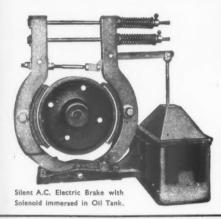
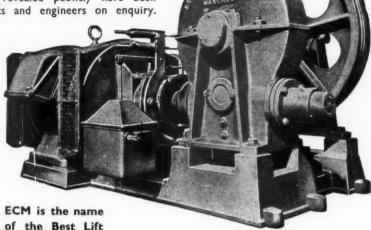
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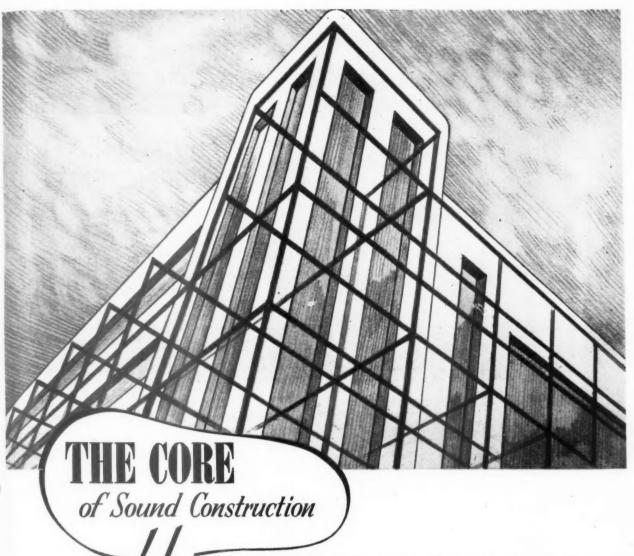
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Architect : G. GREY WORNUM, F.R.I.B.A.



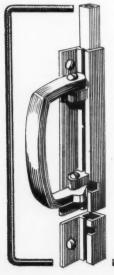
# SIMPLY, NEATLY and EFFICIENTLY



N the illustration reproduced it will be noted that unsightly rods, levers and cords are conspicuous by their absence—such patience - wrecking appendages are relics of a bygone age.

In the modern building windows, roof-lights and top-hung ventilators are simply, neatly, and efficiently operated by the ARENS Control.

Whilst we regret that we can, for the present, only accept orders for buildings of an essential nature, may we send you our catalogue and Information Sheet No. 441, which describe in detail the construction and finish of ARENS WINDOW CONTROLS and indicate some of their many applications?



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Chill Cast Gunmetal and Phosphor Bronze Bars, and

Terne Metal and Cupro Nickel Ingots and Granules,

regret their inability to satisfy all the requirements of clients for their products for the time being.

When Peace returns to the World again, however, they look forward to being in a position to supply their old and new friends with all their needs of the Non-Ferrous Metal Alloys they produce and to be able to prove once again that "McKECHNIE" products are second to none and that clients' complete satisfaction is their chief concern. In the meantime, they ask the indulgence of their friends and thank them for the understanding and the forbearance already extended to them.

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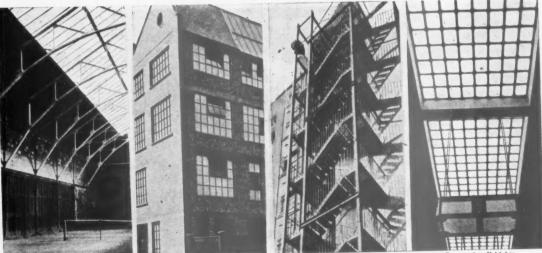
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Metal Windows

Steel Fire Escape Stairs

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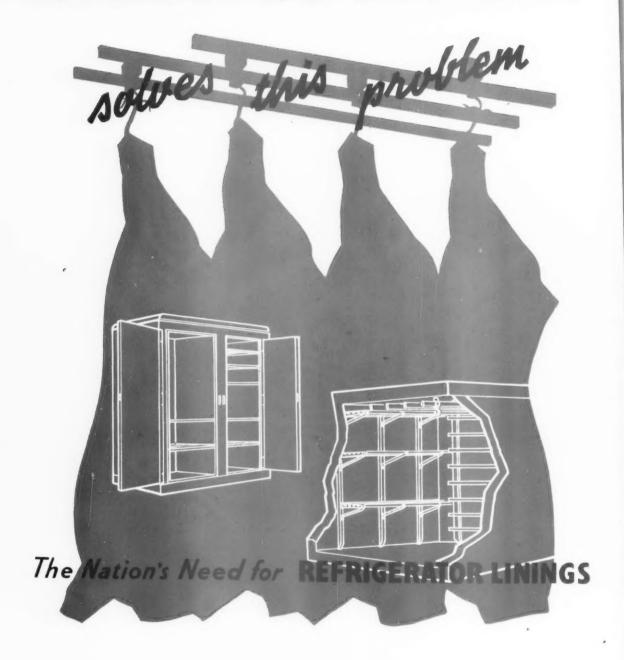


# In the days of Justinian

The empire of Justinian is hardly more than a myth. The fame of his encouragement of Architecture is unlikely to perish. The cathedral of the Holy Wisdom, the palaces whose polychromed marbles were reflected in the blue waves of the Golden Horn, the numerous churches of the Levant and Near East, the precious mosaics—the age was

both daring and mature, the opportunity was splendidly accepted . . . . We in this country will shortly be favoured with one of the great building opportunities of history. We join with architects in looking confidently ahead—and in the days to come, trust that Celotex will make an essential contribution.

## **ASBESTOS-CEMENT**



This is one of a series of advertisements designed to show how Asbestos-cement can help to solve an almost infinitely varied range of problems. At present, war-time needs have a monopoly of its service, but when peace comes the manufacturers look forward to extending further its usefulness.



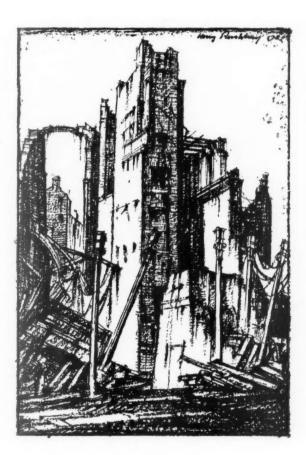
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Sheets for Refrigerator and Cold
Storage Chamber Lining.

# CRITTALL WINDOWS



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#### ARCHITECTS'



## JOURNAL

THE ARCHITECTS' JOURNAL WITH WHICH IS INCORPORATED THE BUILDERS' JOURNAL AND THE ARCHITECTURAL ENGINEER IS PUBLISHED EVERY THURSDAY BY THE ARCHITECTURAL PRESS (PUBLISHERS OF THE ARCHITECTS' JOURNAL, THE ARCHITECTURAL REVIEW, SPECIFICATION, AND WHO'S WHO IN ARCHITECTURE) War Address: 45 THE AVENUE, CHEAM, SURREY.

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The Editor will be glad to receive MS. articles and also illustrations of current architecture in this country and abroad with a view to publication. Though every care will be taken, the Editor cannot hold himself responsible for material sent him.

THURSDAY, NOVEMBER 26, 1942. NUMBER 2496: VOLUME 96

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The fact that goods made of raw materials in short supply owing to war conditions are advertised in this JOURNAL should not be taken—as an indication that they are necessarily available for export.

Owing to the paper shortage the JOURNAL, in common with all other papers, is now only supplied to newsagents on a "firm order" basis. This means that newsagents are now unable to supply the JOURNAL except to a client's definite order.



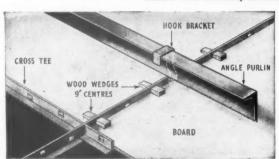
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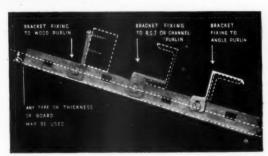
#### FOR APPLYING ANY TYPE OF BOARD TO CEILING & WALLS

The Wallboard is secured to sherardised, pressed steel, slotted T-section by wedges. To the right are shown the methods of attaching the support to various forms of purlin.



Escalator Tunnel at St. John's Wood Underground Station. Architect: S. A. Heaps.





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- Can be applied to new or old buildings of any construction independently of the roofing contractor,
- who proceeds with his work ahead of the AnD Wedge Method.
- 6. Any thickness of board can be used, from  $\frac{1}{8}$ " to  $\frac{5}{8}$ ".
- This method can be used for applying linings to exterior walls.
- 8. The simplicity of application is such that any contractor can apply the AnD Wedge Method, and the materials making up this method can be purchased by the contractor.

Full particulars, specification and a typical layout will be sent on request

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Send us your "certificate of requirements" (such as Form PC/WD/I War Dept.) and we will arrange for licence application to Paper Control HARRIS WHARF, GRAHAM STREET, LONDON, N.I. TELEPHONE: CLERKENWELL 4582

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## PUBLIC SERVICE



## Water Supply

No one nowadays would willingly rely on a well for his water. We expect a constant mains supply of pure water laid on to our homes as a normal service. To-day our cities and towns draw their water from carefully planned and constructed dams and reservoirs, perhaps a hundred miles or more away. From reservoir, through pipe-lines, pumping and purifying stations, to the consumer's tap, the service is in the hands of experts. As a result the water is pure and the service reliable.

Rediffusion applies the same skilled care in distributing to its subscribers the available news, views, entertainment and announcements. Every house in future should be served by Rediffusion as it is served by water to-day.

## REDIFFUSION

is the service which gives to broadcast reception the simplicity of a switch and a loudspeaker. It connects you by wire to the world's radio and to local announcements.

In common with every other periodical and newspaper in the country, this Journal is rationed to a small proportion of its peace-time requirements of paper. This means that it is no longer a free agent printing as many pages as it thinks fit and selling to as many readers as wish to buy it. Instead a balance has to be struck between circulation and number of pages. A batch of new readers may mean that a page has to be struck off, and conversely a page added may mean that a number of readers have to go short of their copy. Thus in everyone's interest, including the reader's, it is important that the utmost



important that the utmost economy of paper should be practised, and unless a reader is a subscriber he cannot be sure of getting a copy of the JOURNAL. We are sorry for this but it is a necessity imposed by the war on all newspapers. The subscription is £1 3s. 10d. per annum.

present and POST-WAR HOUS-ING PROBLEMS of London.

It was agreed that the housing problem was becoming more and more acute owing to war damage, the absence of new building, and the deterioration of old buildings for want of works of repair and maintenance. It was also agreed that the carrying out at once of considerable preliminary work, such as the acquisition of land and the preparation of plans for its development, was essential in new dwellings were to be built immediately labour and materials could be made available for the purpose. The Minister explained that the building of new houses was not feasible until the present strategic building enterprises were completed. Even then other claims would have to be considered. He could assure the representatives of the Council, however, that the vital claims of housing were constantly under review. He was glad to know that when the time came the L.C.C. would be ready to go ahead. In the meantime he would give the Council every assistance in enabling them to carry out the necessary preparatory works, and would keep in the closest touch with them.

## from AN ARCHITECT'S Commonplace Book

"Are those the plans? Does it matter me seeing them?"

"Of course not."

"Charles has never seen the plans."

"They have only just arrived. Here is the ground floor—no, that's rather difficult. Try the elevation. We are to have a good many gables and a picturesque sky-line."

"What makes it smell so funny?" said Dolly, after a moment's inspection. She was incapable of understanding plans or maps.

"I suppose the paper."

"And which way up is it?"

"Just the ordinary way up. That's the sky-line, and the part that smells strongest is the sky."

Howards End, by E. M. Forster.

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.

## NEWS

The principles which MOWP has agreed with the building industry for the use of groups of contractors for GOVERNMENT CONTRACTS have just been announced. They are printed on page 354. MOWP has also issued the following statement: In order to accelerate progress on buildings urgently required by the Government, MOWP directed that work should proceed on certain specified Sundays between the beginning of November and the end of February. In announcing this decision in October, it was stated that on the Saturdays

prior to these specified Sundays, work should cease at midday. To meet the position of operatives working away from home, the Minister, after further discussions with the organizations of Employers and Operatives of the Building and Civil Engineering Industries, has decided that the midday cessation can be either on the Saturday preceding the specified Sunday or on the Saturday after, but not on both. The Saturday selected is to be arranged on the site between employers and operatives.

\*

The Minister of Health (Mr. Ernest Brown) has discussed with representatives of the London County Council, including Lord Latham and the Chairmen of the Housing and Public Health and Finance Committees, the

\*\*

The National Federation of Building Trades Employers has received the following letter from Mr. Ernest Bevin, Minister of Labour and National Service, on the subject of CALL-UP ARRANGEMENTS in the building industry:

I am writing to confirm the information already given verbally on my behalf, regarding the call-up of men employed in building and civil engineering occupations.

Having regard to the numbers of men required by the Armed Forces in the months of November and December, the Government have decided, after careful consideration, that amongst the measures to be taken to meet those demands must be the call-up of the building workers, whose calling up was deferred last July for the purposes of the extended Building Programme. The men who will be called up will mainly be those who were under 30 years of age at their prescribed date of registration, i.e., men born after June 22, 1910, but if the numbers available after medical examination do not reach the total of 28,000 required, an extension to older men will be necessary. It is expected that the larger proportion will be required in November. Applications for deferment in these cases cannot be accepted in any circumstances, and should not be made. A small number of men, classified as navvies and labourers, will not, for the time being, be included in this call-up.

In announcing this decision I wish to make it clear that the fact that the men are being called up should in no way be taken to indicate that the extended Building Programme has lost any of its urgency. I realize that the call-up will throw a strain on the Industry at a time when it is already carrying a heavy load, but I am confident that both sides will realize that the needs of the Armed Forces must be paramount, and that they will respond to this further effort required from them.

I should perhaps also add the warning that the man-power demands are such that further continuing calls on the Industry must be anticipated in due course.

The Committee appointed by the London Masters Builders' Association to consider the pro-



## Pioneering in Flexible Schools

Down in West Sussex, in 1936, Mr. C. G. Stillman, the County Architect, designed and erected some classrooms in light-steel standard unit construction. Built at Sidlesham as an experiment, these classrooms, the first of their kind in this country, immediately aroused considerable interest in educational circles. Now, in this issue, his later achievements are told in his own words. Born at Newbury, Berkshire, in 1894, Mr. Stillman served in France throughout the last war in the London Territorial Regiment of the R.E.'s. He won the Military Medal in the battle of the Somme and was mentioned in dispatches. Upon demobilization he entered the Office of Works. Later he became Chief Architectural Assistant to the County Architect of Hampshire, Deputy County Architect of Cheshire, and, just before his appointment to West Sussex, was County Architect of East Suffolk. Elected an Associate of the

R.I.B.A. in 1922, a Fellow in 1928 and a Member of the Council in 1939, he has served on the R.I.B.A. War Executive-Committee since the beginning of the war. He is also a member of the R.I.B.A. Reconstruction Committee, the Official Architects' Committee, the Building Research Board of the Department of Scientific and Industrial Research, the Prefabrication Section of the Standards Committee of MOWP and the Architectural Science Board. Many of his schools and other important buildings in West Sussex have already been illustrated in the JOURNAL. At Chichester he designed and carried out the County Hall, St. Richard's Hospital and the Courthouse, and at Worthing the Police Station and Courthouse and the Art School. His schools are at Bognor, Selsey, Shoreham-by-Sea, Littlehampton and in other parts of the County.

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bable effects of the UTHWATT COMMITTEE'S REPORT, when adopted, on building in the London area, has now presented its findings. In its report the Committee says:

In the opinion of this Committee, the proposals of the Uthwatt Report would obviate the large speculations in land which it is certain would follow in the immediate post-war period in the absence of legislation.

The setting up of the Central Planning Authority at an early date, with the object of controlling building and all other development, and of preventing work being undertaken, which might be prejudicial to reconstruction, is desirable.

By achieving this end we consider that monopoly of building work would be less likely to arise, and that its distribution would be wider. Further, having regard to the control envisaged, it is thought the working basis of the Industry would be more uniform and controllable both in the matter of Working Rule Agreements and conditions of Contract. The report is to come before the next meeting

of the Council of the Association.

+

New Directions have been issued by the Minister of Labour and National Service modifying the present exemptions of employers from the obligation to seek permission of a National Service Officer before TRANSFERRING EMPLOYEES. The Directions are published in The Building and Civil Engineering (Restriction on Transfer) Exemption Directions, 1942, which come into force on December 7.

The War Damage Commission announces that a notification of WAR DAMAGE to land or buildings (Form C.I) cannot be accepted after the prescribed period of 30 days from the date of the damage unless it is accompanied by an explanation satisfactory to the Commission of the failure of the claimant to notify the damage within that time.

After December 1 a claimant who sends in a notification more than 90 days after the occurrence of the war damage will normally be required to make a statutory declaration before a Commissioner for Oaths or a Justice of the Peace on a special form which must be obtained from a regional office of the Commission. In this he will be called on to verify the information needed in a notification of damage, and in addition give full particulars of all the damage sustained by the property, the facts upon which he relies to prove that it was war damage, and a full statement of the circumstances put forward as an explanation of the delay. The Commission will then decide, under the powers conferred upon it by the proviso to Section 10 (3) of the War Damage Act, 1941, whether to make a payment notwithstanding that the requirements of the Regulations have not been observed.



## REVOLUTIONARY SCHOOL DESIGN

It was in 1936 that educationalists began to take an interest in West Sussex. In that year they heard that Mr. C. G. Stillman, the county architect, had designed and built some experimental classrooms at Sidlesham. These classrooms were unusual. They were of light-steel standard unit construction and were the first of their kind to be built in this country. They marked the beginning of his investigations into flexibility of design and construction, a flexibility now worked out so thoroughly as to enable every future school to keep pace with the most drastic changes in educational needs.

Only within the last hundred years has education been compulsory. Yet during this relatively short period progress has completely outstripped building design. Schools have become out of date in thirty years and during the greater part of that time have hindered rather than assisted education. They have not altered rapidly enough to keep pace and in most cases are too solidly built or too tightly planned and sited for satisfactory adjustment to be economical or even possible. Schools have been doomed before they left the drawing board.

It was to overcome these misfortunes that Mr. Stillman began his investigations. He abandoned the usual practice of thinking of a school in terms of one building and the consequent compression of all its parts into one mould. External symmetry and uniformity, he decided, must be sacrificed to internal flexibility and suitability to purpose. Schools are required to change and to change rapidly to meet new demands in the methods and standards of education; he therefore concluded that they require buildings planned as a series of separate units, loosely connected, of a light construction, allowing for individual expansion and easy alteration. The result of his investigations is described and illustrated by Mr. Stillman himself in this issue of the JOURNAL. He is extremely critical of his work and compares his pioneer efforts in flexibility with their subsequent developments to enable the reader fully to grasp the ideal towards which he is striving.

The ideal school of the future in his view will embody, on one site, everything connected with the children's welfare: senior and junior schools for boys and girls, health clinics and so on. Different sections of the school will be built as loosely linked units capable of rapid change and addition, and landscape design will play a very important part, since the layout of the whole site is more permanent than the buildings themselves. Thus permanent natural surroundings will form a background to all the buildings and separate them one from another and so avoid the possible monotony of repetition. Playing fields, areas of natural growth for unorganised play, school gardens, all form part of the composition, creating the atmosphere of a holiday camp and bridging the gap between classroom and The aim will be to make school life as attractive as possible to the child, rather than to create monumental effects in brick and concrete, which give a greater distinction between outdoor and indoor life. There will also be an adult educational centre.

This general loosening of site planning and the inclusion of more garden areas will require more ground space, but against this initial expense, he points out, must be set the advantage of being able to plan as a whole. All the possible requirements can be taken into consideration at the start and space allotted so that new developments can take their proper place and not have to be tacked on anywhere and anyhow. Moreover, services can be laid out in such a way to allow for extension. Paved areas and playing fields can be well laid out near the school buildings with enough space for future additions.

is Mr. Stillman's plan of the schools to come.

Although the war is forcing upon architects a change in their methods, Mr. Stillman reminds us that this change is long overdue. He says it must not be merely a temporary war measure to be discarded with our gas masks when peace is signed, but a real change in outlook on the whole question of school design. temptation to put up buildings of a "temporary" construction, of indifferent design, to bridge the gap of the first five or ten years after the war "until we can design something better." No one will disagree with him when he says that this must be strenuously resisted. We must invent now a technique of design and construction that will admit experiment and development. It will be interesting to compare Mr. Stillman's investigations with the findings of the School Planning Group\* set up by the Directorate of Post-War Building. The Group's interim report is shortly to be published.



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S T $\boldsymbol{E}$ 

AIRY-FAIRY MINISTRY

The Select Committee on National Expenditure, starring Sir John Wardlaw-Milne, has returned from its latest provincial tour with a new eye-opener for its fans. This report—the fifty-ninth in the series deals, and none too soon apparently, with the problems of aerodrome construction. Although, broadly speaking, the building industry emerges from the investigations of the Committee with more credit than does the Ministry which controls it, the record disclosed is not one of which anybody concerned could feel proud.

Twenty-eight aerodromes under construction were visited, and the Committee records: first, that not in one single case had the time for the completion of the contract been kept; secondly, although every contract contained a penalty clause, it had never been enforced; thirdly (in the delicate phrasing of the Committee) "the stage has not yet been reached when original estimates will in fact correspond closely with actual final costs.'

To anybody connected with building these complaints have a sadly familiar ring. But the value of the report does not lie in the discovery of what, after all, are the well-known and chronic diseases of the industry, but in the analysis of particular causes and in recommendations for Comr to say 1. T syster the co and t gress job. most and ' made const and . pletic new to co time

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<sup>\*</sup>The School Planning Group of the Directorate of Post-War Building was convened by the Board of Education with the following terms of reference: To report on the applicaby the Board of Education with the following terms of reference: To report on the application of standardization to the planning of schools: (a) as a whole; (b) in component parts (classrooms, etc.); (c) in units such as windows. Constitution: Chairman, Sir Robert Wood, K.B.E., C.B. (Deputy Secretary, Board of Education); Secretary: A. R. Maxwell-Hyslop (Board of Education); Members: F. Jackman, A.R.I.B.A. (Board of Education), Dr. J. Jardine, F.R.I.B.A. (Scottish Board of Education), J. H. Markham, F.R.I.B.A. (Directorate of Post-War Building), W. G. Newton, O.B.E., F.R.I.B.A.

improvement. In these fields the Committee has much of interest to say. Its main recommendations are:—

1. The adoption of a planned system of priority for completing the country's aerodrome programme, and the drawing-up of proper progress schedules for each individual job. 2. Elimination of all but the most essential alterations in plans, and when such alterations must be made the immediate agreement by consultation between the contractor and Air Ministry of a revised completion date allowing for the new conditions. Penalties for failure to complete within this new contract time to be strictly enforced, and a bonus paid for early completion.

The Committee also recommends closer liaison between separate Ministry departments, improved welfare for, and firmer discipline over, labour on the site, and higher salaries for resident engineers. (It is pointed out that these officials are not as a rule so well paid as the site agents for the contractors whose work they are supposed to supervise).

That such a document as this should be necessary in the third year of war is frankly very discouraging. For some time past THE ARCHITECTS' JOURNAL has been urging the establishment of more centralised control of the country's building programme in the hands of MOWP, so that the requirements of the various Ministries could be properly co-ordinated and priorities of labour and material settled. Now it appears that one of the most important of these Ministries has not even taken the trouble to prepare its own priority programme. The omission of so elementary a measure of organisation is bewildering. To take one result: without it the Ministry of Labour cannot be expected to provide at the times required the right type and quantity of labour. The Committee's first recommendation is surely then of the utmost urgency.

I have discussed some of the other criticism made in the report with a colleague who has had practical

experience of the difficulties of the problem. He says:

"Consider the Committee's four big complaints about aerodromes: that far too many changes were made after a job was started; that no attempt was made to plan and check the rate of progress by means of progress charts; that in no case was the completion date adhered to among the 28 aerodrome schemes studied; and that in no case was the penalty clause enforced.

"Those who have had experience administering war building schemes will agree that the first complaint is likely to be fully justified. Nearly two years ago the JOURNAL held that there was no justification for altering schemes of common type (hostels, camps, aerodromes) during construction. Improvements thought of while certain schemes were under way, should be thought over thoroughly and incorporated ab initio in the next series of schemes of the same kind. But it appears quite impossible to persuade any Government department to adopt this method, so that is that.

"The other three complaints are in a different category, and in making them the Committee seems to have forgotten that there is no point in working out detailed time-and-progress charts unless they are going to be adhered to and, secondly, that one cannot penalize one man for another man's failure.

"In pre-war days, when progress charts, completion dates and penalty clauses were adhered to and enforced to some extent, the various parties concerned — architects, engineers, contractors, subcontractors and suppliers—had most of the factors governing fulfilment of their part of the bargain under their own control.

"Architects late with drawings could take on a dozen more men, contractors could take on a hundred more, manufacturers in a jam could help each other out in many ways. There was in fact a pool of surplus men and a pool of goods on which all parties could fall back if anything went wrong with the methods by which they had planned to carry

out their share of the work.

"Things are different to-day. There are no pools. Plans have to be laid in one way only and each variety of goods has to be obtained from a manufacturer who has usually got many orders, barely adequate materials and barely adequate staff. If, after an order for two steam boilers has been placed and delivery date given, a higher priority order is received by the manufacturer, if his works are hit by a bomb, if his four best workmen are injured in a bus smash, there is in practice little that can be done about it except wait. There is certainly no point in trying to penalize for non-completion either the trades held up by non-arrival of the boilers or the general contractors.

"In circumstances like the present a wise client would employ architects, engineers and general contractors with the best war-time record, fix a completion date which includes a reasonable time allowance for unforeseeable hold-ups, offer a tax-free bonus (shared by subcontractors and suppliers) for completion on time, and fix penalties only for gross negligence."

#### DEBATE IN THE LORDS

The future of planning has again been debated in the House of Lords. This time Lord Portal replied on behalf of the Government.

He promised us a Government statement on machinery shortly; in the meantime he's told us that the Government is considering the Uthwatt Committee's suggestions that development rights should be purchased and powers of compulsory purchase in urban areas increased (it could scarcely be doing less), but has decided to shelve the whole question of betterment because the subject is controversial and not urgent!

On the whole the debate was a dull one. Lord Reith did not speak and one has the impression that the fire of the big guns is being held until the Government's views have been more clearly stated. It's said that this is likely to be in about a fortnight.

ASTRAGAL

Many difficulties in modern educational administration are due to schools built to last a century and too solidly built for adaptation (without excessive cost) to inevitably changing requirements. In the pages which follow Mr. C. G. Stillman, the County Architect of West Sussex, whose EXPERIMENTAL WORK IN SCHOOL DESIGN in his own county has already won fame, discusses the peculiar problems to be solved. He illustrates by means of a pictorial history the evolution of the school plan, describes his own experiments in light-steel standard unit construction, and explains his plans for the future.

## S C H O O L S

[By C. G. STILLMAN]

Education in the new Britain we are hoping to build after the war is the subject of much discussion and planning at present. To many, indeed, it seems the most important part of the whole field of post-war reconstruction, for it will be useless to improve our material world without improving the people who live in it, and the only hope of doing this is to give the rising generation the best educational opportunities possible. Hence it is vital to our post-war life that this great task of educating shall not be hampered by out of date, inadequate or ugly buildings, but that the buildings shall give all the help possible, both for the present and the future.

The central task of education, i.e., the highest development of the in-dividual, has probably altered little since the days of the Greeks, but the means for carrying it out have changed enormously with the growth of knowledge of the physical world and more recently with the growth of knowledge of the nature of man himself. Hence the demands made on the buildings which house educational activities have altered rapidly, more rapidly than for any other type of building with an equally long history. Houses, churches, markets, courts, even office buildings, have not altered much in essentials of plan. We still cook, and dine, and sleep, in much the same sequence of time and space as our mediaeval ancestors, and the pulpit and the office desk have not been much disturbed by amplifiers or typewriters, but the essentials of the modern school vary most startlingly from what was adequate for Plato, Dean Colet, or even Dr. Arnold. The gymnasium, the laboratories, the handicraft and domestic science rooms, the emphasis on light and ventilation, the training in hygiene and social behaviour, all are new demands advancing rapidly, and likely to continue to do so as we work out our new world. But the buildings themselves have not altered rapidly enough to keep pace, and education

to-day is hampered by buildings which are inadequate, but in most cases, too solidly built or too tightly planned and sited for satisfactory adjustment to be economical or even possible.

steed for satisfactory adjustment to be economical or even possible.

The Board of Education has been aware of this state of affairs, and in its handbook "Suggestions for the Planning of Buildings for Public Elementary Schools," published in 1936, states that "Many difficulties in modern educational administration are due to schools built to last a century, and too solid for adaptation without excessive cost to the inevitably changing requirements of education." Indeed, the Board has tried to encourage experiment and has stated in the same handbook that "With a view to flexibility and adaptability to possible changes and development in the fu ure, there are advantages in planning school buildings in multiples of a unit of length and width—thereby facilitating and reducing the cost of subsequent alterations." A cue is thus given for the development of light unit construction, with many interesting possibilities, such as standardization, prefabrication, etc. However, with a few exceptions, nothing has been done by education authorities in exploiting these possibilities. The Board further points out that the important exemption of school buildings from local building bye-laws was made "for the express purpose of e-couraging lightness of structure and experimenting with new patented materials, proprietary articles and processes, which might be employed as a means of reducing cost." Unfortunately the reduction of cost is the only factor which seems to have been effective, and where new methods have been tried and traditional ones abandoned, the result has been to cheapen the fabric in order to reduce initial cost, rather than to evolve a far-sighted or imaginative method of dealing with present and future requirements, or of developing a new character of design to take the place of the old monumental type. The exemption from the bye-laws has been used as indulgence to skimp, instead of opportunity to experiment.

to experiment.

The reason for this may be that education authorities have been too busy to spend time in experiment, or that they have failed to consider changing factors in education of sufficient importance to warrant departing from established methods. However, these reasons have now been removed by circumstances. The air is now full of new ideas and plans, not so much for permanence and finality, as for continuous development into the future. All the heavy and traditional materials are scarce because of war conditions, and there is a certain time between now and the end of the war in which we cannot build, but can turn all the available attention to planning what and how we shall build. Cost will probably be a deciding factor as before, but let it be

hoped that necessity will be the mother of real invention, and not of makeshifts and

niggardliness.

Let us remember too, that though necessity is now forcing upon us a change in our methods, this change is really long overdue. It must not be merely a temporary war measure to be discarded with our gas masks when peace is signed, but a real change in outlook on the whole question of school design, which shall be one of the foundation stones of lasting peace. There is a temptation to put up buildings of "temporary" construction, of indifferent design, to "bridge the gap" of the first five or ten years after the war, "until we can design something better." This must be strenuously resisted; we must design something better now.

The first necessary alteration in outlook is in

The first necessary alteration in outlook is in relation to elevation. This is not the most important aspect of the problem, but it is probably the most popular. In departing from traditional materials and types of plan, the old idea of "balanced composition" and the "monumental facade" will have to be left behind. The practice of thinking of a school in terms of one building and the consequent compression of all the parts of the school into one mould, must be discontinued. External symmetry and uniformity must be sacrificed to internal flexibility and suitability to purpose, and is this not reasonable and right, for the children for whom the school is built are inside, and only those on the outside will be impressed by the elevation. Surely a building which takes in little children to be taught and helped to develop, should not present a facade suggesting uniformity and stern compression into a mould. The monumental building standing as a symbol of education and mellowing beautifully with age is a fine ideal, but if its symmetrical facade is lost in the subsequent additions, or is merely a dress to hide a body of a changing and hence quite different character, then it becomes an anachronism and loses much of its value. The fact to be faced by the traditionally-minded is that schools are required to change and change rapidly- to meet new demands in our methods and standards of education, and therefore require buildings planned as a series of separate units, loosely connected, of a light construction allowing for individual expansion and easy alteration.

allowing for individual expansion and easy alteration.

Dignity and refinement, it is argued, are necessary in the atmosphere surrounding children, in order to give them good taste and poise, and the air of tradition in old buildings promotes a spirit of continuity and service. This argument is a legacy of the great public schools and older universities, whose curricula and style of life have remained fairly constant for long periods, but education for the greater mass of the population is a new and growing thing, and the type of education it provides is different in conception and purpose,

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and more " practical " than that of the public schools and universities. Also it must be remembered that the universities themselves consist of numbers of buildings in groups, and scattered about without physical con-nection, thus allowing for new buildings to be as independent units. Children are logical beings, often more so than their elders, and it is likely that old buildings kept on for their own sake, although quite out of keeping with their new functions, may arouse as much contempt as respect.

As for dignity and refinement, they are indeed necessary to the full development of children, but are they confined to traditional building materials, monumental facades and compact planning? Light construction in standardized units can be graceful when well designed, and by virtue of its very lightness and repetition can give the kind of dignity and elegance which we admire so much in Renaissance and Georgian architecture.

So much for the elevation itself. If, as we envisage, different sections of the school are to be built as loosely linked units capable of rapid change and addition, landscape design will play a very important part. Indeed, the layout of the whole site will be more permanent than the buildings themselves, and natural surroundings will form a background to all the buildings and separate them one from another and so avoid the possible monotony another and so avoid the possible monotony of repetition. Playing fields close at hand, areas of natural growth for unorganized play, school gardens, etc., will all form part of the composition and tend to create the atmosphere of a holiday camp, and to bridge the gap between classroom and open air. The aim should be to make school life as attractive as possible to the child, rather than to create mass in the shape of brick and concrete, which draws a greater distinction between outdoor and indoor life.

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A general loosening of site planning and inclusion of more garden area will require more ground space, but against this initial extra expense must be set the advantage of being able to plan as a whole. As in the case of Letchworth and Welwyn, all the possible requirements can be taken into consideration at the start, and the space allotted so that new developments can take their proper places and not have to be tacked on anywhere and Moreover services can be laid out in such a way as to allow for extension. Paved areas and playing fields must be provided in any case, and are expensive items, and it better that they should be well laid out, near the school buildings, but with enough space so that future additions will not have to encroach upon them, as so often happens at present. The extension of many schools has been prevented through the lack of ground space, or only effected at the cost of severe reduction of space for outdoor activities. In other cases there has been no room for the playing fields and land has had to be purchased at a distance, with a consequent waste of time in getting to and fro, and increased risk from traffic. Also it has been necessary to build elaborate pavilions on these new sites. doubtedly, the long view is the more economical as well as the more orderly.

From the economic point of view, the type of construction is important, not only for its initial cost but also its economic life. There are certain central buildings whose function may be expected to remain fairly constant, and which may safely assume a permanent character as a nucleus for the school. But many more specialized sections may become rapidly out of date as to function while their structure is good for many a day. It is obvious that a building does not deteriorate and become useless suddenly and obvious that a structurally sound building cannot be scrapped because it has outlived its original function; so the problem remains to find a method of building which will combine sufficient solidity and dignity with a reasonable economic life, having regard to the

rate of change in educational methods.

This rate of change, which gives rise to the rate at which school buildings become obsolete,

is surprisingly rapid. Only within the last hundred years has education been provided for generally, and yet during this relatively short period progress has completely outstripped building design. The original "National" and "British" schools which came into being after the first Government grant towards elementary education in 1833, were out of date in less than 40 years, when the school Boards were created in 1870 and the Board Schools were built. These in turn were superseded 30 years later by the establishment the local education authorities in 1902, and the issue of the first Building Regulations in 1907, when the "Council Schools" were built. Each of the different styles and patterns has

in turn ceased to meet the full needs of educational requirements within a period of about 30 years, so that for the greater part of their time they have hampered rather than assisted education. Many of these evil-smenning, ... lighted, badly heated buildings are now approaching 100 years age, and are still in use. The worst of them have been officially black-the worst of the worst o listed, and quite a number closed. Others have been "improved" where conditions and money permitted, and those remaining, with their original faults unaltered, can still be found in some villages. Their failure has been in their solidity and complete conformity to contemporary "style." Style, after all, is the visual aesthetic quality given by the architect to the appropriate solution of a problem, and should be a result of the problem and the way it is solved, not a factor in the solution, nor something imposed by fashion upon the solution. If the modern school problem of keeping pace with advancing educational method is solved by means of light unit construction and imaginative layout, a style should arise with a beauty derived from fitness and good design.

The 1907 Building Regulations were revised and republished in 1914, when the war put a stop temporarily to further development. the post-war period, however, development of educational theory and practice were so rapid that in 1926 the Regulations were repealed as being quite out of date. The financial "depression" of 1931 held up progress again for some time, and it was not until 1936 that the Board were in a position to issue further guidance with regard to school planning and design. This was no longer planning and design. This was no longer issued as Regulations, but in the form of suggestions contained in the handbook already referred to. By this time the Hadow Report had come into being, and its principles were embodied in these suggestions, but the Board still found it necessary to state that "they did not constitute a final stage in school development, and while the present require-ments in educational methods are still on trial, all architectural solutions and recommendations must be tentative.

The Hadow Report recommendations not only insist upon a definite break at 11, when children should leave junior schools and go to senior, "Central" or secondary schools, instead of staying in "all-age" schools, but also enunciate the principle that all these types of post-primary schools should be provided on the same standards of accommodation and staffing as secondary and grammar schools. Obviously considerable change is called for, especially in country districts, but the following statement made early this year shows how slowly it is effected:

For financial or other reasons, the Board deliberately have preferred to ignore this part of the 'Hadow' scheme [Secondary Standards in all primary types of school] and most local authorities have been not un-willing to leave things as they are. Not only are thousands of senior children taught in unsuitable out-of-date buildings, but new Senior Schools are built on a plan definitely less spacious than that for 'Grammar Schools.' The normal size of a class is 40 in senior schools, but 30 in 'Grammar' schools. The time has now come when the Board must impress on authorities that 'Hadow' reorganization does not consist only in the concentration of older children in

separately organized schools or departments. also involves radical changes in the conditions under which these children are taught."
During the brief period between the issue of the new suggestions and the outbreak of the present war, school planning and design became one of the chief attractions for architects all over the country, and considerable progress took place in breaking away from stereotyped designs into which school buildings had fallen. This marked the abandonment of the courtyard or quadrangle plan for the greater freedom of the "open" plan. Open planning has enabled full advantage to be made of correct orientation and dis-position of specialized departments. It has enabled provision to be made for the future extension of class-room wings, but the unified plan and construction of the main body is still too rigid for progressive development.

By the true application of standardized unit construction in the form of dispersed departments, full flexibility can be obtained, and the difficulties of the past overcome. The essence of the new type of construction must be fluidity, and to this end the number of different units must be kept to a minimum and special parts avoided. The departments or wings of the building should consist of as many combinations as is desired of standard unit following an external framework. W Within this framework partitions can be placed at each or any bay; these partitions are non-structural and are independent of the framework, so that they can be moved or multiplied work, so that they can be moved or multiplied without disturbing the main construction. The wings should be connected not by special prefabricated parts, but by local materials such as brick or timber. Special parts for the "joints" of the building necessitate these joints being complete and fairly uniform, whereas "joints" constructed of non-standardized materials can vary to meet whereas "joints" constructed of non-standardized materials can vary to meet each case or allow for additions at the joints, otherwise only possible at the extremities. This, combined with loose planning, gives This, combined with loose planning, gives the possibility of fluidity in the general design and lay-out, to suit ever changing demands.

The main points then to be borne in mind in the design of schools are:

1. To secure the maximum flexibility to meet constant development in methods. This can be achieved by:

(a) Loose site planning and abandonment of monumental facade.

(b) Adaptability in the joints between wings.

(c) Light unit construction—in wings.

(d) Non-structural partitions inside wings.

2. To reduce costs by a type of construction which shall be light and cheap enough to meet changing circumstances, but of such quality as to keep down maintenance costs. This can be achieved only by good design.

3. To plan lay-outs generously enough to allow for expansion without interference with expensive services

and recreation areas.

To bridge the gap between outdoor freedom and class-room discipline by increased attention to landscape design and the careful integration of buildings with their natural surroundings.

It will be seen that the final aim in all these points is the same-flexibility. This is the architect's problem, and out of its solution should come suitability, elegance, imagination, in fact,

an Educational Style.

## 1812-1862: BRITISH AND NATIONAL SCHOOLS

These early elementary schools are still in use and many of them date back over a hundred years. They illustrate the development of elementary education from the earliest days. First the school consisted of one room, where children of all ages were taught by one teacher, or in small groups by the brighter pupils under his supervision, and later of several rooms partitioned or curtained off for classes taken by pupil teachers. Architecturally these schools have no special merit,

merely following the current domestic style, and set no tradition in school design. Known as British and National schools, they were provided by the British and Foreign Bible Society and by the National Society, under the auspices of the Church of England. They were assisted by Government grants and provided the only elementary schools, except those built by private individuals, prior to the Education Act of 1870. which established the School Boards.



1812 One of the earliest examples, in brick and half timber.



1839 Current Gothic Revival Style. See two following illustrations.



1839 Classrooms on either side of teacher's house.



1839 Elevation of school shown in the two previous illustrations.



One room type. Second classroom added later.



1853 Tightly planned. Lavatories in lean-to buildings.



1859 L shaped style. Taken from playground in front of school.



862 Strong ecclesiastical influence in style and site (next to church.)



1862 Exterior of school (see previous plan). Very small window area.

## 1870-1902: BOARD SCHOOLS

Board Schools had to provide for greater numbers of children as Elementary Education was now compulsory. The standard of accommodation shows a marked improvement, since the schools were much larger and the whole cost was met from the rates, aided by Government grants. The buildings acquired a more characteristic appearance and were planned with more reference to their use. Design in this period more

truly reflects the beginning of a system of education. Some accommodation is provided for the teachers, cloakrooms are larger and some provision is made for washing. Classrooms increase in number and access is made to them by corridors, instead of through other classrooms, or they are all grouped round a central hall. But education still only implies the "three R's" and there is no provision for physical training, etc.



1870 . One of the [earliest L-shaped Board Schools.



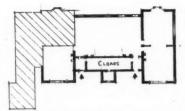
1871 More regularly planned, with staff room and corridor access.



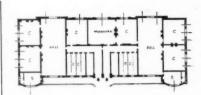
1884 All Board Schools were planned with more reference to their use.



1895 Popular Early Renaissance style. See plan, next illustration.



(See previous illustration). Central classroom is used as access.



1899 Mixed school, with identical sections for boys and girls.

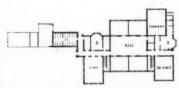
## 1909-1938: COUNCIL SCHOOLS

Board Schools were followed by Council Schools. This occurred in the period which saw the creation of the local education authorities with their wider powers and duties, the establishment of the Board of Education and its subsequent issue of the first Building Regulations in 1907. These Regulations laid down improved standards of lighting and hygiene and gave standards for the size and height of classrooms, cloakrooms, etc. They also recommended a great deal of accommodation, such as assembly halls, gymnasia, space for practical work and physical training, which has since become regarded as essential. As emphasis was laid on cross-ventilation and larger window areas, new types of open-air schools were developed. These were followed by the open corridor or verandah type, which, when extended, became the quadrangle type. The 1907 Building Regulations remained in force until 1926 when they were withdrawn, but not replaced until

1936. During the whole of this period the demand for accommodation steadily rose as the system of free education expanded, but the provision of accommodation up to these new standards was constantly prevented by a series of disasters: the war of 1914, the Financial Crisis of 1931 and the present war. The discrepancy between the actual buildings provided and the recognised standards to which they should be provided has constantly forced the pace of school building and a good many older schools have been altered and even new schools built to old and inadequate designs. 1936, with the general implementation of the Hadow Report and the new Building Regulations or suggestions marked a turning point in school accommodation, separating seniors, juniors, infants, etc. The recommendations had hardly been put into force before the outbreak of the present war, and the Hadow Report has now been supplemented by the Spens Report.



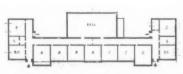
1909 One of the earliest Council Schools. See next plan.



909 Two practical rooms. Lavatory accommodation in same building.



1914 Rigid symmetry, see next plan, loses value in elevation.



1914 Corridor access. Practical rooms separated from main building.



933 Quadrangle type. See following interior and plan.



1933 Interior of quadrangle type, showing clerestory lighting.



1933 Plan of quadrangle type shown in previous illustrations.



938 Side elevation of a school with generous window space.

The schools on these two pages are hopelessly out-of-date, too solidly built or too tightly planned and sited for economical adjustment to the changing needs of education. How to banish these educational deficiencies from school design is shown overleaf.

#### NSTRUCTI FREEDOM

In view of the growth in size and type of accommodation and the fact that even now the actual accommodation provided cannot always be kept up to the standards demanded, it is only too obvious that our modern school buildings must be made capable of constant expansion and alteration to meet increasing requirements. Fluidity must be the keyword of the new school planning and this end will be served by the use of standard unit construction wherever suitable. Certain administrative and service sections of the school can be housed in permanent buildings, but the classrooms, practical rooms, cloakrooms, etc., are best accommodated in wings which can be extended, or shortened if need be, and rearranged internally. If these wings are built of skeleton framework of light steel unit bays of a standard width, they are easy to erect in the first place and can be added to or dismantled equally easily. The wings are divided internally by non-structural partitions which can be placed at any bay. These partitions can be moved without

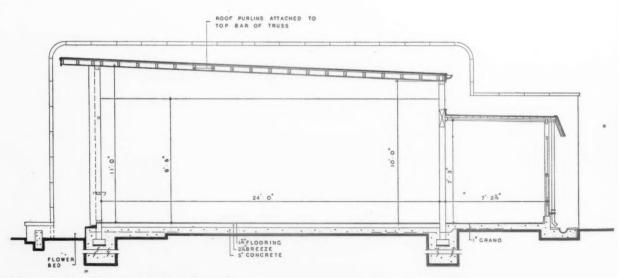
disturbing the framework in any way, so that classrooms can easily be extended or reduced in length. The steel skeleton is bolted together in sections and component parts can be provided with wood inserts for the attachment of covering materials: timber weatherboarding or asbestos sheets. In the same way internal linings of every description can be fixed to the framework without difficulty. The steel sections are treated to resist rust in much the same way as standard metal windows. The material advantages of standard unit construction are many. Erection on the site becomes easier and quicker as the component parts can be fabricated in suitable sizes for ease of handling, and standardization makes for simple and repeated operations. This type of construction, though light, is strong and durable. It is not expensive to maintain while it fulfils requirements and, being easy to dismantle and of high salvage value, will not have to be retained when requirements



Interior of a classroom wing looking towards the corridor The same interior, looking towards the outside wall of the side. Above the roof of the corridor is clerestory lighting.



classroom, which will be entirely glazed.



Diagrammatic section of classroom and corridor.

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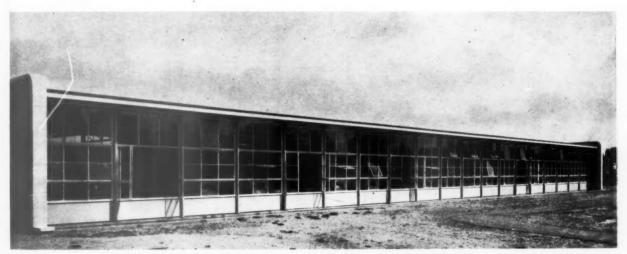
Exterior of the outside wall of the same classroom; and the general classroom wings at a later stage, with glazing bars and weather-boarding. It will be seen from these two photographs that the structure is not concealed, but constitute the design.

## FLEXIBLE CLASSROOMS

Light steel standard unit construction when used for classrooms has proved to have as many advantages in use as in construction. The illustrations (page 345) show clearly how the importance of light and fresh air has been increasingly recognized since 1907 and how school planning has developed in an effort to gain the maximum of light and air consonant with comfort and reasonable economy in heating. The elaborate attempt to achieve a large window area by clerestory lighting breaking into the roof line was followed by the more rational but still rather ungainly large and frequent windows. But having advanced so far, it seems only reasonable to abandon the usual structural wall pierced by windows for a system of weight-bearing columns, where the spaces can be filled with either light walling or glazing. Not only is the exterior pleasant, but the light steel framework filled with glazing gives an altogether light appearance as well as more actual light than the pierced wall, where the remaining portions of wall are necessarily very sturdy and give an effect of obstruction. The corridor is now closed in so that pupils do not come directly out of warm classrooms into windy passages, but the maximum of light and fresh air is obtained in the new type. From the æsthetic point of view, it is much better that the weight-bearing columns should be expressive elements of the design.



Not only is the exterior pleasant, but the light steel framework, filled with glazing, gives a light appearance to the whole structure.



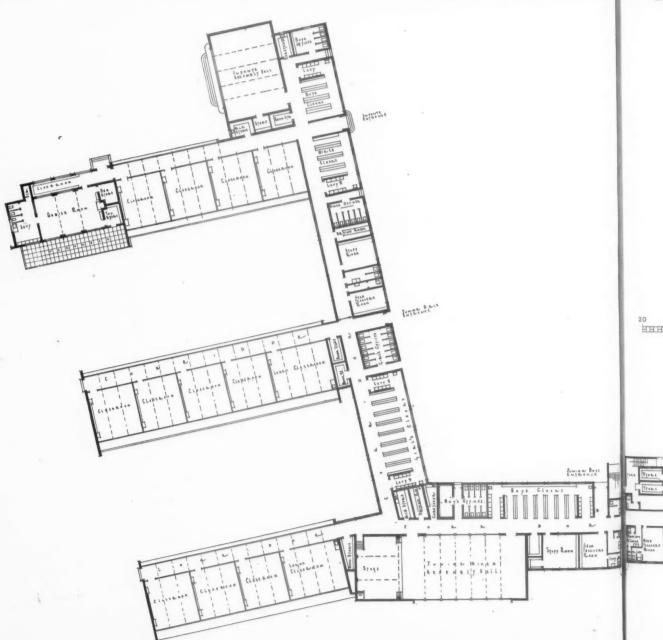
The weight-bearing columns are expressive elements of the design and are not clad and hidden in brick or stonework.

#### FLEXIBLE CLASSROOMS-(contd.)

Right, an exterior wall of a completed classroom.

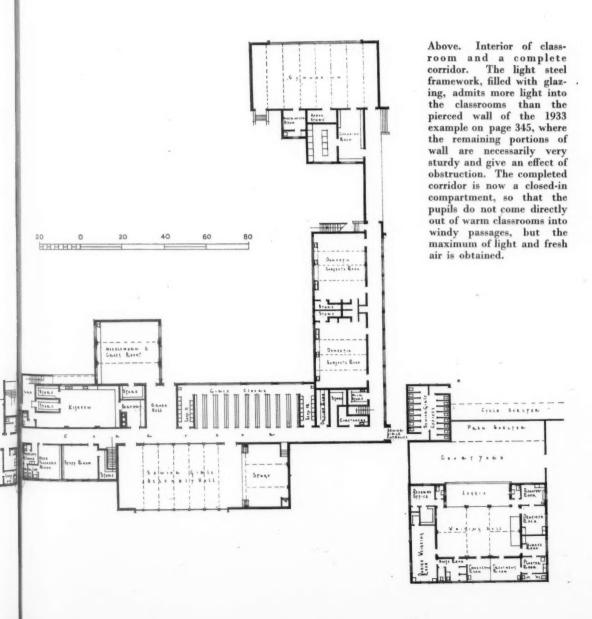
Below, plan showing opening out of the quadrangle-type school. Besides increasing light and air, school design since 1907 has been gradually developing towards more open planning: first internal corridor access to classrooms, then an open corridor running down one side of a range of classrooms, then the quadrangle plan. This last type was soon found to be too constricting and was opened out as shown in the plan, below. This consists of a large main block of brick construction, giving a symmetrical elevation, with wings of light steel unit classrooms attached to it, and disposed so as to obtain the best aspect for sunshine, the corridors being always on the north side. The main body of "permanent" construction is still the larger portion of the school, including halls, cloakrooms and practical rooms, which are too fixed to allow of easy alteration, but are as liable to require it as the classrooms themselves. Practical rooms are particularly likely to require extension and multiplication as the school-leaving age is advanced.





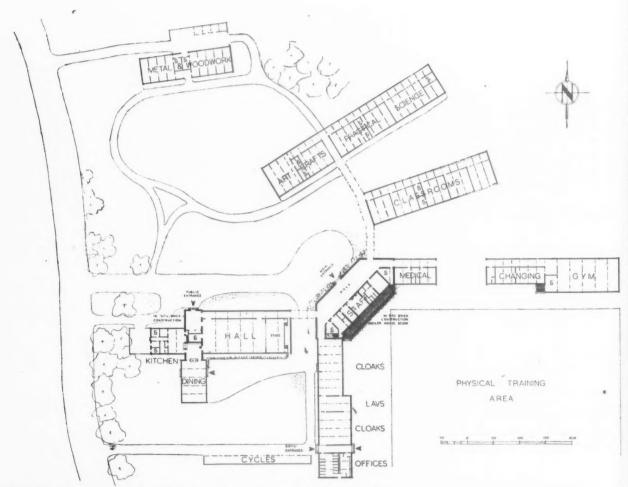




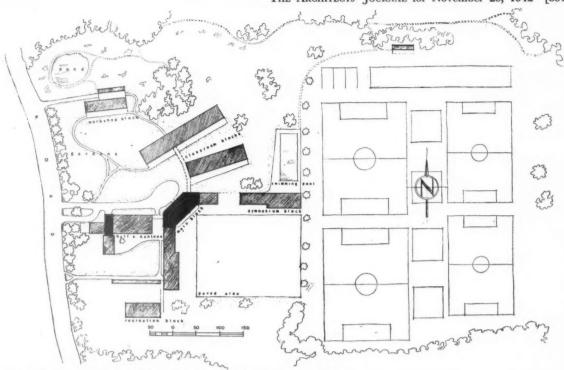


## FLUID SITING AND PLANNING

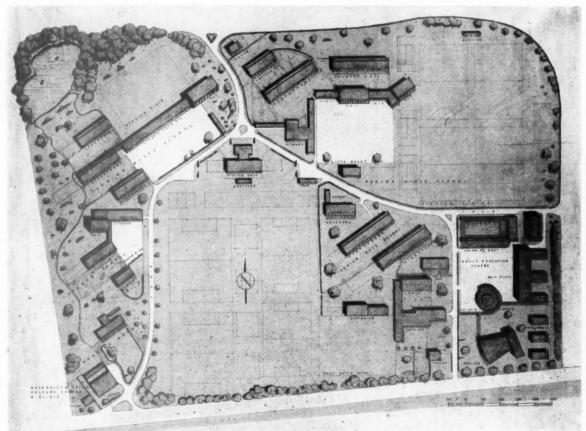
The next step towards the attainment of maximum flexibility, obviously, is to reduce to a minimum the main block or blocks to be built in brick or other more permanent construction and to provide almost all the accommodation in unit construction. The administrative department can well be in the main block and possibly some room of a monumental or commemorative character such as a library, which it is desired to make permanent. The boiler house must, of course, be somewhere under this block and where there is a kitchen it should be in or near a small brick block for convenience of flues, etc. The remainder of the school should be broken up into independent units, each unit being a specialised teaching department separate from the others, capable of alteration without disturbance of the general layout and accessible by covered ways. Under present requirements the playing fields take up more space than the school buildings and are an expensive initial item. These playing fields and the paved space for physical training should be regarded as even more permanent than the buildings themselves and in no circumstances as possible space for future extensions. The site in fact becomes the permanent setting for a school which may be subject to great and rapid change, and flexibility in layout planning follows flexibility in the design of the buildings and in construction to achieve the desired "fluidity" of the whole. In certain circumstances it may be found desirable to group several schools together on a large site. Infants, junior and senior schools, although in quite separate groups of buildings and with separate playing fields, can all make use of services, such as water, drainage, lighting, etc., thus effecting some economy in initial outlay and subsequent upkeep. By judicious arrangement of the schools it may also be found more economical to accommodate four schools on one large site than on four different ones. In the post-war plan (page 351) use is made of any irregularities of the site, trees, etc., to screen the different schools from each other. Plenty of room is also left between the different schools to allow for their expansion. An attempt is made by planting groups of classrooms in as natural surroundings as possible to minimise the gap between classrooms and out-of-doors and to introduce some of the atmosphere of a holiday camp. The use of colour in the different buildings would help this and would also create a variety of appearance in buildings, which must of necessity be similar.



This plan and that at the top of the facing page show a school for 400 boys worked out at present-day standard of requirements, but sufficiently flexible to allow for developments which are almost certain to take place within a few years. It is an example of fluid planning by which means full advantage can be taken of standardized unit construction.



Layout of site for school for 400 boys. The ground floor plan is shown on the facing page.



A proposed school colony, including maternity and child welfare clinic, infants', junior mixed, senior boys' and senior girls' schools and an adult education centre. This type of group, of course, is only applicable in special cases. It shows how the principle of flexibility can be extended, especially when compared with the plan on page 348, which actually includes a clinic, infants' school, junior school and senior girls.

In the House of Lords last week, LORD LATHAM tabled a motion urging the Government to introduce, without delay, legislation so that the necessary preparatory steps may, as far as is practicable, be taken now in order that actual planning and re-construction may be commenced immediately after the war. Extracts from the speeches made during the debate are printed below.

## House of Lords DEBA

LORD LATHAM: The Motion which I submit to your Lordships' House to-day is to urge the Government to proceed to determine what the foundations of planning shall be and, having so determined, to take the earliest possible steps to bring in legislation for that purpose. The Government have now had the advantage of the Reports of two expert Committees which were appointed to advise upon complicated elements of this problem. The Scott Committee have reported on the difficult question of the utilization of rural land, and the Uthwatt Committee have reported upon the difficult question of control and the twin problems of compensation and betterment. With these Reports in hand, it ought to be possible for the Government to make up their

problems of compensation and betterment. With these Reports in hand, it ought to be possible for the Government to make up their minds as to the steps necessary and to take action without much further delay. I should like this afternoon to invite your Lordships to a consideration of some of the recommendations of both these expert Committees. There is a tendency, I think at times distinctly marked, in the Report of the Scott Committee to regard industry, so far as the countryside is concerned, as a kind of poor relation which must be kept severely in its place, and there are raised in this Report high questions of major policy as to the economic and physical future of this country. We all wish to see a prosperous agriculture, and we all, I hope, desire that the agricultural labourer shall share in that prosperity, but whether that prosperous agriculture can best be secured by an enlarged agriculture depending, as it appears to me, either upon traiffs or subsidies or both, or whether it can be achieved by a highly specialized and concentrated form of agriculture, is a matter for very serious consideration. I think we must bear in mind that for good or ill this country is an industrial country and it is too late, even were it desired, to change it into a major agricultural country. The Scott Report seems to raise issues which in certain connections would be in conflict with certain of the principles laid down in the Atlantic Charter, and in conflict with that freer intercourse of trade between nations which we have been compelled to recognize as being one of the most important foundations of international peace. If industry is to be dispersed it must go into the countryiste is to be dispersed it must go into the countryiste is to be dispersed it must go into the countryiste in the submits in very telling language grave issues of economic as being one of the unotain many admirable procedural recommendations. All of us will agree that rural housing should be improved. In the consideration of housing problems it is

and the conditions upon which he is employed, is also in a position to determine whether he shall live in a house or not. It will be a useful step forward that this vestige of feudal bondage should be abolished.

Certain members of the Committee in a separate memorandum recommend that there should be a valuation of land for all purposes. My own view is that we cannot much longer muddle along without such a valuation. Many of the elements of taxation, of rating and of property rights demand that there should be a uniform valuation of land. It is to be hoped that the Government will face up to that problem and will provide machinery for carrying out such a valuation.

In the Uthwatt Report there are posed two major questions of policy. One is the proposal that the development rights of undeveloped land outside urban areas, with certain exceptions, should be acquired for the State on a basis of fair compensation, and the other is that land not within the development rights scheme is to control development of merceases in annual site value. The purpose of the development rights scheme is to control development of metevoloped land. It is based upon the submission that to preserve beauty spots and to control fringe land and certain desirable tracts of land, coastal or otherwise, the cost to local authorities would be beyond what they can bear. As an alternative to that, it is proposed that the development rights of all land should be acquired, although it is admitted that a relatively small part of the at present undeveloped land is ever likely to be developed or is even being imposed upon it. I find it difficult to agree that it is sound to incur the cost of restricting all undeveloped land merely in the hope that you may reduce the cost of that portion which needs to be controlled.

of the owner, 75 per cent, shall be taken by somebody. The Report is rather disappointingly silent as to who shall receive it. The basis of this valuation is to be the value of the site as actually developed, and therefore such a valuation is not likely to catch any increase in value arising from betterment in the narrow sense—namely, increase of value arising from public expenditure or public activity—nor is it likely to reflect increases in value arising from general community influences, which are by no means inconsiderable in growing urban areas. For that reason I think that the proposal has a defect.

My own view is that in place of the periodic levy lit would be better to proceed by means of a rate or a tax based upon annual site value. Valuations of the site unencumbered by any building, and made from time to time, would reflect any increase in value arising from betterment or from general community causes, and therefore the State or the local authority would be able to have a fair share of that increase in value which arises principally from public activity and frequently from public expenditure. The fact that an undeveloped or badly-developed site would be subject to this rate would tend to force owners to develop undeveloped land in urban and near-by urban districts, and it would compel owners of inadequately-developed sites to develop them properly.

I suggest that the way to tackle the three problems of the control of development, the avoidance of payment

uroan and near-by urban districts, and it would compel owners of inadequately-developed sites to develop them properly.

I suggest that the way to tackle the three problems of the control of development, the avoidance of payment of excessive compensation for land required by local authorities or otherwise for planning, and of catching a fair share for the community of increase in value which arises from community activity, and indeed arises from the very existence of the community, is two-fold. There should be control of development through town-planning procedure over all land, without compensation save where such control and restriction would work a manifest injustice; and there should be proposals for the rating of site values which would squeeze out of the price of land a large portion of its speculative element. If that were the case the problem of fair compensation would be very largely solved. I invite the Government to consider those proposals as alternatives to those submitted by the Uthwatt Committee.

The development rights scheme and the levy, however, are matters of high policy which may need a long time for consideration, and it would not be unusual for this Government, or for any other Government, to require a long time to consider them. There are certain things, however, which can be done at once, and I should like to urge this on the attention of the Government. We can prepare legislation for putting on the Statute Book the recommendations of the Uthwatt Committee which deal with procedure and with the powers of local authorities for planning purposes; and there are in those recommendations some very helpful proposals. Finally, I come to the question of finance. Even if we have the most perfect machine and the most liberal

policy for the acquisition of land, and the fairest policy for securing that compensation shall not be excessive against the public interests; even if we have all the required amendments to town-planning laws, the local authorities cannot begin planning unless they know where they stand financially. In point of fact, urgue as will be the problem of housing after the war, with returning populations to cities and urban districts, that cannot be dealt with, however much local authorities may make prior arrangements, until the Governmen have spoken with regard to finance. And I-again urge the Minister to take courage and, if he feels he want more, to take one or two other Ministers with him and go and see the Chancellor of the Exchequer and find our what it is proposed to do with regard to the finance of replanning and of housing. I urge upon the Government the extreme importance of their not wasting a single week in deciding what they are going to do in order to enable the foundations to be laid of the new Britain which they, we, and everybody else want to be commenced, and the structure completed when the "Cess fire" shall have sounded.

LORD PORTAL: At the commencement I wish to refer to the debate initiated by my noble friend Lord Reith three weeks ago on the machinery of planning advocated by the Uthwat and Scott Committees. In that debate my noble friend Lord Snell wound up on behalf of the Government. Here you had two separate Committees appointed by my predecessor both reporting on the machinery needed, and in both cases they reported that the Ministry to which the name Planning had been added was not the one to carry it out. It was difficult for me to answer a debate which concerned only machinery in which my own Department was involved though as Lord Samuel pointed out, that was not included in the terms of reference to these Committees. The debate when the reference to a Ministry of Planning as against a Commission.

My noble friend Lord Reith asked the question in that debate whether I knew where I got

though as Lord Samuel pointed art, that was not included in the terms of reference to the Committees. That debate was a very useful one to the Covernment—as is this one—because it brought out the different argumens with reference to a Ministry of Planning as against a Commission.

My noble friend Lord Reith asked the question in that debate whether I knew where I got off and the Paymaster-General got on. My answer is that I get off at exactly the same place as my noble friend Lord Reith did, and the Paymaster-General is in exactly the same position as the former Minister without Portfolio, with this important exception, that the former Minister without Portfolio, with this important exception, that the former Minister without Portfolio was in the War Cabinet while the Paymaster-General is not. That is the distinction between the present set-up and the last. In his final remarks, after my noble friend Lord Snell had wound up, Lord Reith, in criticising the Government for not showing vreater speed in dealing with the Scott and Uthwait Reports, said that two years had passed. I should like to remind your Lordships of the debate in your Lordships' House on April 21, when I told your Lordships that my desire was to ask Lord Justice Scott and Mr. Justice Uthwait to press on with their Reports and to put off any legislation on the Interim Report of the Uthwait Committee until I had received both Reports in full. They told me that they expected to get them out within a month of one another—in August and September—which they did. Both these Reports were published immediately they came into my hands, one at the end of August, the other at the end of September. We are now in the middle of November. I cannot accept the statement that there has been any undue delay.

Before the war I was associated with three Commissions which reported to one Government Department, and they did the server of the server of the statement that there has been any undue delay.

Before the war I was associated with three Commissions which reporte





#### ARCHITECTS/ JOURNAL LIBRARY OF PLANNED INFORMATION

RUBERDAL ASBESTOS TILE FINISH TO RUBEROID BUILT-UP FLAT ROOFS: (Suitable for light traffic, wheeled or loof) TYPICAL SECTION, SCALE 1/2 F.S.

Overall thickness 13/16!

(1/2" Ruberdal (asbestos) tile Jinish.

1/16! Ruberoid Compound joints ..

Covily

wall

Ruberoid apron.

Ruberoid Astos Asbestos Roofing . Ruberoid Astos Asbestos Felt. (2 or 3 layers, of grade to suit roofing requirements).

Screeding for falls to be free from lumps, depressions and excess of moisture.

Concrete or wood roof.

Lead apron flashing and d.p.c. 121 x G! x 1/2! Ruberdal. Parapet Wall skirting tile 12! x 12! x 1/2! Ruberdal roofing tiles. Ruberaid builtup rooling.

Concrete or tile structural roofs screeded to jalls.

Ruberoid roofing turned into joint between sill and brickwork

Scale of details :-Inch equals I joot

> Ruberoid built-up roofing and angle upturn.

SECTION THRO/ FLAT BEHIND PARAPET

FINISH AT LANTERN, SILL OR LOW PARAPET

9! woll.

SECTION THROUGH FLAT CONCRETE ROOF SHOWING EAVES & VERGE TREATMENT (1. scale): 12' x 6' x 1/2! Ruberdal eaves tile carried around three sides of roof Ruberoid drip

12 x 12 x 1/2 roofing hies. Ruberoid built-up roofing laid on

> VERGE TREATMENT .

screed to jalls.

EAVES TREATMENT

Guller.

lascia board

Isrued by The Ruberoid Company Limited

INFORMATION SHEET: (FLAT) BUILT-UP ROOFING Nº5: TILE FINISH

THE ARCHITECTS' JOURNAL LIBRARY OF PLANNED INFORMATION

# • 885 •

Subject: Ruberoid 5: Ruberdal Tile Finish to Built-up Flat Roofing.

ROOFING

Description:

The flat roof finish illustrated on this Sheet consists of Ruberdal Asbestos Tiles, laid on a built-up Ruberoid base. To ensure the desired results, only underlayers containing a fibre base of asbestos are employed, and these are laid by the Manufacturers in a similar manner to the Standard built-up roofings described on previous Sheets of this series.

Wooden roof foundations should be not less than I in. T. and G., or  $l\frac{1}{2}$  in. rough boarding; and solid roof foundations may be of old asphalt, screeded terra cotta, concrete, etc. The minimum falls should be 2 in. in I0 ft., and it is preferable to drain the roof to outlets or eaves gutters.

#### Properties and Uses:

This type of roof finish is suitable for chairs and wheeled or foot traffic, and may be used for flat, close-boarded and concrete roofs, verandahs, promenade decks, sun parlours, terraces, etc.

Flat roofs laid to these specifications (M. and N.) are fireproof and comply in this respect with the requirements of the London Building Act (1935) and the Ministry of Health Model By-Laws.

The weight per 100 sq. ft. of the tiles only is approximately 320 lbs. The weight of the underlayers and sealing compound varies

according to the number and thickness of the laminations, the alternative composition of which is shown in the Company's Catalogue No. 326. The total weight of the roofing is approximately 437 lbs. per 100 sq. ft.

#### Ventilation:

To avoid dry rot, adequate ventilation should be provided between roof boarding and ceiling.

#### Details:

Special vertical tiles are available for the finish at abutments and verges. Lead apron flashings are recommended over the skirting tiles and Ruberoid angle upturns, or complete Ruberoid flashings may be used.

#### **Previous Sheets:**

Previous Sheets dealing with Ruberoid roofing and waterproofing materials are Nos. 267, 304, 402, 404, 407, 873, 876, 878 and 881.

Issued by: The Ruberoid Company Limited.

Address: Head Office: Commonwealth House, 1-19, New Oxford Street, London, W.C.I.

Telephone: Holborn 9501.

Registered Office: Meadow Mills, Stonehouse, Telephone: Stonehouse 212. Glos.

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Belfast: 57 & 59, Great Patrick Street.

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PA

A

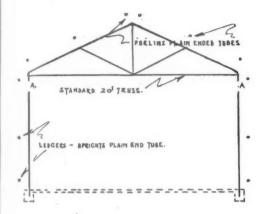
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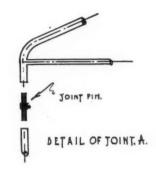
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### PATENT WELDED TUBULAR CONSTRUCTION

Data Sheet No. 8





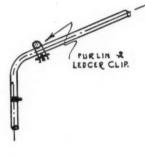


The simple form of assembly indicated in Fig. 18 is suitable only for small temporary structures of a span not exceeding 20 ft. The standard roof truss is connected to the tubular uprights by means of a special joint pin.

The trusses, gable ends, door frames and double doors (10 ft. by 5 ft.) are supplied to be used with plain ended tube and couplings, and the whole of the structural frame is covered externally with asbestos-cement or corrugated iron sheeting. These tubular framed hutments, simply erected and equally simply dismantled, are being used as temporary site-workshops, cement stores, etc.

Buildings of 30 ft. to 40 ft. span incorporate the composite truss, tubular column and tubular wall frame as shewn in Fig. 19. A ceiling lining of insulating board or plasterboard can be incorporated at tie level; the detail in Fig. 22 shews "Celotex" board suspended at tie level, the "Celotex" clip-suspension method being utilised.

Fig. 18. Tubular sections for 20' span assembly, with special joint pin and ledger clip.



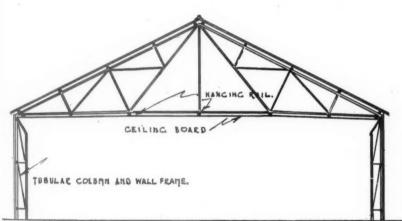
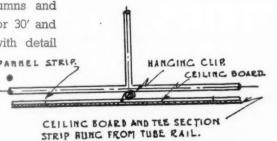


Fig. 19. Tubular columns and composite roof truss for 30' and 40' span structures, with detail shewing method panner of ceiling suspension.



NOTE.—These data sheets are appearing weekly in The Architects' Journal.—they are now available in complete Folder form and application for these Folders should be addressed to Scaffolding [Great Britain] Limited, 77, Easton Street, High Wycombe, Buckinghamshire.



# BULL MOTORS (E.R.&F.TURNER LTD) IPSWICH

ALSO LONDON, MANCHESTER, BIRMINGHAM, SHEFFIELD, NEWCASTLE AND GLASGOW

The plane illustrated is the Messerschmitt 109E, illustration by courtesy of "The Aeropiane.



may be saying and it was a way in a saying and it was a way in a saying it was a saying it was

may be the best course, but I do not agree with him in saying that all these small authorities ought to be wiped out in this connection. I think the non-county boroughs and the urban and rural districts can undertake very useful functions of an advisory character, and with their more intimate knowledge of the local details may be adverted to the control of the local details may be adverted to the local details and the local details are the local details and the local details and the local details are the local details and the local details and the local details and the local details are the local details and the local details and the local details are their more intimate knowledge of the local detains may be of great assistance to the county councils in the act of drawing up of wheir plans." If you take England by itself, the most densely populated country in the world, and if you include Scotland and Wales, second only to Belgium, it is essential to see that the proper use is made

and if you include Scotland and Wales, second only to Belgium, it is essential to see that the proper use is made of the land and that piecemeal, spasmodic and wasteful development should not take place. That is what we have to start with, and that I think is a formula with which everyone will agree. I will now describe the salient points in the Uthwatt Report.

As my noble friend Lord Latham has already said, the Committee recommend that the State should forthwith acquire the development rights in undeveloped land outside built-up areas on payment of fair compensation. The Committee explain that the scheme which they recommend involves four points. The first is the placing of a general prohibition against development on all undeveloped land outside built-up areas, and immediate payment to owners of the land affected of compensation for the loss of development value. That point was criticized by my noble friend Lord Latham. The second point is unfettered determination through planning for the loss of development value. That point was criticized by my noble friend Lord Latham. The second point is unfettered determination through planning machinery of the areas in which public or private development is to take place, the amount and type of development is to take place, the amount and type of development being determined as regards development for public purposes by national needs and, as regards private development, by private development, whether for public purposes by the State of the land itself if and when required for approved development, whether for public purposes or for private purposes; and the fourth point is, in the case of approved development for private purposes, the leasing of such land by the State to the person or body undertaking the development. The committee reached their conclusion after examining various alternative proposals for the solution of the compensation-betterment problem. That problem has hitherto been a main obstacle to good planning. The scheme which the Uthwatt Committee propose gives the Central Planning Authority complete control of development outside built-up areas, and enables that authority to acquire the land required for approved development and to see that such development in fact takes place. Compensation for the prohibition of development is to be paid on the basis that a single sum is to be fixed which will represent the fair value to the State of the development rights taken as a whole. This sum would be divided among the owners with the development value of their various holdings. That is the Committee's view.

is to be fixed which will represent the fair value to the State of the development rights taken as a whole. This sum would be divided among the owners with the development value of their various holdings. That is the Committee's view.

The proposal to pay a single global sum is designed to meet the difficulty of "floating value." This difficulty has long been well known.

Lord Latham referred at some length to the levy on increases in site values. The Committee point out the difficulties of these levies and I am not going to go over the points again. I should say that the scheme is a very technical one, and that it is controversial appears from the fact that one member of the Uthwatt Committee records his dissent. It is clear that the necessary datum line valuation could not be made until after the war and the proposal therefore is not of the same urgency as the remaining recommendations of the Report which are accordingly being examined first.

With regard to control over interim development, control of development must cover the whole country. It is recommended in paragraph 136 that it should be provided by legislation; that areas not already covered by operative schemes or resolutions to plan, should be deemed to be subject to such resolution. We agree with this recommendation and provisions for this object are included in draft clauses for incorporation in forth-coming legislation. These draft clauses also contain provisions for strengthening the powers of planning authorities and of the Minister in the control of interim development. Their effect is to give power to control building and other development throughout the country by reference to national requirements.

The question which I next wish to deal with its the compulsory acquisition of land. The Committee make important recommendations are agrading the powers of local authorities to acquire land compulsorily. This was referred to by Lord Latham. In war damaged and other reconstruction areas, the Committee planning authorities to acquire land compuls

Ministry of Agriculture to play a prominent part. As your Lordships know, the county war agricultural executive committees are already playing a very important part, and in various parts of the country are exercising their power where land is not properly farmed to take it over on behalf of the State and farm it. That, I suggest, conforms to the recommendation of the Scott Committee. Another point which was made was that local planning authorities must employ qualified personnel. I consider it is very important in planning anythine in the countraside to employ exopte who

local planning authorities must employ qualified personnel. I consider it is very important in planning anything in the countryside to employ people who really do understand the countryside and there are many members of your Lordships' House, including myself, who do understand the countryside. The Council for the Preservation of Rural England gave great assistance to the Scott Committee. Then it is proposed that a procedure similar to that adopted under the present Town and Country Planning Act of 1932, but considerably strengthened both locally and by the super-imposition of national riaming is the best method of controlling land use in country areas. If your Lordships read the recommendations of the Scott Committee you will find that there are a great number that can practically be agreed to immediately and some of them are in use to-day. I would like to mentione mentioner that can provision of holiday camps. Before the war nobb frem the search of holiday camps. Before the war nobb frem are in La Warr, who was then President of the Board of Education, asked me to be Chairman of the National Holiday Camps of giving holidays to schools coming out of London, for the hitty-two were to be forme for the purpose of giving holidays to schools coming out of London, for the weeks or a month. All these camps are in occupation now, though it is true that the children in them are children who had to be well as the contraction of teams and the children in them are children who had to be well as the children in them are children who had to be characted the vectors ago. I cannot child the contraction of the search and the children in them are children who had to be characted the vectors ago. I cannot children and the children in them are children who had to be characted the vectors ago. I cannot children who had to be characted to the care ago. weeks or a month. All these camps are in occupation now, though it is true that the children in them are children who had to be evacuated two years ago. I cannot claim any credit for myself because for a year and a half I have not been able to look after them, but they are doing great service. The result is that after the war there will be a great number of camps that can be used for holiday purposes and I suggest that the children should come first before anyone else is allowed to use these camps. They will be very valuable in the future. Then there is the question of the control of advertisements. What we who love the countryside have to try to do is to keep all the things that are useful, beautiful and progressive in village and rural life and see if we can improve them. There are many things that we want to maintain in the countryside but I think nobody can say that advertisements. that advertisements beautify it. Their removal may upset some people but if you are travelling from London through beautiful country and see advertisements of a popular pill all the way down you feel ill before you get to your destination.

popular pill all the way down you feel ill before you get to your destination.

We come to the most important question and that is the question of rural housing. Everybody who lives in the countryside knows that a great deal more rural housing is required but I join issue with Lord Latham on this subject and it is probably the only subject upon which I think I have as much knowledge as he. I do not agree with his remarks about tied houses. I dislike the word "tied." I look upon a tied houses a part of the equipment of a farm. If the Minister of Agriculture asks me to get X number of houses built in the countryside and at the same time tied houses were to be abolished, very little progress would be made. The noble Lord talked about tied houses and the feudal system. If he visited the part of the country where I come from he would find no feudal system there. The important thing is to do what you can to make agriculture prosperous. I have not alluded to the whole of these two reports. My duty is to see in conjunction with my colleague, the Paymaster-General, and others that we get on as speedily as we can with these questions and I can assure your Lordships that we are doing all we possibly can and that we hope in a short time to be able to show you something of the work we have been able to show you something of the work we have

able to show you something of the work we have been able to show you something of the work we have been able to do.

ARCHBISHOP OF YORK: Unless there is, in the immediate future, called into existence a strong Central Planning Authority which will co-ordinate different plans, which will advise, which will lay down the general principles of development and planning we shall have a hotchpotch of all sorts of buildings and estates in inconvenient places with great waste and overlapping. I agree thoroughly with a remark which appears in The Times this morning to the effect that, unless machinery is soon put up, the chaos which succeeded the last war will be repeated with all its horrors of ruined countryside and shoddy suburban development. A number of towns have already prepared some extremely picturesque schemes of rebuilding. These schemes have been largely prepared by architects. Now I have had a good deal of experience of architects and I admire them greatly as a class. But I must say that as a class they are inclined to be very optimistic. Their optimistic estimates of what the cost of their buildings is going to be is not always in harmony with the estimates of the contractor who has to carry out the work. I feel that a number of these schemes which have been made to appear attractive by pictures published in the Press are, so far, if not castles in the air, at any rate towns in the air until we know what the principles of compensation are to be, and until we know more about the financial aspect generally.

When the war industries cease, and when large numbers of men are demobilized, work will have to be found for them at once. If at the end of the war men find neither houses nor sufficient work there will be throughout the country a most dangerous feeling of angry discontent and disappointment. If, however, we have a strong and comprehensive plan for dealing with the housing problem, we shall also be dealing with the problem of unemployment.

unemployment.

EARL OF RADNOR: Planning is of recent growth—a very sturdy growth. A lot of people now are keenly interested in planning. This possibility of adding development to planning means a very great increase in the growth of planning, and one which I view with great distrust. I feel that public bodies are not suitable people to undertake on a large scale the active business of development, especially when you have added to it the absurdity, as I think, in the Uthwatt Report of giving power to a public body to purchase compulsorily from a private individual in order to re-let the land to another

private individual for development—and presumably to that third party for the benefit of his own pocket. It is an absurd situation, which carries development and planning to a degree which I do not think was ever contemplated when we first started talking about On the other hand, I rather reluctantly agree that

On the other hand, I rather reluctantly agree that planning in some form is necessary. Constitutionally, I am an anti-planner, and I suppose, for that reason, ought never to have served on the Scott Committee: but I do realize, as I think even the most hidebound individualist realizes, that planning of some sort is necessary in order to prevent the private individual from doing harm to the public by the misuse of the land under his control.

doing narm to the public by the misuse of the land under his control.

VISCOUNT SAMUEL: No one can prophesy, of course, and anyone would be foolish to attempt to prophesy, when the war will come to an end, but if it is not a probability it is at least a possibility that when the German system is exposed to serious shock it may collapse all of a heap, for it has no foundations. If that is so and if, to use the words of Lord Reith, the Government are "caught by the peace," with none of these necessary measures passed through Parliament, and none of the local authorities ready with their schemes, and if you have a great problem of unemployment following upon demobilization and the cessation of war industries, the Government will not be forgiven for this procrastination; they will be discredited in the eyes of the nation and there will be a spirit of anger spread throughout the country which might result in very grave consequences.

very grave consequences.

There is much need for planning a new Britain. No one who has been, as I have, at the head of the National Council of Social Service can fail to realize that Great Council of Social Service can fail to realize that Oreat Britain is far behind some other countries, notably the new countries of the world, in developing social conditions, in improving the conditions of the housing of the working people, in promoting national parks, in the beautification of cities and towns and other improvements which long ago have been put in hand by other countries.

ments which long ago have been put in hand by other countries.

LORD BROCKET: My Lords, a great many of us will agree with one particular sentence in the Uthwatt Report—namely, that planning is for the planned and not for the planners. We have heard this afternoon and in the other debate various opinions expressed about the scope of this planning, and we have heard some people express the opinion that the new Minister or Commission for planning must be almost an omnipotent being. In another place, on the Second Reading of the Minister of Works and Planning Bills, Mr. Austin Hopkinson made one or two criticisms of planning, and said that at one remote period, instead of living in houses, we lived in trees and gracefully, he added, there were no planners in those days, or the whole country would have been planted with nut trees in order to provide suitable food for the future population. That, of course, shows that one cannot plan too far ahead. He also expressed his very individualist opinion by saying: "The supreme planner of all is Adolf Hitler, who is going to plan the whole world. He is doing it most successfully in his own country. What are we fighting the war about? We are fighting to avoid planning." Well, I do not agree with those statements, any more than I agree with the absolutely omnipotent planners, and I do hope that when the planning will be confined to really workable limits of physical planning of the countryside and the building of houses.

[The debate was resumed on the following day.]

EARL DE LA WARR: The fundamental question we EARL DE LA WARR: The fundamental question we have to tackle is whether we intend in future to coop up millions of our people in the restricted areas of the towns or whether we intend to help them to spread out over the great unpopulated areas of the country. Behind that again stands the great question of what we are going to do with our countryside, what is going to be our agricultural policy, and what are going to be the conditions for the use of our sadly limited and frequently decreasing stores of agricultural land. Those are the questions we have to face and those are the reasons why some action has to be taken by the Government here and now to deal with the problem, if not before the conclusion of hostilities, at any rate at the end.

LORD BALFOUR OF BURLEIGH: There is a tremendous volume of opinion in the country, which wants to see the Government get on with this question of machinery for reconstruction. Therefore my plea to the Government is this. This matter is one of great controversy, but I do not believe that it is controversy on ordinary Party lines which would be barred by the declaration that was made the other day by the Lord Privy Seal in another place. I believe there is controversy here which cuts right across Parties and classes, and is a matter in which the Government ought to give a lead, and I believe the lead will be found in adopting the whole Uthwatt Report. I ask for the Uthwatt, the whole Uthwatt and, in its scope, nothing but the Uthwatt, and I believe if the Government do that they will have laid the foundations for a real beginning of reconstructione VISCOUNT SANKEY: That there must be som. LORD BALFOUR OF BURLEIGH: There is

the foundations for a real beginning or reconstructione VISCOUNT SANKEY: That there must be som. central authority is beyond argument, but in a movement which is in a large measure to alter and regulate our national life, it is devoutly to be wished that Parliament is own degree will retain its control, and will not hand over national planning to the uncriticized discretion of a single Minister, or a Committee of Ministers, or a Com-mission, or any central or local authority.

mission, or any central or local authority.

LORD CHANCELLOR: I would like to take up a reference, I may say an appeal, made to me by my noble friend Lord Astor, when he asked for an assurance that, nothwithstanding difficulties—and they are very great—that would not be regarded as a reason why legislation as prompt as possible on this sort of subject should not be pursued. He asked in effect that the Government should in this House repeat the assurance that was given to the other, and that is quite right, for I conceive that your Lordships are entitled to similar treatment on such a

matter. I will not delay, but I will simply say categorically that the assurance that the Lord Privy Seal there gave is one upon which undoubtedly both House of Parliament may rely.

one upon which induced in a property of the fact that the Government are not going to set up the fact that this topic raises difficulties and controversies as a final and conclusive reason for denying the possibility of further action.

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At a lunch-time meeting of the Town and Country Planning Association last Thursday, Mr. W. H. ANSELL, P.R.I.B.A., read a paper, extracts from which are printed below, on

### BEAUTY AND UTILITY IN LANNING

Some people fear planning as much as they fear a surgical operation, believing it to be much the same thing. They realize that there are Housing and Town Planning and Restriction of Ribbon Development Acts on the Statute Book, and they see the pleasant town or village, or piece of countryside after a development operation, never recovering its former health and beauty which the operation, though of course entirely successful, has very successfully destroyed. They despise laws which fail to prevent such disasters, or they go further and quite unfairly lay to their charge the actual performance of most of them. These people must be reassured. Civic planning, as we trust it will appear, does mean a far higher standard of usefulness, together with the preservation of such beauty as may exist and the creation of new beauty of possibly a different kind. But to obtain this it will be necessary to use all and neglect none of the necessary to use all and neglect none of the nation's resources in design and planning skill. Circular 1, issued by the Ministry of Works and Planning to Local Authorities, recognizes this when it says: "It is necessary in all planning schemes to consider not only health and convenience, but the future appearance of town or village. Architectural advice is therefore essential." And "the value of architectural advice, taken at an early stage, will amply prove itself when rebuilding takes place; and no planning scheme can be regarded as satisfactory which does not provide opportunities for good building in every area in which building is contemplated." So far so good.

Then came the shock in the form of the talk given by Dr. Robson to this very Association in which he said: "I must not be understood to be criticising or attacking the architects' profession if I say that there is no valid reason why the training or experience of an architect should be regarded as specially relevant to physical planning at the national, regional, or even local level." I was not present on that occasion, and do not know how this was received by the audience, but when I read it, I received by the audience, but when I read it, I felt, as an ordinary citizen, that I was going to be deprived of something I and all my friends considered indispensable to good planning. The generous tributes to architect town-planners which followed made it sufficiently plans that Dr. Belson was not intending as clear that Dr. Robson was not intending, as he said, either attack on or criticism of the profession, but the devastating effect of that one sentence made me wonder what he would have said if he had been criticizing or attacking. Dr. Robson gives a formidable list of people

whose knowledge, training and ability are required, statisticians, economists, transport experts and highway engineers, lawyers, geographers, financial experts (who pre-

sumably are not economists), medical officers, botanists, biologists, geologists, electrical, mining and gas engineers, public administraexperts, psychologists and students of public relations—and then—very much as an afterthought, he says "architects and surveyors will be needed."

Looking at this list, there is only one classification which, to my mind, has any qualifica-tion for planning, or has been trained in logical planning, and that is the architect's. Take any of the others to an open area and show it to him as a site, say for any small town or village group of communal buildings, give him paper, pencil and large size india rubber and ask him to plan the area. Most of them would say that it was not their job (if they were wise), and would decline the invitation. Some of them would offer to plan roads, but civic design is more than a layout of All the others could no doubt give valuable help by suggestions as to what should be included in a plan, but they could not physically plan the area. Only a trained planner could do this, and having regard to the three dimensional nature of civic design, only the planner with architectural training can in the last resort set down the lay-out which shall not only incorporate what the public demands, but do so in such a way that while utility and convenience are assured. beauty shall be, not added to, but inherent in the solution.

May I quote Dr. Thomas Adams on the Architect and Civic Design. He said: 'The preparation and carrying out of plans with centralized administrative machinery under which these operations are controlled is gradually making town-planning merely an gradually making town-planning merely an extension of the by-law system for controlling development. Civic Design better defines the art as distinct from the mere act or legalized system of town planning, and he went on to say one of the profoundest truths of planning thought that has ever been uttered. 'A proper understanding of civic design conceives the city street as a composition of both city street as a composition of both building and open area surfaces, and leads to a logical conception of the town and its expand-ing suburbs as being primarily a group of buildings combined with traffic ways and parks, designed to serve the uses of the buildings rather than as a grouping of highways and streets along whose frontages we permit a more or less incongruous development of building to occur.

building to occur.''
I am therefore led to the conclusion that
Dr. Robson and I, when talking about planning, mean different things. Lord Samuel, in the debate which I have mentioned, spoke of the same point, saying that there was confusion in the minds of the country at large as to what the term 'planning' really meant. At the time of the first Housing and Town Planning Act in 1909, planning meant such Planning Act in 1909, planning meant such questions as the lay-out of cities, the future development of our towns, and the like. Lord Samuel went on to say that in recent years the term 'planning' has been given a much wider sense, and has come even to include how we are to secure a nationally organized society. In this wider sense, I very much agree with Dr. Robson. Planning is, in its consideration of the use of the land, the affair of every section of the nation. I would accept his whole list and even add to it the accept his whole list, and even add to it the ordinary citizen who has no claims to exceptional knowledge, training or ability, but on the ground that he and his wife and his children are the main bulk, and, in this country, the sound heart of the nation. But when decisions have been made by our great planning committee, as it might be called, then I maintain that only the planner with architectural training can translate those decisions into three-dimensional fact. I seem to have quoted quite a lot of people in this talk to strengthen my own arguments—this time it is Mr. Edward Carter who truly gaid. "The architectural contribution to said "The architectural contribution to planning comes in now as it has always come in in the past, in all those aspects of the use of the land which involve the placing of buildings, and this, of course, involves considerations of access to them (transport), their amenities (landscape), their social re-

lationships in a general sense, and so on."

I do not claim for the civic designer that he should decide the policy, but that he should design the environment. The best of the planning committees must necessarily be somewhat confused by reason of the many interests pleading for their own good, and the architectural planner, trained to produce an aesthetic order and reduce apparently conflicting requirements to a coherent whole, as every good architect is, is not only the best man for the work of planning, but the only man who can do it as it should be done.

The principles which control good planning were studied and known before any Town or Country Planning Acts were ever thought of, and they still persist in spite of the Acts, and they still persist in spite of the Acts, or should I say side by side with them. If there were no Acts, these principles would still govern planning, and the Acts, it was hoped, would cause the principles to have greater influence, but because of their permissive and negative character, they have failed to achieve in the past what we hope for in the future. We therefore must clarify in our minds the idea of the difference between civic design and the administration of the legalized system of Town Planning Acts.

Now inasmuch as town-planning is a legalized system, it must be administered and well administered, and as one would not expect to find the best designers among the best administrators, neither is it necessarily true that the best designers make the best administrators. I should say that men of the highest class in design and administration are comparatively few, requiring, as it would, a combination of qualities not always found in the same person, but I should also say that it is easier for a good designer to become a good administrator than for the latter to become a good designer. Here there would seem to be the need for the planning officer of the system, if he be not himself an architect, to have associated with him a civic designer who has had an architectural training, not as a subordinate assistant but as the planning expert. Otherwise you may have a most efficient good administration combined with a darned bad plan—and that is not a quotation. The architecturally trained civic designer should be present in every scheme of planning, whether local or regional.

### DIARY

Friday, November 27.—Town Planning Institute. 3 p.m. General Meeting at Caxton Hall, S.W.1. Colonel W. S. Cameron will deliver

S.W.1. Colonel W. S. Cameron will deliver his Presidential Address. Saturday, November 28.—A.A.S.T.A. 2.30 p.m. Annual General Meeting at the Royal Hotel, Woburn Place. W.C.1. Hotel, Woburn Place, W.C.1. Institute of Quantity Surveyors. 3 p.m. Meeting of N.W. Branch at White Hart Hotel, Warrington. Monday, November 30.—Royal Society of Arts; John Street, Adelphi, W.C.2. 1.45 p.m. "Sound Insulation." By W. Allen. Living In Cities Exhibition. At 44, High Street, Sevenoaks. Until December 12.

Sevenoaks. Until December 12.

Tuesday, December 1.—Housing Centre, 13,
Suffolk Street, S.W.1. 1.15 p.m. "The
Stepney Reconstruction Survey." By Miss

### GOVERNMENT CONTRACTS

The principles which MOWP has agreed with the industry for the use of groups of contractors for Government Contracts are as follows:—

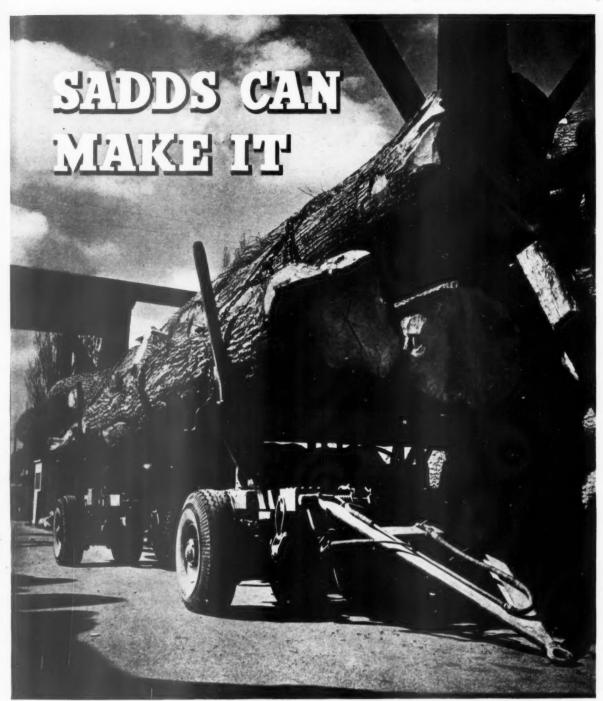
1. Contracts estimated to cost over £25,000.

(a) The group must be approved by and registered as a group with the Ministry of Works, W. G. II, Abell, House John Islip Street, S.W.I.

(b) One firm must be appointed as Group Leader to the approval of the Ministry's register as having an average annual turnover exceeding £60,000 per annum.

(c) The contract will be made with the Group Leader except in cases where the groups have been formed into a registered company which is a legal entity capable of entering into a contract in which case it must also be registered under Defence Regulation 56 AB.

(d) The theoretical capacity of the group for Government contracts will be rated as two-thirds of the



Substitution of this for that—and that for this—has tested their organisation; but whatever the commodity which has to be made in Wood or Wood allied to another material Sadds have done it and finished the job.

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aggregate average annual turnover of the components

aggregate average annual turnover of the components of the group.

(e) But for the purpose of assessing the group's capacity for any one contract, the peak load of a group will be taken to be 25 per cent. above two-thirds of the aggregate average annual turnover of the components of the group.

(f) The component firms of a recognized group will be to invited to tender as individual firms for Government Works over £10,000, but will be eligible for individual contracts under £10,000. The component firms may tender in whatever way they like for other than Government work, but all such work is taken into consideration in calculating the outstanding load (see) (g) below).

(g) The outstanding load of a group will be regarded as the total value of unexecuted work on all contracts (Government and non-Government) held by the group, whether as individual firms or as a group collectively.

(h) A group having an outstanding load of 60 per cent. or more of its average annual turnover will not be eligible for tendering until the outstanding load his fallen to 40 per cent.

2. Contracts estimated to cost £25,000 or less.

(a) The group must be approved by and registered with the Works and Buildings Emergency Organization in the Regional Office of MOWP.

(b) One firm must be appointed as Group Leader to the approval of the Works and Buildings Emergency Organization, such firm must be recorded in the Regional Office of MOWP.

(c) The contract will be made with the Group Leader to the approval of the Works and Buildings Emergency Organization, such firm must be recorded in the Regional Register as having an average annual turnover exceeding £25,000 per annum.

(c) The contract will be made with the Group Leader to the approval of the works and Buildings Emergency Organization, such firm must be recorded in the Regional steries of the performed into a registered company which is a legal entity capable of entering into a contract (in which case it must also be registered under Defence Regulation 56 AB).

(d) The theoretical capac

of a group will be up-graded in accordance with the following scale:—

(i) Groups with an assessed capacity of £60,000 per annum or more—up-graded by 25 per cent.

(ii) Groups with an assessed capacity of £50/60,000 per annum—up-graded to £70,000 per annum or by 25 per cent. whichever is the greater.

(iii) Groups with an assessed capacity of £40/50,000 per annum—up-graded to £65,000 per annum—up-graded to £65,000 per annum—up-graded to £65,000 per annum—up-graded to £60,000 per cent.

(f) The corp p-ment firms of a recognized group will not be invited to tender as individual firms for Government works over £10,000. They will be eligible individually for contracts under £10,000. The component firms may tender in whatever way they like for non-Government work.

work.
(2) The outstanding load of the group at any given time will be regarded as the total value of unexecuted work

on all contracts held by the group whether as individual firms or as a group collectively.

3. Special Conditions for Scottish Contractors.
The conditions which must be fulfilled by any group of Scottish Contractors are as set forth above, except that the minimum average annual turnover a firm must have before it can be approved as Group Leader (referred to in clauses 1 (b) and 2 (b) above), is reduced as follows:

as follows:—
(a) In the case of a Group of Scottish Contractors qualifying to tender for contracts estimated to cost over £25,000, the firm appointed as Group Leader must have

an average annual turnover exceeding £45,000 per annum, (b) In the case of Groups of Scottish Contractors qualifying to tender for contracts estimated to cost nor more than £25,000, the firm appointed as Group Leader must be recorded on the Scottish Regional Register as having an average annual turnover exceeding £18,000 per annum.

having an average annual turnover exceeding £18,000 per annum.

The Regional Offices referred to above are the offices of the Regional Allocation Officers of MOWP as set forth hereunder, and any communications in connection with this matter should be addressed to the appropriate Regional Allocation Officer.

Region No.	Area Covered	Regional Allocation Officer		
		Name	Address	Telephone Number
1	Counties of Northumberland, Durham, and the North Riding of Yorkshire	H. W. Wake	12, Osborne Avenue, Jesmond, New- castle-on-Tyne	Jesmond, 2683/4/5.
2	East and West Riding of Yorkshire	E. Bell	40, Wetherby Road, Oakwood, Leeds, 8	Leeds 58201.
3	Counties of Lincoln, Leicester, Nottingham, Rutland, Soke of Peterborough, North- ampton and Derby, including High Peak District	H. H. Robinson	Gordon House, Carrington Street, Nottingham	Nottingham 46278/79/80.
4	Counties of Bedford, Cambridge, Essex, Hertford, Huntingdon, Norfolk, Suffolk, but excluding anything within London Civil Defence Area	Frank Wells	Shaftesbury Road, Brooklands Ave., Cambridge	Cambridge 55206.
5	Approximately fifteen miles radius of Charing Cross	Stanley W. Wall	Drake House, Dol- phin Square Grosvenor Road, London, S.W.1	Victoria 4477 Ex. 122
6	Counties of Hants, Isle of Wight, Berks, Bucks, Oxon and Dorset, but excluding anything within London Civil Defence Area. (Approximately 15 miles of Charing Cross)	A. Cannon	Whiteknights' Park, Earley, Reading	Reading 61431.
7	Counties of Gloucester, Wilts, Somerset, Devon and Cornwall	Stanley White	23, Richmond Hill, Bristol, II	Bristol 38457
8	Monmouth, Glamorgan, Carmarthen, Pem- broke, Cardigan, Radnor, Brecon, Flint, Denbigh, Caernarvon, Anglesey, Merioneth and Montgomery	Oliver John	66, Park Place, Cardiff	Cardiff 1609/10
9	Counties of Worcester, Warwick, Stafford, Shropshire and Hereford	H. O. Missenden	Somerset House, Temple Street, Birmingham	Birmingham, Midland 6561. Ex. 15.
10	Cheshire, Lancashire, Westmorland and Cumberland	W. H. Watkinson	79, Fountain Street, Manchester, 2	Manchester Central 7247/50.
11	Whole of Scotland	J. T. Middleton	9, George Street, Edinburgh	Edinburgh 34621.
12	Counties of Kent, Surrey and Sussex	F. S. Bond	Forest Road, Hawkenbury, Tunbridge Wells	Tunbridge Wells, 2780/8.



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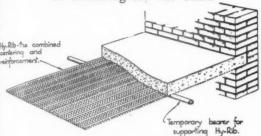
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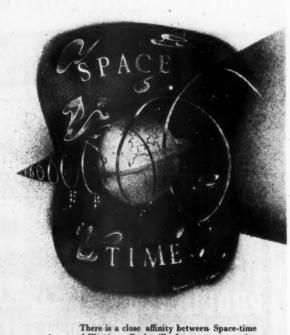
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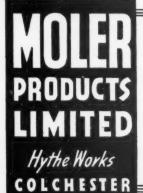
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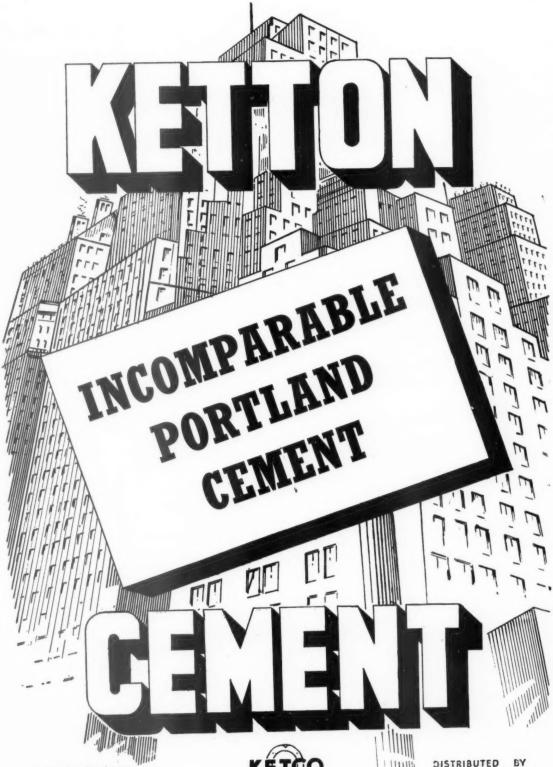
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