of where the workers employed in them are to sleep or eat or shop, of where they can be entertained or educated, or of how they are to get to and from their work, has led to the disastrous, interminable growth of great cities and, in more than one case, has gone far to destroy unique historical beauty.
"Planned use of land": that's a short way of putting a tremendous problem. to say, but far from easy to secure. It involves all those difficult questions as to compensa-tion and finance which are dealt with in the Uthwatt Report and some still more difficult questions for which no solution is proposed even in that Report. Let's have no illusions about the difficulty of dealing with this issue of the use of land. But don't let's run away from the difficulty either-because without planned use of land we can't make a new Britain free

from Squalor.

The second stone in our sling must be the sane use of transport. By that I mean using wisely our immense and growing means of transportation of all kinds for men and goods, our roads and railways and aircraft, using these means to spread industry and population healthily, instead of using them to jam more and more people into the great cities and their suburbs. With the sane use of transport goes also the use of power and its distribution; that more than anything else makes it possible to keep land to its best use—to find sites for factories, shops and houses without sacrificing farms and agriculture, without crowding all our industry around our coal-fields.

When I told a school-girl friend of mine that I was coming to open an Exhibition she said: "I hope it has a Chamber of Horrors." Well, it has. You will see many beautiful things as you go round this Exhibition and you will see some horrors also. I will mention one of these horrors only. You will see it on a small scale on page 38 of the book of the Exhibition, showing the plans of London at four dates, including as the last two dates 1914 and 1939. Please look at those plans and think what they When I came first to London from Oxford to work, I went to live at Toynbee Hall in Whitechapel and I remember that as I walked about the East End streets I used to try to imagine how many miles I and the people around me were from any pleasant country sight or sound—from real country, not a smoke-smutched open space. I remember saying to myself that if I were a supermillionaire, I'd buy up all the unbuilt land for five miles around London and stop all further building in that belt. If London wanted to go on growing, it would have to start again on the other side of the belt. That was in 1904, ten years before the map of 1914. Look at that map and at the map of 1939. How many

WATERPROOFING AN UNDERGROUND CONVENIENCE AT FELIXSTOWE



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Surveyor: A. HUGH PAVITT, A.M.Inst.C.E. M.Inst.M.&Cy.E.

> Contractors: Messrs. ROGER BROS., FELIXSTOWE.

Left: Finishing the top ot the vertical dampcourse of sand, cement and 'PUDLO' Brand Waterproofer

THE bottom of the excavation was covered with a raft of reinforced concrete 5 in. thick, made impervious by the addition of 5 lb. of 'PUDLO' Brand Waterproofer to each 100 lb. of the cement in a 4 : 2 : 1 mix. The raft was thickened to form foundations under the outer walls, and the outer faces of these walls were rendered in three coats, breaking joint, with two-to-one of sand and cement having a 5 per cent. admixture of 'PUDLO' Brand Waterproofer. This is one of several such structures in Felixstowe which have been waterproofed in the same way, and with complete success in every case.

> Right: The raft of waterproofed cement concrete.

CEMENT WATERPROOFER

Structures subject to water pressure should be formed entirely of reinforced concrete waterproofed throughout its thickness - ask for a specification.



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CAUSE AND EFFECT

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CABLES

MEMBERS OF THE C.M.A.

The Anchor Cable Co. British Insulated Cables Ltd.

The Craigpark Electric Cable Co. Ltd.

Crompton Parkinson Ltd. (Derby Cables Ltd.) The Enfield Cable Works Ltd.

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Johnson & Phillips Ltd. Liverpool Electric Cable Co. Ltd.

The London Electric
Wire Co. & Smiths Ltd.
The Macintosh Cable
Co. Ltd.
The Metropolitan
Electric Cable &
Construction Co. Ltd.
Pirelli-General Cable
Works Ltd. (General
Electric Co. Ltd.)

St. Helens Cable & Rubber Co. Ltd.

Siemens Brothers & Co. Ltd. (Siemens Electric Lamps & Supplies Ltd.) Standard Telephones & Cables Ltd.

Union Cable Co. Ltd.

dismal miles have been added in every direction to the distances from Whitechapel to the green! How much richer a millionaire I'd have to be, to do to-day what I imagined nearly forty years ago!

There was a time shortly before this war when Mr. Herbert Morrison as a leading member of the London County Council was running a campaign for a green belt round London. the same time the London Passenger Transport Board was helping to destroy green spaces round London ten times as fast as anyone could preserve them; every time it opened a new station, a new green space was doomed. That's not a sane use of transport. It is not a sane use of transport to make human beings travel for two or three hours every day between their work and their dormitory suburbs rather than spread out the factories and offices and make goods or letters travel instead. It is not a sane use of transport to fix your freights so that there is an advantage in crowding together—rather than spreading out—your towns. Our second stone must be the sane use of transport

and of power. I come to the third stone; the right use of the right architects. Some of you may have been wondering why I have not mentioned architects before in opening this Exhibition which they have organised. This is not because I they have organised. think that what architects can do is any less important than what I've named already. It's because their job comes after those jobs in time—it comes after other people, by economic and administrative measures for the planned use of land and the sane use of transport, have brought about a reasonable distribution of industry and population. That alone provides the essential conditions within which architects as architects can work, with satisfaction to themselves and advantage to the community. Dealing with the giant Squalor is not a job for architects only or even mainly. But they have an essential part in the campaign. They must be rightly used and, as I have suggested, must be the right architects. That means that they must be architects even more concerned with the insides than with the outsides of what they I say that not through any under-

particularly of great public buildings. It is one of the things of which I am most proud that I was associated with the securing of the services of Mr. Holden to design the new University of London Building on the site presented by the Rockefeller Foundation. The outside of that makes it one of the great buildings of the world. But there is only one University of London and there are millions of dwelling-houses and hundreds of thousands of places of paid employment, and in all these the inside is more important than the outside. It is on the ingenuity of architects that we shall depend for designing homes in which the persons who work there—that is to say, the housewives—shall have no needless toil, can have their hours of labour shortened and their health preserved. The name of Lord Shaftesbury is associated with our Early Factory laws, measures for shortening hours and improving health in factories. Architects should set out to be the Lord Shaftesburys of the home. That means thinking not only of the walls or roof or the shape and size of the rooms, but of every detail of equipment and its placing. That means thinking of how to make homes not only well but quickly and cheaply.

estimate of the importance of the outside,

It's important also that those who design homes to-day should realize that they must be birth-places of the Britons of the future—of more Britons than are being born to-day. If the British race is to continue there must be many families of four or five children. We must design houses not for the one or two-child family, but houses in which large families can be expected to come into existence. The houses that we design and build to-day are the shell in which the British race must live, will be living for perhaps 40 or 50 years. We do not want a shell so narrow or uncomfortable for numbers that it kills us. The Victorian era of nurseries without baths and garages, gave way to an era of garages and baths without nurseries. For to-

morrow we can aim at all three for all-

nurseries, baths and garages.

My fourth stone is the maximum efficiency of the building industry. The building industry— both managers and men—should think of themselves as about the most important industry in the country, because on how they do their work depend the lives and the happiness of citizens for many years. Houses, even the worst-built, are lasting. We cannot change them to-morrow if we do not like what we have built to-day, and we cannot get the houses we want without an excessive use of labour in building them unless we have also the maximum of efficiency in building to keep down its costs. A low price for a product doesn't mean low wages for the producers—as is shown by the American automobile industry; it is all a question of efficiency. A low price for a product doesn't mean that it must be ugly; machine-made simple things can be beautiful if they are made to a good design. What a low price for the product means is that every one can have more of it; plenty of cheap house-room is more important to the race than cheap motorcars or radio. And that can come by efficiency of design and execution, of good pay to the producers for high production. I am glad that the holding of this Exhibition has been made possible by the building industry itself, which has met all the expenses involved. That is a most encouraging sign of their desire to serve

These, then, are the four stones which we must put in our sling before we set out to fight the giant Squalor: planned use of land, sane use of transport, right use of the right architects and the maximum of efficiency in the building industry. But it is no use having slings or stones unless you are determined to use them: it is no use declaring war and setting out to fight unless you mean to win, unless you want passionately the things you are fighting for. The drive for dealing with the giant Squalor must come from the people of this country. What they really demand they will get because they themselves will provide it, but they must demand it.

I believe that the people of Britain desire social and economic security—freedom from want and idleness—so strongly that they'll be ready to pay all the price of hard work and thought involved in getting them. I hope that they are going to demand as strongly freedom from squalor also; that they'll come to feel that the conditions of crowding, discomfort, dirt, danger to health and daily exhaustion of travelling to and from work in which we have been content hitherto to let some of our people live are not worthy of Britain for the British. If, as a people, we come to feel that strongly enough we can change those conditions. Now is the opportunity for making the New Britain that we all desire.

Of course, by saying that now is our opportunity, I don't mean that now is the time to forget about the war and talk and think chiefly about the peace. The war is not finished yet —far from it; the winning of the war must come first in all our thoughts and labours. Nor do I mean just the opportunity for physical rebuilding that has been given by the destruction of parts of some of our towns through enemy action. Many people are talking of that, but that opportunity is too small and uneven. The real opportunity of the war is different and greater. The real opportunity lies in our quickened sense of national unity, and of the joys of fellowship and service; in having had to face so many difficulties that seemed overwhelming, and having learned that by courage, imagination and hard work we could overcome them. Don't let us forget those lessons. In rebuilding Britain physically as in rebuilding it economically, socially, spiritually, let us try to carry on into the peace the heroic mood of war.

I have pleasure in declaring this Exhibition of Rebuilding Britain open. I invite all of you who hear me, not forgetting, not letting up for a moment on the war which we have already against that tottering ogre Hitler, to join in declaring war upon the giant Squalor.

Sir Kenneth Clark: "It is my welcome, on behalf of the Trustees of the National Gallery, both Sir William Beveridge and the RIBA Exhibition. We have tried We have tried throughout the war to make the gallery a centre of all the arts—music, painting, cookery and now, thanks to the RIBA, we can include architecture. Perhaps the present Exhibition will seem to some visitors to be more concerned with architecture as a social necessity than with architecture as an art. You cannot have fine buildings unless you take a conscious pride in them, and with our present social conscience we shall not again be able to take pride in our buildings until we are sure that they provide the possibilities of a good life for everyone. Great building must express a belief—a conviction so widely held as to be unconscious. The architecture of the middle ages expressed belief in God, the architecture of the Renaissance in the god-like qualities of man's intelligence. These beliefs are no longer strong enough to produce great architecture. But we all share one strong belief which earlier ages lacked: that everyone has a right to a certain standard of life; that no one need be cold, hungry, dirty or diseased through sheer want. In the past these things were thought of as inevitable. We believe that the machine, which so disastrously increased them a century ago, can be used to abolish them to-day. This is the great belief which our architecture must express in order to become beautiful. Beauty in architecture is not a thing which can be produced in a drawing office by means of taste and learning, although heaven knows that taste and learning are not things which the architectural profession can afford to despise. A poet or painter may do fine work in comparative isolation, but architecture is a social art, touching men's lives at a hundred points. In the words of Professor Lethaby, a great building must not be one-man thick; it must be many men thick. That is why this Exhibition does not deal with facades, elevation and styles, but with the prerequisites of architecture : needs, plans, materials. I am sure that this is the right approach, but there is a danger in it—materialism. We may become so involved in questions of hot water and sewage disposal that we forget how much people's spirits depend on question of space, proportion, light—even texture. And we overlook the vital principle of waste—what Ruskin in his Seven Lamps of Architecture called the lamp of sacrifice. The imagination requires that certain things should exist for their own sakes -not because they do us any demonstrable good. Such were the towers and pinnacles of the middle ages, the volutes and sculptured pediments of the 17th century; but these things cannot simply be stuck on to buildings, they must grow out of them. They must express a need for play which bursts through the wall, or a sense of glory which shoots into the air and defies the laws of gravity. Perhaps it will be a long time before our buildings blossom in this way; but during the present winter of our architecture let us not try to raise hot-house flowers; let us rather devote ourselves to winter pursuits, to hedging and ditching, to clearing and drawing. That is why we are proud to welcome here to-day the great gyrotiller himself-Sir William Beveridge —and for the benefit of non-agricultural listeners I should explain that the gyrotiller is the instrument by which waste land, hopelessly overgrown with weeds and brambles, can be reclaimed for the use of man

Please do not take my agricultural metaphor too literally. Sir William's speech and the Exhibition itself lays plenty of stress on reasonable use of land. But it is perhaps more fitting that a speaker representing the National Gallery should lay his emphasis on design. The buildings of the machine age are going to be more than ever dependent on design. In the past a skilful local craftsman could give distinction to a mediocre design; but when the parts of a building are mass produced and sent out to be put together on some predetermined

plan, the responsibility placed on the original design becomes very heavy. This is one of those rare occasions where cost doesn't come in. If an object is to be produced in tens of thousands, the cost of the original design is trifling, and manufacturers of building parts will soon realize that it will pay them to reward designers handsomely. But can the designers be found? Has the general demand for good design been great enough to have produced them? Are we attempting to train them? So may I add this small pebble to the three big ones which Sir William has already promised the giant Squalor—the pebble of the trained designer who can produce the component parts from which the buildings of the machine age must inevitably be constructed. He, no less than the allocation of industry and the construction of roads, is a prerequisite of architecture.

This Exhibition is a complete contrast to the one which has just preceded it, the Exhibition of 19th Century French Paintings. That appealed to the senses and delighted the eye. This one appeals to the mind and much of what it contains is distressing to the eye; the French Impressionists were a joy in themselves. They left one feeling satisfied, but this Exhibition is an incentive to action and will have failed in its purpose if anyone leaves without a sense of profound dissatisfaction."

New Members

As Fellows (6).—Bowden, Gordon Everard (Chester), Henry, Major George Austyn (Armagh, N. Ireland), Howard, William Frederick (Edinburgh), Roberts, Hugh Duckworth (Leatherhead), Yorke, Francis Reginald Stevens (London), Ellis, William, J.P. (St. Helens, Lancs.).

As Associates (13).—Devaney, John Joseph Gerald, B.ARCH. (University College, Dublin) (Dublin), Fox, John Bernard, B.ARCH.(N.U.I.) (University College, Dublin) (Kells, Co. Meath, Ireland), Gilling, Malcolm Glynn, DIP.ARCH. (L'POOL) (University of Liverpool) (Birkenhead, Cheshire), Hounsell, Miss Jean Burwood (Leicester), Inglis, Iain Walker, DIP.ARCH. (EDINBURGH) (Edinburgh College of Art) (Edinburgh), Northcroft, Miss Anna Holmes (University College, Auckland, New Zealand) (London), Rushton, Roy Frederic (The Polytechnic, Regent Street, London) (London), Wainwright, Keith (The Technical College, Cardiff) (Cardiff). Overseas.—Daitsch, Miss Thelma (University of Cape Town) (Cape Town), Hope, Richard Edward Godfrey, B.ARCH.(RAND) (University of Witwatersrand, Johannesburg) (Johannesburg), Nandwana, Lakhaji Kalabhai (Bhadra, Ahmedabad, India), Walker, Frederick Arthur (Edinburgh College of Art) (Winnipeg, Canada), Youldon, Edwin Burnett, B.ARCH. (WITWATERSRAND) (University of Witwatersrand, Johannesburg) (Johannesburg) (Johannesburg)

ourg).

As Licentiates (33).—Baldwin, John Stanley (London), Barnes, William Henry (Brecon), Brough, Robert William (Hove), Burn, Sidney (Newcastle-on-Tyne), Crooks, William (Blaydon-on-Tyne), Davies, Hywel Scott (Chester), Dickinson, Leslie (Bradford), Dickinson, William (Bradford), Eastwood, George (Burnley, Lancs.), Gill, Frank (Cambridge), Heaton, Frank Halliwell (Salford), Hole, Wilfred Edgar (London), Hunter, James (Aberdeen), King, Harold Frank (Cambridge), Larter, Claude Eustace (Abingdon, Berks.), Lawrence, Walter William (London), Lewis, Ronald Thomas (Burslem), McCulloch, Duncan (Glasgow), Meston, Frederick William, M.C. (Windsor, Berks.), Overton, Sidney Norman (London), Poole, Clarence Arthur (Barking, Essex), Potts, Alexander Robert Balliol (Southport), Ramage, Herbert (London), Randall, William Edward Renwell (Chatham), Rusby, Allan (Halifax), Taylor, Leslie Lamb (Newcastle-on-Tyne), Temple, Colonel Frederick Charles, C.I.E., V.D. (Newcastle-on-Tyne), Tidy, Edward Albert (London), Tilbury, Joseph Frederick (Cambridge), Webber, Richard Alan (Clydebank), Wheeler, Edward (Newcastle-on-Tyne),

Williamson, Sydney (Wakefield), Young, Horace, John (Gateshead-on-Tyne).

NFPO

Uthwatt Report

The National Federation of Property Owners has issued a Memorandum on the Uthwatt Report. NFPO, representing the view of 200 Affiliated Property Owners' Associations throughout the country and a very large number of Property Owning Corporations, Trusts and Companies (all of whom are interested in the development and proper use of their land), whilst appreciating the need for planned reconstruction after the war, is of opinion that some of the recommendations of the Uthwatt Committee go far beyond the committee's terms of reference as an expert committee. If given statutory effect, these will prove to be a fatal deterrent to individual initiative, thrift and enterprise and will produce serious political controversy. NFPO claims that the Uthwatt Report is based largely upon the erroneous assumptions: (a) that all development by public bodies is good; (b) that all development by individuals and (c) that all betterment is created by the State and accrues to individuals.

Experience has shown that betterment is

Experience has shown that betterment is more often created by the enterprise of owners than by the State or local authorities and more often accrues to the State in the form of higher rateable values and Schedule A tax upon property than to the individual whose enterprise has created it.

State acquisition means nationalisation. If the recommendation to vest the rights of development in the State is accepted it will have a shattering effect upon values. It will upset confidence and create uncertainty. Millions of pounds have been advanced by the friendly societies, building societies, trust companies, individuals, banks and insurance companies based on the security of land. All such loans would be jeopardized and building operations

would ultimately suffer.

The "Global basis" of compensation and the Uthwatt theory of shifting values are contrary to accepted methods of fair valuation. On such a basis fair compensation is impossible. It will entail costly proceedings before tribunals or arbitrators, and owners will be compelled to accept whatever figure the "Global" fund will permit, irrespective of the price paid for the land or its realisable value in a free market. All valuations made for estate duty, mortgage, etc., purposes will have to be disregarded, notwithstanding the fact that the Treasury has always taken the highest valuation in valuing for death duties.

The existing Town and Country Planning Act, 1932, provides the basis for any necessary legislative machinery in respect of developed land and is capable of amendment to meet new requirements. The sections of the Act governing appeals and for the holding of local inquiries are safeguards both for the acquiring authority and for the property owner.

The effect of the recommendation to dispose of publicly owned land by way of lease only will be to create a "leasehold community," and the ultimate abolition of freeholders. There would be less incentive for a man to own his house if he felt that he could be dispossessed on a simple breach of covenant. Owner-occupiers have responded to the patriotic appeals made to them to "own their little bit of old England." The recommendation will have the effect of creating an army of Government official "dictators," or council inspectors. From experience it is to be expected that leases granted by public authorities

will be more stringent than those pertaining under private enterprise.

The Federation will strenuously oppose the abolition of the procedure for the holding of public inquiries. The recommendation dealing with this will mean that decisions can be reached behind a smoke-screen of officials. If, as we hope, we are to be properly planned, let us be planned in the light.

The Uthwatt Committee refers to "fair compensation," but property owners will be at the mercy of officials as to what buildings in their opinion are below modern standards of fitness. The operation of the Rent Restrictions Acts prevents owners from obtaining possession of "dwelling houses" and carrying out the repair work necessary to the attainment of the standard of fitness from time to time prevailing.

A definite bias against private ownership prevails throughout the whole report (which seems inconsistent with the repeated expression of the desire to foster private enterprise).

The report provides a means of collecting "betterment" but does not provide for recompensing "worsement." The Government may levy a tax, collectable by the local authority, equal to three-quarters of the annual value by which the site, in the opinion of some official, is supposed to have increased. Thus the owner of a property worth £100 a year may find the local authority thinks it worth £200 a year. The owner gets £100 from it and is going to be charged an extra tax of £75 a year. The owner, on the income of £100 a year, already pays £50 a year in income tax at 10s. in the £. In addition to the £50 a year he would have to pay another £75 a year (the new tax), making a total of £125 out of an income of £100. An impracticable proposition.

In the second case, the owner of a property worth £100 per annum which depreciates to £50 by reason of "the shifting of values" is refused any compensation for depreciation occasioned by planning over which he can exercise no control.

The recommendation of the Uthwatt Committee on the collection of a levy on the increase of annual site value would undoubtedly, if translated into legislation, result in a forced depreciation of the whole of the property of the country. That the Committee is aware of this and that it is its deliberate intention to create this position is evidenced.

Generally, the suggestions of the Uthwatt Committee would seriously reduce the value of property and land and create uncertainty and fear, which is so prejudicial to private enterprise and building operations. The effects of the Finance Act, 1909/10, and the increment value duty on site value had such disastrous results. The majority of the proposals are aimed at avoiding the rights and freedom of individuals and would mean the creation of officials at whose mercy the property owner would be. Some of the methods suggested would cause a grave injustice to owners of property—dictatorship methods in fact.

Subject to proper planning it is in the national

Subject to proper planning it is in the national interest that there should be as many real estate owners as possible. House ownership makes for good responsible citizens, proud of their holding. National planning, yes, by all means, but the other main suggestions are contrary to the best national interests.

ASB

Reconstitution

The RIBA Architectural Science Board has been reconstituted and the following have been appointed and have agreed to serve on the Board for the present Session:—

Joseph Addison, M.C., F.R.I.B.A.; Professor J. D. Bernal, F.R.S.; E. L. Bird, M.C., A.R.I.B.A.; Professor L. B. Budden, M.A., F.R.I.B.A.; P. V. Burnett, F.R.I.B.A.; A. R. Cobb, M.A.; A. W. Davson, F.S.I.; I. G. Evans, M.A.; A. Farquharson, M.A.; R. Fitzmaurice, B.S.C.,

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The Board has appointed Mr. Alister MacDonald, Major the Hon. Godfrey Samuel and Mr. W. A. Wort as Chairman, Vice-Chairman and Acting Hon. Secretary respectively.

NFDC

Salvage

NFDC (National Federation of Demolition Contractors) came into being in October, 1941, at the suggestion of MOW, to assist the national effort in dealing with the effects of enemy air action and the recovery of essential salvage.

It has confined its membership to established demolition contractors, virtually all of whom are represented. A regional committee has been formed in every Civil Defence Area, which works in close collaboration with the Ministry's regional organisations, and is represented on their Advisory Committee. Demolition, though closely aligned with Civil Engineering and Building, is very much a specialized trade, depending on the combination of experienced direction with skilled workers. Many amongst both employers and operatives come of families who have been engaged in this industry for several generations.

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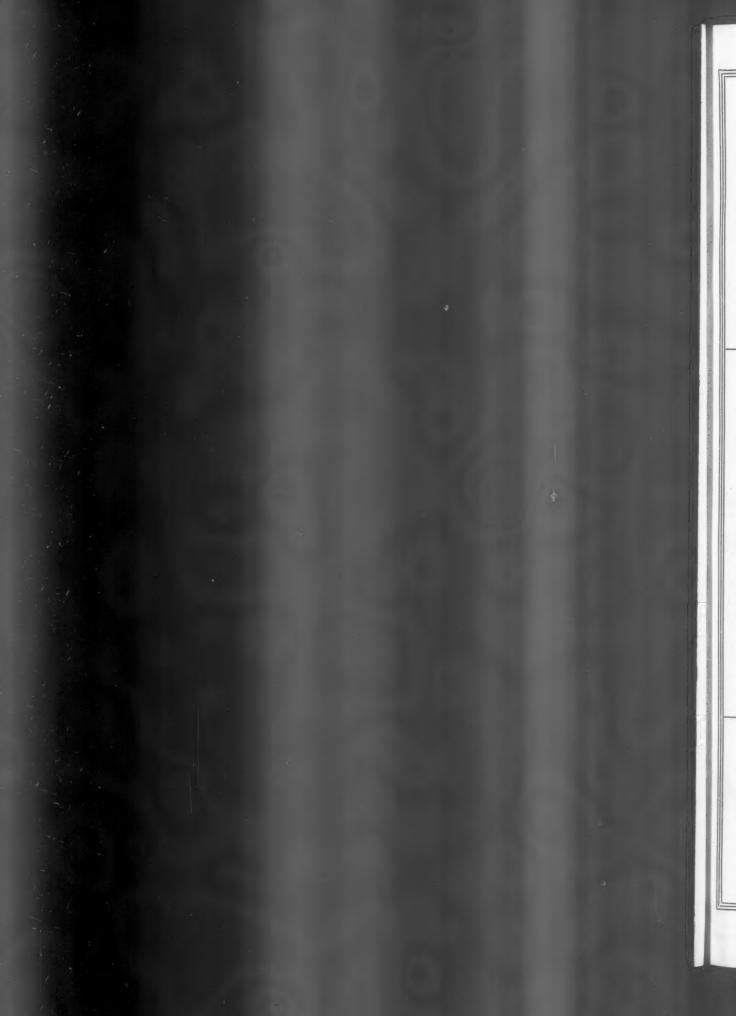


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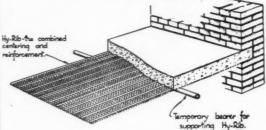
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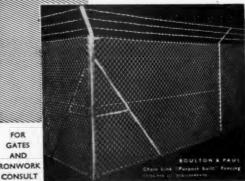
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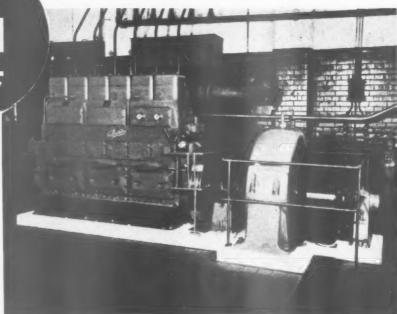


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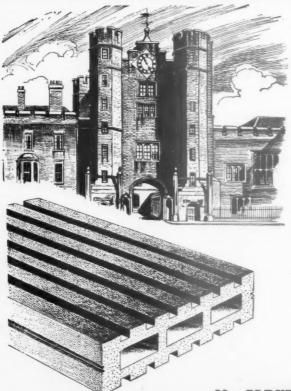
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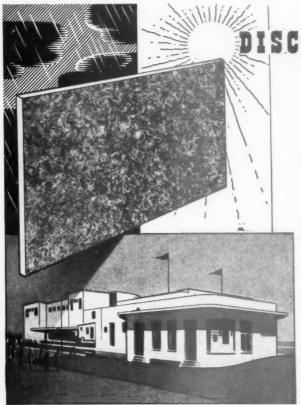
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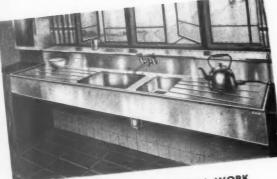
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The National Federation of Demolition Contractors was inaugurated on the 28th October, 1941, at the request of the Ministry of Works and Planning, in order that demolition contractors might be organised to be of full use in the national effort. It has now a representative area organisation in every Civil Defence Region. Membership is strictly limited to contractors of experience in demolition.

Further information may be obtained from The Secretary, 13, Bloomsbury Sq., London, W.C.1. Chancery 6731-2-3.

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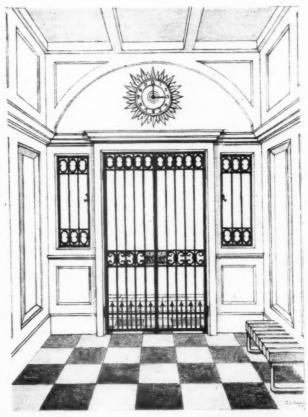
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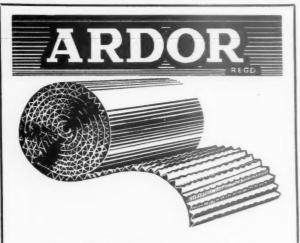
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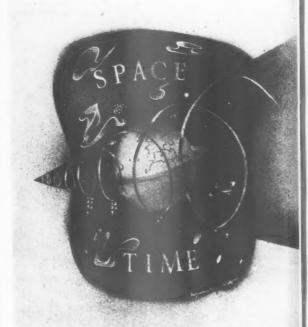
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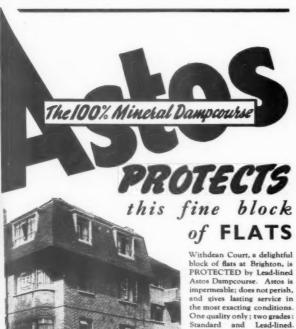
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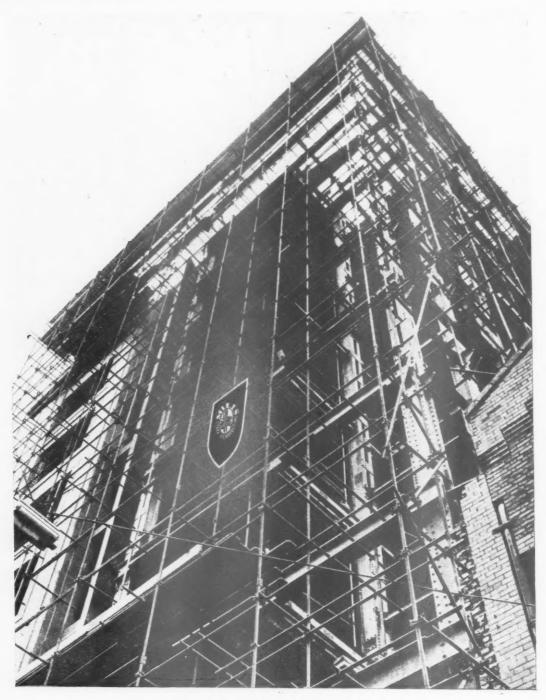


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