



IN silence IS OUR STRENGTH

It has been said that there is a time for everything — a time to talk — a time to keep silent. We commend this sound advice as supplementary to the National Appeal Posters regarding "Careless Talk. . . ." We add also the Latin Tag — AUDI, VIDE, TACE (Hear, see, and hold your tongue). Remember that despite the vast improvements in wireless reproduction — the human tongue is still the best "amplifier" . . . of rumour, but with "distortion." To mind one's own "Business" at the present time means that all "hands" are kept fully busy helping Britain, instead of IDLE tongues helping the enemy. Why not an auxiliary "Silent Service" — on land?



REYNOLDS TUBE COMPANY LTD.
REYNOLDS ROLLING MILLS LTD.

"BELL"

Precast Reinforced Concrete AIR RAID SHELTERS



The "Bell" concrete shelter is of apex-roof type with one-piece wall-roof units, designed for sinking approximately 5 ft. below ground level.

It is strongly constructed, heavily reinforced and the sections bolt together; thus, rapid erection can be effected. Concrete floor is provided throughout.

The Industrial type, as illustrated, providing ample accommodation for fifty persons, is supplied with separate W.C. compartments, shielded double-entrance doorway and escape shaft with gas-proof manhole cover.

COPY OF REPORT (EXTRACT) FROM

Sir John Brown and A. E. Henson

Chartered Architects

Northampton and London

"We have examined the Shelter both before and after the test loading of 750-lbs. per square foot was applied, and we can certify that even with this loading the sections showed no sign of deflection—and they can therefore be used in positions where a collapse load of 400-lbs. per square foot is required."

We shall be pleased to submit drawings and estimate for any particular scheme, and for any number of persons.

FAMILY TYPE SHELTERS FOR 4 TO 12 PERSONS A SPECIALITY

MANUFACTURED BY

A. BELL & CO., LTD.

Gold Street and Kingsthorpe Works
NORTHAMPTON

Telephone: 771 (2 lines).

Telegrams: "Iron"

THE ARCHITECTS'



JOURNAL

THE ARCHITECTS' JOURNAL
WITH WHICH IS INCORPORATED THE BUILDERS'
JOURNAL AND THE ARCHITECTURAL ENGINEER
IS PUBLISHED EVERY THURSDAY BY THE ARCHI-
TECTURAL PRESS (PUBLISHERS OF THE ARCHITECTS'
JOURNAL, THE ARCHITECTURAL REVIEW, SPECI-
FICATION, AND WHO'S WHO IN ARCHITECTURE)
FROM 45 THE AVENUE, CHEAM, SURREY.

*

THE ANNUAL SUBSCRIPTION RATES ARE AS FOLLOWS :
BY POST IN THE UNITED KINGDOM.... £1 3 10
BY POST TO CANADA £1 3 10
BY POST ELSEWHERE ABROAD..... £1 11 6
SPECIAL COMBINED RATE FOR SUBSCRIBERS TAKING
BOTH THE ARCHITECTURAL REVIEW AND THE
ARCHITECTS' JOURNAL : INLAND £2 6s. ; ABROAD
£2 10s.

SUBSCRIPTIONS MAY BE BOOKED AT ALL NEWSAGENTS

*

SINGLE COPIES, SIXPENCE ; POST FREE, EIGHTPENCE.
SPECIAL NUMBERS ARE INCLUDED IN SUBSCRIPTION ;
SINGLE COPIES, ONE SHILLING ; POST FREE, 1S. 3D.
BACK NUMBERS MORE THAN TWELVE MONTHS OLD
(WHEN AVAILABLE), DOUBLE PRICE.

*

SUBSCRIBERS CAN HAVE THEIR VOLUMES BOUND
COMPLETE WITH INDEX, IN CLOTH CASES, AT A
COST OF 10S. EACH. CARRIAGE IS. EXTRA.

*

45 The Avenue, Cheam, Surrey
TELEPHONE : VIGILANT 0087-9 (3 LINES)

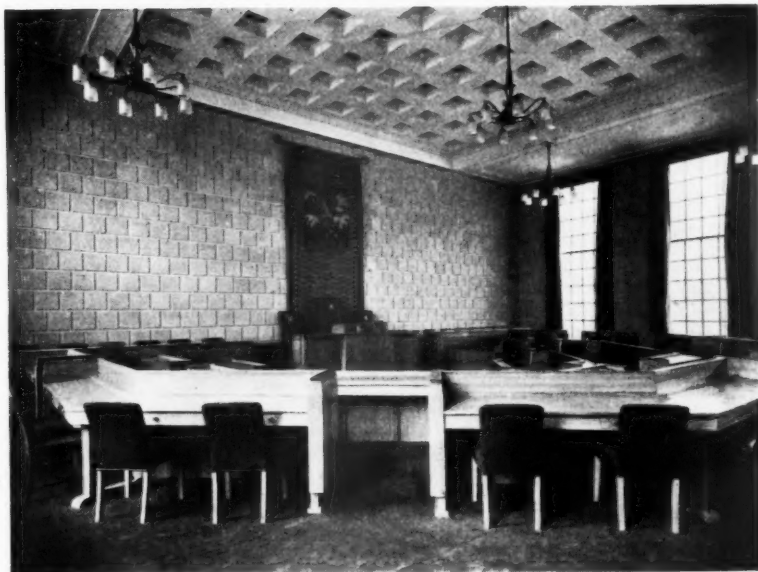
The Editor will be glad to receive MS. articles
and also illustrations of current architecture in this
country and abroad with a view to publication.
Though every care will be taken, the Editor cannot
hold himself responsible for material sent him.

THURSDAY, NOVEMBER 23, 1939. NUMBER 2340 : VOLUME 90

PRINCIPAL CONTENTS

	PAGE
Municipal Offices Extension, Bromley : Council Chamber	615
Holiday Home, Cervia, Italy. By E. G. Faludi ..	616, 629-635
This Week's Leading Article	617
Notes and Topics	620
<i>Astragal's notes on current events</i>	
Information Centre	622
<i>Questions and Answers</i>	622
<i>Shelters—3. (By F. J. Samuely)</i>	623
<i>Correspondence</i>	626
<i>Architectural Front</i>	626
<i>Building Front</i>	627
Control of Wood	636
Trade Notes	636
<i>By Philip Scholberg</i>	
General News	637

MUNICIPAL OFFICES EXTENSION, BROMLEY



Two views of the Council Chamber—just completed—in the Municipal Offices Extension, Bromley, designed by C. Cowles Voysey. Plans and photographs of this building appeared in our issue for November 9.



HOLIDAY HOME IN CERVIA, ITALY

The approved system of physical development for working-class children in Italy is compulsory. Consequently, all industries and factories employing a certain number of hands are compelled by law to build holiday homes by the sea and lakes and in the mountains. The organization is controlled by the Government.

The owner of each factory must see that his employees' children are sent to these holiday homes for one or two months in each year.

These holiday homes are permanent buildings, and must be made of brick or reinforced concrete, and in many cases from stone, depending, of course, on the type of building material available near the site. The majority are near the Adriatic between Ravenna and Cattolica, and by the Liguria and Tirrenia Sea between Savona and Pisa. There are many homes in the mountains in the Dolomites. The largest number are by the Adriatic Sea, where in the normal way these buildings house from 500-2,000 children of both sexes from the age of 6 to 14 years. The children's time is divided between sport, gymnastics, swimming, playing and resting, and for one hour each day they receive special educational instruction, varying according to the age of the child.

A typical Holiday Home was built this year for the employees' children of the biggest chemical industry, the Montecatini, Ltd., by the Adriatic Sea, by Cervia, between Ravenna and Rimini. The architect was E. G. Faludi. Above is the isolation building of this scheme. Further illustrations and plans are reproduced on pages 629-635.

RESERVED FOR WHAT?

FIRST STEPS TO AN ANSWER

IN September 1938 architects, together with the rest of the population, were profoundly disturbed by coming near to a second Great War. They were disturbed as private individuals and they were disturbed as architects.

Their professional disturbance had two results: the compilation of a Register of technical ability which would be available in war-time, and some questioning as to how that ability could be best used in war-time.

The questioning produced no coherent answers. There was a general impression that if war came it might take one form or another form, but that serious bombing raids were certain; and therefore the architects, being classified and experts in buildings, would be allotted one responsible job or another as circumstances dictated. Faintly comforted by mingled convictions of being ready, being looked after and of being wanted by those behind the curtain, the profession got on with current work.

We have now been at war for all but twelve weeks; the curtain is still there and events are certainly happening

behind it. Big contracts are being placed, a programme of war works is in hand, materials are being controlled and considerable disorganization has already shown itself in the industry. In the meantime only a few architects have been given war-work. If the majority of them expected (as they have so often expected at big moments) that, without any effort by them, cut and dried Architects' War Service Plans were going to be produced on the dot, they were mistaken. Those who thought that special plans would be made for architects by Authority were also mistaken.

In war-time architects are only important, in public estimation, as part of the building industry—which has a great deal to do. It is only by their mastery of what building has to do in war-time and how it ought to do it, by showing how their abilities enable it to be done better, that they can in fact obtain respectful hearing by Authority—whatever ought to happen in theory.

It is in this belief that the JOURNAL describes below what, in its view, is the situation now confronting the Building Industry.

EVERY architect is worried just now. Secretly or openly, nearly every architect is additionally worried that, after twelve weeks of war, his particular war service is no clearer and no nearer.

Now there is not the slightest use in every architect and assistant keeping up a daily, personal, worry till the end of this war. It is far better, if that is all that can be done, to take to gardening in the hope that Authority—and the National Register—will in time provide a job.

But if it were possible for architects, by three months' effort, to do two things:

1. See quite plainly what work many architects, if not all architects, can best do in war-time, and
2. Convince Authority that they were right . . . ,

Would it not be worth while making this effort? It seems obvious that it would.

But the JOURNAL, as well as many architects and builders, believe that if this effort is worth making, it must be made NOW: before the first hand-to-mouth methods of organizing war building work are raised, on a small pile of precedents, into WHAT IS ALWAYS DONE—leaving the firms who will be needed so much when the war in the air really starts simply nowhere (and architects with them).

Believing this strongly, the JOURNAL tries to describe below the main factors tied up in the question

Reserved For What?—with all that its answer means to architects.

We do not print this outline of a big problem in the belief that all our statements are exact, all our conclusions valid, or all our suggestions the best possible.

We do print it in the belief that someone must put the evidence before the profession in a form that can be kept and thought about.

Here, then, are our—

RAW MATERIALS

THE ARCHITECTS:

There are about 14,000 architects on the Register of Registered Architects. All architects, draughtsmen, and others colourably engaged in the profession are reserved at 30 and over. Besides those over 29, many younger architects have no immediate prospect of any other job, in the Services or out, and are therefore available for architectural work.

No one has bothered to find out how many Registered Architects are over 29, and it is impossible to say how many people, besides Registered Architects, were engaged in architectural practice or study on September 3. Probably the grand total was not much under 20,000.

How many of these 20,000 want work, preferably architectural work, NOW? This is a difficult question. We know that:—

1. Almost the whole of the ordinary work of private firms and local authorities' departments is coming quickly to an end.

RESERVED FOR WHAT?

(Continued from previous page)

2. The emergency work of such private and local authorities' departments (chiefly shelters) may be expected to end in two or three months if serious air raids do not occur.

3. The official departments engaged on war work are not expected to increase their staffs by more than 20 per cent. at most in the next year.

4. Not more than 500 architects or students are in the Services now; and not more than another 1,500 are likely to be allowed to join in the next year.

5. Fifty special appointments and 250 junior jobs will probably be the total obtained through the National Register in the first year.

It is therefore probable that about 10,000 architects and assistants want work now, and that about 15,000 will want it badly in six months' time.

The work architects would do best is work which is as nearly as possible that which they were doing in peace-time. To achieve this, for any considerable proportion of architects, requires that the organization and methods of the building industry—of which architects are a part—should remain in war-time as nearly as possible that which they were in peace-time. And this retention of peace-time methods in the industry appears desirable on far more important grounds than those of the architects' need. So the next step is to examine—

HOW THE BUILDING INDUSTRY CAN DO MOST EFFICIENTLY
WHAT IS ASKED OF IT IN WAR.

THE BUILDING INDUSTRY:

This forces architects to think a little about the building industry in its larger aspects.

Here are a few facts:

- ★ *The gross value of all work carried out by the building industry in the year ending September 3 last was about £600,000,000. The value of work on buildings (including repair and maintenance) was about £400,000,000.*
- ★ *The number of insured persons in the building industry (building, public works contracting and constructional engineering) in July, 1938, was 1,424,870*

<i>Numbers in industries directly dependent</i> ...	<i>529,030</i>
<i>Numbers in industries partly dependent</i> ...	<i>264,540</i>
<i>Numbers in industries indirectly affected</i> ...	<i>992,400</i>

If one takes one-third of the last two categories as deriving their employment indirectly from the building industry, the grand total is ... 2,372,880
- ★ *The figures just quoted do not include architects or other allied professions and their staffs; they do not include any person in building firms or materials manufacturing firms who earns more than £5 a week. How much the total is increased by these additional people is not known: certainly by 100,000—perhaps by 250,000. Therefore TWO-AND-A-HALF MILLIONS may be taken as a fair estimate of the number employed in, or dependent on, the building industry.*
- ★ *There are about 48,000 building and contracting firms which employ more than ten people. There are about 2,000 which employ more than a hundred.*

These few statistics remind architects that they are intimately bound up with, and dependent on, an enormous industry which is spread all over the country

in small and large units—all linked up and inter-dependent—and able to do absolutely anything: HUT, WATERLOO BRIDGE OR TEAM VALLEY ESTATE—without fuss or bother.*

With this we come to the main point. A big programme of building work for war purposes will have to be carried out. It will be mostly light, quick, cheap buildings; but it will include an unknown amount and type of air-raid reparation and extension of air-raid shelters.

This work can be done in two ways:—

1. By using the peace-time methods, organization, trades and materials of the building industry as fairly and widely as is consistent with the nature of the works—that is by a **BALANCED USE**.

2. By monopolizing one or two materials (and, consequently, trades) for war purposes, and inducing a part only of the industry to change its methods and technique by means of large contracts, first preference in the chosen materials and a measure of standardization—that is, by **UNBALANCED USE**.

Let us consider these one at a time.

METHOD 1. Advantages:

1. It spreads the unavoidably smaller volume of war work fairly through all building firms of any size and most of the important building materials. It will make it more probable that the smallest builders will be able to carry on with essential work of maintenance and repair.
2. It helps to keep the industry throughout the country at a reasonable level of efficiency to meet unpredictable demands of air raids.
3. It preserves (by not draining away one material and one set of tradesmen) the existing structure of the industry.
4. If materials are properly allocated according to the relative urgency of works, it enormously increases the potential output of the industry.
5. It avoids a double dislocation of the industry: (a) when some trades and firms are monopolized for war work and the rest left to survive as best they can; (b) when the industry is changing back for peace-time again.

METHOD 2. Advantages:

1. It is capable for the first contracts, when the easiest materials are plentiful and controlled, of being very much faster than Method 1.
2. Providing the total volume of war work is certain to be small (say, one-tenth of peace-time volumes), the building types not too diverse and chosen materials plentiful, it is probable that it would still be quicker than 1—though not so good in quality or cheap in price.

* We are not suggesting that the building industry is the perfect human organization. It has no doubt its human proportion of stupidity, avarice, wangles, dead-ends and financial tight-rope walking. But it can do anything, anywhere; and it can rise to emergencies—nearly all building is rising to emergencies.

Much more could be said for and against both methods. But the central fact remains that the building industry, as it now exists, must be kept in working order to meet air raid risks—since it is too large and complex to be replaced.

The use of Method 1 for the execution of works for war purposes will go some way to ensure this.

The use of Method 2 must do exactly the opposite. For (we repeat), as the volume of war work grows, so must the use of Method 2 increasingly disorganize the proportions in which materials are produced and the internal organization of building firms.

If these contentions are correct, the first war work of architects is to join with the rest of the industry in persuading the Government to use Method 1 for all building for war purposes.

When Method 1 has become the rule, the amount and kind of work which ought to be done in war-time can be decided later. If it does not become the rule, the JOURNAL believes that a large portion of the industry will be unable to avoid liquidation for the duration of the war.

Before they accept this statement, architects will want the answers to these two questions:—

WHAT IS METHOD 1?

WHAT SHOULD BE DONE TO SEE THAT IT IS USED?

Method 1 has three principal aims:—

- (1) To use for war-work all suitable building materials in the proportions in which they are now produced.
- (2) To spread war contracts fairly through the industry both geographically and in size (i.e. big works to big firms and smaller works to small firms).
- (3) By avoiding concentration on one or two materials for war work, to enable the industry as a whole to keep its organization and stocks of materials ready both for air raids and for any normal work it can get.

That is the answer to the first question.

The answer to the second must be found by the building industry as a whole. The JOURNAL makes the following suggestions of steps which seem, in principle, essential:—

1. The establishment of a small Committee which shall possess complete authority to act on behalf of all the two-and-a-half millions of the building industry, allied professions, and dependent industries.
2. That it should be agreed that no partisan claims for work will be made independently by sections of the industry or its professions without the consent of this Committee.
3. That this Committee should approach the Government and speak to it (with irrefutable corroborative evidence), roughly like this:

"We are the biggest internal industry,

RESERVED FOR WHAT?

and general unemployment among us will affect the whole economic structure of the nation.

"It is essential for the prosecution of the war to keep our organization in tolerable working order throughout the country—for the work which we may be required to do both in armaments and rebuilding when air attacks develop.

"It is therefore common sense to spread present war building contracts as fairly through building firms and important materials as is possible.

"The unavoidable fall in building volumes in war-time enables us to do all you can possibly want (bar bombing) with ease, and still reserve plenty of labour and plant.

"The present competition between departments for the easiest materials and quickest results will, if not checked, damage our organization badly—even ruinously.

"We therefore ask you to allow US to organize your whole building programme on these conditions:

1. That you tell us as nearly as possible what buildings and other works you will want for the next year (bar bombing)—including a description of each scheme and its component units.
2. That you establish an order of urgency for these schemes (and please curb Departmental passion for thinking that nothing later than next week will win the war).
3. That you give us a grant for a War Buildings Bureau which will prepare and standardize designs for all the commonest types of war building in all the building materials which can be used with tolerable speed and at low cost. These designs (and detail drawings) will be available free to all contractors; and the material used will be decided according to the urgency of the contract.
4. That we are allowed to do our own controlling."

In this manner, the JOURNAL believes architects can begin to answer—hand in hand with the industry of which they are a part—the question "RESERVED FOR WHAT?" In war the industry faces new problems, and must solve them faster. Architects can, if they are determined, get in at the beginning of this work, understand thoroughly the difficulties of the Government and those of the industry and go through to the end. What they cannot do, is to stand by and hope that just the right work for them will be thrown out by those involved.

In this belief the JOURNAL has published the summary of the main points involved (as it sees them) in *Reserved for What?* In the next few weeks it intends to elaborate these points, and in this it will be helped by being told the views of all others—and they must be many—who have also been struggling to find an answer to the same question.



The Architects' Journal

45 The Avenue, Cheam, Surrey

Telephone : Vigilant 0087-9

NOTES

&

TOPICS

ART FOR THE PEOPLE

ON Tuesday last week Sir Kenneth Clark gave a broadcast talk about the "Art for the People" exhibition of modern paintings organized by the Institute of Adult Education. He spent the whole ten minutes at his disposal explaining why it is that a good picture is not necessarily one that looks exactly like the real and natural thing.

This, of course, is the fundamental mistake made by the adult British public, and until naturalism as the sole criterion is abolished, there will be no general appreciation of the painter's art. Sir Kenneth was extremely persuasive; but public appreciation of art is a long and patient educational process which must start not with adults but with children—by developing instead of perverting their first instincts.

It is pleasant to find, once in a way, that "To-Night's Talk" is on a cultural topic instead of a war-like one. I hope this kind of propaganda will increase. There is certainly no reason why we should allow our war to get too pompous.

SCHOOLS . . .

I have received a letter from an architect billeted in a school:

In the entrance hall is a fine, sugary, three-colour exhortation: TO BE CLEAN IS WELL • IT IS WELL TO BE CLEAN.

In every classroom is a copy of another, pallidly Underground: "Are my knees clean? Have I washed my face? Are my hands clean? Have I washed my teeth? . . ." and so on far beyond the further edge of boredom.

NOTICE TO SUBSCRIBERS AND CORRESPONDENTS

The Architectural Press announces that in order to ensure production and distribution of THE ARCHITECTS' JOURNAL, THE ARCHITECTURAL REVIEW, SPECIFICATION and the numerous books published by the firm, it has taken temporary offices at 45 The Avenue, Cheam, to which address editorial and advertisement matter should be sent. The telephone number is Vigilant 0087-9 (3 lines).

Temporarily Therefore:

THE ARCHITECTS' JOURNAL

45 THE AVENUE
CHEAM, SURREY

Vigilant 0087-9 (3 lines).

There are posters of cottages, the Coronation and Royal Family; plans of Roman villas, live gold fish, and lovely prints of British birds.

Fifty men have now taken the place of 150 all-age children. Curly Trotter* can speak for all of us:

"And where are we to wash or shyve . . . or these new wimmen cook? D'yer know there's not a drop of 'ot water in the building?—not a cooker nor a sink except in the coal-ole and up among the birds' eggs on the top floor . . . and those lats. in the yard would turn-up a goat's last meal."

To this I may add the remarks of a school doctor, noted by Mr. G. T. Garratt (as farmer and member of a local education committee) in *Hundred Acre Farm*:

"The better the facilities in the schools for washing purposes, the more importance the children are likely to pay to exhortations to cleanliness. And some schools are still lacking in this respect."

. . . AND FARMS

In the same book (published in 1928—Longmans, Green & Co.) Mr. Garratt wrote:

Putting up farm buildings must be a venture, because as a rule they never add what they cost to the value of the farm. . . . Farming with bad buildings is such a squalid job that, until this question is tackled, agriculture is bound to be a backward industry from which intelligent people escape as from a prison.

. . . In England we have got into a vicious circle. We dare not build because the industry will not stand it, and the industry gets worse because of the badness of the buildings.

Once again farming is a "vital" industry. Once again we find no one, in twenty years, has tried to tackle Mr. Garratt's problem.

FANTASIA

Here is a true fairy tale to take your mind off the rest of this paper. It is told in the *World Digest*. Let me digest the *World Digest*.

* One of the fifty.

In 1931 Cosmopolitan Productions joined hands in Hollywood with Metro-Goldwyn-Mayer.

★

Cosmopolitan P. (President : U.S. Newspaper magnate, William Randolph Hearst) had a long-term contract with Miss Marion Davies. In honour of the new alliance, Mr. Hearst decided to give Marion a bungalow of rambling Spanish patio type : 9 rooms, 3 bathrooms and an office (meaning an office)—the whole in the grounds of jointly-owned studio. Cost, £8,000—furniture and shrubberies, £16,000.

After nine years of troubled partnership, Hearst and M.-G.-M. decided to part. Mr. Hearst, to whom Marion (and bungalow) was still under contract, decided to take both along with him. Mayer, feeling hipped over this, refused to allow any breach in wall surrounding studios and bungalow, as this wall was property of M.-G.-M.

★

Hearst replied by chopping bungalow in seven bits and hoisting all over the wall by special apparatus. Labour : 22 men. Time : seven weeks. Cost : £3,000.

★

Meantime Cosmopolitan had joined up with Warner Brothers, whose lot was 15 miles away by a road which led through a narrow canyon. The convoy got jammed in the canyon, and had to do a long detour. Cost of transportation, £2,000.

Later, when Warner Brothers split with Cosmopolitan, the bungalow was again chopped into seven parts and moved to Beverley Hills. Over a period of nine years, exclusive of taxes, Marion's bungalow had cost £40,000.

MORE PERU

Above is another of the photographs sent to me by Mr. Edward Wright from Santiago de Chile. It is a stone measuring about 4 ft. by 3 ft., with twelve wrought angles. At first I thought that was all there was to it. Then I noticed it was part of the walls of Cuzco.

★

Here is what Prescott (*Conquest of Peru*) has to say about the Inca fortress of Cuzco :

Towards the north, on the sierra or rugged eminence already noticed, rose a strong fortress, the remains of which, at the present day, by their vast size, excite the admiration of the traveller.

★

... the heavy blocks were not laid in regular courses, but were so disposed that the small ones might fill up the interstices between the great. They were rough hewn except towards the edges, which were finely wrought ; and though no cement was used, the several blocks were adjusted with so much exactness and united so closely, that it was impossible to introduce even the blade of a knife between them. Many of the blocks were of vast size ... being full thirty-eight feet long by eighteen broad, and six feet thick.

★

We are filled with astonishment when we consider that these enormous masses were hewn from their native bed and fashioned into shape by a people entirely ignorant of the use of iron ; ... that they were brought from quarries from four to fifteen leagues distant without the aid of beasts of burden.



Prescott was writing in 1847, but our astonishment has not grown less.

HIDDEN BRICKWORK

Not since the tax on light was imposed have so many windows been bricked up ; for now we are back in the pre-Tudor days of the arrow-slit and the boiling oil aperture, and protection, not light, is considered. Incidentally, many of the warehouses and sheds by the railways that lead out of London have been greatly improved by the removal of smoke-blackened and broken glass windows : the shining patches of fresh London stock that have replaced those soot-smeared eyes restore to such buildings the architectural character they originally possessed when railways were young and London was cleaner.

OLD FIRES

I spent an hour in Winchester Cathedral a few days ago, and discovered that the gilded figure of Joan of Arc now gazes longingly at a gleaming red conical shape on a neighbouring wall, where a large fire-extinguisher is fixed.

★

It reminded me of a notice in a French city which read : "Restaurant Jeanne d'Arc, English Grill."

ASTRAGAL

*Current Prices for Measured Work, Part 2, and
App. Est. are held over from this issue*

Civil Defence is with us from now on. The technician's work won't be finished when basement strutting is complete and trenches are dug. In future every client will demand of his architect technical guidance on fire-fighting appliances, escapes, the equipment and construction of shelters, and planning for A.R.P. Thus not only emergency legislation but defence measures in general have become the permanent concern of the architect who is faced today with the problem of digesting a whole new official literature and solving a whole new series of problems. The INFORMATION CENTRE exists to simplify this task by providing expert opinion for any reader who cares to use the Service. Any question connected with building will be dealt with by the Centre.

ARCHITECTS' JOURNAL

EMERGENCY

- If you have an A.R.P. problem which demands an expert answer.
- If you want information regarding A.R.P. appliances.
- If you have an A.R.P. problem which requires knowledge you have not got of official recommendations.
- If you want information regarding MATERIALS.
- If you want guidance in finding your way around the new Government Departments.
- If you want the change of address of a firm or manufacturer.

Write to:—

THE ARCHITECTS' JOURNAL,
45 THE AVENUE,
CHEAM, SURREY.

VIGILANT 0087

or ring:

THE A.J. INFORMATION CENTRE

FLAXMAN 5322

The Information Centre itself is working from London, but enquiries sent direct to the JOURNAL will be passed on without delay.

These are typical of the questions we have already answered:

How are ventilated black-out window screens formed?

How is sandbagging rotproofed?

How much safer is a 20-ft. deep shelter than a semi-surface type?

How is a light lock formed?

How should screen walls be arranged?

How is a basement shelter protected from bursting water mains?

What is the definition of a light-proof material?

What publications are there on farm buildings?

What would be the maximum spread of debris if an h.e. bomb hit a 330-ft. stack?

What publications are there on camouflage?

What protection is needed for light shafts?

What is adequate provision for a first aid and decontamination centre?

Is a 1938 contract binding?

Who is responsible for making good air-raid damage to unfixed materials?

What is the cost per head of gas filtration?

Under what obligation is a building owner to provide shelter for the occupants?

How is a leaking shelter waterproofed?

How will the grant be paid?

Are cinemas to be provided with shelters?

Can blast-proof doors be used for naturally ventilated shelters?

INFORMATION CENTRE

Q91 GUNNERSBURY.—As one who knows little about A.R.P., I should value your opinion of an idea for an AIR RAID SHELTER I propose to build in my garden. It has always struck me that compared with shelters below ground, shelters at the surface, where blast and splinter effects are at their maximum, are at a disadvantage, except in regard to ease of access. I propose, therefore, to build as my shelter a sort of summer house, say about 6 ft. by 4 ft., raised 8 ft. or 9 ft. above ground level on four wooden columns. How would the resistance of such a shelter to bombs compare with the more normal surface types?

We are afraid your idea of a shelter is not to be recommended. A bomb will always penetrate a short distance into the ground before exploding and will then throw up a certain



amount of earth which will form a rim to the crater. This rim has the effect of diverting the blast slightly upwards (Fig. 1), and protecting to a certain extent structures close to the ground. You will see, therefore, that

the shelter you propose will be particularly vulnerable, quite apart from the fact that the floor and walls would have to be blast proof, and the cost therefore much higher.

Q92 WESTMINSTER.—Is there anything you can recommend for protecting a wood door against LIQUID GASES? We have been told a paste Densyl gives good protection.

In our opinion metal would be the best protection, possibly in the form of Plymax, though we understand Densyl is a quite good material for the purpose.

Q93 MANCHESTER.—I had decided some time ago to construct a domestic TRENCH SHELTER for approximately five people. The trench itself is about 30 ft. from the house. As the main idea of the shelter is protection from blast, I have made the trench

7 ft. deep, to enable a person standing upright to be comfortably below ground level, and also to allow ample room for overhead construction (construction of trench wholly of timber). I enclose sketch (Fig. 2), and shall be glad if you will suggest improvements, also correct mistakes, as well as stating the best type or most suitable timber for the job. A very rough estimate of the cost of timber would also be appreciated.

As far as cost is concerned, today's approx. prices for sawn deal are:
4 in. by 2 in., 2½d. ft. run; 4 in.

by 4 in., 4½d. per ft. run; 9 in. by 3 in., 9d. per ft. run; and 6 by 1½, t. and g., 42s. per square.

This is the third of a series of wartime articles which will deal with the problems that most closely concern architects at the time of publication.

RESEARCH

SHELTERS: 3

[BY FELIX J. SAMUEL]

TYPE AND PLACING OF PUBLIC SHELTERS

THE general arrangement of shelters must be decided upon more with regard to the accommodation required than from a structural point of view. The most suitable type and position of any shelter cannot be determined until an exact survey of the people requiring shelter has been taken and their distribution at any time worked out. Public shelters are not meant to serve the public either at home or at work. Only where the provision of private shelters is impossible are public shelters expected to serve people who are at home when the alarm is given. On the other hand, people who can provide their own shelters are not intended to leave their home and make use of public shelters.

Thus public shelters are only for those people who are neither at home nor at work, and not within such distance from either place that they can arrive at their shelter during the normal time allowed, at present assumed to be 7 minutes, but likely to be less.

This will mean that, apart from those on their way to or from work, people in the streets for other reasons will also require public shelter.

The foregoing explanation makes it clear that shopping centres, parks, cinemas, etc., will be in particular need of public shelters, while smaller shelters will be needed elsewhere. As the time allowed between the alarm and the actual attack defines the nearest distance from the shelter, the density of the population will control the sizes of the shelters.

Below are some indications of how public shelters could be suitably spaced.

It seems reasonable that, in principle, public shelters should be dotted over an area in a kind of network, with a distance of ¼ mile between them. This network

is of a purely theoretical character as local conditions will modify it considerably in every case, but the only practical method is to seek a theoretical solution first and then to modify it to fit local circumstances.

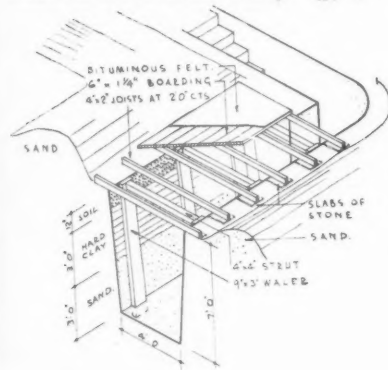
A practical example would best illustrate this point and for this reason a square mile of a large city in England has been taken and reproduced in Figure 28. This particular area has been chosen as it contains nearly all problems which may arise anywhere.

The unshaded areas represent parks and railway sidings, i.e. uninhabited parts. The diagonal hatching denotes a district with a population of between 15 to 25 people per acre; the vertical hatching 25 to 75 people per acre, and the double hatching more than 75 people per acre. (When preparing an actual design this classification would be more detailed).

The streets shown by two lines serve local traffic only, and where heavy through traffic is to be expected a third line has been inserted in the middle. Shopping centres are indicated by thickening the outline of the street and the black dots show where a congregation of people is probable (churches, cinemas, etc.).

The crosses indicate where, in accordance with the rough scheme outlined above, shelters should be placed, but the circles give the final position of the shelters, modified to fit local conditions. For instance, the shelter marked 1 would have been in a small street and less accessible than it is at point 1A, at the crossing of several roads. Shelter 2 was in the centre of a block near a park and as the distance from the park was very small, position 2A, free from falling debris, is much more suitable.

Shelter 3 came in the neighbourhood of a large thoroughfare, and as the number



2

the ground falls away from one side of the shelter, this will take care of the water from the roof. If not, a shallow trench taken well away will probably do. (6) You should use ordinary deal and give it two coats of creosote.

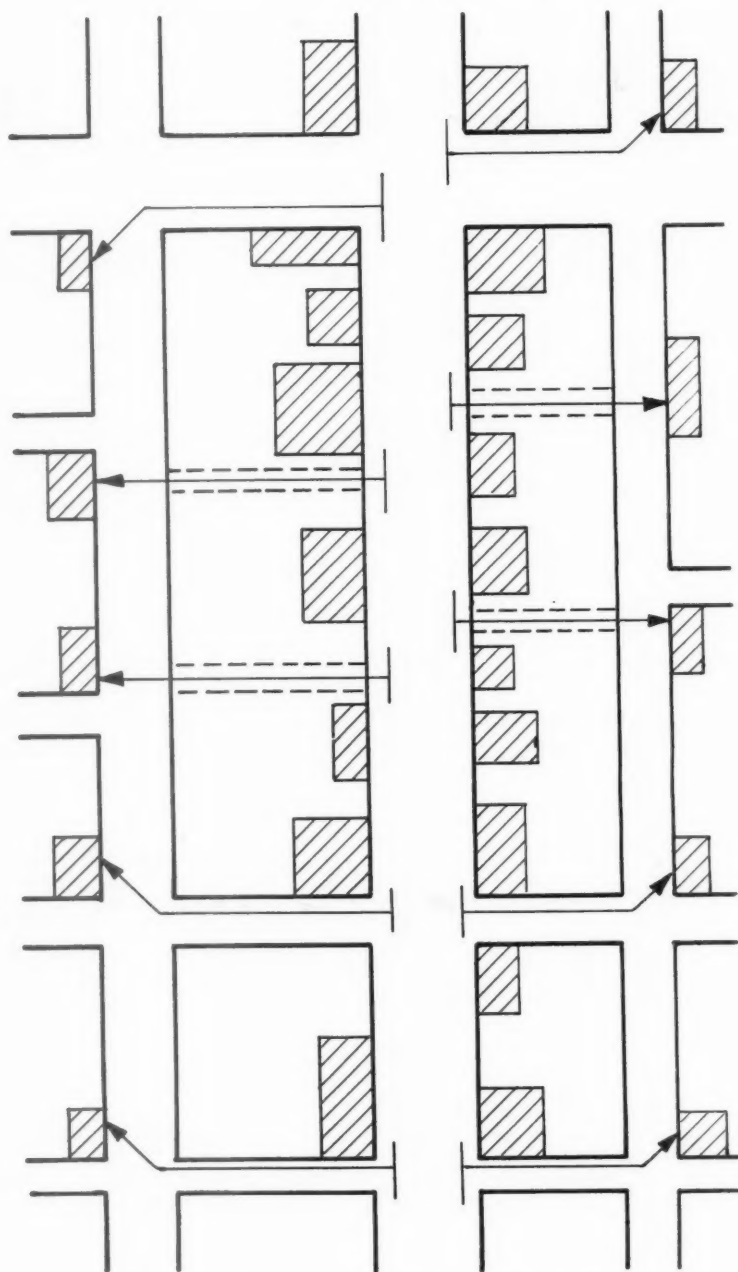


28 Typical arrangement of public shelter for one square mile of built-up area.

of people using this shelter would be largely made up of people using this thoroughfare, it has been found more suitable to move the shelter to position 3A, adjoining the road.

Shelter 4 was in a reasonable position, namely, adjoining an important street, but as this road widens into a square a little further on, position 4A is more suitable from a structural point of view.

By moving the shelter over to one side the distance from the next shelter has been increased and a second shelter, 4B, has been introduced at an important corner. Shelter 5 would have been at the



29 Shelters in streets parallel to main thoroughfare.

back of an important shopping centre and has been moved forward and split up into five parts, A, B, C, D, E.

(1) because the number of people at that particular point would be considerable;

(2) because local conditions, for instance the existence of convenient basements in some of the larger shops, make the splitting up necessary.

Shelter 6 was in the middle of a railway siding, and has been split into two parts, 6A and 6B, on either side of the railway, conveniently reached from the surrounding streets.

Shelter 7 has been moved into the immediate vicinity of a cinema. The

most suitable arrangement would be to have it underneath the cinema, with entrances from the cinema and from the street.

After deciding on the position of any shelter (a much more complicated process than can be shown by this example) the number of people to be sheltered in each must be calculated. This can only be done by taking an exact survey of the number of people to be expected in the streets. As a rough guide only, the following figures might serve to indicate the extreme possibilities.

The number of people is by no means proportional to the number of residents in any area. For instance, in any quarter

which serves purely residential purposes the percentage of people who may be in the streets and not within reach of their houses will be fairly small. Actually it will be smaller the greater the density, and while in a district of more than 100 people per acre scarcely more than 5 per cent. of the inhabitants will be in the streets, in a more rural district of about 20 people per acre there may be as many as 10 per cent. at times. Where shops are to be found, concentration of people must be expected. Even a small street with three or four shops may at times be visited by 25 people at once.

According to the general scheme outlined before, with shelters every 440 yds., each shelter would serve an area of 40 acres, and in wealthier residential districts of, say, 15 people per acre, of which 10 per cent. might be in the street, cater for about 60 people. If such a shelter were to provide for a group of shops, however, the number of people would be increased to 85. Where more shops are grouped together, the number of customers is correspondingly increased, and even more so as such shopping centres have a defined "rush" hour. In some such shopping centres as many as six people per yard of pavement can be expected on certain days, and even this figure is exceeded in market places, etc.

Twelve hundred has been often assumed as maximum capacity for public shelters. Thus shelters in busy shopping streets should not be more than 300 ft. apart. In fact, where existing accommodation is used, they may have to be even closer together, as the shelters will seldom hold more than 200 people.

Main thoroughfares present a special problem, as, during an alarm, buses and trams, together with private motorists and cyclists, are supposed to stop and everybody seek shelter. Unfortunately, main thoroughfares frequently coincide with the shopping centres, thus further increasing the density. Taking into account the total number of people requiring shelter, it will often happen that all suitable space is, theoretically, required for shelters. Such increase in the density of shelters can be avoided in many cases by providing passage underground, or through the ground floor of building to neighbouring streets (see Fig. 29), and by providing additional shelters in such parallel streets.

The erection of bomb-resisting shelters where a heavy concentration of people can be expected would not be contrary to the Government policy, although it would not be in line with the present policy of the Government to concentrate people in order to make bomb-resisting shelters an economical proposition.

(2) SHELTERS FOR EMPLOYEES

The provision of this type of shelter has progressed more than

any other owing to the grant available to any person who erected a shelter for employees before September 30 this year. This time limit was extended until November 15, 1939, and it is possible that it may be further extended. By no means all the shelters required by the Act have been carried out. Apart from a large number of owners of commercial buildings and occupiers of factories who took the point of view that the best policy would be to "wait and see," even if their expenses were heavier in the end, buildings have been left without shelter wherever the provision of the required accommodation presented difficulties. It can be guessed, therefore, that the shelters which have still to be carried out will present more intricate problems than those erected during the last months.

Shelters for employees may be of the same three types as public shelters. These are:—

- (1) Trench shelters.
- (2) Shelters in lowest floors of buildings.
- (3) Surface shelters.

Where the site permits, trench shelters are the simplest type to provide. Careful construction is necessary for them, but they do not give rise to intricate problems. The real trouble starts when, in a built-up area, space does not permit of outside shelter accommodation, so that parts of the building itself must be used.

The problems with which the designer is confronted in such a case are manifold, and are usually not structural. For example:—

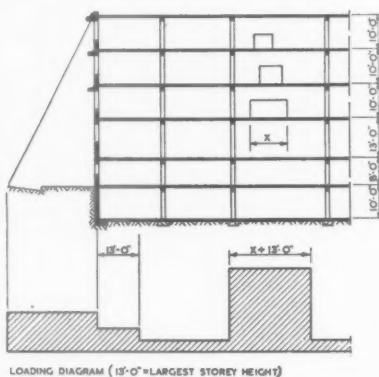
- (1) How to make arrangements so that the use of the building is not all impaired, or is impaired as little as possible, and
- (2) How to deal with services, i.e. water, gas, soil, waste pipes, etc. Such pipes will be found almost everywhere, particularly if the lowest storey referred to is a basement.
- (3) How to arrange proper emergency exits.

These problems are more acute in shelters for employees than in public shelters, for with regard to public shelters there is generally a choice of sites, which allows the use of the one with the least obstacles. For employees, however, the shelter is in or adjoining the building in which they work. In a few cases owners of buildings may collaborate and erect a common shelter in the most suitable of their several buildings, but so far practice has shown that the possibility for bringing owners together, in order to collaborate, is very limited.

Where serious obstacles exist, the choice of position for the shelter will not usually depend on what is structurally the simplest. Apart from purely local considerations, the following should be borne in mind from the beginning:—

Shelters should not be erected in positions endangered in any way, and to underestimate this point might easily

increase the danger of an air raid instead of reducing it, e.g. the loads stipulated for falling debris refer to average buildings where the movable live load is not very high. Where extraordinarily heavy



LOADING DIAGRAM (10'-0" = LARGEST STOREY HEIGHT)

30 Loading diagram.

debris loads might be expected, due to special features, e.g. cornices, etc., special provisions should be made, and the author suggests that 50 per cent. additional load be allowed on the inside of a house where such special features exist, and 100 per cent. additional load on the outside. (Figure 30.) There are also certain loads, printing and other machines, heavy stored goods, etc., which, in falling, might crush constructions which are much heavier than those which are provided in accordance with the Code, and thus constitute a serious danger which cannot be evaded without very great expense. To concentrate people under such a load would be a crime.

If there is no available room in a building where suitable protection can be provided, Section 10 of the Civil Defence Act permits the local authorities to be approached and agreement to be reached for public air raid shelters to be erected in the immediate neighbourhood of the building, and reasonable arrangements made with regard to the expenses. The owner of a commercial building for instance, who makes such an arrangement with a local authority, is entitled to the same grant with regard to his share of the expense as he would receive if the shelter were in his own building.

This solution is far preferable to concentrating people in dangerous positions.

(To be continued)

Correspondence

SIR,—With reference to the R.I.B.A. notice in your JOURNAL for November 9, showing its interest in filling vacancies for architectural draughtsmen in the Royal Engineers, I trust that, this time,

these volunteers will not find themselves at a disadvantage on return to civil life, as was my case after volunteering and taking part in the front line throughout the last war, with the Royal Engineers as an architectural draughtsman.

I had completed my articles and spent one year as an assistant when the war broke out in 1914. After the war I was offered 30s. a week by an architect of good standing who said he could get first-class men for that. I turned down this offer and re-enlisted in the R.E. as a draughtsman, and was discharged in 1938 with the rank of warrant officer, having been a trade instructor for most of my service. On discharge I obtained employment as an architectural assistant.

Nevertheless, the Admission Committee of the Registration Council considers that I have not the seven years' experience qualifying me for admission to the Register.

I hope the present-day volunteers will not suffer "loss of caste."

Yorkshire.

HUGH DAVIES

Architectural Front

R.I.B.A.

Next informal meeting will be held at the R.I.B.A. on Tuesday, December 12, 1939, at 3.30 p.m. Time has been fixed for 3.30 p.m. at the special request of country members.

ARCHITECTURAL ASSOCIATION

An ordinary general meeting of the Association will be held at 36 Bedford Square, W.C.1, on Thursday, November 30, 1939, at 2 p.m. Business: Nomination and election of members and presentation of accounts for session 1938-39.

School of Architecture is being conducted at the Mount House, Hadley Common, near Barnet, Hertfordshire. Every effort will be made to continue the programmes of study, examinations, etc., as stated in prospectus, and proximity to London will facilitate this. Modifications will only be made as proved necessary by experience at Mount House.

Entry to the School.—Entry to the school will be possible at the commencement of any term in the year, and below is given a list of the dates of terms for the present and next session, together with dates of the Admission Board meetings and entrance examinations.

Session 1939-40.—Spring Term: January 9 to March 21, 1940 (11 weeks). (Admission Board, December 19, 1939. Entrance examination, December 18 and 19, 1939.) Summer Term: April 30 to July 19, 1940 (12 weeks). (Admission Board, April 2, 1940. Entrance examination, April 1 and 2, 1940.)

Session 1940-41.—Winter Term: October 1 to December 13, 1940 (11 weeks). (Admission Board, July 23, 1940. Entrance examination, July 22 and 23, 1940.) Spring Term: January 7 to March 21, 1941 (11 weeks). (Admission Board, December 17, 1940. Entrance examination, December 16 and 17, 1940.) Summer Term: April 29 to July 18, 1941 (12 weeks).

(Admission Board, March 25, 1941. Entrance examination, March 24 and 25, 1941.)

Travel Services to the School.—The school is easily accessible from London. Approximate half-hourly train service from King's Cross to Hadley Wood Station, Mount House being 10 minutes' walk from this station. Also 'bus service—Route 134 from Victoria Station.

A.A.S.T.A.

Resolution passed at the November meeting of the Association: "The Council of the Association of Architects, Surveyors and Technical Assistants views with deep concern the Government's policy of suspending the building work of Local Authorities and the restriction of civil building operations. Not only are vital public needs being neglected thereby, but many architects and allied workers are unemployed at a time when they could be of great assistance in connection with the provision of adequate measures of air raid protection and buildings for health, education and recreation in connection with evacuation schemes."

Change of Address*

ARCHITECTS AND SURVEYORS

NEIL AND HURD
12 Randolph Place, Edinburgh 3. (Edinburgh 23347).
PRAXIS ARCHITECTS
Long Hoyle, Heyshott, Midhurst, Sussex.

Building Front

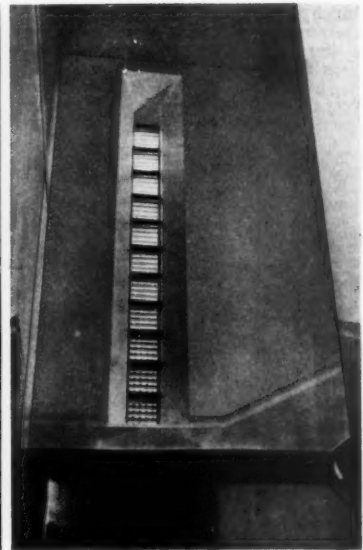
CEMENT MARKETING CO.—Prices of Lightning brand High Alumina cement for delivery in London area increased by 7s. 6d. per ton. Owing to increase in cost of pigments, and also in cost of making cement, it has become necessary to increase prices of all coloured cements by 6s. per ton (with exception of Colorcrete, which was increased by £1 per ton on November 1). New prices came into force on November 9. Cullamix prices also to be increased.

FRIGIDAIRE.—Even with drastic curtailment of imports, supplies of Freon refrigerant are adequate for long period ahead. Firm state:

Following the outbreak of hostilities and more particularly since the recent Government Orders concerning the limitation of imports, many rumours have been prevalent concerning the availability of Freon refrigerant. This refrigerant has been used by us for a number of years, to the exclusion of any other type of refrigerant, for both our household and commercial refrigerating equipment. Steps have been taken by us to safeguard supplies of Freon refrigerant so that we can in turn protect existing and prospective users of Frigidaire equipment.

PILKINGTON BROS.—To prove resistance of Armourlight roof and pavement lenses to severe thermal shock, this firm staged at their St. Helens works a series of tests by igniting incendiary and thermite bombs on a number of their Armourlight lenses fixed in concrete. A film of the tests was shown at their London showrooms last Friday.

* A full list of changes of address was published in THE ARCHITECTS' JOURNAL for October 19, 1939.



A method of protecting windows without excluding daylight at St. Stephen's (L.C.C.) Hospital, Fulham. The windows are partially bricked up, leaving a narrow vertical slit which is glazed with glass bricks. Right, an interior of a window on landing, using glass bricks.

Types of Armourlight lenses tested:—
Type T. 401 4½ in. by 4½ in. by 2 in. deep.
Type T. 601 6 in. by 6 in. by 2½ in. deep.
Type T. 702 7 in. dia. by 2½ in. deep.

The bombs used for the first four tests were kilo electron bombs burning at a temperature of 1,300/1,500 deg. Centigrade. Those for tests 5, 6 and 7 were thermite bombs, burning at a temperature of about 3,000 degrees Centigrade.

In all these tests the bombs were allowed to burn out.

Summary of the tests shown on the film:

Kilo Electron Bomb Tests

Test 1. Lens type T.601. Sixteen lenses fixed in a 4-in. thick concrete slab. Some of the lenses cracked on cooling, but held firmly to the concrete.

Test 2. 4-in. concrete slab containing 16 lenses, Type T.702. In this test the residue of the kilo electron bomb covered one lens completely. Even in spite of this concentrated heat the lens which cracked during cooling remained in place and prevented the passage of any incendiary material.

As a further means of protection, and to withstand impact of a falling bomb and possible shattering of a lens, double glazed panels were constructed by casting the toughened lenses facing each other in slabs of concrete 5 in. thick.

For purpose of tests on these panels it was assumed that in one case a falling incendiary bomb had broken top lens, and in another case that bomb had broken the top lens and cracked underneath lens and these lenses were broken in and cracked respectively before the commencement of the test.

Test 3. 5-in. concrete slab, double glazed with type T.702, the top lens previously broken and the bomb placed in the cavity.

Test 4. 5-in. concrete slab double glazed with Type 401 Toughened Lenses. Top lens was previously broken through and bottom lens previously cracked, bomb being placed inside the cavity.

In both these tests bottom lens remained firmly in position, preventing passage of any incendiary material.

Thermite Bomb Tests

Test 5. 4-in. concrete slab containing 5 single Toughened Lenses, Type T. 601.

Test 6. 5-in. concrete slabs double glazed with Lenses Type T.702, the top lens previously broken and the thermite bomb placed in the cavity.

Test 7. 5-in. concrete slabs double glazed with Toughened Lenses Type T.401. Top lens was previously broken and the bottom lens previously cracked. The thermite bomb was placed in the cavity.

In the above tests, in spite of the intense heat, no incendiary material was allowed to pass through, all the bottom lenses remaining firmly embedded in concrete.

R.I.W. PROTECTIVE PRODUCTS CO.—Company's range of precautionary services is in great demand for waterproofing and damp-proofing of concrete, brick, etc., shelters below and

above ground; for decontamination chambers and protection of steel and metal, cement work, brick, stone, wood, etc., against effects of gas. Preservative and Insecticide for the protection and preservation of sandbag fabric also in great demand.

Change of Address

MANUFACTURERS AND AGENTS

BUILDING INDUSTRIES SERVICES, LTD.
returned to their permanent address at 90 Ebury Street, S.W.1, on November 9.
CLAY PRODUCTS TECHNICAL BUREAU OF GREAT BRITAIN, LTD.
Bureau returned to its permanent address, 90 Ebury Street, S.W.1, on November 10.
TECHNICAL INFORMATION BUREAU OF LEAD INDUSTRIES DEVELOPMENT COUNCIL
Now operating from their usual address—90 Ebury Street, S.W.1—and not from the emergency address previously notified.

PHILIP SCHOLBERG

on

Equipment

Black Out Reflectors

For the last six months or more various firms have been producing designs for BLACK OUT REFLECTORS, mostly well designed and made, and selling at a quite considerable price. Now that the war is actually upon us, and people are being forced to take this black out business seriously, it has rather naturally been found that many prices were far too high, and most makers have had to think again. As far as I know, Messrs. Ediswan made no high priced efforts before the war, but they have now produced a range which vary in price from 1s. 6d. to 6s., which is much nearer the sort of price the average householder is prepared to pay. The cheapest is the opened bottom cone type for use with lamps from 15 to 25 watts, this being spray painted matt black inside and out. At the other end of the scale there are the D and E types, made in accordance with

British Standard Specification ARP/16/20. Their main purpose is to provide very low levels of illumination over wide areas such as goods yards and docks. In special circumstances it may be possible, with the type D fitting which gives only an illumination of '002 foot candles,



to leave the lighting on during an air raid. Mounting heights vary from 10 to 20 feet, and the spacing should be not less than four times the mounting height; the mounting height is always stamped on the shade. Type D fitting is 4s., and is for use with 15-watt lamps, while type E is 6s., and gives an illumination of '02 foot candles with a 100 watt lamp. Lamps other than those made to B.S.S. No. 161 must not be used, for the angle between the rigid baffle and the bottom of the reflector is extremely critical, and the wrong lamps may emit more light than they should. The same firm also makes lampholder adaptors for altering existing fittings from either of the Edison screw sizes to the ordinary bayonetcap.—(The Edison Swan Electric Co., Ltd., 155 Charing Cross Road, London, W.C.2.)

THE LATE MAURICE WEBB

Last week we published a memorial notice, by Mr. F. R. Yerbury, of Mr. Maurice E. Webb. Below we print an appreciation by Mr. Harold Falkner.

A BARE obituary notice with only a passing allusion to his military service seems a not altogether adequate record of a rather considerable effort.

M.W. was in 1914 President of the A.A., and, as such, a force in the ranks of the architectural profession. In August he decided, with others, to enlist in the ranks—an example which turned many wavering minds (including my own) in the right direction.

Things were not then as now, when the stroke of a pen can produce a quarter of a million men. Kitchener had asked for 100,000, and wasn't getting them too rapidly.

The professions thought they ought to have commissions, as those in "The Artists," "London Scottish" and other O.T.C.'s. K. didn't, and

the inclination was to "wait and see." We enlisted as one body, to be made (or promised to be made) one company of the R.E.'s. Somehow I got to Chatham first, and met Webb on the third or fourth day on the parade ground "between the Arches" and from then on for the next four months we were very much "thrown together."

It was a strange position; men who had twenty-year-old practices, their assistants, and other youths, in the ranks; N.C.O.'s who had been pensioned after the Boer War; officers from dug-outs and the ends of the earth, and others just out of Sandhurst. However, we all shook down in the end, and became the 10th Div. Sig. Co., R.E.'s, with Webb a second-lieutenant in the company in which he had been first sapper, then sergeant.

Webb went right through the war, Gallipoli, Salonica, Palestine. 1914-1919, sapper to Major (or was it Lt.-Col.?), M.C., D.S.O., a feat of continued endurances which only a strong man with very great enthusiasm could have performed.

Maurice inherited a great practice from Sir Aston, a handicap he in no way required, and I sometimes thought endured, for he was one of those men who could have built himself a practice, or anything else he wanted, without paternal help.

But it was in carrying on the parental tradition at the R.I.B.A. and the A.A. that M.W. found his life's work. Time after time when either of those institutions looked like taking the road to danger, if not destruction, it was his diplomacy which brought them back.

He was at his best as a chairman of committee (and would have been better still as chairman of a more businesslike concern), but beneath that diplomatic manner, that almost harsh exterior, lived a heart of gold.

LETTERS

Suggestions

SIR,—I would like to make the following suggestions through the medium of the JOURNAL, if possible, to your readers and the authorities concerned, to keep the profession in these days of idleness usefully occupied.

(a) To start or resume planning parts of our towns that needed and will need rebuilding after the war. Any raids on these districts will have their use. This will (1) obviate hurried schemes after the

As a result of the necessity of economising paper in war-time, newsagents will shortly be unable to keep a stock of journals and periodicals for casual sale. If you wish to make sure of receiving your copy of this JOURNAL in future, you should either place a definite order with your newsagent or subscribe direct to

THE PUBLISHER, 45 THE AVENUE, CHEAM.

Annual subscription rates £1 3s. 10d. inland; £1 8s. abroad.

duration, and (2) encourage architecture and town planning as a planned art in the future.

(b) Now that most firms and authorities have provided their shelters according to the Code, which was only a case of emergency, I do think that we can and ought to be now occupied to design proper shelters to replace the temporary ones. These shelters can be designed with peace-time uses on a nation-wide scale, and carried out, war or no war, for future security.

The best way, to my mind, to organize and co-ordinate the industry to deal with both (a) and (b) is to form groups composed of members of the arts and sciences concerned, for each district, to give the best possible result, and their efforts cannot be wasted.

1942

Camps

SIR,—I have read with interest the recent articles in the A.J. on the subject of camps, and I would stress the vital importance to the country as a whole of the immediate adoption by the Government of a carefully-planned camp programme to cater for the needs of evacuated school children, instead of the present unsatisfactory billeting system.

In pointing out the many advantages of camp buildings in peace-time, I think it has not been realized as much as it ought how vitally necessary these buildings would be to the permanent rural community. The camp should be sited wherever possible in woodland or near woodland country, easily accessible from a small town or village. If the assembly hall and dining hall of the camp were planned as one large building (with kitchens capable of serving both), this building could be used, when the camp was not being occupied by children, as a village hall, gymnasium, dance hall, church hall, venue for all kinds of meetings, lecture hall, village college, or community centre, etc.

The whole complex idea of the community centre as a vital and necessary part of rural life has not yet been accepted nationally, but surely this is a wonderful opportunity, which must not be missed, of putting the idea into practice.

W. NOEL MOFFETT

Ribbon Development

SIR,—Under the Restriction of Ribbon Development Act, compensation is subject to the development of land being immediately practicable and there being a demand for such development.

I have cases where negotiations have been carrying on for twelve months, and now the Authority concerned is proposing to withhold compensation on the above grounds owing to the War conditions.

As the delay has been caused through the Act only, it appears to be somewhat arbitrary.

Are other architects experiencing this?

F.R.I.B.A.

HOLIDAY HOME, CERVIA, ITALY

D E S I G N E D B Y E . G . F A L U D I

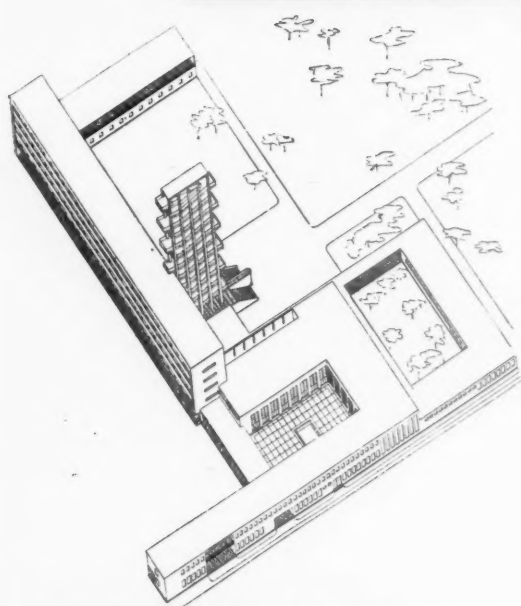


THE TOWER, SEEN FROM THE MAIN ENTRANCE

GENERAL—The general purpose of this scheme is described on page 616.

SITE—The site chosen is near the little town of Cervia, between the beach and the main road to Ravenna, in the middle of a pine wood. The Holiday Home is built on dry ground some

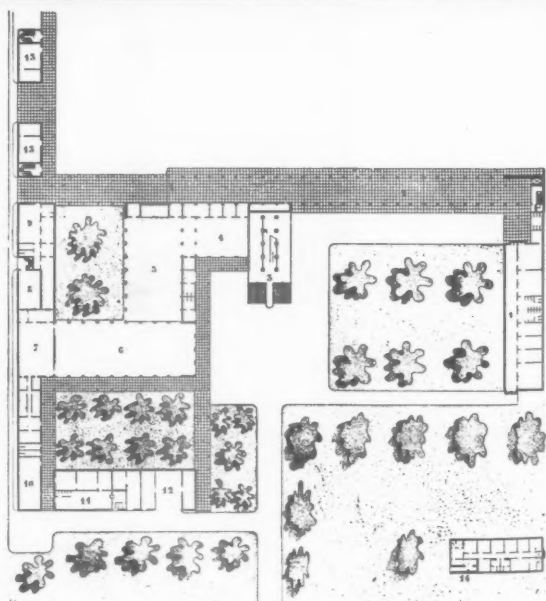
2,000 ft. back from the beach, thus eliminating the danger of flooding at any time. From this position the building has access to the electricity supply. The Home, which can accommodate 500 children and 200 adult staff both summer and winter, occupies 16 acres.



AXONOMETRIC

KEY

1. Reception and medical consulting rooms.
2. Dormitory block and porticos.
3. Main entrance and tower.
4. Manager's and administration rooms.
5. Auditorium and chapel.
6. Dining room.
7. Kitchen.
8. Staff dining room and staff dormitory.
9. Instructor's and guests' dining room and drawing room.
10. General and food storerooms.
11. Laundry and water, electrical, etc., workshops.
12. Garage.
13. School room and museum.
14. Isolation building.

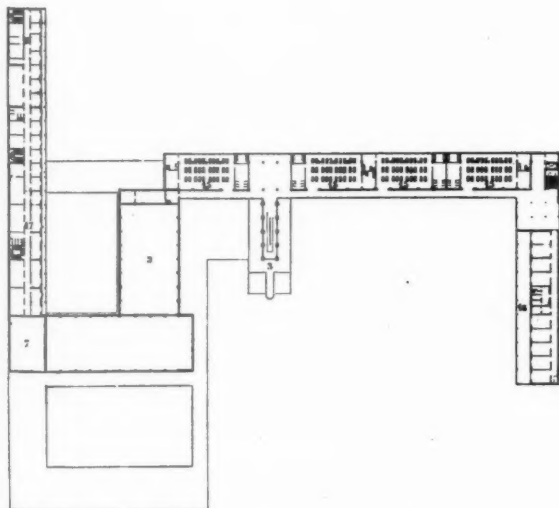


GROUND FLOOR PLAN

HOLIDAY HOME, CERVIA, ITALY



ABOVE AND FACING PAGE:
VIEW FROM THE SEA SIDE OF
THE DORMITORY AND DINING
ROOM BUILDINGS. RIGHT:
DORMITORY BUILDING.



FIRST FLOOR PLAN



CONSTRUCTION AND FINISHES—The buildings have a reinforced concrete frame filled in with hollow brickwork and lined with insulation board covering. Outside walls are faced with a material which is resistant against the sea air and then tiled, in white. Portico colours are stone finished in black. Windows are made of wood and are protected by sun blinds.

• D E S I G N E D B Y E . G . F A L U D I



ABOVE: CHILDREN'S DINING ROOM; BELOW: YARD BETWEEN THE DINING ROOM AND AUDITORIUM AND HOSTEL BUILDINGS.



DETAILS OF PLANNING—

ENTRANCE: This is divided into two parts—one comprising the enquiry offices which have complete control over the main entrance, and waiting rooms for parents, visitors, etc. The other division comprises the warden's private quarters, consisting of two rooms, kitchen and bathroom.

RECEPTION BUILDING: Two-storeyed pavilion. The upper part of this building forms the sanatorium, and upon arrival at these rooms the children begin their new life at the home. The reception rooms comprise a cloakroom, wardrobe, medical examination room, bath and shower rooms and hairdressers. The sanatorium occupies the top floor of the building, and here the children are treated for minor ailments and accidents. This floor has six wards.

DORMITORY
Each floor
in charge
connected
the central
space is

DINING
together
along the
convey

KITCHEN
tea, etc.
preparation

LAUNDRY
(1) Laundry
accommodates
steam heating

TOWER
purpose
children

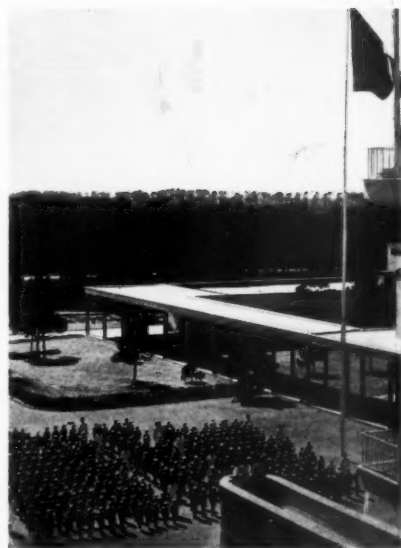
DORMITORIES: *The dormitory buildings comprise four floors—two for boys and two for girls. Each floor has four bedrooms holding 32 children in each, with a separate room for the persons in charge attached to every bedroom. Lavatories, w.c.s and shower-rooms, with 10 units each, are connected with the dormitories. Staircases and lifts at each end of this building, with a ramp in the centre, give easy access to the different floors. The main entrance and executive offices are in the centre of this building, on the ground floor. The remainder of this ground floor forms a covered space where the children can play in hot or bad weather.*

DINING ROOM: *A communal dining-room for all the children is connected with the dormitories, together with the kitchen and scullery. "U"-shaped tables, each seating 60 children, are provided along each side of the room, the children sitting along the outer sides of these tables: trolleys convey their food down the centre of the dining room and along the inside of each table.*

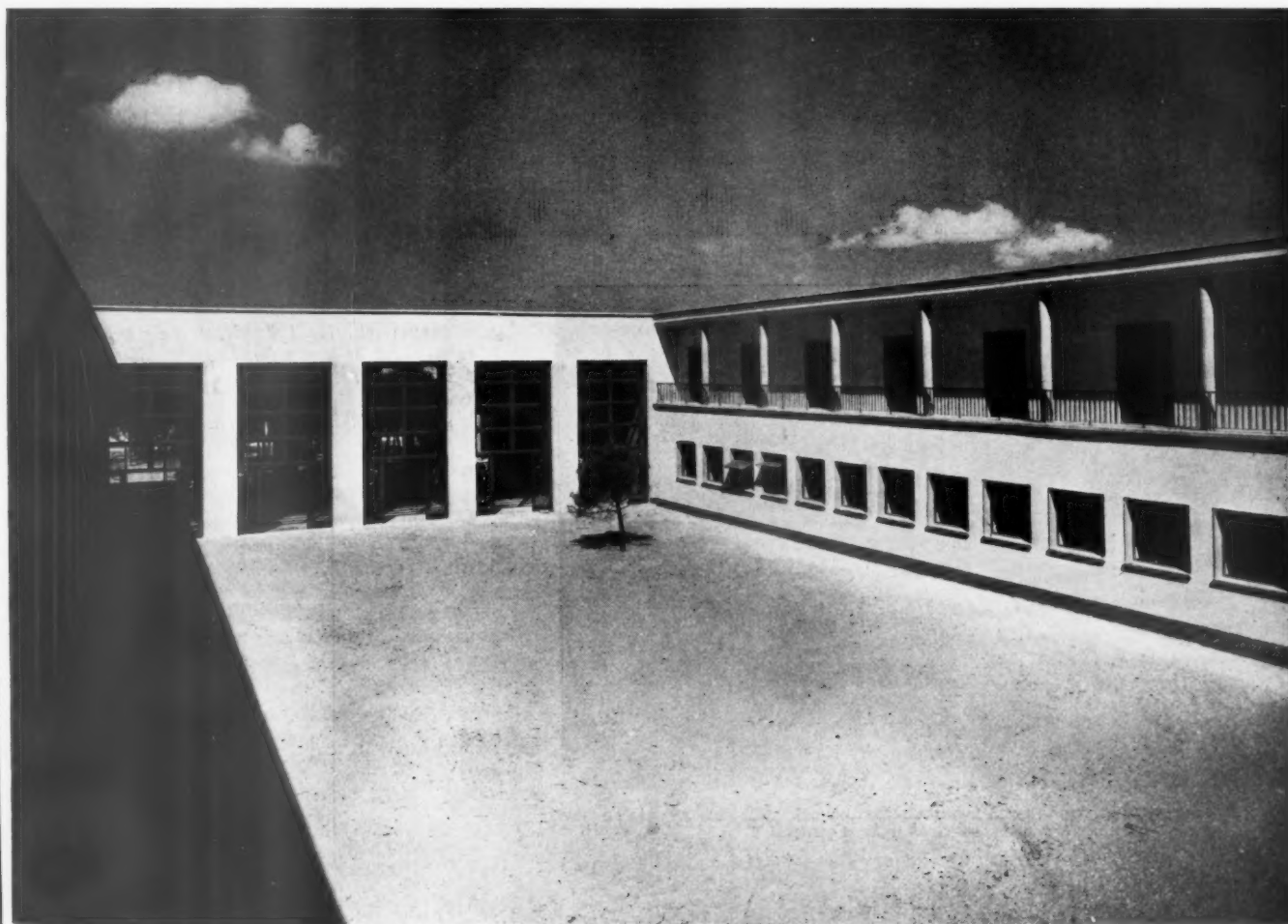
KITCHEN: *The kitchen is divided into three sections: (1) Breakfast preparation room—milk, tea, etc.; (2) lunch and dinner preparation room—soups, meat, etc.; (3) vegetable and sweet preparation room. All cooking is done by electricity.*

LAUNDRY AND GARAGE: *Near the kitchen is the service block, which comprises the following: (1) Laundry; (2) coal store; (3) workshops (joinery, plumbing, etc.); (4) garage with accommodation for 10 cars; (5) stores; (6) heating, lighting and electrical plant with centralized steam plant for the whole home.*

TOWER: *The tower, which is 180 ft. high, is connected with the main building and has two useful purposes, i.e. (a) as a water tower, and (b) to provide a "look-out" for those in charge of the children—who may be in various parts of the grounds.*



ABOVE: ASSEMBLY GROUNDS AND PORTICOS BETWEEN THE SERVICE AND DINING ROOM BUILDINGS; BELOW: RECEPTION BUILDING



DESIGNED BY E. G. FALUDI



TOP: CLOSE-UP VIEW OF TOWER RAMP AND THE DORMITORY BUILDINGS; BELOW: DORMITORY AND HOSTEL—VIEW FROM SEA SHORE.

AUDITORIUM: On the left of the main entrance office is found an auditorium accommodating 800 persons. This hall has a chapel attached which can be opened out into the auditorium by means of a movable timber wall. Dimension 120 ft. by 53 ft.

STAFF BUILDING: This is formed by a two-storied building attached to the kitchen. The second floor forms the staff's sleeping quarters, with bathrooms and lavatories.

HOSTEL: A two-storied building on the north-east side by the sea forms a hostel for the female staff of the factories. On the ground floor are the dining room, living and reading rooms. The first floor provides sleeping accommodation with lavatory and workrooms.

CLASSROOMS: Four classrooms, museums and workshops for the children are provided on the north side of the main building in a single-floor building.



APPROACH-ROADS AND PLAYGROUNDS: *The drive into the Home grounds leads into parking spaces for cars and assembling grounds for the children.*

In front of the main building is a wood, cut into two by the main entrance road, which runs through the centre, and the ground around the Home buildings has been cultivated into gardens. By the sea at the back of the Home, tennis courts, football grounds, swimming pool and porticos for rest have been laid out.

PORTICOS: *The strong Italian sun makes it absolutely essential that the buildings are provided with porticos under which the children can rest during the hottest hours of the day, and in wet weather these porticos also act as shelters and provide covered playgrounds. The floors of these porticos are finished with marble mosaic which resists the summer heat.*

ISOLATION BLOCK: *Single-floor building. This building is situated 200-300 ft. away from the other Home buildings and contains: (1) Six bedrooms each holding two persons; (2) medical examination rooms; (3) nurses' rooms; (4) kitchen and storerooms; (5) dining room.*



TOP: MEDICAL EXAMINATION ROOM; BELOW: TOILET ACCESSORIES.

CONTROL OF WOOD

Below we print an article by a special correspondent dealing with various aspects of timber control.

THE control of wood is based, on the one hand, upon centralized buying invested in the Timber Control and, on the other hand, upon a licence system in regard to the distribution of supplies. The advantages of centralized buying may be stated as follows:—

(1) The elimination of competition in those restricted markets which remain open as sources of supply.

(2) Ability to neglect any source of supply where timber operators show signs of exploiting the present emergency.

(3) The concentration upon imports of a type which are essential as opposed to those which are not essential.

(4) Regulated expenditure of foreign exchange balances in accord with expediency.

The distribution of timber to consumers by means of a licence fulfils the following needs:—

(1) The general safeguarding of supplies at a time when vast quantities of timber are required for vital war purposes.

(2) Better control of consumption, inasmuch as any applicant for a licence to use wood urgently needed in the war economy of the nation may be instructed to use a substitute which is less urgently needed.

(3) The assurance of a usage of various species of timber which complement a predetermined policy of overseas buying.

The outbreak of the present emergency found supplies of timber in this country at an abnormally low level. Furthermore, our great imports of softwoods from Northern and Central Europe were immediately curtailed, so that replacements were precarious. Until the exact position of available stocks could be precisely ascertained it was obviously in the national interest to prevent all sales except for purposes of vital importance.

This sudden cessation of the flow of material into many firms in the building trade and the cabinet-making industry caused dislocation, and quite naturally a considerable outcry. It was argued that this sort of thing did not occur in the last war, that control was merely another unnecessary aspect of bureaucracy, and so on. One point, however, which cannot be too strongly stressed is that in this war vast quantities of wood had to be used to protect the civil population, and to meet the hundred and one emergencies likely to arise in the event of hostile air activity. Few people have any conception of the drain on existing timber supplies, which is covered by the all-embracing term "Civil Defence."

Had the Timber Control failed to safeguard stock from the very outset of war, and during a period when replacement of dwindling supplies was difficult, it would have been guilty of negligence. The requirements of the Service Departments and other Government bodies make it essential that softwood timbers must still be very rigidly conserved, but the position in regard to certain types of hardwoods, plywood, and decorative veneer is more satisfactory, and within narrow and reasonable limits should become available to builders, cabinet-makers, and other consumers.

The machinery of the licensing system, now realized by most consumers, is operated through Area Officers covering Great Britain and Northern Ireland (see A. J. Oct. 12). A builder, cabinet-maker or other consumer requiring material applies to the Area Officer for his district for Form TC 3/8/1, "Consumers' Application to acquire supplies." This form, when complete, is returned to the Area Officer, who will satisfy himself by a proper investigation:—

(a) That the application comes within the

several categories enumerated below under which timber may be released for work of national importance.

(b) That the quantity required is no more than is sufficient to carry out the work on hand, with a minimum of waste.

Normally within 48 hours the licence will have been approved, suitably amended, or rejected. It should be noted that Area Officers of the Timber Control will only grant licences for timber which is for immediate use and for a very limited time ahead.

Work for which wood goods can be immediately released:—

(a) Supplies for contractors and sub-contractors to meet the requirements of Government contracts for which they can show the requisite authority.

(b) Supplies for local authorities or others charged with duties under the Civil Defence Act.

(c) Supplies to railway companies and to public utility undertakings for essential repairs, maintenance work and extensions.

(d) For collieries for essential repairs and maintenance work above ground other than pit timber, for which licence will be dealt with by the district pitwood officers.

(e) Supplies for hospitals for urgent repair or maintenance work, or in approved cases for extensions.

(f) Requirements for timber concerned with the manufacture of export products and packing, but not for the export of wood and wood products, for which a special licence must be obtained.

(g) Maintenance and repair of public buildings, schools, etc. In this connection certificates should be obtained from the local Councils or other authority.

(h) Supplies for the Ministry of Agriculture and farmers and/or persons employed in the production of necessary foodstuffs.

(i) Supplies for the purpose of putting partially built houses into weather-proof condition.

(j) Factory repairs and maintenance where such can be shown to be related to the war effort of the country.

In regard to applications from contractors engaged in the completion of housing schemes distinct from builders erecting one or more houses sold or for sale, the sanction of the Ministry of Health must be obtained by the local authority.

Certain discretion is exercised by Area Officers, and architects carrying out work under such public bodies as the Ministry of Health, Ministry of Agriculture, the Home Office, etc., should obtain an appropriate certificate for attachment to the application for a licence to consume wood.

Every consideration is given to the claims of those who manufacture agricultural equipment, including requisites for the bee-keeper or the chicken farmer. Licences to acquire timber are not necessary for purchases valued at under £20 in any one calendar month.

There are many manufacturing firms throughout the country who, at the outbreak of war, held stocks of timber and who continue to hold stocks. Any manufacturer having in his possession more than 50 standards of softwood, 5,000 cu. ft. of hardwood, 2,000 cu. ft. of plywood, is bound, under paragraph 5, Order No. 1, Ministry of Supply, Timber Control Order, to declare such stock to the Timber Controller.

It is hoped, as soon as the stock position is improved, that moderate supplies of timber may be released to manufacturers and other consumers of wood engaged in the maintenance of normal industry. Preference in regard to release will be given to some of the more unusual softwoods such as Canadian Western white pine, hemlock and parana pine and, in hardwoods, to woods associated with decoration rather than utility.

It should be added that within the Timber Control a department has been set up to promote timber economy. The function of this department is to take steps which may seem appropriate to ensure the best and most economical utilization of timber for Government and civil purposes—to recommend substitutes whenever it is desirable from the point of view of the availability of stock, and to prevent wastage.

TRADE NOTES

[By PHILIP SCHOLBERG]

How to Carve

IN the midst of change of address notices and various ideas for making the black-out blacker, it is something of a relief to be sent a booklet on carving. It is published by Radiation, Ltd., and has been written by Mr. Iwan Kriens, the late head of the L.C.C.'s training school for chefs, waiters and hotel servants. Starting with some brief notes on knives and forks, the booklet passes to beef, and so via hares and herrings, pheasant and pigeon to venison and woodcock. Prawns caught my eye in the index, and I had visions of some Brobdingnagian type suitable for carving, but the advice given is merely to hold the prawn in the left hand and remove the shell from the back first and then from underneath. More alarming is the advice given about the spring guard to be found on most forks. Mr. Kriens disapproves of this. "In my opinion it should not be used, as the knife rarely slips, but when this does

happen the keen edge is spoiled when knocked against the fork guard." While this may be all very well for professional carvers at a place like Simpson's, it seems a little tough on the poor amateur. Proper duelling scars may perhaps add to one's personal magnetism, but notched knuckles merely advertise incompetent carvers, and most of us will be cowards and prefer safety to the possible spoiling of a blade. It is said that no countryman can rub up a scythe properly until he has cut his forefinger to the bone at least once, and on these grounds it is possible that we should all be prepared for a few chips lost in the interests of our ultimate skill. But I doubt it.

Nearly all architects should get hold of a copy of this booklet if they can. It says hardly anything about gas for cooking, and as a source book for a good family quarrel it is well nigh perfect, for almost everybody I know has apparently been carving all wrong all their lives, and there is here a most admirable series of pictures to

show how it all ought to be done. And if meat rationing ever starts, it will form excellent escapist literature for those who, faced with mutton-bacon, would like to see pictures of the good food they used to have when there was some work for architects to do.—(*Radiation, Ltd., Large Apparatus Section, 4 Berners Street, London, W.1.*)

GENERAL NEWS

APPOINTMENTS

The L.M.S. Railway have appointed Dr. J. L. Martin, M.A., PH.D., A.R.I.B.A., to be their principal assistant architect, and he has already commenced his duties with the company. He is the son of Mr. Robert

Principal Officer to the Midland Region (Civil Defence), has now been recalled, and appointed Acting Comptroller-General of the Department of Overseas Trade.

THE EDINBURGH COMPETITION

An exhibition of the designs submitted in the competition for a New Exhibition Hall, Waverley Market, Edinburgh, is now being held in the Royal Scottish Academy Galleries, The Mound, Princes Street, Edinburgh. It will remain open until November 28 between the hours of 2 p.m. and 6 p.m. (November 28, 6 p.m. to 8 p.m.)

ROYAL INSTITUTE OF THE ARCHITECTS OF IRELAND

At the annual general meeting of the above Institute Mr. W. H. Howard Cooke, F.R.I.A.I., A.R.I.B.A., was elected President for the ensuing term and Mr. T. F. Inglis, M.R.I.A.I., was elected Honorary Treasurer.

A general progress report from the President included the following matters:—

(1) The establishment of a Joint Town Planning Board, formed of four representatives from each of the following bodies:—

Royal Institute of the Architects of Ireland.

The Institution of Civil Engineers of Ireland.

The Chartered Surveyors' Institution (Eire Branch).

The objects of the Board are as follows:—
(a) To provide and/or further education in Town Planning.

(b) To set up examinations available to members of the three bodies or others with approved qualifications.

(c) To consider the setting up of a Town Planning Institute in Ireland.

The Institute's representatives on the Board were elected by the Council and are Messrs. J. J. Robinson, G. F. Beckett, Desmond FitzGerald and Manning Robertson.

(2) *Joint Committee on Prices, etc.*—Steps had been taken to set up a joint committee with the object *inter alia* of keeping a record of prices. The committee is to be formed of representatives from the professional bodies, trade groups and Government Departments. A deputation had gone to the Ministry of Supplies and various aspects of the present war situation were discussed.

Later, the setting up of a body including labour representatives was decided upon, and a Council of Building Industry was in progress of formation. This body would have wider scope than the joint committee and when further progress had been made the members would be informed thereof.

R.I.B.A.: ELECTION OF MEMBERS

At a Council Meeting of the Institute the following overseas members were elected:

As Fellows (3): Messrs. A. R. Cobb, M.Sc. (Halifax, Nova Scotia); K. E. F. Gardiner (Johannesburg); I. D. MacGillivray (Bulawayo, Southern Rhodesia).

As Associates (6): Messrs. K. S. Birch (Johannesburg); M. J. P. Mistri (Architectural Association) (Bombay); C. McD. Sinclair, B.Arch. (Rand) (Johannesburg); (Mrs.) N. H. Sinclair, B.Arch. (Rand) (Johannesburg); A. G. Stewart (Johannesburg); J. A. Smith (Capetown).

I.A.A.S.

At a meeting of the London and Home Counties Branch Committee of the Incorporated Association of Architects and Surveyors, Mr. Keith Preston, A.I.A.A., was elected Chairman on the retirement from that office of Mr. Walter E. Cross, F.I.A.A., F.R.I.B.A. Mr. Reginald Browne, F.I.A.A., was re-elected vice-chairman.

1940 DIARY

Messrs. William Collins, Sons & Co., Ltd., of London and Glasgow, have sent us a copy of their *Architects' and Builders' Diary for 1940*. This diary, measuring 3½ ins. wide by 5½ in. deep, presents, in a simple practical form, the generally accepted principles of design as applied to building. Recognized standards of the building trades, plasterers, plumbers, glaziers, etc., have been followed in making up each section.

This is an ideal diary for the architect, surveyor and builder. Copies of the diary are obtainable from Messrs. Collins at 4 Bridewell Place, London, E.C.4, or 144 Cathedral Street, Glasgow, C.4.

NO SHORTAGE OF GLASS

An impression seems to be prevalent in some quarters that in the event of extensive damage to windows by air raids over this country, the supply of glass necessary for replacements will not be sufficient to meet immediate demands. Messrs. Pilkington Bros., Ltd., the largest manufacturers of window and plate glass in this country, assure us that they hold sufficient stocks of glass to meet all requirements.

PROFESSIONAL ANNOUNCEMENT

Mr. P. T. Wilsdon and Mr. G. W. North, of Townsend House, Greycoat Place, S.W.1, have dissolved their partnership as from November 2. Mr. North will continue his practice under the style of North and Partners, from the same address.

REFERENCE BACK

On page 595 of the November 16 issue of the JOURNAL, under the heading "Reference Back," in reply to Q.78 we stated that the Ministry of Supply had issued a circular giving recommendations for rot-proofing sandbag revetments. The circular in question, however, was issued from the Ministry of Home Security.

GREEN BELT

At Tuesday's meeting of the L.C.C. it was announced that a contribution of £10,000 had been authorised to the preservation of 457 acres of land for the green belt, known as The Chantries and Tyting Farm, Guildford.

GOVERNMENT BUILDINGS, EDINBURGH: CORRECTION

We regret that in the list of contractors for the Government Buildings, Edinburgh, published in our issue for November 16, we inadvertently stated that Messrs. Thaw and Campbell, Ltd., were the general



Dr. J. L. Martin

Martin, Ecclesiastical Architect for Manchester.

During his training at the Victoria University, Manchester, he won the following prizes:—1927: The Manchester Building Trades Open Competition for New Layout and Street Reconstruction in the centre of the City; 1928: Hon. Mention, R.I.B.A. Tite Prize; 1928: University Travelling Scholarship; 1929: R.I.B.A. Soane Medalion and Scholarship; 1929-30: R.I.B.A. Recognized Schools Silver Medallist.

Dr. Martin's post-graduate experience includes Assistant Master of Design and Lecturer in Architecture in the Victoria University of Manchester, and in 1934 he was appointed Head of the School of Architecture in Hull. Whilst holding the latter appointment he has conducted private practice and carried out a variety of works, including domestic and scholastic buildings, his most recent examples being the New Youth Centre at Scunthorpe, the Mess Room for the Appleby Frodingham Steelworks, Lincs, and a Nursery School at Northwich, Cheshire.

The Board of Trade announces that Mr. A. Mullins, C.M.G., C.B.E., Deputy Comptroller-General of the Department of Overseas Trade, who, since the outbreak of hostilities has held the appointment of

contractors. This was incorrect. The general contractors were Messrs. Jackson, Brown & Co.; their contract for the superstructure embodied all trades with the exception of certain specialist trades. Messrs. Thaw and Campbell were responsible for the demolition, excavation and concrete foundations.

Handbooks on Home-grown and Empire Timbers

The Forest Products Research Laboratory of the Department of Scientific and Industrial Research has just issued two publications which should be of particular value at the present time. The first is a revised edition of the handbook on *Home-grown Timbers* (published by H.M. Stationery Office, 2s. net); the second is a companion volume dealing with Empire timbers (*Handbook of Empire Timbers*, published by H.M. Stationery Office, 3s. 6d. net). This latter volume contains a large amount of new information on the increasing number of Empire timbers offered in the home market which has become available since the publication of a handbook with a similar title by the Empire Marketing Board in 1932.

Both volumes are planned along the same lines. The volume on home-grown timbers covers some 35 species, viz. 26 hardwoods and 9 softwoods, while that on Empire timbers covers 79 hardwoods and 17 softwoods. The sections devoted to each species contain descriptions of the tree and its timber, and include notes on its seasoning and mechanical properties, its suitability for bending, its wood-working properties, its natural durability and resistance to insect attack, and preservative treatment. Other paragraphs contain information on the most suitable uses of the various species of timber and their main sources of supply. Where possible, reliable shrinkage figures are cited for each species, while particulars of kiln seasoning schedules and figures for mechanical strength are provided as appendices to each volume.

In considering strength properties of timbers it is stated:—

"Although, within very broad limits, most strength properties increase with the density of the species, there may be marked differences in specific properties between timbers of the same weight. Thus, home-grown ash has about the same weight and bending strength as beech but has an energy-absorbing capacity 50 per cent. higher than that of that timber. For use as a beam, these two timbers are equally strong, but where suitability for, say, hockey sticks is in question, ash is, by virtue of this higher capacity for absorption of energy, definitely superior to beech. This example, which might be multiplied many times, illustrates the importance, when comparing timbers, of taking into account the uses to which they are to be put and the specific strength properties relevant to these uses."

The notes on general wood-working qualities of the timbers described are based on the behaviour of normal air-dried material with a moisture content of 15-18 per cent. Information is given on planing and on the most suitable types of saw to be used. Details of the saw types mentioned under each timber are given in a third appendix.

An explanatory introduction to each volume assists the reader to interpret the data correctly and to make a ready comparison between one timber and another.

LAW REPORTS

BUILDING ESTATE: PROPOSAL NOT A STATUTORY CONDITION

Medcalfe and Another v. Hole.—King's Bench Divisional Court.—Before the Lord Chief Justice and Justices Charles and Humphreys.

THIS was an appeal by Medcalfe and Another from a decision of magistrates. Medcalfe and Booth, builders, appealed from a decision of magistrates at West Malling (Kent) that they had contravened a by-law of the local council with regard to four houses in an estate at Ditton, namely, had let the houses without obtaining the certificate of the surveyor, Mr. John Hole, to the effect that the houses were fit for human habitation.

A fine of £20 and costs was imposed.

Mr. Hole was respondent to the appeal.

In July, 1924, the Malling Rural District Council made by-laws by virtue of powers given by the Public Health Acts with regard to houses to be erected, and one by-law said that a person should not let or occupy a new dwelling house until . . . it was certified as being fit for human habitation, provided that such certificate should not be refused unless it could be shown that a by-law had been contravened or some statutory requirement not observed. In 1933, the Council resolved to adopt the Town Planning Act, but the scheme is not yet operative in the Council's area.

In 1937, the Council, as a Town Planning Authority, approved the plans of the builders for the development of an estate at Ditton, and granted them an interim development permission which contained the condition that "definite and proper proposals be made before the commencement of any work, for the making up and dedication to the public of the length of private road between London Road and the proposed new estate road."

The appellants erected 32 houses and 28 had been granted habitation certificates. But, with regard to the remaining four, the certificate was refused, the surveyor holding that, although the houses were in good order, a statutory condition had not been observed. The road had been completed for a certain distance but the communicating highway was not made up.

The Council argued that there was a statutory condition in the interim permission which must be observed before the remaining habitation certificates could be granted.

Appellants answered that there was no statutory condition enforceable, and that there was nothing in the Town Planning Act, 1932, which compelled any person to carry out the terms of an interim development order until a town planning scheme was in operation. The effect of the interim permission was merely to protect the owner from the demolition or alteration of his property without compensation in the event of the development contravening the provisions of the scheme when it came into operation.

The magistrates held that the conditions imposed in the interim permission was a statutory condition, that the certificate had been therefore legally withheld by the surveyor, and the builders had committed the offence charged.

Mr. A. W. Nicholls (instructed by Messrs. Clitheroe, Smith & Co.) was for the appellants, and Mr. Granville Sharp (instructed by F. B. Jeavons and Riley, Tonbridge) for the respondent.

The Lord Chief Justice, in the course of the argument, asked, "Are builders still

content to build houses in the midst of this labyrinth of orders and conditions?"

The appeal was allowed with costs and the order of the magistrates reversed.

The Lord Chief Justice, in giving judgment, said section 10 (3) of the Town Planning Act, 1932, provided that where an application for permission to develop land was made to the certifying authority, the authority could grant it unconditionally or subject to such conditions as they thought proper to propose or might refuse it.

The condition of the proviso as granted by the council was that proper and definite proposals should be made for the making up and dedication to the public of a length of road.

There was no ambiguity about that condition. It was that a proper and definite proposal must be made. The word was "proposal" and no ingenuity could successfully show that "a proposal to make up a road" was the same thing as "to make up a road."

It was important to remember that it was by no means certain that effect would be given to the scheme of town planning, and even now, in October, 1939, after a lapse of two years, the scheme had not been carried out by the council; indeed, it was not certain that the scheme would ever be carried out. No particular time was stipulated for the carrying out of the work; yet, in the circumstances, the justices were invited, and accepted the invitation, to treat what was done by the builders in letting the houses as being a contravention of the law because a statutory condition had not been observed.

In his lordship's opinion the magistrates had been invited to misconstrue and misread the law.

Their decision would be set aside.

Justices Charles and Humphreys concurred.

DAMAGE TO ADJOINING PREMISES: LIABILITY

Wringe v. Cohen.—Court of Appeal.—Before Lords Justices Slesser and Luxmoore, and Mr. Justice Atkinson.

THIS was an appeal by the defendant, Mr. Meyer Cohen, from a decision of the Judge of the Sheffield County Court, in an action in which Mrs. Jessie Wringe, who was the owner of a lock-up shop in Proctor Place, Sheffield, claimed damages for injury done to the roof of her shop by part of a wall of the adjoining house, of which Mr. Cohen was the owner, having fallen in.

Mr. Cohen's premises were let to a tenant who was under no obligation to repair, and Mr. Cohen was liable for repairs. During a high wind in November, 1938, the top part of the wall at the end of Mr. Cohen's house fell on to and destroyed the roof of Mrs. Wringe's shop.

The County Court judge held that there was an absolute duty on Mr. Cohen to keep his premises in repair, that the wall had become a nuisance, and that Mr. Cohen was liable.

Mr. Cohen appealed from this decision on the ground that in the absence of proof that he knew or ought to have known of the want of repair, he ought not to be held liable for damage.

The question raised by the appeal was whether a landlord who was liable to repair, was liable for damage done to adjoining premises by the collapse of part of the landlord's premises due to want of repair, when

Continued on page xx



B.I. CABLES

IN QUEEN'S UNIVERSITY, BELFAST

The illustration shows the **New Arts Building** of the Queen's University, Belfast, the Architect being W. A. Forsyth, Esq., F.R.I.B.A., of 12 Stratford Place, London, W.1.

In the wiring of the new portion, **B.I. Cables** have been used by the Contractors,

Messrs. CURRAN BROS., Registered Electrical Contractors, BELFAST.

**BRITISH INSULATED CABLES
LTD.**

PRESCOT—LANCS.

Tel. No.: Prescot 6571.



STRAIGHT - TO - FLOOR LEVELLING EQUIPMENT

is an important feature of the Wadsworth Goods Lift illustrated here. With a capacity of 5 tons, it has variable speed car switch control and automatic power-operated gates. For full particulars write Wm. Wadsworth & Sons, Limited, Bolton & London

WADSWORTH

Continued from page 638

there was no evidence that he knew or ought to have known of the need for repair.

The Court held that the appeal failed and dismissed it with costs.

Mr. Justice Atkinson, giving the judgment of the Court, said the Court were of opinion that the undertaking to repair gave the owner control of the premises and a right of access for the purpose of maintaining them in a safe condition. At common law it was an offence to permit premises adjoining a highway to get into disrepair, and it had been clearly held that there was an absolute duty to prevent premises from becoming a nuisance. The appeal therefore failed.

Leave was given to appeal to the House of Lords.

DAMAGES FOR OBSTRUCTION OF LIGHT

Barker v. Beeston.—Chancery Division. Before Mr. Justice Farwell

THIS was an action by Mr. L. Barker a jeweller, of Waterloo Road, Burslem, Staffs, against Mr. Frederick Wm. Beeston, who carries on a furniture business at 12 Waterloo Road, Beeston, to recover damages for obstruction of light coming to plaintiff's premises.

The parties are neighbours and plaintiff complained that in October, 1937, defendant pulled down a low building and erected a building for his furniture business with a wall abutting on plaintiff's premises, 16 ft. high. The result was that light which formerly came to plaintiff's windows was

obstructed, causing him discomfort and inconvenience.

Defendant denied plaintiff's allegations and disputed the plaintiff's right to the light he claimed.

His lordship, after hearing the evidence, said in this case the plaintiff was not seeking an injunction or a mandatory order. He was only claiming damages for loss of light in his living-room, sitting-room and scullery. He was satisfied on the evidence that since the new building was erected there had been a very appreciable diminution of light to plaintiff's rooms. The effect had been to cause serious nuisance to the plaintiff by depriving him of some of the light he was entitled to. He assessed the damages at £120 and gave judgment for the plaintiff for that amount with costs.

For the plaintiff expert evidence was given by Mr. John Swarbrick, Mr. P. H. A. Bailey and Mr. M. Upright, and for the defendant by Mr. Percy John Waldram.

ARCHITECT'S CLAIM FOR WORK DONE

Roberts v. Thorpe.—King's Bench Division. Before Mr. Justice Wrottesley.

THIS was an action by an architect to recover remuneration for work done arising out of professional work done for the development of an estate at Bapchild, Sittingbourne.

Mr. Ivan Frederick Roberts, an architect, of The Sheilings, Womersley, Guildford, sued Captain Bernard Thorpe, of Millbank Terrace, Westminster, to recover damages

for alleged breach of an oral agreement of September, 1937, or in the alternative payment for services rendered to plaintiff as architect.

Mr. Roberts is a Licentiate of the R.I.B.A.; Capt. Thorpe is a builder and estate developer. Mr. Roberts' case was that Capt. Thorpe entered into an oral agreement with him, whereby he was employed as architect to prepare drawings and plans and bills of quantities, etc., for the erection of 124 cottages by direct labour on the Bapchild Estate at Sittingbourne. Mr. Roberts pleaded that it was agreed that he should be paid £15 in respect of each of the cottages. He said he had done all the professional work he agreed to do, and had consulted with the defendant's Town Planning consultant, Mr. Brooks, and with the Town Planning Authority at Sittingbourne. Defendant had failed to carry out the scheme, and plaintiff now claimed remuneration. He had received £100 on account from the defendant. In the alternative he claimed reasonable remuneration.

Capt. Thorpe raised a number of defences. He denied that he employed plaintiff as his architect and pleaded that plaintiff had not produced a scheme that would show the return he desired for the estate, and that he was never under any obligation to make payment to plaintiff. In the alternative he pleaded that plaintiff had accepted the £100 paid him in satisfaction of all that was due to him. He denied that he agreed to give plaintiff reasonable remuneration.

Mr. Cecil Havers, K.C., and Mr. P. L. E. Rawlings appeared for the plaintiff, and Mr. Levy, K.C., and Mr. Robert Fortune for the defendant.

THE DESIGN OF NURSERY AND ELEMENTARY SCHOOLS

This book describes the new educational policy in relation to the design of Nursery and Elementary Schools. Dimension and layouts are considered for each element in the school plan; the various alternative groupings of the plan units are discussed, and a large number of complete school schemes carried out in this country and abroad are illustrated. No such survey of contemporary school buildings exists at present in this country. The book contains 120 pages, size 12½ × 9 ins., about 250 photographs and drawings and is printed on art paper, bound in cloth.

By

H. Myles Wright, M.A., A.R.I.B.A.
and

R. Gardner Medwin, B.Arch., A.R.I.B.A.

Price 10s. 6d. Postage 6d. (Abroad 10d.)

THE ARCHITECTURAL PRESS, 45 THE AVENUE, CHEAM, SURREY