JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA





JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

Serial No. 202 TORONTO, JUNE, 1942 Vol. 19, No. 6 CONTENTS Editorial Immediate Planning Needed for Post-War Rehabilitation, by A. S. Mathers 140 A. R. P. **Provincial Page** PLATES The Elsie Perrin Williams Memorial Public Library and Art Museum, London, Ontario 137 House of Mr. Warren Hastings, Ganges, Salt Spring Island, British Columbia . 138 THE INSTITUTE DOES NOT HOLD ITSELF RESPONSIBLE FOR THE OPINIONS EXPRESSED BY CONTRIBUTORS **OFFICERS** GORDON McL. PITTS (F) First Vice-President JOS. F. WATSON President. Second Vice-President ANDREW R. COBB (F) FORSEY PAGE (F) Honorary Treasurer CHARLES DAVID (F) Honorary Secretary Emeritus ALCIDE CHAUSSE (F) Honorary Secretary..... .. MARY ELMSLIE, 74 King Street East, Toronto, Ontario Secretary .. COUNCIL O. BEAULE
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MEMBERS of the Institute will be pleased to know that the A.R.P. issue has been an enormous success. We have received enthusiastic letters from people in high places, both military and civil, and reviews in the Press have been excellent. It would have cheered the A.R.P. Committee had even a faint whisper of appreciation reached them from the Provincial Associations whose coasts seem most likely to be attacked, and whose interests were the Committee's prime concern. We would like here to express the thanks of the Editorial Board to the Quebec and Ontario Associations whose generous grant of nearly \$2,000.00 made the A.R.P. issue possible.

The date has not, as yet, been set, but the Council of the Institute has asked the Editorial Board to proceed with a number on Housing. For those of us who are condemned by age and divers infirmities to carry on a more or less hum drum existence while younger architects and younger Canadians are fighting overseas, there could be no more clear call to duty than Post-War Housing. It is true that we have not been asked as a profession to assist in a great national scheme, but the problems of initiating such a scheme in its economic and constitutional aspects are formidable in a country that has no experience in housing. We think we are right in saying that preliminary studies of far reaching importance are being carried out "elsewhere". Other countries may be ready to start an army of architects and engineers on their boards but Canada is far from that stage. There are grim slums in Montreal, Toronto and Winnipeg and every large city in Canada, but what Canadian community is prepared for slum clearance or the housing of any class of people in large areas?

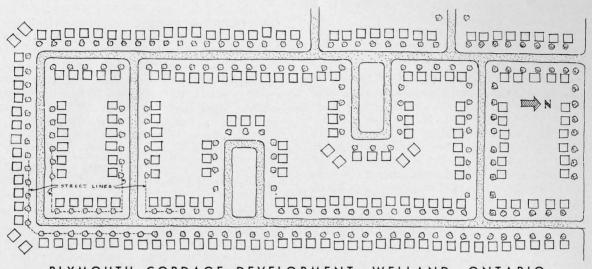
Town Planning preparations must proceed immediately if funds for Post-War Housing and other projects are to be available at the time when they are needed most. A few cities in Canada have Town Planning Boards or Commissions that are more or less active and well or poorly advised. They are all, we expect, properly emasculated by the term "advisory" and the "advice" given to one council is usually pidgeon-holed by the next. That kind of folly and waste can no longer be tolerated. Long range Town Planning must proceed immediately not of the kind to appease a group or an individual—not as an academic study, but as the basis of Post-War Construction. In the past nearly all Town Planning or Housing proposals were opposed by the municipal ostrich with one eye on January 1st, and by those antiquated zealots on citizen property committees whose selfish zeal for the protection of their own property blinded them to the larger issue of the common good.

To silence the obstructionists to post-war planning, Canada needs to hear from men in public life whose views will be respected—and a few have already spoken. Unfortunately the people who know about Town Planning and Housing and who will ultimately carry it out—the architects and the engineers -have a modest place in the community and, when they speak, are charged with having an axe to grind. We are sure the Canadian people would rally to a cry such as Mr. Oliver Lyttleton uttered recently in England. "I believe," he said, "that there are three things which we all want. The first is to make this a truly cheerful country—a country in which we can laugh when we want and put out our tongues at the people we don't like—a spacious, active, enterprising country. The second is to see that we are never again faced with the horror of mass unemployment. The third is to modernize the capital equipment — by which I mean the transport, the roads, ports, towns, houses and amenities of our country, and the curious thing is that in reaching for the third of these objectives we shall be going a long way towards attaining the first two." And Mr. Anthony Eden sounded a warning "while there is unemployment and malnutrition and animal standards of life and poverty that can be remedied, there will be no peace." There is in that the solemn warning that while our soldiers are giving their lives to win a war, we may be the fifth columnists of the peace. It is only by planning that we can be sure that the words "General Demobilization" will be words of joy at our deliverance untempered by chill forebodings for the future.

We would like to see this Journal used to the limit for war purposes through the A.R.P. pages, and as a centre for information and inspiration for every phase of reconstruction. Every architect can help to make it so.

SITE PLANNING FOR WARTIME HOUSING

By W. L. SOMERVILLE



PLYMOUTH CORDAGE DEVELOPMENT, WELLAND, ONTARIO

Example of a development on a narrow site between existing city blocks on level ground, using a deep block and cul-de-sac treatment.

As one might expect, the Engineer's approach to site planning differs radically from that of an Architect. Every Architect secretly or otherwise hopes for an opportunity to show what he could do if given the opportunity. It is only when suddenly faced with the problem that he is likely to discover the many exacting conditions with which he must contend. It is not merely a matter of street design, orientation, and provision for parks, etc.

The Engineer, on the other hand, has a tendency to be more concerned with provision for his public services and consider his street layouts as mere arteries to carry them.

The contours of the land, unless it is a rocky site or the grades extreme will probably give him less concern than the Architect. Nevertheless, good engineering is just as essential to a good site plan as it is to a building.

In site planning for War Housing good engineering is imperative. Speed and economy are the watchwords for both Architect and Engineer. This does not necessarily mean that they must be the only considerations, but they are extremely important and cannot be lost sight of. Where housing is required it must be provided quickly. Labor is necessary for the production of war materials, and labor cannot be obtained unless housing is available. Every dollar that is not needed for housing is a dollar more for munitions.

Due to the temporary nature of these projects, based on an agreement with many of the municipalities that requires the possible demolition or removal of the houses following the war, it is especially desirable to lease land with public utilities, streets, etc., all ready and available for immediate building. In many cases land owned by the municipality, fulfilling these requirements has been secured for a mere token rental. In such cases existing street layouts must be accepted, and the only opportunity afforded the site planner is sub-division for house sites within the street boundaries.

Where it is necessary to construct sewers, water supply and streets, it is the policy of the Company to purchase the land. By doing so there is a better opportunity for salvaging the capital invested in the public services by sale of the improved land at some future time.

Within the limits of its physical aspects, such a site offers a freer hand to the planner. Subject to the tying up with existing thoroughfares, streets may be laid out as site conditions or requirements for housing may dictate. The nature of the soil or rock, surface drainage, height of water table or location of large trees may influence the results. These might be termed the usual site conditions.

A contour survey is prepared as soon as the land is obtained. Before the deal is closed, however, a full report is made, stating in detail such matters as location of shopping centre, schools, churches and transportation, and its relation to the industries it is to serve. All of this information is available to the planner.

It has not been necessary, so far, for Wartime Housing Limited to undertake the building of an entirely new community. Very few developments exceed two or three hundred houses, except in the larger cities, where schools, shopping centres and other amenities are usually available. The sites are selected to avoid the necessity of the additional expenditures that would be required if these had to be provided.

The street layouts are in most cases governed by contours of the site which fix within certain limits the possible variations. In all cases excessive depths for sewer trenches are avoided due to cost. This influences the type of plan. It is a particularly important factor on rocky sites. Wherever possible the Architect and Engineer study the preliminary schemes together in order to save time and to arrive at a scheme both feasible and capable of development architecturally.

In most of the provinces the law requires that every house shall face on a public thoroughfare, and further that such public thoroughfare must be 66'0" wide. In some municipalities the minimum set-back of the building from the street line is also fixed by law. This limits a great deal of freedom in planning, and the grouping of houses which might be made if these laws did not exist. They were no doubt made to prevent the over-crowding of land such as exists in some of the older parts of our cities where two houses were placed on one lot, one facing the street and the other at the rear, facing the lane. The result desired could have been obtained by limiting the density of population supplemented by minimum requirements for light and air. A thoroughfare 66'0" wide is much too wide for most residential secondary streets.

A paved strip 18'0" wide plus a sidewalk and boulevard allowance of 8'0" on each side with a set-back from street line of 15'0" to 20'0" for the houses is more than ample for light and air, especially where the houses are only one or two stories high. It is not possible to obtain a satisfactory grouping of small houses unless the two sides of the street form one composition. This cannot be done if the street is too wide. A great deal of the charm of a small community depends on the street grouping.

Group houses are much easier to handle in this respect. The units are larger and more in harmony with the street.

The question of why group houses have not been used by Wartime Housing Limited has been raised many times. There are several very practical reasons. The most important is the fire hazard, always present with temporary housing; another, that most of the workmen engaged in war industries work in shifts. A man on the day shift may have a neighbour on night duty. The difficulties involved are obvious, especially if one or the other is a slightly deaf radio fan or likes his swing loud and strong.

To reduce the fire hazard as much as possible, the minimum lot width was established at 40'0" which gives a minimum dimension of 16'0" between houses. An additional precaution is taken by using a non-inflammable exterior finish on houses placed at intervals in each block. Using a minimum sized lot of 40'0" x 100'0" with the standard 66'0" street, sites for between seven and eight houses per gross area are obtained. This avoids over-crowding and allows plenty of room for allotment of gardens or playgrounds for smaller children in the areas at the rear of the houses. As the houses are all rented, none are sold to individuals. No fences are permitted nor outhouses of any kind, including garages. It was intended that the interior of the blocks would be for the common use of all tenants. There is some opposition to this by the tenants and it is a matter that has to have further consideration. Local prejudice is a hard thing to break down. The average industrial worker is a very conservative person. Innovations such as this are not easily introduced without some opposition. His home, including his garden, is still his castle, and he prefers to have a wall around it.

The garage problem was also a difficult one. Due to restrictions on motor fuel and tires it will not be quite so acute this year. The policy of the Company has been to build community garages where transportation facilities are such that it is necessary for the workers to provide their own. Such cases are extremely rare. There is no excuse for encouraging the use of motor cars under any other circumstances, when the conservation of gasoline and rubber is so vital.

The Company is experimenting with the idea of providing community recreational centres and has organized these in a few of the larger developments. There has not been sufficient opportunity as yet to say just how successful this movement will be.

The object is, of course, to promote a neighborly spirit of co-operation among the tenants, to encourage the proper care of the property, and principally to make them contented and happy and thus help the war effort.

It is not any easy undertaking. An attitude of paternalism must be avoided, and also any tendency to treat the tenants as a class apart from their fellow workers who do not live in Government-owned houses.

Although strictly speaking, not a part of the site planner's function, belonging more to that of the Architect, in the case of Wartime Housing Limited the grouping of the houses, colour schemes, etc., are all considered part of the site plan.

Due to the necessity of utmost speed and economy, the number of different house types is restricted to three. To avoid monotony each type has some minor variations in exterior appearance. In addition to plans reversed from right to left and design of porches, there are four different exterior finishes. These again are varied in colour schemes for exterior painting and roof colours.

These variations permit of some opportunity for street design, coupled with consideration of set-backs, street vistas and grouping.

Variety alone, however, will not avoid monotony. There is such a thing as monotonous variety.

Long blocks are avoided where possible. The best results obtained so far have been on hilly sites. Even bad grouping and arrangement would look better on a hillside than on a level site, so that this proves but little. Of those on level sites, the developments with short blocks or cul-de-sacs are more interesting. Very good results have also been obtained where long blocks could not be avoided by giving careful attention to grouping and set-backs so that as far as possible the houses do not count too much as individual units. This would be easier if the lots were smaller, some group houses used, and if the streets were narrower.

Next in importance to the grouping or mass outline of the houses is the roof colour. To facilitate the manufacture and delivery of roofing it was necessary to use three different colours. To use any one of these three would cause a shortage of necessary materials for manufacture. The use of three colours, contrary to the expectations of the Architects on the staff, has not proved to be a disadvantage. By using them to emphasize the grouping and arrangement of units on the streets it has helped to bring the larger blocks into scale with the units themselves. This, however, is not the unanimous opinion of all concerned. There are still some advocates of the use of one colour, and other extreme individualists who think that the promiscuous use of types, colour schemes, and roof colours produces a less stilted and "Government-owned" appearance.

The site planning for what have been called Staff Houses for want of a better name is a comparatively simple matter compared with that for houses.

These buildings are built to house single workers. To date these have been for men, but due to the increasing use of women it is evident that in the near future similar accommodation will be required for women.

The standard staff house accommodates 88 men in single and double bedrooms with necessary toilet facilities, a writing room and a lounge, also quarters for the superintendent in charge. These are erected in groups of two or more.

In most cases a separate Dining Hall building is provided with kitchen and storage facilities.

The grouping of these buildings varies according to the terrain and orientation. Recreation grounds are provided where possible.

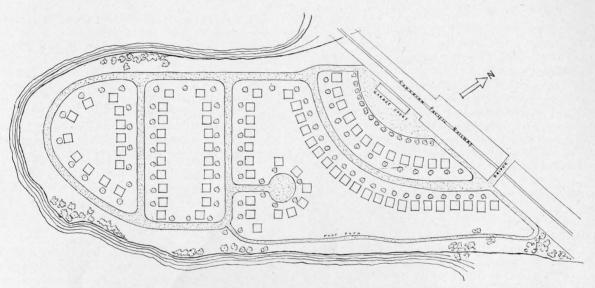
At Hamilton it was necessary to house over 500 men in a district quite removed from restaurants, theatres, etc. A large building was erected with bedroom wings and a large lounge and dining room for the entire group, as well as billiard room and bowling alleys. This has developed into a community centre for the entire industrial area in that part of the city, filling a great need with very satisfactory results.

The landscaping of all the developments is now under way. Last year none of them was entirely completed, especially the finished grading and street surfacing in time to sow grass or do any planting. This year's programme includes the preparation and seeding of the grounds adjacent to the houses and the planting of shrubs and trees. These improvements can be justified both as a necessity for proper living conditions and as an expenditure that will assure a greater salvage value in the resale of the properties.

Although handicapped by war conditions and the urgency of emergency, Canada's first large scale housing programme will probably have a great influence in the future on Government housing in this country. Every Architect should therefore be keenly interested in the results and in contributing to the best of his ability towards the success of the undertaking, not losing sight of the fact, however, that the sole object is to win the war by making it possible for the industries to be adequately supplied with labour.

Between thirty and forty Architects from Halifax to Vancouver, all members of the R.A.I.C. have been engaged in this undertaking.

To obtain this objective with all possible speed and at the same time provide facilities for healthful living and contented workers is the task assigned to Wartime Housing Limited by the Department of Munitions and Supply.



BURNHAM POINT DEVELOPMENT, PETERBOROUGH, ONTARIO

Example of a site with natural boundaries, the location of streets influenced by site conditions and the contours of the land.



3 RD ANTI-TANK REGIMENTAL MESS, R.C.A. DEBERT, NOVA SCOTIA

Photographs of two chapels in Iceland by British architects on active service appeared recently in English Journals. We are pleased to see the fine Italian hand of Lt.-Col. Mackenzie Waters in his regimental mess at Debert.

-Editor.

IMMEDIATE PLANNING NEEDED FOR POST-WAR REHABILITATION

By A. S. MATHERS

We should like to record here our pleasure that a brother architect and friend should have risen to the Presidency of the National Construction Council. Mr. Mathers is in the van of those members of the profession who feel that the architect's place is at the heart of the Construction industry and not in the vague world of interior and exterior decoration upon which an older school placed altogether too much emphasis. His competence to fill the Presidency of the National Construction Council is admitted unquestionably by architects and industry alike, and the influence of the Council under his direction and inspiration on Post-War Construction cannot help but be of immense value in the difficult years to come.

—Е. R. A.

S you will recall the last annual meeting went on record in favor of a proposal to enter into a study of the problems which will face the industry when the war is over, and as a beginning, to conduct a survey of the possible backlog of projects which have been deferred due to the war, in order to determine their character, magnitude, the amount of money involved, the localities of them and other pertinent information. All of our constituent organizations were informed of this proposal and were invited to play their part in it. Of these the Royal Architectural Institute and the Engineering Institute of Canada were asked to canvass their members by some form of questionnaire for such information as they might have. The R.A.I.C. agreed at once to the suggestion and set up a Committee on Reconstruction for the purpose. The E.I.C. expressed agreement with the idea but intimated that some larger scheme might develop and took no definite action at the time. In the meantime the R.A.I.C. have been slowly developing their own programme, but have not actually commenced their part of the survey.

In the absence of any concrete results from the architects and engineers it has not been possible to place any information before the other constituent organizations.

I might explain here a fundamental difference between the architectural and engineering professions, which has some bearing on the reactions to this survey idea. In Canada about 90% of all architects are in private practice; that is they are employed on a consulting basis. On the other hand the engineers are largely employed on salary by governments and corporations and not as independent consultants. Even those who are in private practice find their employment with public and semi-public bodies, mainly municipalities. It is obvious that a survey such as the architects are conducting, would not be suitable if conducted in exactly the same way by the E.I.C. However, a conversation which I had with Professor Young yesterday leads me to believe that something may be forthcoming from them shortly.

Shortly after our proposal to conduct the survey was first made, the Government of Canada set up a Cabinet Committee known as the Committee on Reconstruction under the chairmanship of Dr. James of McGill University. This committee will study the whole problem of reconstruction in its broadest sense, including the part to be played by the Construction Industry in the post-war reconstruction programme. As I shall explain a little later the National Construction Council is expected to assist in the findings of this Committee.

Outlook Improves

A year ago the end of the war seemed a very long way off even though every day that passed brought us just one day nearer to that inevitable time. We in the Empire were alone in the fight, with it is true the sympathy and moral support of a powerful friend. Since then, however, our erstwhile enemy, Russia, has been double-crossed by the Hun, and our friend has been dealt a treacherous blow by a newcomer to the conflict. Today we are not alone but are part of a concert of powers whose might is irresistible. The end of Germany and all it stands for is no longer in doubt and may come much sooner than any one dared to hope a year ago.

While no one can predict that day, and many reverses and disasters will surely befall us before Victory is ours, one thing is sure and that is this: If we do not prepare for the peace much more wisely and thoroughly than we did for war and that in time, the peace will be no peace, but chaos, and the aftermath may well spell the end of our civilization. Even though the energy of the nation is fully harnessed for and engaged in the present and urgent business of war, another campaign must follow its conclusion and rash indeed would be the General Staff that did not prepare to consolidate and exploit the successful conclusion of a campaign.

I am convinced that leisurely preparations for the post-war period are no longer wise but that there is great urgency and perhaps too little time to organize ourselves for a peacetime effort, the magnitude of which can only be comparable to the war effort itself.

That the Government is fully aware of the dangers of unpreparedness for peace I do know. The Committee on Reconstruction has already begun to organize itself. It has set up a Sub-committee on Construction with panels to deal separately with the various kinds of construction, an important one being the panel on Housing.

While the committee, being a Cabinet Committee, does not discuss its work publicly, that being the prorogative of the Cabinet itself, nevertheless I have been assured that it is anxious to discuss with us and all responsible technical bodies the problems with which we are concerned and to give careful consideration to any proposals which we may make. As an instance of this Dr. Marsh, the Technical Advisor of the Committee, has expressed his approval of the survey which we are proposing to make and has asked that the data so received be put at the disposal of the Government. From my talks with Dr. Marsh I have learned that a knowledge of the extent of the backlog of private construction projects will be of the utmost value to the Committee in making recommendations to the Government.

Boom Prospects

It is the almost unanimous opinion of economists that the task of meeting the pent-up demands for civilian goods not to mention the rebuilding of the war damaged cities of Europe will in the immediate post-war years cause a boom of considerable size. Such a boom if permitted to run an uncontrolled course would lead surely to an inflationary price rise with attendant labor disturbances and an inevitable collapse. It may be politically impossible to resist this sudden demand for goods and services and to prevent some kind of

boom and consequent depression. All post-war planning must take this situation into account and preparation must be made to take up the slack when the normal spending spree abates. The problem which will face the Government must therefore be to know how to carry the country through this cycle as smoothly as possible.

The Committee on Reconstruction have therefore a tremendous responsibility in advising the Government as to the measures to be taken, and likewise those who are consulted by the Committee must be prepared to consider well the recommendations which they make, with the national welfare rather than their own selfish interest in mind.

The National Construction Council as the co-ordinating body of the whole Construction Industry should be prepared to study carefully all proposals designed to use the industry as a mere means of providing employment, and if necessary to resist any programme of building and construction which has as its only goal the laying of one brick upon another. The kind of thing which the Americans call "dirt moving projects" should have no place in any post-war construction programme.

If such is to be avoided it will be necessary for the industry to make counter proposals, and to properly do this will require the imagination, technical skill and sound judgment of every unit in the industry. It should be our aim to see that the aim of all post-war construction effort is directed solely toward increasing the national assets of Canada and toward the happiness and betterment of Canadians as a whole.

Skilled Labor Needed

One important ingredient of any successful post-war construction programme must be a supply of skilled labour in all trades. Since the depression the excellent apprentice training scheme in Ontario has become largely inoperative due to lack of opportunities for practical instruction and experience, and the war has of course absorbed a great many of those who were potential candidates for entry to the building trades. In another year the situation will begin to be serious and if some comprehensive plan for training is not put into operation, the end of the war may find us with many willing but few skilled hands, and any programme of construction must of necessity be hampered by this shortage. Recently the Department of Labor of Ontario, held a conference with interested persons on this subject and the findings of that meeting are now before the Minister for consideration.

At this point I cannot but pay the greatest compliments to those individuals and organizations in the industry, who have delivered the goods in the form of buildings and other kinds of construction for the use of the armed forces and the production of munitions of war.

In volume the total amount of construction in the country has in no year since the war broke out approached the volume of 1929. However, a comparison of this kind is quite misleading, and would only be important if wartime construction was of the same nature as that of peace time. The remarkable thing about the achievement of the industry is that it has produced such a prodigious volume of a totally different type of projects than those that make up a normal peace-time programme.

The buildings and landing fields of the R.C.A.F. alone were not only unfamiliar in design and structural technique but were built in many cases far distant from the normal sources of labour and of materials. The lumber industry, already taxed with unheard-of demands from Britain, was still able to produce the lumber for this programme. Paralleling this the munition plant building programme made demands upon the steel and equipment industries which were

met on a scale unknown in peace time. New methods in design, and great ingenuity in substituting new materials and techniques for those normally employed were quickly and smoothly adopted, and to the everlasting credit of every part of the industry these things were done with an infinitely small amount of friction with labour.

True, some units of the industry have had to view this inspiring spectacle as onlookers only, but I have not the slightest doubt that their days of inactivity are numbered and that every willing back will soon be given an opportunity to bear its share of the load. Through the operations of the Wartime Bureau of Technical Personnel the country is being combed for the kind of manpower required for technical work and technical management.

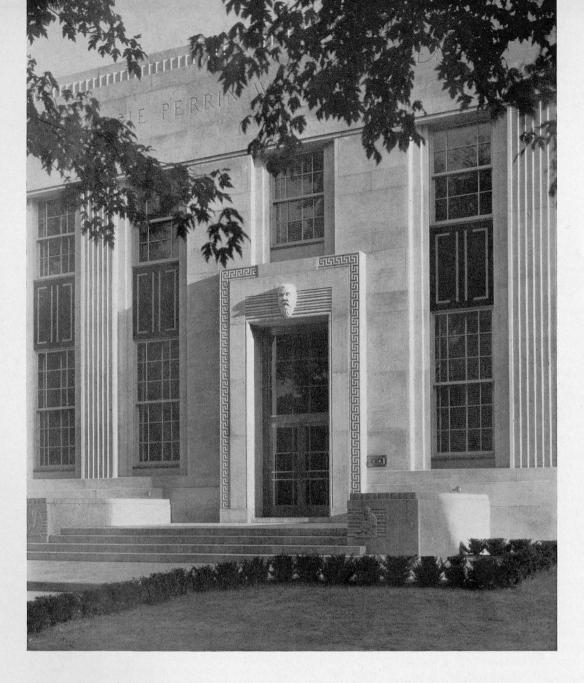
It is no longer possible for civilian firms not engaged in munitions production of some kind, to engage a university graduate in engineering or science without the express permission of the Government. Every architect, engineer, chemist and metallurgist must now be registered with the Bureau, even those who are serving with His Majesty's forces.

War-Time Regimentation

Our industry is controlled and regimented to an extent undreamt of at the beginning of the war. The purchasing agent has replaced the salesman; we accept scarcities and unavailable materials as the ordinary routine; we are subject to licenses and priorities; we fill out and file endless applications, and returns to the government; we even act as tax collectors for the state without remuneration. All of these things we accept, because we know that they must be done in order that this war be won and that quickly, and we do them willingly and cheerfully, irksome though they be. The majority of us, I believe, sub-consciously assume that these controls are temporary, that they will be abandoned when peace is declared, and that we will return to our normal and accustomed way of life. This unfortunately is not an assumption that is based upon any serious contemplation of the problems to be faced with the peace. In the first place, the controls and the scarcities have not been applied suddenly. The translation from a peace-time to a war-time economy has been accelerated from zero to its present rate over a period of nearly three years and the pace is ever increasing. When peace comes and the necessity for the driving forces behind the war effort no longer exists, it will not be sufficient to simply release that force, for we will have attained a certain momentum, in a no longer desirable direction.

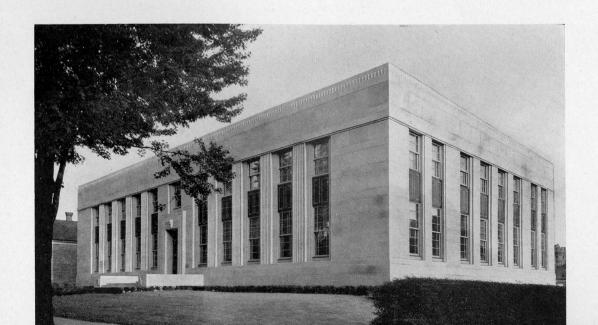
In order to reverse our direction and to provide an acceleration of our pace toward our starting point will require a driving force of the same magnitude as that behind the war effort if the deceleration is to take place in an equivalent length of time.

Furthermore, if that force is to be applied constantly toward a single objective, namely, winning the peace, then its direction must be along a straight line, and since straight lines are ruled we must be prepared to expect some control, certainly in the early stages of the recovery period. For this reason I do not expect to see other than a gradual relinquishment of control. At the end of the war it will be the duty of those in power to decide the time and extent for relaxation of present restrictions relating to the economic life of the country. Those decisions can only be made with wisdom if their makers are in possession of the most complete knowledge of all the facts and the considered wishes of the people as a whole. The Construction Industry must therefore be prepared to accept responsibility for its share of the reconstruction programme and be ready to assume its obligations to the country as a whole. To effectively do this, it must, I submit, begin its preparations without delay.



THE ELSIE PERRIN WILLIAMS MEMORIAL LONDON PUBLIC LIBRARY AND ART MUSEUM, LONDON, ONTARIO

THORNTON C. McBRIDE AND L. GORDON BRIDGMAN, ARCHITECTS



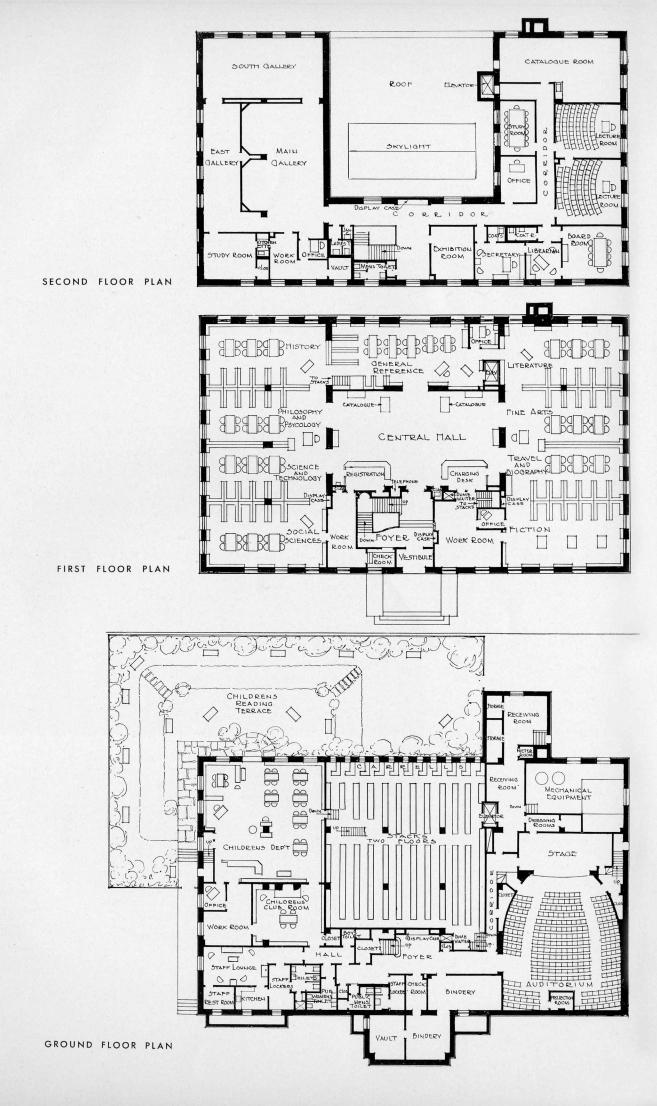


THE CENTRAL HALL



THE AUDITORIUM







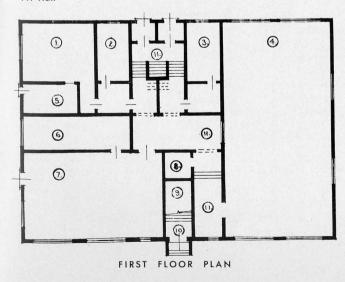
COBDEN HIGH SCHOOL, COBDEN, ONTARIO RICHARDS AND ABRA, ARCHITECTS

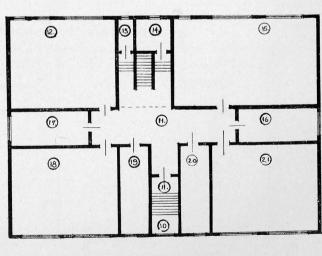
- 1. Boiler Room
- Boys' Lavatory
 Girls' Lavatory

- 3. Girls Lavatory
 4. Gymnasium
 5. Fuel Room
 6. Storage
 7. General Work Shop
 8. Pump Room
 9. Cistern

- 10. Vestibule 11. Hall

- 12. Science Laboratory
- 13. Lavatory14. Principal's Office15. Home Economics
- 16. Teachers' Room
- 17. Library 18. Class Room 19. Boys' Cloak Room 20. Girls' Cloak Room 21. Class Room





SECOND FLOOR PLAN

137

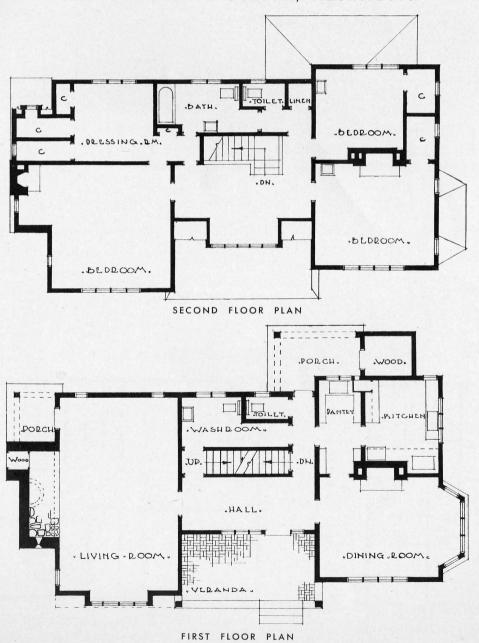


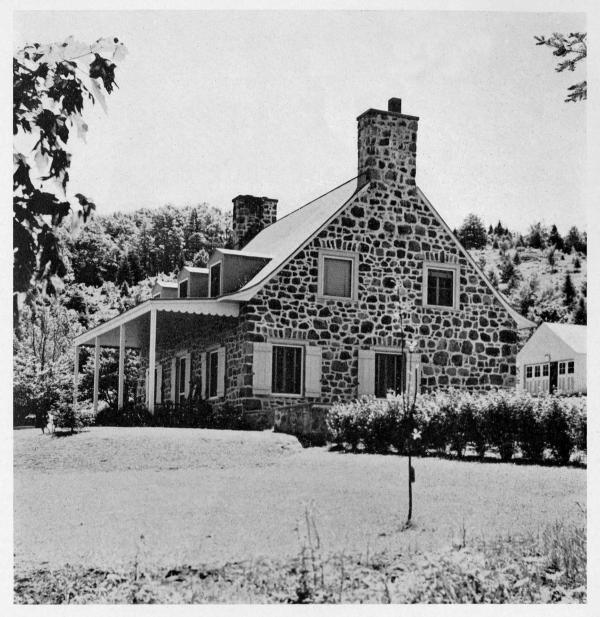


SEA FRONT

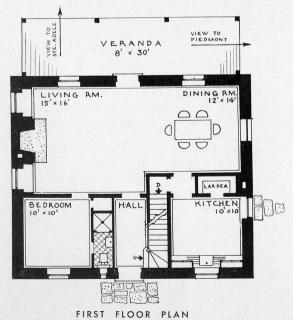
LIVING ROOM

HOUSE OF MR. WARREN HASTINGS, GANGES, SALT SPRING ISLAND, BRITISH COLUMBIA JOHNSON AND STOCKDILL, ARCHITECTS





HOUSE OF MR. L. MARCOUX, PIEDMONT, QUEBEC FETHERSTONHAUGH AND DURNFORD, ARCHITECTS



BEDROOM
13'x17'

BEDROOM
13'x12'

BEDROOM
10'x10'

SECOND FLOOR PLAN

OBITUARY

SAMUEL GEORGE CURRY

A Tribute by the Very Reverend Stuart C. Parker, D.D.

THE death of Samuel George Curry on February 10th last, removed a distinctive and significant figure. He had lived long enough to be one of the links between today and yesterday, one who wrought with the men who gave us the present city of Toronto, and who himself continued to march sturdily with the generation now walking the city's streets.

In civic life, in which in his heyday he had taken a notable part; in the Church, to which he gave his loyalty to the last; and in the profession of architecture, which he loved,
—he represented the type of stalwarts, now mostly gone from us, who were serving the community when many now active in these spheres were not yet born. Looking at him and marvelling at his vigour of body and mind, one realised that, in Canada at least, the latter half of the nineteenth century produced a most virile breed of men. In days when it is common to hear them dismissed lightly as "those Victorians", it is sobering to reflect that the powers of the best today would have been stretched to the uttermost to compete with them as contemporaries, and to equal their achievements. There is a character in the Bible who in a moment of self-scrutiny confessed—"I am not better than my fathers." The daily contemplation of the merits of our predecessors in any of the professions would do much to induce in today's practitioners the like healthful humility!

The old "Architectural Guild of Toronto",—Mr. Curry's "child", now grown to a lusty maturity as the Ontario Association of Architects,-comprised figures whose proportions are still impressive, whose works are before our eyes to show what manner of talent it was that gained for the Canadian architect a place in the sun. The Minute Book records the attendance at the inaugural meeting of "E. Burke, S. G. Curry, Frank Darling, A. R. Denison, D. B. Dick, G. Helliwell, W. G. Storm, W. R. Strickland, and S. H. Townsend",-all of them men whose Colleges, Churches, and other works still grace the city of Toronto and the Dominion of Canada. It was in the minds of Mr. Curry and Mr. Storm that the idea of a professional association first took shape, and of the two Mr. Curry was the dynamic. So we read that when Mr. Storm had taken the chair, he turned over the meeting to his zealous friend that he might explain to the brethren of the profession the novel project of an association of architects, and convince them of its necessity. He did, and for ten years the Guild, while primarily a social organisation, did not a little to remove the disabilities that were crippling the Canadian architect, and supplied the precedent and the inspiration to the later Ontario Association of Architects to battle successfully for a still further removal of them.

Mr. Curry, as an old friend has noted, "for some reason shunned office", though for four years—from 1887 to 1891—he was Secretary-Treasurer of the Guild, and appears as one of the first Directors of the Association. But throughout all the days of difficult struggle, he continued to be the moving spirit in the cause of professional association. There are still active some who know well the part he played. It is perhaps to be regretted that his pioneer services were not more generally known among the younger men, that they might have looked with a still greater interest in later years on that somewhat solitary figure of the man who

did so much to put the profession in its rightful place in Canada.

It cannot be out of place to say that Mr. Curry was one of the first friends I made on coming to Toronto from Scotland, and in our nineteen years of friendship there never arose even a slight misunderstanding between us. His loyalty was admirable. I would venture the opinion that his friendship was not lightly given: he had a keen, critical mind, and was never one to disguise his dislike of anything which fell below his own standards. Such men do not go about collecting friends. But when their loyalty is given, it endures. There was no service Mr. Curry would not render to St. Andrew's Church, which his friend Storm had built and which he himself had developed in later years to its present form. A faithful member of the congregation, he was seldom absent from a service, until his strength began at last to fail. And the congregation trusted him. We should never have dreamed of making any change in the structure or furnishing of our buildings without calling in Mr. Curry to ask his advice and availing ourselves of his services, always enthusiastically given, as overseer and master of works. I recall a summer when he appeared to me as a supremely happy man. Redecoration was going on, St. Andrew's was scaffolded inside so that it looked like the interior of a Zeppelin, and several hours each day Mr. Curry prowled and climbed through that intricate erection, watching all that was done, not only with the vigilance of an architect professionally interested, but with the sedulous care of a Churchman determined that nothing but the best would have place in his Church!

Both the Church and the profession of architecture have lost a colourful personality from their ranks. I do not suppose that either will forget S. G. Curry readily. To do so would be unseemly. But in any case it seems to me impossible, because in the exercise of his calling he has left behind many memorials of himself in stone, and in living his manly life he has bequeathed to all who knew him the memory of an upright and independent character.

K. M. CAMPBELL

Kenneth Mowatt Campbell, distinguished Canadian architect who for the past year was Chief Architect in the Department of Works and Buildings of the Naval Service in Halifax, died on March 25 at the Victoria General Hospital in that city, after a brief illness. He was a native of Springhill, N.B., where he was born in 1891.

Mr. Campbell had a brilliant record as a soldier as well as in his profession of architecture. Two years after graduating with honors in architecture from McGill University, he went overseas with the 5th C.M.R. as a signalling officer, to later become second in command of the Second Division of the Signalling Corps, with the rank of Major. He served in France, was mentioned in dispatches; later was attached to the Canadian Corps Headquarters staff.

After the war he studied under Sir Aston Webb in London, then came to Canada to practise with the Ernest E. I. Barrett firm of architects in Montreal. From there he went to Palm Beach and set up his own practice in Florida. Later, associated with the J. E. R. Carpenter firm of architects in New York, he had a part in the designing of the Lincoln Building and many large apartment buildings on Park Avenue. Seven years ago he returned to Canada, and established his own practice in Fredericton.

A. R. P.

by The Committee for the Study of Protection of Buildings against Aerial Bombardment, and the Design of Shelters and Bomb Resistant Structures.

N an issue such as the last one, it would not be surprising to find a number of typographical errors, in spite of rather thorough proofreading. To four of these we draw your attention and note the correction in each case.

1. Page 94—in second column:

$$\frac{\sqrt{7,700,000}}{2g} \text{ should read } \frac{7,700,000}{3}$$

- 2. Page 94—at bottom of second column: 52,000,000 ft. lbs. should read 52,000,000 inch lbs.
- 3. Page 98—in paragraph headed *Impact* the value for Kinetic Energy should read 1/2 m v^2 and not as printed.
- 4. Page 77—Diagram 4:

 The caption should read "an approximate evaluation of relative danger of an individual.

In the May issue there appeared an advertisement in which were illustrated two designs for shelters by members of the Institute which respectively were awarded First and Second Prize in a competition held last year.

Since the design of Air Raid Shelters is a serious business and lives may be lost if they are improperly constructed, the Committee feels it its duty to discuss these two designs critically, although they appear in the advertising pages and therefore are not the responsibility of the Committee.

Our criticism is in no way directed at the advertiser for quite properly using the designs which had received the approval of the P.Q.A.A. However, in the year since the P.Q.A.A. held this competition, much has been learned about the behaviour of structures under the effects of bombing and many ideas incorporated in earlier shelter designs have proved inadequate and have been abandoned.

The two designs have therefore been evaluated in the light of the latest findings as follows:

I. General Principle Governing Design

(a) Degree of Protection and Radius of Vulnerability

It is assumed that:

- (a) No protection can be provided against a direct hit.
- (b) Protection against the effects of a near miss to be provided at the minimum distance possible from the explosion.

The design technique explained in the A.R.P. Issue of the *Journal*, will provide good protection at a distance slightly greater than the radius of the crater which is assumed to vary roughly from twenty-five to thirty-five feet.

(b) Analyses of Designs in General

The two designs in question comply with the above assumptions, but would not give results comparable to shelters as now recommended, being vulnerable at any distance from an explosion of a demolition bomb, less than 100 feet. This, in effect, increases the destructive area of each bomb and renders less the degree of protection provided.

II. Ground Shock

Since both shelters are buried, ground shock is the important destructive force to be countered and it must be realized that this force has two components, one horizontal and one vertical, both of which act on the structure.

As far as the horizontal component is concerned the first design is much stronger than the second and would probably be effective at a distance of about 75 feet. The hollow wall of the second prize design is extremely weak and would not effectively stand up against the wave at any distance nearer than about 125 feet. In neither case has any provision been made to resist the *shear* at the ground level. Against the vertical component the gravity design of the walls renders them impotent and complete collapse of both structures would undoubtedly be the result of a near miss.

The remedy in each case lies in provision of tension reinforcement throughout the vertical section to resist the vertical component, and by excavating a moat or ditch all around the structure in order to take care of the horizontal component.

III. The Blast Wave and Splinters

Both shelters, being buried, are structurally immune to the effects of the blast wave. In each, however, the entrances are vulnerable. In the first prize design the blast wave would most likely tear loose the hatchway cover and blow in the inward opening vestibule door. In the second prize design the door is vulnerable to the suction phase of the wave. The first prize design is better designed to resist penetration from splinters than the second, but the hatch cover of the first and the exposed door of the second prize design would probably both be punctured.

In both cases a properly baffled entrance should be provided (see page 116, May issue).

IV. Debris

The debris load from nearby structures or sections of pavements would be serious in both cases. In the first prize design the hatch would be rendered useless as a means of exit, even if not actually collapsed and the occupants would have to be rescued before they were suffocated.

The arched roof is only fairly resistant to the impact of falling debris. The roof of the second prize design is inadequate to bear this load. The remedy in both cases lies in the use of reinforced concrete roof slabs.

V. General Observations

The use of buried shelters in Canada is open to several serious objections, namely:

(a) Their cost due to hand excavation and sub grade water-proofing is higher than necessary.

(b) The effect of the horizontal component of the ground shock wave in frozen ground is not known but it must obviously be greater than in unfrozen ground. The existence of a surface layer of frozen ground of a foot or two in depth also would involve considerations of horizontal shear of some importance. The collection and freezing of water in a moat around the shelter would nullify the value of the moat.

(c) Snow removal from entrances might cause fatal delay for persons suddenly called upon to take shelter.

For the above reasons the Committee advocates surface shelters for use in Canada. The Committee also recommends the use of properly reinforced solid brick walls at least 13½" thick for all shelter walls and for baffling.

PROVINCIAL PAGE

ALBERTA

In the April issue of the Journal various reports of the R.A.I.C. and of the P.Q.A.A. were published. In these there was emphasised, amongst other matters, the need for public interest and the desirability of informing the public on something of the technique of town planning methods and on the benefits that may be expected from the adoption of such methods. It is true that the public is not nearly sufficiently alive to these matters, but in certain quarters there is definite evidence of such interest. During the past year or two I have personally been asked to give talks to not less than eight different societies, and some radio talks in addition to these. I have also found daily newspapers and other journals very willing to publish occasional letters and articles on these subjects. The most encouraging and hopeful feature is the interest taken by clubs and societies; for such institutions are the natural and necessary culture ground of our democratic social structure, without which democracy itself could scarcely hope to exist.

Recently Mr. J. Martland, president of the A.A.A., was asked to address the Society of Real Estate men on the subject of Zoning. On this department of Town Planning few in this country are in a better position to speak since, as City Architect, it has been part of his duties to administer the Zoning By-laws of the City of Edmonton. In speaking on the subject, he referred to the Zoning Primer published by the Department of Commerce in Washington, D.C. Mr. Martland was able to endorse from twelve years personal experience the recommendations of that little bulletin and at the same time he could point out the pitfalls that beset the actual administration and some of the cunning evasions that have to be countered. It would be well that some similar Primer should be produced specially adapted to Canadian conditions. It has popular appeal; it is good propoganda. At the time that Town Planning was adopted in Edmonton the members of the commission, to most of whom the subject was entirely new, found it of great service and a copy is supplied to each new appointee to the commission along with a copy of the Zoning Plan and By-laws.

In the issue of the Journal of March, 1941, there was an admirable article by Mr. Humphrey Carver entitled "The Strategy of Town Planning". In that article Mr. Carver appeared to decry the idea of Zoning and suggested, "If we reject Zoning . . . should we not return to our basic social unit and regard our cities as cellular compositions built up from local neighbourhood communities?" He then went on to develop his meaning. Nothing could be sounder. Mr. Carver's view was particularly interesting to myself as the chairman of a zoning committee; for his suggestion was precisely the interpretation which our committee had from the start placed upon the idea of zoning simply as its natural and logical development. We never looked upon zoning as being an entire segregation of uses. Thus, in allotting districts for residential use we saw to it that each residential district should have its own neighbourhood park, there being, of course, very extensive general parks besides these. Each has its local business quarter, so that no one has far to walk for small purchases and services. Each has also its school. All these we assumed as town planning necessities and we made provision for them if they were not already existent. We did not provide for first class, second class and so on, residential districts. Our city is not aristocratically minded. There are certain minimum sizes of lots registered and we take care that these are not subdivided. If a citizen wishes to have a large house or garden he buys two lots or three or as many as he likes and arranges his buildings and grounds to his liking. Once having done so, however, he cannot cut off and dispose of a portion in a manner that will infringe regulations regarding minimum standards.

In his article Mr. Carver set forth another very excellent idea which only revealed itself to us too late for inclusion in our zoning plan. We may still be able to incorporate it at some later opportunity. He says, "In an ideal community plan any one should be able to find accommodation appropriate to his phase in the cycle of life without moving from the neighbourhood." The "cycle of life" which he refers to is the fact that very generally a young couple find their appropriate home in an apartment. On arrival of children a house is their proper habitat. When the children grow up and leave the home an apartment is again the natural resort of the old folks. In practice what he advocates would be fulfilled by incorporating in each residential district a certain proportion of apartment buildings,—just as there is a school, a park and a local business corner. Apartment buildings do not need to be a definite separate group. A little practical observation will reveal that the so-called Multiple Dwelling District commonly provided always consists chiefly of some other classes of use.

—Cecil S. Burgess.

ONTARIO

Outside of government-sponsored organizations, the hardworking architect is more or less a legendary figure these days. The feverish activity of the committee which prepared the A.R.P. number was, therefore, one of the sights of Toronto for a few weeks; and their concentrated sigh of relief when the job was finished has not blown itself out yet. They have earned the thanks of the profession; but in all probability their names will be more firmly linked with the errata, now being assembled. "The evil that men do lives after them . . ."

The problems of post-war reconstruction, which are of such vital interest and importance to the profession, were considered in some detail at the Annual Meetings of the Canadian Manufacturers' Association and the National Construction Council, which were held recently at Toronto. The C.M.A. heard Dr. F. Cyril James, who is Chairman of the Dominion Government's Advisory Committee on this matter; and the president of the N.C.C., A. S. Mathers, made it the principal subject of his opening address. These two speakers were in substantial agreement on several points, notably the imperative need for planning now, the likelihood of a post-war boom which must be prevented from getting out of hand, the use of construction projects for the purpose of "cushioning" our economy against subsequent depression, and the importance of seeing to it that all such projects shall contribute to the national assets and the wellbeing of the people. In this latter connection, Mr. Mathers emphasized his belief that if mere "dirt-moving" projects are to be avoided the construction industry must be prepared to make counter-proposals—a job which will require all the imagination, technical skill and sound judgment which can be brought to bear upon it. It would be a sound idea to print both these addresses in full. They do not have to be swallowed, hook, line and sinker; but they do contain plenty of material which should be of real value to the various committees now working on the problem.

—Gladstone Evans.

QUEBEC

We have, so far, heard nothing but praise for the A.R.P. Number from confreres and believe others privileged to be on the mailing list will re-act the same way. It should be carefully studied by every one but especially those in responsible positions like public officials, officers of corporations, C.P.C. wardens, and members of volunteer groups organized to assist in any emergency that may overtake us through attack by air. A lot of thought and labour went into the production of this number and we are deeply indebted to the Toronto Group who gave so unsparingly of their time and talent to the undertaking of what we feel will be recognised as the most authoritative concise coverage of the subject to date. We are proud that through their efforts the architectural profession can show leadership in a matter of such important public interest.

The Town Planning Committee has joined the Reconstruction Committee in combined weekly meetings at the Association Rooms. It is possible that during the summer months meetings will be less frequent but there is no intention of letting up entirely. A sub-committee is now studying the feasibility of enlisting the support of other professional bodies and social service groups with a view to holding a conference this autumn. Mr. H. A. Terreault, Chief of the Town Planning Department of the City of Montreal, met the Committee one evening and explained how his department, which is less than a year old, was functioning. Mr. Percy Nobbs, who is not only a member of the City Council but also Chairman of one of Mr. Terreault's advisory committees, came to one of the meetings and in the course of a most interesting talk brought out practical suggestions which might be followed by architects in developing schemes for public improvements. The committee realizes that while building is only one factor in Post-War Reconstruction it will probably be the largest single medium for rehabilitation of discharged soldiers and workers in war industries. There is a practical implication in this that must be apparent to every architect.

At the 8th Conference of Canadian Social Work held in Montreal, the City Improvement League organized a luncheon and invited the architects to come and hear an address by Mr. Sydney Maslen of New York City. Having heard many speakers in our time, we expected to hear just another speech. But this time it was different. Mr. Maslen's subject was "Recent Trends in Housing" and within a space of twenty-five minutes he gave one of the most informative highly condensed talks on this subject that we have ever heard. There was enough material in it to fill a book. He stated at the start that he could only speak from first hand knowledge of conditions in the United States, but as he talked it was easy to draw parallels which would apply in Canada. His address has since been published in the Canadian Municipal Review and is well worth reading.

The Housing Shortage has for some time been a live issue in newspapers and periodicals, popular and technical. Everybody agrees that the situation is acute and that prompt action must be taken. After crying for action everybody stops like the old Mississippi steamboat that had to stop every time it blew its whistle. It, of course, cannot go on. Some day the Government (we can't think who else) will step in to relieve the shortage and it may be in a way that will not benefit the architects. In the meantime let's have some bright ideas on setting up the machinery for developing permanent housing and community planning in centres that are likely to remain industrially stable.

By way of personals: Mr. W. S. Maxwell's office received a letter today (June 2nd) from him, stating that he was still in Haifa, that he was well and often thought of his friends in Canada and wished he was with us. We wish you were here

too, Billy. Professor John Bland has taken an opportunity for work with the National Research Council in Ottawa for the summer. He will return to McGill in the autumn.

-Harold Lawson.

SASKATCHEWAN

The Saskatchewan Architects' Act was amended at the 1942 session of the Legislature. The wording of the old Act made it difficult or impossible to enforce in some particulars. It is believed these difficulties have been overcome.

In bringing the Act before the Legislature for revision, the Association had one main object in view. The old Act had a clause requiring plans of all buildings to be used as places of public assembly or erected from public funds, to be prepared by a registered architect, where the cost exceeded \$10,000. An attempt was made to have the \$10,000 limit applied to all buildings. This was prompted by the collapse of a filling station floor in Saskatoon wherein a man lost his life.

The Act, as passed, requires architects' plans for all buildings costing over \$15,000. Farm buildings, grain elevators and engineering works are excluded from this provision.

One other important amendment was made. This will affect architects residing outside the Province of Saskatchewan. The old Act required a non-resident architect to register in Saskatchewan in order to practise. He can now obtain a temporary license but is required to collaborate with a resident architect.

Non-resident members automatically become licensed architects according to the new Act.

Copies of the new Act and By-laws will be available in due course.

—Е. J. Gilbert.

D. W. BELLHOUSE

At the annual dinner of the Manitoba Association of Architects an honorary life membership was presented to D. W. Bellhouse.

Mr. Bellhouse was born in England. At the age of three his family moved to Germany. He was educated in Germany, Switzerland and Belgium and started his architectural education in Bruges. He returned to Germany, and from there to England, and studied at the Royal Academy Schools, London. Mr. Bellhouse's father was an architect and giving up practice, travelled widely through Germany, Switzerland, Italy and Belgium, sketching and painting in water colours. I have seen many of his delightful sketches and pictures.

In 1883 Mr. Bellhouse came to Canada and like the majority of Englishmen in those days, took up farming. After five years he left the farm to practise architecture in Winnipeg.

In the old days Mr. Bellhouse played rugby and until a few years ago he was still a well-known active cricketer in Winnipeg. He is an ardent fisherman, big game hunter and has the hat trick in bears. Not satisfied with shooting two, he strangled a half-grown one. Mr. Bellhouse is now in his 80's, hale and hearty, ever ready to go fishing and hunting in the great outdoors.

Mr. Fingland spoke for the Association, wishing Mr. Bellhouse continued good health and happiness.

-Gilbert Parfitt.

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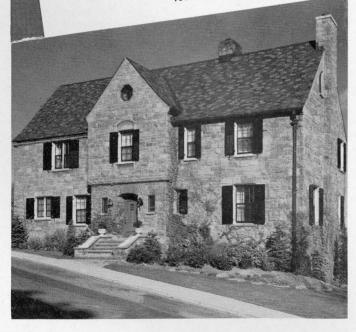
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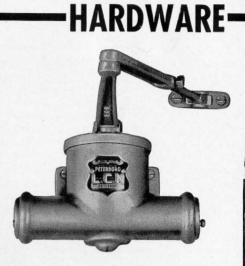
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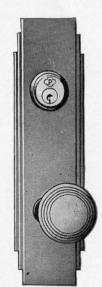
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