

JOURNAL

ROYAL ARCHITECTURAL
INSTITUTE OF CANADA



VOL. 20

TORONTO, JUNE, 1943

NO. 6

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JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

Serial No. 214

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WE would like to draw particular attention to the article on Town Planning, which appears in this issue, not so much for its content which is of a general nature written by an Englishman for people in the British Isles, but for the implications which lie behind its original publication in *Current Affairs*. *Current Affairs* is a paper that goes to every officer in the British Army, and this particular issue has been reprinted by H. M. Stationery Office, Ottawa. We understand that the contents of each issue are explained to all ranks as part of the Army Course on education.

At a time when hundreds of citizen committees are working in Canada on problems of Housing and Town Planning without direction in most cases, and without official support or recognition, it is encouraging to think that the thoughts of Canadian soldiers are being directed into similar channels through the educational programme of the British War Office. We were always of the opinion that during the war, the Government of Canada, along with Provincial Governments and Municipal Councils, Universities, and Newspapers, should undertake the education of the people in Town Planning matters. It would be ironic, if not tragic, if fully informed troops returned to a Canadian people ignorant as a whole of the prime necessity for all reconstruction projects.

We were delighted to hear that members of the Architectural Research Groups in Montreal and Toronto, who are now in Government employ, have formed an A.R.G.O. in the Capital. They have taken on the modest task of replanning the seat of Government. We have every confidence that a fine and comprehensive plan will be the result. Too often in Ottawa, "Town Planning" has been something forced on the municipality at a moment's notice by the necessity of finding a site for a monument or a public building. If we know the young architects concerned, they will not be satisfied with any such piecemeal programme, and we wish them every success in an excellent public-spirited effort.

Our generation has become accustomed by war to news of death in a way that was unknown to our fathers. Even so, the sudden death of a very dear friend comes with the effect of a physical blow, especially when that friend was removed from war, and was engaged in the peaceful pursuit of his profession. It was in this way that all architects in Canada who knew him, heard of the death of Andrew Cobb. The people of Nova Scotia, and perhaps beyond, knew him as an architect outstanding in our generation. We knew him as well as a Fellow of the Institute, and a person whose life of service to the profession might well be a pattern to all architects. At our Annual Meetings one was always conscious of that feeling of affection which members from every province hold for the little band from Nova Scotia and New Brunswick, who, year after year, come to make their contribution to the Institute's affairs. Next February one of them will be sorely missed.

SHALL WE REBUILD WITHOUT A PLAN?

By RALPH TUBBS

Member of the Reconstruction Committee of the Royal Institute of British Architects. Author of the Penguin Book "Living in Cities."

The article below was sent us by Major L. E. Shore. It appeared in a pamphlet entitled "Current Affairs", which goes to every officer in the British Army. This particularly number on Town Planning was reprinted for the Canadian Army by H. M. Stationery Office. The publication of such a document with the support and approval of the War Office indicates the importance of the subject to every class in Great Britain. When one realizes that each Officer explains the pamphlet to his men, one can foresee a great body of opinions being built up in the armed forces that will expect action when the army is demobilized.

—Editor.

What is Planning?

Before discussing whether planning is necessary prior to erecting any buildings in town or countryside, let us consider what planning really is. Let us forget for the moment any prejudices we may have against the word. Planning means nothing more than thinking ahead and making the proper preparations before starting a job. It involves deciding what you want, assessing the means available, and then using them to get the best possible result. It is nothing more than that. It would seem obvious, therefore, that the larger the job, the greater the need for making the necessary plans before starting it. Unfortunately, this has not always happened in the past. While we have planned the decoration of our living-rooms and the layout of our gardens, the much more complex work of expanding the towns for the growing needs of the people has been left to haphazard development. If a lot of different people were all working on a job without any plan to work to, you would expect chaos. That is what has happened to our towns, and quite naturally we have got chaos!

The Ruination of Towns and Countryside in the Past

The rapid unplanned growth of the towns has not only taken place since the last war. It began just over one hundred years ago. At that time towns were small compared with the towns of today, and although they had not grown according to any plan, the very smallness of their size and the relative simplicity of people's lives had prevented the lack of planning from having very serious consequences. The towns had a great deal of charm. Many delightful squares and terraces had been built, and the country could always be easily reached.

The population of England and Wales was then under ten million. A very rapid increase in the population, however, soon began to take place, and this at a time of tremendous industrial expansion. As the coal mines were opened up, and as the factories grew in size, a great number of houses were required for the operatives. It is a grim fact that these workers were regarded in the nineteenth century more as part of the machinery than as human beings. Development was so rapid that planning was neglected. Row upon row of dreary houses, indiscriminately mixed up with smoke-belching factories, were being built in every industrial area. The degradation of the city had begun.

But the nineteenth-century builders are not alone responsible for the ugliness we see in nearly every town. Since the last war we, too, have done much to spoil the beauty of town and countryside. It was clear at the time the armistice was signed that there was an acute shortage of houses. Instead of preparing

proper plans, so that the new houses should add to the beauty of the country and be really pleasant places to live in, the provision of houses was left to haphazard development, and was usually exploited as a means of making profit.

What happened? Vast suburbs of mean and ill-designed houses sprang up, little thought being given to the appearance of any district as a whole; trees were cut down; and the open country was pushed farther and farther away from the towns. Although new arterial roads were built, their effectiveness was immediately destroyed by rows of houses constructed along their side. Ugliness was appearing everywhere. The use of the motor-car and motor-coach as the new means of travel meant that no part of the country was safe from spoliation. Even the Downs and the coast-line were not immune. Indeed they suffered particularly badly.

The face of Britain was being irreparably scarred.

Who Was to Blame?

There is a tendency to put all the blame on land-owners and speculative builders who took the most active part in the rape of the British countryside. But we cannot justly pass on the responsibility quite so easily. Anyone who passively allows a crime to be committed is guilty of aiding and abetting. We are all partly to blame for the ugliness we have allowed. Our own crime may be apathy. We have held up our hands in self-righteous horror at the hideous building that has gone on in our own town. We have cried, "Why do they permit it?", and then gone quietly home and done nothing ourselves to prevent it. We have not taken the interest we should in the elections of our Town Council; we have not insisted that the Council should publish proper plans for the control of building in our own town. In fact we have not been prepared to shoulder the responsibility which democracy demands of us.

What Would Happen if We Allowed Planless Development to Start Again?

When we see the effect of the absence of planning in the past, it does not need much imagination to see what appalling results would follow if we allowed planless development to start again after the war.

In the first place, the opportunity of rebuilding the blitzed towns as finer and healthier cities would be lost; the owner of each site would naturally exploit it to the utmost, so the towns would be rebuilt with all their old faults. Then the large towns would never be provided with the parks and open spaces so urgently needed: the countryside would be still further littered with mean houses; unplanned roads would lead to endless traffic jams; while the building of factories without the proper consideration of the location of industry would lead to shortage of labour in one town, while severe unemployment existed in others.

Not only would the beauty of town and countryside be finally lost, so that we would be compelled to live our lives surrounded by ugliness, but the whole standard of living would be dragged down by unhealthy surroundings, the inefficiency of communications, the lack of cohesion in industry and the deterioration of agriculture.

The Need for Both a National Plan and Local Plans

We would probably all agree therefore that planless development must not start again. Planning will have to be done

not only locally, but also on a national basis. The social and economic life of one town is affected by the social and economic life of other towns; the life of each one of us is affected not only by the lives of the people immediately around us but by the lives of people in many different parts of the country. For example, the development of a particular light industry on the outskirts of London might create unemployment in some town in the North, where that industry was previously carried on. It might therefore, at the same time as creating a shortage of houses in the vicinity of the new industry, be the cause of a surplus of houses in the town of the original industry.

No one town can therefore be considered entirely independently of other towns. Every town will be affected, and each in a different way, not only by the movement of industry, but also by any changes in the birth-rate and by the national policy on such matters as transport and international trade. It is clear, therefore, that no local body can prepare the necessary plans for their town or district unless they know how their district is going to be affected by national policy and by changes in other towns.

The first answer therefore to the question: "What do you mean by a plan?", is that there must be both a national plan and local plans. The national plan would set out a constructive policy for the whole country; it would be concerned primarily with problems of industry, trade, transport, and the distribution of the population. It would outline how the national policy on these matters affected the extent and location of building throughout the country. As soon as these decisions had been made, local plans would be prepared in each district, having due regard to the directives of the national plan. These local plans would be concerned with the actual siting of buildings, the provision of houses and open spaces. On them will depend the actual appearance of town and countryside.

The Welfare and Happiness of Every Individual the Basis of Planning

It must always be remembered that plans are not an end in themselves, they are only the means to an end. We all like to be interfered with as little as possible, and we really rather like muddling along. The most civilized societies have always recognized that the individual should be free to live as he likes and think as he likes, so long as he plays his part in contributing to the welfare of society and refrains from committing any acts harmful to his fellows. Character and individual worth must always remain the first goal of man.

We do not want to make our society so ordered that each man feels himself but an infinitesimal part of a vast national machine. But the planning of our cities and of our countryside, far from attempting to crush the sense of individual worth, should be based on a very deep recognition of this. If man represents life in its highest form, surely he should build himself an environment worthy of him and not be contented with ugliness and squalor. The aim of any plan for town or country must be the welfare and happiness of every individual who lives there.

Good Building Does Not Only Satisfy Practical Needs

The recognition that our highest aim is individual worth and that man's purpose is not only economic efficiency, is not an objection to town-planning; it is a further justification. All needs, individual and public, might be efficiently met on the practical side, and yet, in the result, the visible face of Britain might be not the better for the change, but immeasurably the worse. Town-planning, based on a realization of this, while preventing economic waste and maintaining the material standard of living as high as possible, aims at satisfying something more than man's practical needs. A finely laid-out city can, in itself, be an expression of human purpose; it can reflect some of our innermost feelings.

As we walk through the lovely squares, quadrangles and avenues of such towns as Bath, Oxford and Edinburgh we cannot help feeling pleasure in the buildings around us. We share with their builders some of their sense of the purpose of life. Or abroad, if we stand in the colossal and formal square in front of St. Peter's Cathedral in Rome, we are conscious of the assertion of men's belief in their destiny; and in Venice, when we see the lovely grouping of cathedral, square and palace on the water's edge, we feel that here in the buildings is something of the free spirit that once dominated that town.

With such examples of the glory of fine building in the past, are we going to admit ourselves satisfied with ribbon-development and sprawling suburbs as the expression of our own civilization?

We should not attempt merely to imitate the architecture of the past, for much of its quality is due to the fact that the builders were thinking for themselves and expressing themselves. We, too, must think for ourselves. Our own civilization must have its own expression. But we should aim that our towns should have some of the beauty and fineness of conception that other men in other times have found it possible to give to their towns.

How a Positive Planning Policy Could Be Carried Out

We have seen that both a national plan and local plans will be required if we are to realize the almost universally felt desire to build a finer Britain after the war. The principle of planning has already been accepted by the Government, and in February, 1941, the Minister of Works and Buildings announced:—

"I am authorized in the preparatory work to proceed on certain assumptions: (1) That the principle of planning will be accepted as national policy, and that some central planning authority will be required; (2) that this authority will proceed on a positive policy for such matters as agriculture, industrial development and transport; (3) that some services will require treatment on a national basis, some regionally and some locally."

If such a positive planning policy is put into effect it will imply a far-reaching and most welcome change in method from that which has been adopted in the past, when schemes produced by planning authorities have been almost entirely restrictive in character.

With regard to the machinery for carrying out a positive planning policy no details have yet been announced. It is suggested, however, that this might take the following form:—

A *National Planning Authority* would lay down the main lines of a national building programme, based on research into such matters as the movement of industry, the distribution of the population, transport, health and the best use of the soil for agriculture.

Regional offices of this authority would consider regional requirements and character. They would also deal promptly with decisions and approvals.

Local Authorities would still be responsible for their own districts, but their planning would be inside the framework of the national planning policy.

Planning Trusts might be appointed by local authorities to prepare plans for their cities or districts. These trusts would include architects, engineers, sociologists, economists, etc.—experts belonging mostly to the locality.

Whatever the detailed machinery may be, it will require the whole-hearted co-operation and support of the people of this country. If we really desire to live in finer cities and in a lovely countryside we can. We must make it our business and our determination to create a better background for our lives than we have in the past.

HOW TOWN-PLANNING WOULD AFFECT YOU

If You Live in a Large Industrial City

Cast your mind back and remember what life used to be like in the large industrial cities before the war. There was the centre of the town, chaotic and formless, continuously filled with traffic jams, noise, dust and petrol fumes; there were the dreary rows of houses built in the last century, set in grey, narrow streets, and covered with grey slate roofs; there was the long and tedious journey, often standing all the way, from home to one's place of work; there was no open spaces; children played in the streets and ambulances were provided to collect those that had been run over.

This state of affairs had come about because these cities had never grown according to any plan. It is not necessary for even the largest town to be dreary. It will be a first duty after the war to tackle the problem of these large cities, and to see that they are made truly pleasant places to live in.

The "Master Plan"

With such a vast undertaking ahead of one as the transformation of a congested and grimy town into a fine and dignified city, it is quite clear that a comprehensive plan of action must be worked out. It is not sufficient to attempt improvements here and there, piecemeal, without considering the city as a whole. This plan, setting out the main lines of development and reconstruction of the town, is called the "Master Plan".

It is not intended that the whole of it should be immediately carried out for this would be impossible. Many buildings, although obsolete, will have to be kept for a while, until they can be replaced. When any building is, however, demolished, the new building that is constructed on the site would have to be in accordance with the plan. So, by degrees, the new and better town would materialize.

The master plan would, in the first place, relate the future development of the town to the "National Plan"; that is, any anticipated changes of population or industry would be borne in mind.

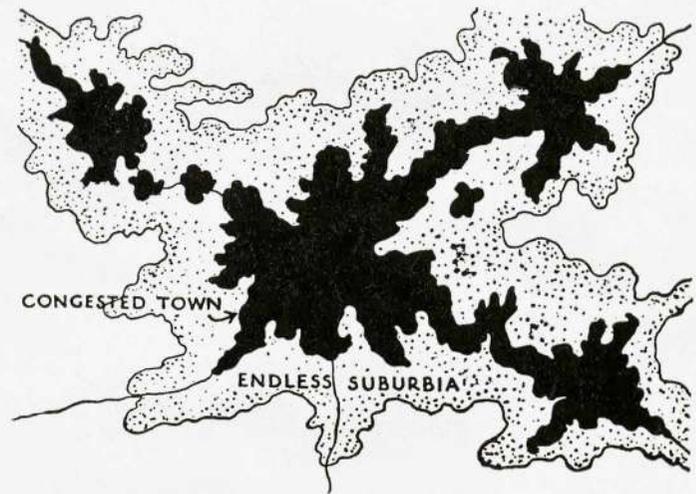
The plan would then aim at relating the siting of workplaces and homes, so that wearisome journeys were avoided, and, where necessary, it would improve the actual transport facilities.

Open spaces and parks are essential in all large cities. On summer evenings, when the day's work is done, or at week-ends, one wants to be able to rest quietly among the trees and grassy slopes of a park, or if one is feeling more energetic, to play tennis or go swimming. Towns should provide opportunities for doing this, and it would be one of the aims of the master plan to see that it was possible for everyone to enjoy these things.

It is obvious that in the case of the most overcrowded and smoke-ridden industrial towns, the master plan must envisage very great changes. For this reason, we must remember that it will need great efforts and great determination to carry the master plan through. It may mean that the street in which you live may have to be pulled down in order to make an open space of trees and grass, or to make a site for a modern cheerful school.

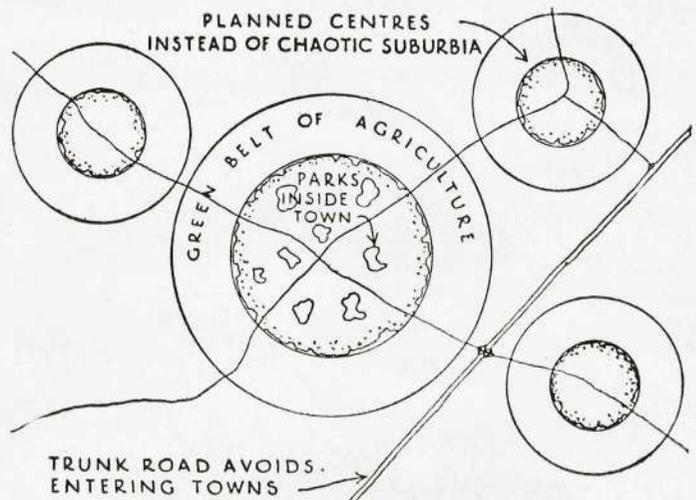
If you think of your own industrial town and imagine the improvements and changes you would like to take place, you will immediately realize the size of the task ahead of us.

THE TOWN PLAN



AS IT WAS—with no master plan.

Unplanned development of houses and factories spreading out around the towns until often no country was left between one town and another.

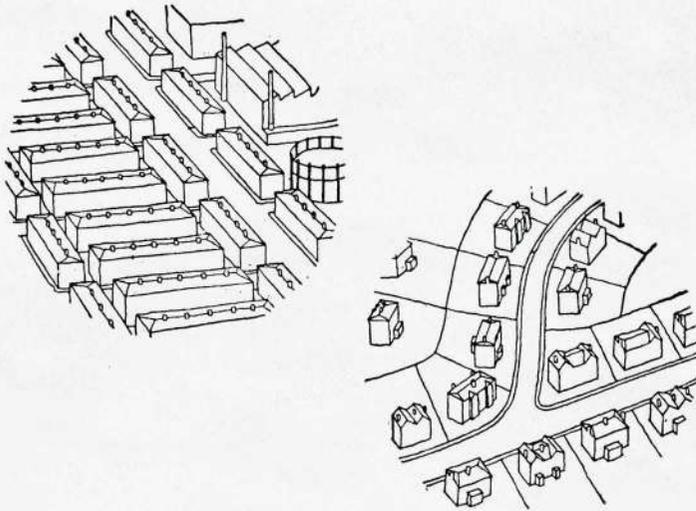


AS IT MIGHT BE—with a master plan.

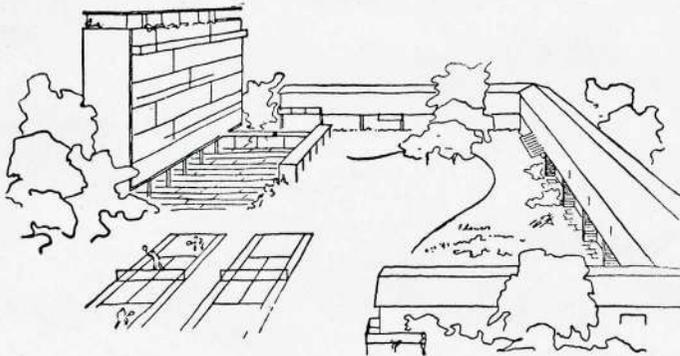
Efficient and concentrated building, interspaced with parks, inside the towns, and the open country always near at hand.

The City Centre

The heart of the city is the focal point of the social life of the citizens. The buildings and layout should have some of the fineness of conception that would reflect our belief in the worth of man. The heart of the city should no longer be a collection of unrelated buildings. It is a chance for the imaginative planning of tree-lined avenues, squares and colonnades, lofty buildings and terraces.



AS IT WAS—monotonous streets and sprawling suburbs.



AS IT MIGHT BE—the pleasant grouping of buildings, trees and lawns.

The Home in the Town

In a large city, individual houses each standing in a separate plot cannot be the solution of the problem of the residential district. This is self-evident for the purely mathematical reason that if many thousands of people are to live in completely detached houses, these houses must cover such a large area that ridiculously long journeys would be required to get to work or to see one's friends, while the country would be quite inaccessible. This is quite apart from the dreary monotony of a vast sea of individual or semi-detached houses.

When considering the planning of homes, it is important to remember that different people have different requirements, according to age, whether single or married or with children. Some can live most happily in flats, some in houses. All will want to see flowers and trees from their windows.

The solution is surely terrace houses around open squares and spacious quadrangles of lawns and trees, punctuated with high blocks of flats. In the squares would be gardens, tennis courts and children's playgrounds.

Life in the city could be very pleasant.

Every town must be considered individually. Your town, perhaps in Norfolk, may have quite different problems from another, say, in Devon. Market towns are primarily distributing centres where agricultural produce is exchanged for manufactured articles from industrial towns. Their size therefore varies according to the extent of country for which they are the natural centre for marketing. This in itself makes each town a special problem. So does the type of produce marketed, which may be livestock, grain or even fish. Often some specialized industry has grown up in the town over a long period, and this may have special demands.

If the drift of population away from the market towns to the already congested industrial cities is to be stopped, it will be necessary to revitalize the life of the market towns, perhaps encouraging the development of new light industries in them. Young and energetic men do not wish to stay in a town where there are no opportunities for them.

Planning for revitalized market towns does not mean sweeping away the character of each town. Market towns are usually of very old foundation, and over centuries each one has acquired a character of its own. This must not be forgotten. There should be no attempt to enforce a uniformity throughout the country.

Although most English market towns have their market squares and attractive old streets, there have recently been springing up rows of suburban houses and ugly garages along all the roads leading into the town. No longer can you get quickly out of the town into the open fields around. You have a long walk through dreary outskirts or have to take a bus. This planless development must stop.

We must regain clear demarcation between town and country.

If You Live in a Country Village

Agriculture has now become a vitally important part of the home front; there is little doubt that it will form an important part of English life after the war.

It is true, of course, that before the war there was a movement away from the land. That was because farming was becoming increasingly uneconomic, and also because country life offered neither the opportunities, nor the conveniences, nor the attractions which were to be found in the towns. He who worked on the land had little chance of developing his ability and by so doing getting a better job where he would have greater responsibility. He often had no choice but to live in a damp cottage without electric light, main water supply or gas. He had very few opportunities of making friends or learning of other people's points of view. He only very seldom had the chance of going to any form of entertainment, and this meant a long journey to the nearest town.

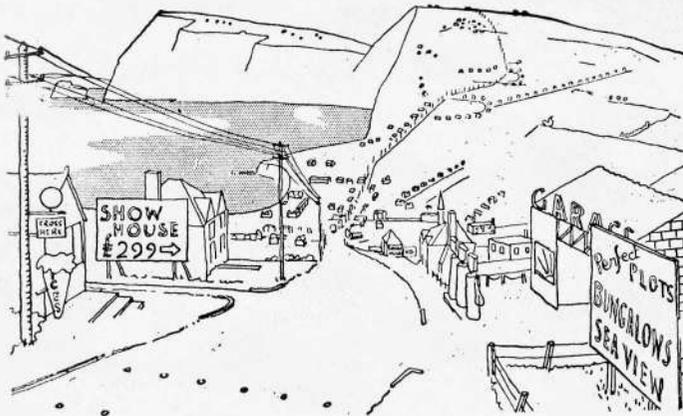
The basis of rural planning becomes clear therefore.

Firstly, agriculture must be put on a sound economic footing. A properly organized and flourishing agriculture should encourage initiative and offer ample scope for satisfying one's enthusiasm and ambition.

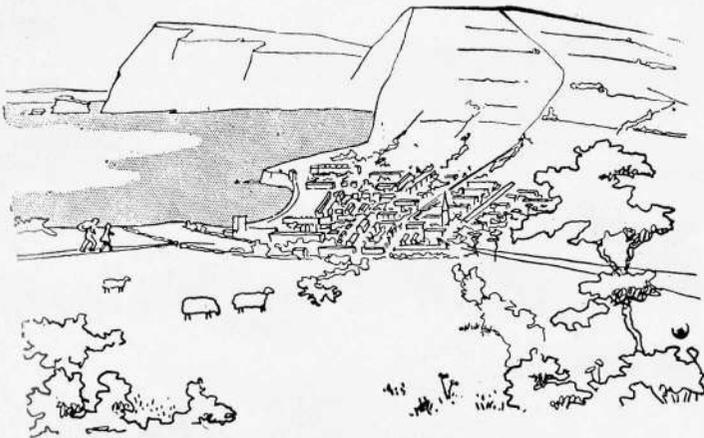
Secondly, living conditions must be improved. We should bring to every village we can the supply of electric light, water and gas. We should build new houses where they are needed. These should be designed to add to the attraction of the village. Never again must we scatter ugly "villas" in the countryside.

Lastly, country-dwellers should be able to enjoy some of the social and recreational life that town-dwellers enjoy. Each village or group of villages should have a well-designed and heated building (with a licence!) where you could dance, see films and have small concerts.

THE SEA COAST



AS IT WAS—"jerry-building", garages and planless development spreading over cliffs and hillsides. The whole coast-line was gradually being destroyed.



AS IT MIGHT BE—the cliffs and hills in their natural grandeur, the towns compact and finely laid out with squares and terraces.

If You Live by the Sea

You and your family have perhaps lived for generations in a lovely part of the English coast and have recently been appalled by the arrival of bungalows and week-end cottages, which have been built all along your coast-line, often on the tops of the cliffs on the hillsides. You have remembered with bitterness what the country used to be like.

In many cases complete "seaside resorts" have been built since the beginning of the century. A few years ago the sea lapped the shores of a green and pleasant valley, untouched by man, except perhaps by the humanizing hand of the farmer. Then the speculators saw their opportunity. They built a few shops; they divided the land into "desirable plots"; and advertising did the rest. Now ugliness fills the valley. How ill do these towns of scattered "jerry-built" houses compare with the terraces and compact grouping of the fishing villages and small seaside towns that used to add to the charm of the valley, not spoil it.

It is of first importance that the cliffs and hills of the coast be left in their natural grandeur. No building, hut-development, or bungalows must be permitted to deface them in the future. Coast-roads sweeping cleanly over the downs should have no building between them and the sea.

This, of course, does not mean that building should cease in the coast towns. No positive planning policy can be limited to preservation, and planning control of the sea coast must aim not only at safeguarding the interests of the villagers and farmers who live there, but must also consider the health-giving value of the sea-coast for those who only visit it on holiday. Every effort must therefore be made to make the sea-coast towns pleasanter and finer.

England's natural coast-line, in all its changing moods, offers infinite refreshment to mind and body. It is right that as many people as possible should be able to derive pleasure from it. What is important however is that some people should not be allowed selfishly to spoil it for others.

Success Will Depend On Every One of Us

Just as we are all to blame for the ugliness we allowed in the past, so we shall all have to play our part in making certain that our towns and our countryside will be more worthy of us in the future. We cannot leave it to others. Not only will we be living in the world we create, but very many of us will be taking an active part in the actual building itself, for a very large building programme is certain after the war.

The quality of this building will be one of the means whereby future generations will judge our civilization.

Are we going to fail again?

ANY QUESTIONS?

1. Q. *Will planning interfere with the freedom of the individual?*
 - A. Planning aims at giving the greatest number of people freedom to enjoy their lives in beautiful surroundings. Just as the law leaves us free to do what we like so long as we do not harm our fellow men, so we shall be able to build as we like within a framework that protects the rights of other men.
2. Q. *How much say will the individual have in the planning of his locality?*
 - A. The people of any town are free to have what they want if they are willing to take the trouble to select and support in election representatives on the local council who really bear their wishes at heart. It would also be helpful if interested residents in each district formed "Civic Societies," in order to suggest in further detail what they would like.
3. Q. *Would I be prevented from building the kind of house I want?*
 - A. If towns and villages are to be pleasant to live in, they must have some sense of order. Naturally we shall all have to co-operate as far as we can; but neighbourliness is required in building, not uniformity. There must certainly always be scope for individual expression.
4. Q. *Does planning mean that all towns will look alike?*
 - A. No. Differences of local tradition, of trade and industry, of weather conditions, of soil, and of the character of the people, will inevitably produce different types of towns, as they have always done in the past.
5. Q. *Does planning mean the sweeping away of tradition?*
 - A. Of course not. Only a very unfeeling person would be foolish enough to want to wipe away all association with the past. The slums, the mean houses and the ugliness must go, but the fine achievements of the past must be retained, for they enrich our lives. We can only follow tradition, not by copying, but by thinking for ourselves and expressing ourselves, as the best builders always did in the past.
6. Q. *Is nationalization of the land essential for planning to succeed?*
 - A. Control over the development of all land is clearly essential if any planning policy is to be carried out, but this does not necessarily involve "nationalization". The powers of control must, however, be sufficient to ensure that the use made of land is not only for private profit but in the interest of everyone.

UNIT STRESSES, LIVE LOADS AND FACTOR OF SAFETY

By J. MORROW OXLEY

The impact of the war and the necessity of providing for post-war conditions has accelerated the desire for a re-appraisal of values. The facts and ideas noted below deal with the physical and economic values of some of the materials in general use in building construction. They contain nothing original or abstruse but merely serve to emphasize some of the questions to be considered in any new appraisal of unit stresses and loading.

The materials of present concern are structural steel, concrete, reinforced and plain and timber. Most of the other materials in general use have either been used for so long that their properties are assumed to be thoroughly known or are so new that there is, as yet, little background of experience upon which to formulate opinion.

For the sake of brevity structural steel shall be chosen for the examples illustrated and the stresses will refer to the working unit stress in tension or transverse bending unless noted otherwise. Similar facts and reasoning would apply to the other materials and stresses.

THE RECORD OF PAST YEARS

When structural steel began to be accessible and acceptable for general use, little more than fifty years ago, the usual working stress was 16,000 lbs. per sq. in., sometimes 14,000. Despite improvements in uniformity of material, knowledge of analysis and design, and technique of detail and fabrication, that basic stress held the field for nearly forty years, until the late 1920's. During most of this forty years there was a wide diversity of opinion as to what live loads building structures should be designed to sustain. After 1935 medium steel began to replace mild steel in general use and the permissible unit stress was raised to 18,000 and in 1935-40 to 20,000. Co-incident with this, recognition was given to continuity and effective span lengths were permitted to be designed for less than the centre to centre span in appropriate cases.

The following table gives a summary of the changes, although the dates would vary with the location:

TABLE I

| Date | Ultimate Strength | Yield Point | Working Stress | Live Load for Dwg., Apts., Hotels, Office Bldgs., etc. lbs. per sq. ft. |
|------------------|--------------------------|--------------------------------|----------------|---|
| | Pounds per square inches | | | |
| Previous to 1928 | 55,000 to 65,000 | ½ ult. strength | 16,000 | 50 to 100 (average 75) |
| 1928-30 | " | " " | 18,000 | 50 to 75 |
| 1935-40 | 60,000 to 72,000 | ½ ult. strength Min. 33,000 | 20,000 | 40 to 50 |

Figs. 1 and 2 give a comparison, for a typical panel, between what was required fifteen years ago and what would be acceptable today, assuming that stone or gravel concrete was used for the floor slab and encasement of the framing and that connections of the steel work were rivetted. In actual practice there would be further substantial savings in a modern design. Rolled steel, pressed or open web joists, eliminating the secondary beams, and welded connections of beams to columns to take full advantage of continuity, and a light weight aggregate

instead of ordinary concrete, might be used. But with no change in the layout and without taking into account the saving in quantity of concrete the comparison shows a reduction of 1250 lbs. of steel (over 37%) which at present prices would mean a saving of about 19 cents per square foot of floor area.

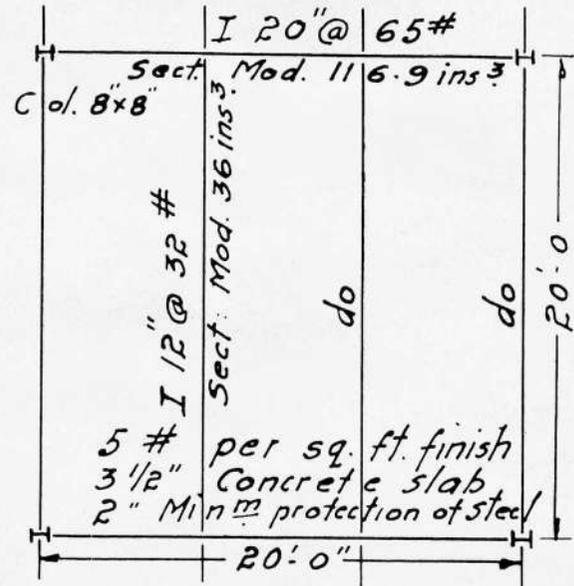


FIG. 1
L.L. 75 lb. per sq. ft. Steel stress 16,000 lb. per sq. ins. 1928

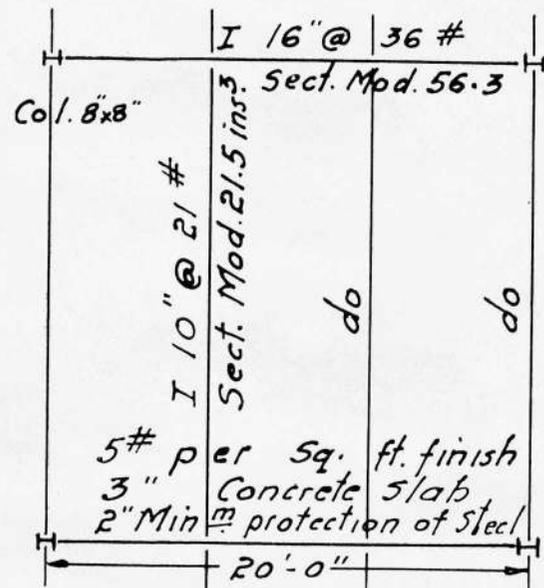


FIG. 2
L.L. 50 lb. per sq. ft. Steel stress 20,000 lb. per sq. ins. 1940

Other examples might be selected to show even greater differences. It is to be noted that a reduction of the section modulus or strength required for a given beam due to higher unit stress and lower loading does not result in a proportionate

reduction in weight of section. The average reduction in weight is about 60% of the reduction in strength requirements.

FACTOR OF SAFETY

Thirty or forty years ago it was customary to compute the factor of safety as the ratio of ultimate stress at failure to allowable working stress. Steel with an ultimate strength of 64,000 lbs. per sq. in. would be designed for a stress of not over 16,000 lbs. and the factor of safety would be called four. For use in building structures a more accurate definition would be the ratio of the stress which would produce permanent deformation to the working stress. *For steel with a yield point of 33,000 and a working stress of 20,000 this would give a factor of safety of 1.65.*

The factor of safety is a provision to protect the completed structure from the effects of the following uncertainties:—

1. Unforeseen overloading, shocks, vibration, etc.
2. Variation in quality, and hidden defects in material, faulty fabrication and incompetent inspection.
3. Deterioration in material with exposure and passage of time.
4. Inaccurate or incomplete calculation of design.
5. The seriousness of partial or total failure.

Item 1 needs no elaboration. Potentially dangerous overloading is always possible and frequently occurs.

Item 2 exists more frequently, even in steel, a supposedly uniform material, than is generally realized. The customary criterion for the strength of steel is the result of tests made in tension on specimens cut from the webs of beam or channel sections, which are fairly uniform in results. Thick sections give lower values, and specimens cut from the outer edge of flange and from the root, at junction of flange and web, give most erratic results. *More information is needed from full size tests*

in flexure of whole beams as compared with small specimens tested in tension.

Faulty fabrication in shop or field and incompetent or non-existent inspection result in the completed structure not having the strength for which it was designed.

Item 3 emphasizes the necessity for permanent protection, particularly in parts inaccessible for frequent inspection.

Item 4 is, we hope, a diminishing source of uncertainty due to improvement in knowledge of design and analysis and the sense of responsibility of the designer.

Item 5 throws open a wide field for the application of experienced judgment. "Safety" is a relative term. Absolute safety is unobtainable within economic limitations. Safety of human life is "a consummation devoutly to be wished", and, as far as prevention of loss of life from structural failure of completed buildings is concerned, it has been practically attained. Safety of property is, in essence, an economic question.

There is a limit to the amount that should be spent to ensure the safety of all buildings against possible overloads or other unforeseeable conditions that might occur in only one in ten thousand of them, and if they did occur would probably result only in damage, not loss of life. The fixing of that limit depends on the results of experience.

The great bulk of experience at present is with buildings erected in the days of higher live loads, lower working stresses and more restrictive limitations on design. The changes within the past fifteen years have resulted in a gain in efficiency of about fifty to sixty per cent., if judged by strength requirements, or thirty-five to forty per cent. if measured by the reduction in weight of steel required. How fast and how far is a further liberalizing of standards justified? That is the root of the question which requires a thorough re-appraisal today.

Mr. Earle Morgan, Honorary Secretary, The Toronto Chapter, O.A.A., gives below the steps which led to the paper by Mr. Oxley on Unit Stresses.

In January, 1943, the Executive of the Toronto Chapter, O.A.A., discussed the new developments in structural design unit stresses and asked Mr. C. P. Disney, M.E.I.C. and C.N.R. Bridge Engineer, to attend an Executive meeting to give advice in this matter.

This meeting led the Executive to believe further investigation was warranted and a special meeting, with representatives of all branches of the construction industry was arranged for March 23rd. In attendance at this meeting were:

- J. M. Oxley and R. S. Morris—Architects.
- C. Blake Jackson and J. M. Pigott—Contractors.
- G. L. Wallace, C. D. Carruthers and E. A. Cross—Consulting Engineers.
- Prof. R. F. Legget and Prof. Carson Morrison—Professors of Engineering.

W. H. Laughlin—Dominion Bridge Co. Limited.

Joseph Breen—Canada Cement Co. Limited.

K. S. Gillies and L. Lee—City Building Department.

Mr. Disney addressed this meeting and after considerable discussion Mr. Oxley was asked to form a resolution requesting the O.A.A. Council to forward through the necessary channels a request to the Canadian Engineering Standards Association to have the appropriate committees consider the question of revision of the current standard specifications in regard to permissible working unit stresses for structural steel, plain and re-inforced concrete and timber for general use in post-war design and construction.

It should be noted that at present there is a temporary change in the specifications for war emergency buildings and the meeting was of the opinion that a good deal of thought should be given to the question of continuing with the revised specification or a general revision of this part of the building code.

The O.A.A. Council has forwarded the resolution to the C.E.S.A.



MONTREAL CONVALESCENT HOSPITAL, MONTREAL, QUEBEC

ORIGINAL BUILDING

THE LATE JOHN S. ARCHIBALD, ARCHITECT

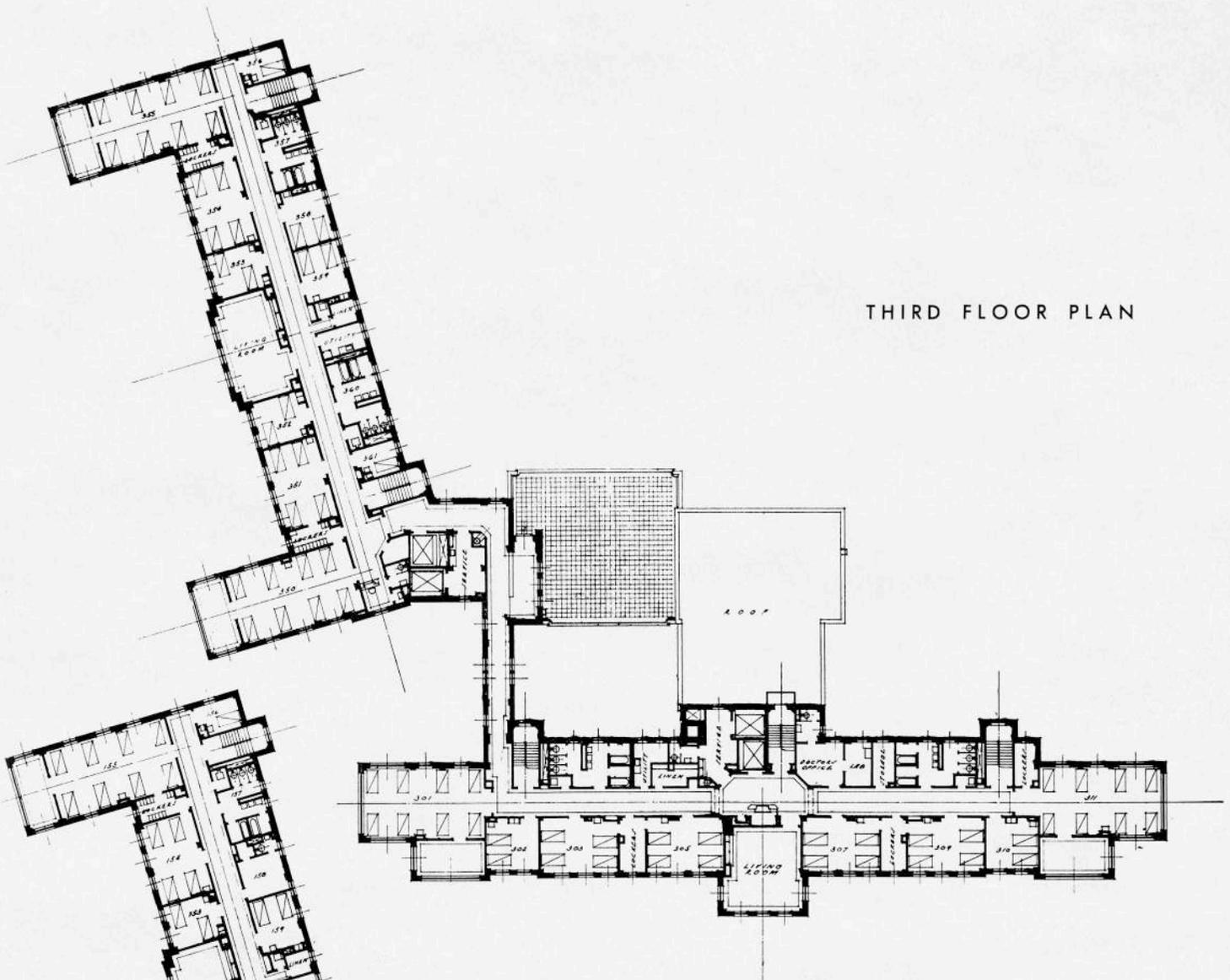
EXTENSION

ARCHIBALD AND ILLSLEY

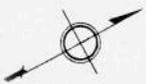
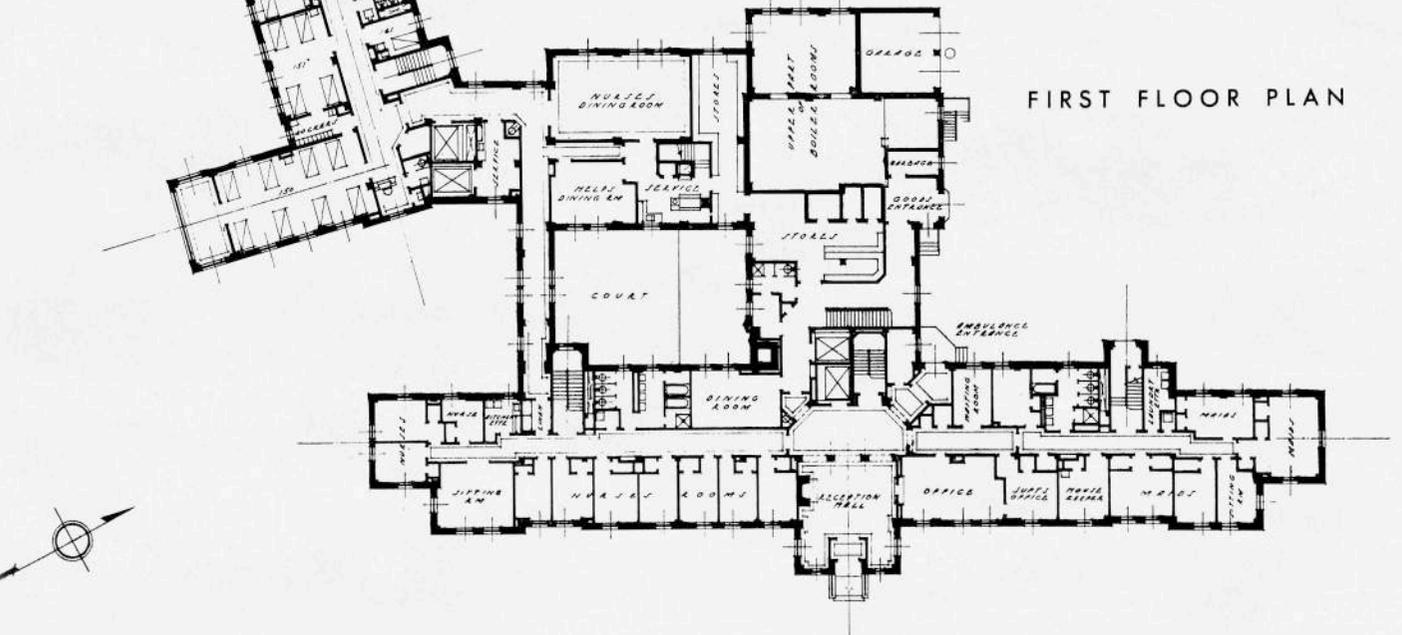
GRATTON D. THOMPSON

ASSOCIATE ARCHITECTS

THIRD FLOOR PLAN



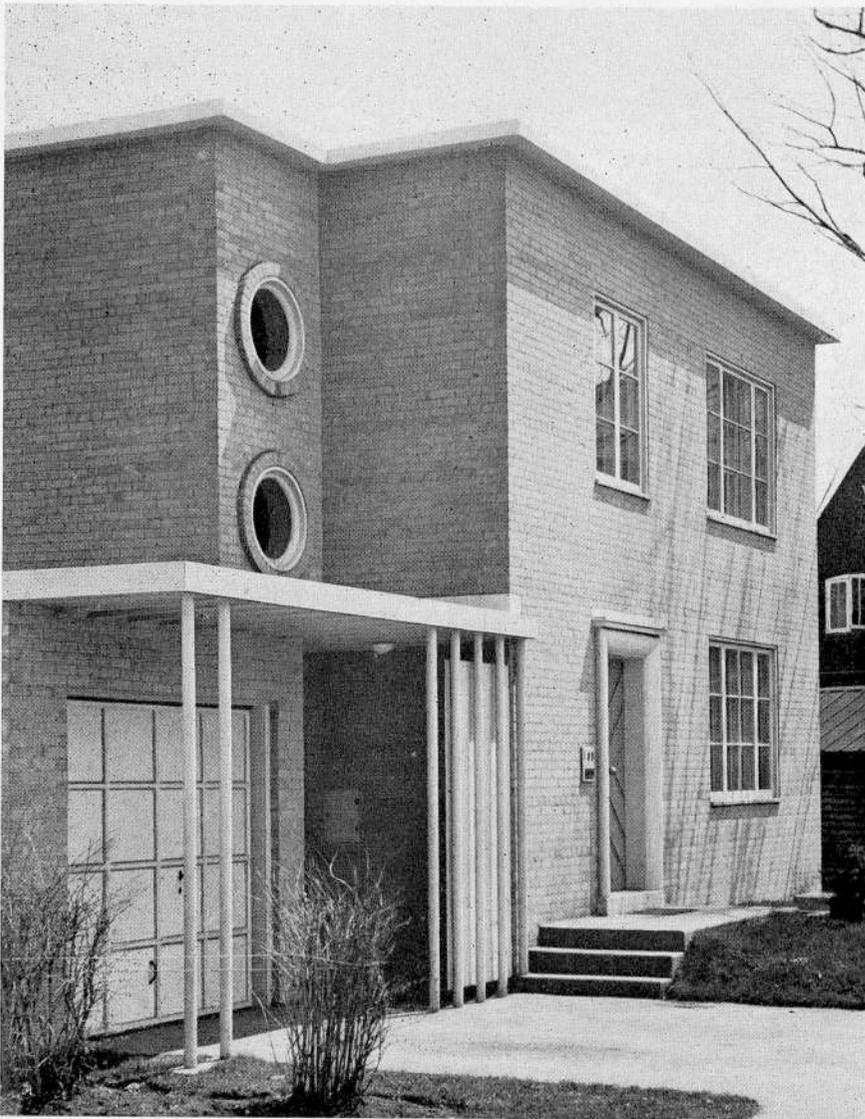
FIRST FLOOR PLAN



SCALE
1" = 10' 0"

HOUSE ON HUDSON DRIVE
TORONTO ONTARIO

GEORGE H. PIERSOL, ARCHITECT



This house was designed and built in 1941 for a retired University professor and his wife. A basic idea in the plan and design of it was to simplify the housekeeping as much as possible. This resulted in a very well equipped, small kitchen, an easy stair, simple details, the use of an oil-fired forced warm air heating system and the elimination of a dining room. The ravine location and the small lot led to a compact three level house rather than a single storey scheme. The house and grounds are not as intimately related as might seem desirable, but this is due to the orientation and the fact that the owner does not spend the warmer months here.

The lower floor has two finished rooms and the loss of storage space this causes is made up by the extra space in the garage.

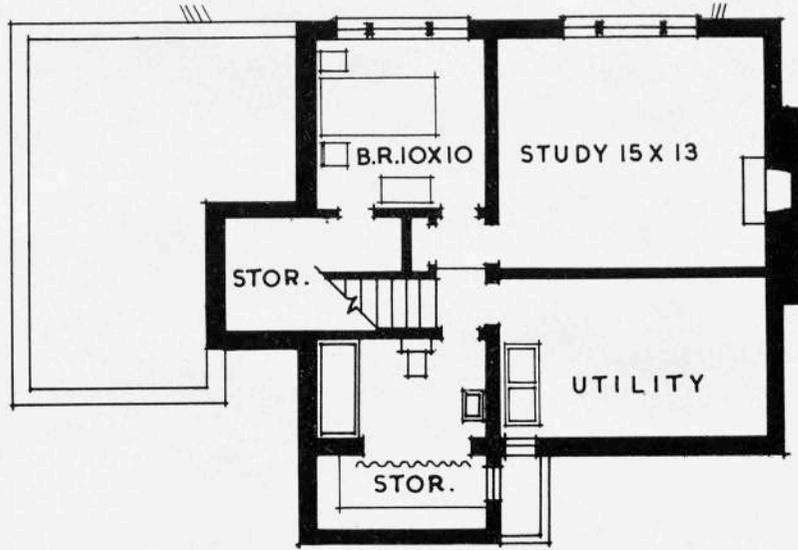
The combined driveway and entrance walk simplifies the lawn treatment as well as the circulation. An interconnecting cupboard and buffet is built in between the kitchen and the part of the living room used for dining. The fireplace is placed off center on the living room wall because of the logical furniture arrangement which can be grouped to embrace both it and the large new window which faces the ravine. Because the coat cupboard has two outside walls, grilles were placed near the top and bottom of each of its doors to provide air circulation. This keeps the cupboard and its contents pleasantly warm.

On the upper floor, the master bedroom has a small balcony off it which commands a good view of the ravine. Sliding doors were used on the cupboards to give fuller access to them and to conserve space. The guest bedroom has a wash basin of its own, an economical convenience in a one-bathroom house.

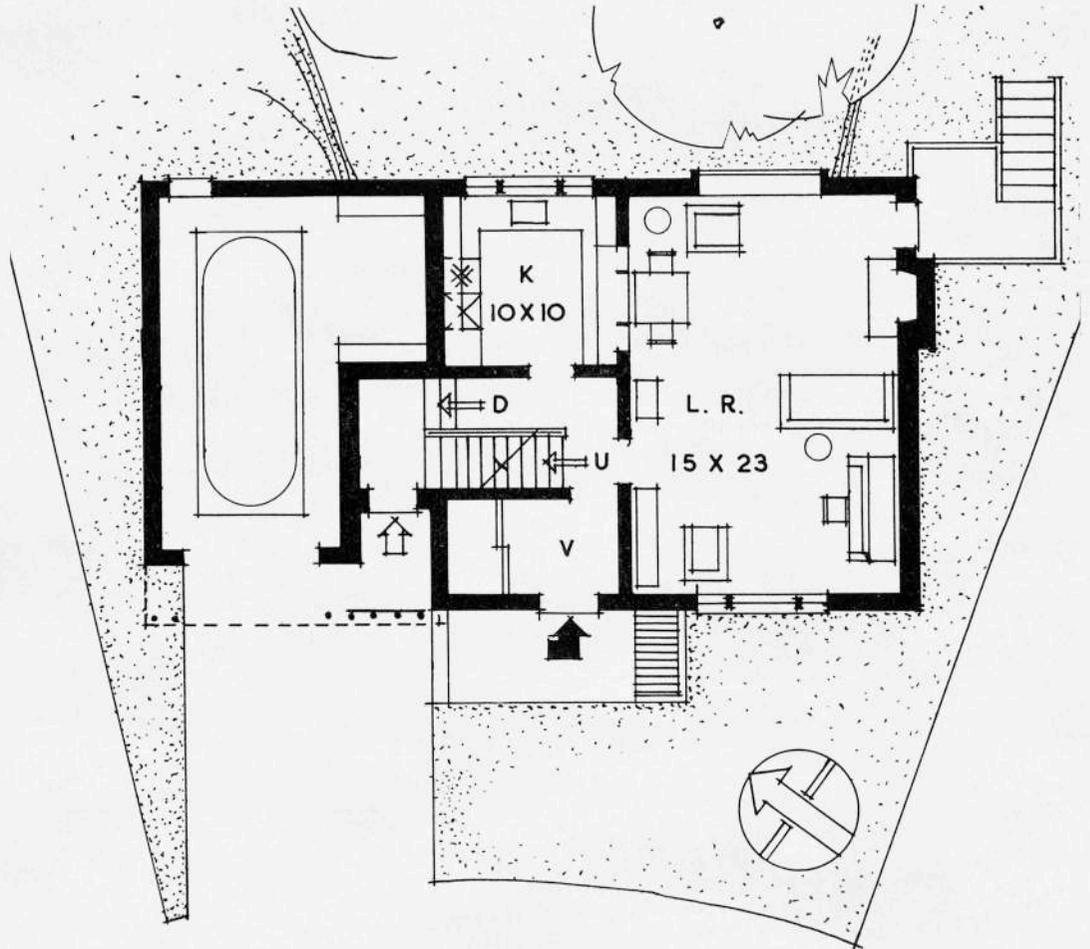


FRONT AND REAR VIEWS

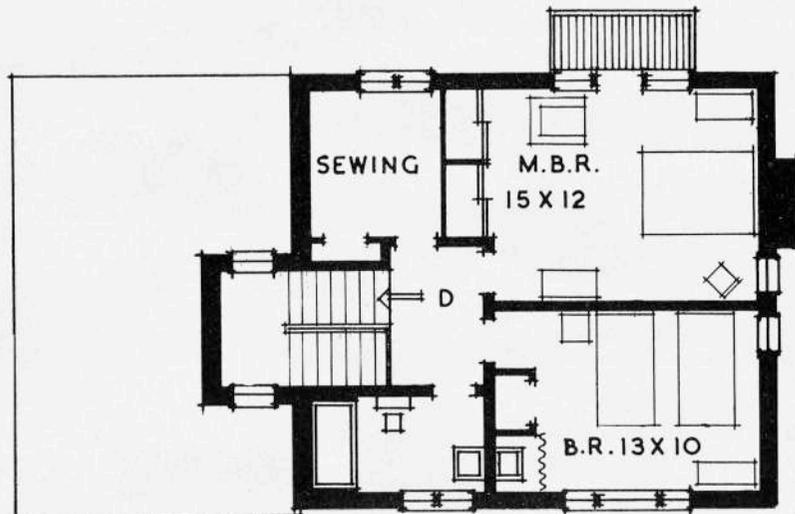
BASEMENT PLAN



FIRST FLOOR PLAN
Showing Site Plan



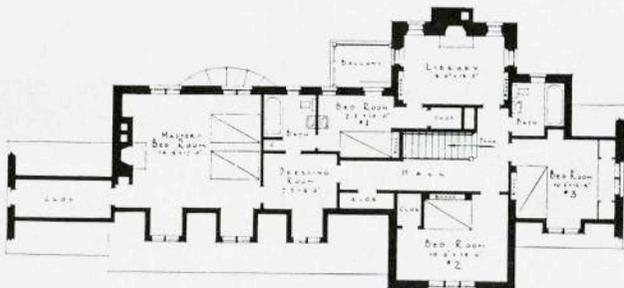
SECOND FLOOR PLAN



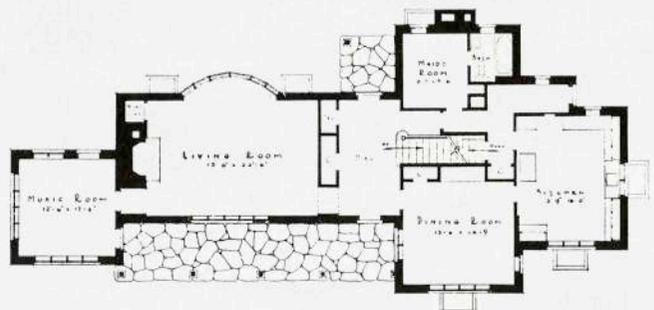


HOUSE OF MR. W. H. C. SCHWARTZ, PRINCE'S LODGE, NOVA SCOTIA

ANDREW R. COBB, ARCHITECT



SECOND FLOOR PLAN



FIRST FLOOR PLAN

RECOMMENDATION OF THE R.A.I.C. FOR A POST-WAR PLANNING AUTHORITY

The Royal Architectural Institute of Canada and its component Associations throughout Canada have had under discussion and study the desirability of setting up at an early date A CENTRAL PLANNING AUTHORITY TO SECURE CONSISTENCY AND CONTINUITY IN THE FRAMING AND EXECUTION OF A NATIONAL POLICY, COMPATIBLE WITH PROVINCIAL RIGHTS AND PRIVILEGES, IN RESPECT TO:

- A. USE AND DEVELOPMENT OF LAND.
- B. ESTABLISHING CONDITIONS FOR DEVELOPMENT OF CONSTRUCTION PROGRAMMES.
- C. ASSISTING PROVINCES, MUNICIPALITIES AND PRIVATE INTERESTS IN ACQUISITION OF LAND, PLANNING, DEVELOPMENT OR RE-DEVELOPMENT.
- D. ENCOURAGING THE CREATION OF PROVINCIAL, REGIONAL AND LOCAL PLANNING BOARDS (OR COMMISSIONS) FOR THE ESTABLISHMENT OF MASTER PLANS.
- E. CO-OPERATING WITH ALL GOVERNMENTAL AUTHORITIES IN REGULATING VOLUME AND DISTRIBUTION OF PUBLIC CONSTRUCTION PROJECTS, FINANCED BY PUBLIC FUNDS, UNDERTAKEN TO MEET SOCIAL AND ECONOMIC NEEDS; AND REHABILITATION MEASURES.

The Royal Architectural Institute of Canada is of the opinion that the Central Planning Authority should be set up with the least possible delay with a view to its being in a position to act promptly upon the conclusions of the various non-governmental committees engaged throughout Canada on post-war community planning and physical reconstruction, the establishment of a national policy, and the prompt initiation of projects when the war ends.

It is also the opinion of the Institute that the Central Authority on Post-war Planning should be a new department of the Federal Government under its own minister. Members of its governing council should be chosen by the Dominion Government for their outstanding ability and leadership from the architectural, engineering, legal and notarial professions; from production and construction industries; from financial institutions and lending companies, with which might be coupled the field of economics; from social service, labour and agricultural organizations.

The Central Planning Authority, as an organization, may be composed of seven divisions, each under the management of a chairman selected from the governing council, each chairman being an authority in his own field.

The following outline of divisions is submitted for consideration. It is merely tentative and suggestive of its scope.

- I. Executive Section.
- II. Research Section.
- III. Public Information and Education Section.
- IV. Planning Section.
- V. Legislative Section.
- VI. Finance Section.
- VII. Operations Section.

The Institute in the course of its deliberations has followed with interest the steps taken by the British Government, following the recommendations of the Scott and Uthwatt reports, which have led to the establishment of a Ministry of Town and Country Planning for England and Wales, to direct the machinery for land control and administration. The Institute also appreciates the valuable work that is being done by the James Committee on Reconstruction which with its ramifications is empowered to investigate all phases of post-war conditions and, further, notes with interest the setting up of the Clark Advisory Committee on Economic Policy. They will all undoubtedly lead to important decisions and results in general planning for post-war reconstruction, and while we realize that such planning as comes within the scope of a Central Planning Authority as herein recommended, is but a part of the whole unfolding mosaic, it is nevertheless a very important part.

The above suggestion is submitted by the Royal Architectural Institute of Canada as a token of its interest and earnest desire to co-operate in formulating at least a part of a National Reconstruction Programme.

LETTER TO THE PRESIDENT

Mr. Gordon McL. Pitts, President,
Royal Architectural Institute of Canada,
1158 Beaver Hall Square,
Montreal.

Dear Mr. Pitts:

I do appreciate your kindness in meeting the request of Mr. Mooney to forward me a copy of your "Reconstruction Number" of the *Journal* of your Institute. For several years I have held office as Chairman of our own Architects' Journal Committee and through the kindness of Mr. Arthur we have exchanged Journals. For this reason I had already enjoyed the many excellent articles contained in this special number. I think it represents a very fine effort on the part of the Canadian architects. I can assure you this second copy will be put to good use as I have a wide circle of friends who I know will enjoy reading this number.

Unfortunately the war has caused us to give up our *Journal*, for the time being. We now publish what is known as a "News Letter" which is restricted to Institute news only, and usually runs to six or eight pages. The Royal Australian Institute have been forced to cut their monthly *Journal* to quarterly.

May I say from the material I have been collecting from Canada and despite the disappointment of some of your members on your progress in matters of Post-war Planning I believe you are far ahead of Australia in matters of Planning and Post-war Reconstruction. Our own Federal Government have recently appointed a Minister of Post-war Reconstruction, a rather brilliant Economist of thirty-nine years of age, and we feel this is an encouraging sign. Again thanking you for your kindness, I remain,

LESLIE M. PERROTT, F.R.I.B.A., F.R.A.I.A.,
Melbourne, Australia.

THE PERIODICALS SHELF

By ANTHONY ADAMSON

As your columnist was busy as an expectant then exultant father (cigars upon written request) just about the time the last *Journal* should have gone to press, the Periodicals Shelf got overlooked. We apologize, and we now endeavor to make up for two months.

The news sections of the U.S. magazines are exercising themselves over the probable impending extinction of the National Resources Planning Board and the blow this will be to government organized planning and housing schemes. There seems to be some skullduggery afoot with the horrible Republicans. Governor Dewey is trying to oust the great Moses and with him all things that go counter to the profit motive. The Metropolitan Life is giving him a lift by building another \$40,000,000 low-cost housing scheme as an investment venture. Even the N.Y. *Times* has said "that planning should be confined to the first few months after victory, that the longer future should be of no immediate concern." Having little to read about Canadian government plans and Canadian reactions to them, it does architects no great harm to read the news of the big league even though their teams are not competing. There are two articles in the "*American City*" called "Getting Ready for Federal Aid in Urban Redevelopment" and "Senator Thomas introduces Bill for . . . ditto . . .", the reading of which would be useful to Canadian architects who may have ideas on this subject for Canada. The new scheme with private money for the Metropolitan Life is briefly illustrated in "*New Pencil Points*" for May, page 19. And while on the subject of urban redevelopment there is a good article in this same issue in the series "Discussions on Urbanism," No. 6, called Housing and Community Planning by W. S. Churchill. In the April issue is also No. 4, "Urban Economics and Land Values" by E. W. Shengler, which is excellent.

Prefabrication is the principal topic these last months. In the April "*Forum*" is the fifth and last of the series on this subject and is devoted to wooden methods. There is besides in this issue a remarkable half cylindrical house reputed to be buildable at around \$1,000. Dr. Cyril James must have seen this before he told Canadians that we had a secret weapon which could build houses for \$1200. "*Pencil Points*" for April has 12 pages entitled in large type, "At last we have a prefabrication system which enables architects to design any type of building with 3-dimensional modules." We would not know but it seems reasonable. The whole April issue is, however, devoted more or less to prefabrication.

The "*Forum*" for May has done some surprising hypothetical things to an imaginary town of 70,000. It has got dozens of architects to work hard on plans for a hotel, a post office, a church, a museum, a bank, etc., etc., that fill nearly a hundred pages. The project is called "New Buildings for 194X". It is well worth reading. Don't be confused into thinking it is Syracuse remade. They have put in a plan of Syracuse unreasonably. Some of the buildings are most interesting, one for instance is a house factory by Caleb Hornbastel, which we can't help feeling is a funny name. The "*Record*" for April has Part II of "Britain's Plans are Bold" which, though far shorter and undetailed, are also for 194X. But it is the "*Architectural Review*" for April that has dived into 194X with quite a remarkable number. It is really a special number built around the "Rebuilding Britain" Exhibition now touring England designed by the R.I.B.A. Reconstruction Committee. The same printed material will be issued as a pamphlet which should be bought when it gets here.

The R.I.B.A. "*Journal*" for March talks about this Exhibition and has a good lecture "The Village and the Small Town" by A. W. Kenyon. The Architects' "*Journal*" has a plan for a Maltese Crossing which we have not seen before. It has advantages over the Cloverleaf. "*Design and Construction*" (England) continues its Housing Forum into Part IV and is quite good. New "*Pencil Points*" for May is devoted to the full illustration of six houses. All of which are most interesting and one of which is called "one of the best we've ever seen" by N.P.P. If you are interested in houses you would be interested in these. "*Construction Methods*" is a newcomer to our shelf and is filled with snazzy ideas for doing things we have never had to do in ways we have never thought of. We don't know what to do but goggle.

Then of course there is "*Homes andhovels*", 14 illustrations, 48 pages, 10 cents, or 6 cents in bulk from the Ontario Association of Architects. We-er . . . Well, its . . . Anyway, it is the first thing we have ever published and if we can't put in a plug for it in the *Journal* it is how-do-ye-do!

OBITUARY

ANDREW RANDALL COBB
1876-1943

The sudden death of Andrew Cobb came to us as a great shock. I sat beside him on the old wooden benches at Horton Academy at Acadia. Cobb, to the amusement of all around him, was more engaged in drawing perfect likenesses of our beloved professor than in the lessons of the day. This inborn determination to amuse people developed as the years went on and he finally became an accomplished magician. Leaving Acadia, he went through the M.I.T. in Boston, then to the Ecole des Beaux-Arts in Paris, and a year in Italy. He returned to Nova Scotia in 1909 and we were partners for two years. The only thing of importance done during that time was the Memorial Tower on the shore of the North West Arm. He was an architect of exceptional ability, an entertaining companion, and a man of decided aesthetic tastes and temperament, contributing greatly to the social and cultural life of our city. The pages of this number of the *Journal* will illustrate some of his work. He was buried in the Anglican cemetery at Bedford where he made his summer home. There we left him 'neath the murmuring pines and the hemlocks "till the day break and the shadows flee away". A lonely robin carolled a solemn requiem, the spring flowers bowed their heads and the June sun bathed his grave with welcomed warmth. Farewell Andrew Cobb and rest in peace.

S. P. Dumaresq.

NOTICE

The attention of the members is drawn to the revised Document of the American Institute of Architects, No. 172, Standard Filing System and Alphabetical Index, which can be obtained through Mr. Theodore Irving Coe, Technical Secretary of the A.I.A., Department of Technical Services, 1741 New York Avenue, N.W., Washington, D.C. Price: \$1.00.

PROVINCIAL PAGE

ALBERTA

In this province we find everywhere great enthusiasm expressed in regard to the new territories which are being opened up by the Alaska Highway and by its tributaries, actual and projected. The extent of this area is almost that of an empire. The natural resources actually known are considerable. Imagination multiplies the amount many times. Imagination may exaggerate or it may underestimate. At present no one knows. It is, however, certain that any efficient exploitation of the resources of these newly opened lands will profoundly affect the cities of Alberta. A great and rapid increase in population seems certain. What the nature of the occupations of these people will be is not so sure. Edmonton has long been called the Gateway to the North. During the past spring many hundreds of trucks have been waiting at that gateway for the snows to melt and for the roads to become hardened for heavy traffic. In future years it is to be expected that this waiting will not need to take place and that a vast traffic will be continuous.

Here surely, if anywhere, there is scope for regional planning. But how can one plan for what is so largely speculative? We scarcely know on what natural resources there will be the greatest call or any considerable call. The tar sands of northern Alberta are in quantity so great that they are reckoned in cubic miles. To extract gasoline from them on a profitable commercial scale has, so far, baffled applied science. Locally, they can be employed in excellent road surfacing. The only mining of high value so far disclosed lies in the region of Great Bear Lake, accessible as yet only by air or by rough river passage. There may or may not be more valuable mineral discoveries.

The best wheat in the world can be grown as far north as the boundary of Alberta, 400 miles north of Edmonton. Fish in large quantities have long been exported from the many lakes of the far north. Herds of reindeer supply food around the delta of the Mackenzie River. Millions of caribou and fur bearing animals roam the more barren and inhospitable regions. Vast timber lands line the route of the new highway.

At one time the climate of Edmonton was estimated to be too severe to permit normal life to be carried on, a reflection which now raises a half incredulous smile in the Edmontonian—at least during six months of the year. We have conquered the climate. Farther north the climate may be more rigorous but we can scarcely doubt that that, too, will be conquered and even further ameliorated with the advance of science. Are we to see populous cities within the Arctic Circle?

Perhaps most important of all is the certainty that the new road forms a thread on which airports are strung as bases for one of the most important airways of the world, a world which, with China and Russia in active co-operation, will be twice as large and will have more than twice the dynamic potential of that old world we used to know. The direct line from New York to China and the Orient passes through Edmonton airport and so will that from San Francisco to Britain and Northern Europe. In this regard Canada is on the top of the world.

Now who is so bold as to lay out a regional plan for this—presumable—new empire? Meanwhile, all the existing cities of the south of this province—and Edmonton itself is well to the south of the centre line of the province—are assuring themselves of great changes on account of these developments. But, apart from such developments, our Canadian cities—all of them—are becoming dimly aware that they have failed and fallen far short of planning adequately to meet the real needs of that civilized life which we aspire to and have some glimpse of. To tackle these real needs the set-up of our civic governments is totally inadequate. They themselves require a complete

reconstruction on larger and more rational lines. At present they are staggering along stumbingly under the loads imposed on them. They have no opportunity or ambition to look around or to explore better paths. Town Planning is to them an expression almost empty of content. We require a large supply of trained expert administrators.

Cecil S. Burgess.

MANITOBA

Congratulations are due to the three graduates of the Department of Architecture, University of Manitoba. The class consisted of Margaret Wilde, John Graham and Ronald Whitely. Their theses were respectively, A Hospital, A School and A Trade School. The graduation thesis consists of a Problem analysis and report preliminary to drawings, complete architectural working drawings and specifications for the building developed from the report. This year the problems and their solutions were particularly well studied because each student approached a definite Owner actually now managing a school or hospital and planned their theses to actual requirements. Honours in the class were taken by Ronald Whitely who was awarded the R.A.I.C. medal, the Gold medal and the thesis prize.

Post-war planning has had so much publicity by now that almost all our branches of government, city, provincial, municipal, together with their affiliated or semi-public institutions are listing post-war construction projects which are, to say the least, "terrific"; but all seem to be based on the assumption that the necessary money will be made available by some mysterious government method not yet revealed.

At our annual meeting Dr. F. Cyril James warned that the Dominion Government could not be expected to meet the cost of all community plans for post-war construction. Premier Stewart Garson of Manitoba in a recent speech on post-war reconstruction has pointed out that the western provinces, at least, cannot finance large scale works as their sources of revenue are overburdened now and new fields of taxation are all occupied by the Dominion Government. We all know that our cities are not obtaining the money they need and their chief revenue source is real property taxes which are themselves strangling new building. Where then is the money for all these grand schemes to come from?

The first requirement for post-war reconstruction seems to be a complete major adjustment of our tax structure, city, municipal, provincial and dominion government, either as recommended by the Rowell-Sirois report or some acceptable alternative. The need for such revision was obvious and urgent before the war so how can it suddenly be forgotten with all the greater problems of post-war reconstruction? It is only the war and the present temporary dominion-provincial agreements that allow the various governments to carry on. These agreements expire within a year after the end of the war and as yet we have heard nothing of plans for permanent agreement or revision.

It seems, therefore, that all our planning will only be planning and nothing will be built, unless the financial affairs of our numerous governments are first put in order. While finances are not exactly the field of the Architect, we should know better than anyone that construction projects cannot be even started without the necessary financial arrangements. Along with every other body we seem to be concerned with post-war controls and administration, yet unless some other group, not yet in evidence, devotes itself to the number one problem, the revision of government taxation and functions, there cannot be any public building to control or administer.

Robert E. Moore.

ONTARIO

Being a humble representative of one of the "Outposts of Empire" it is with considerable timidity that one takes up the pen to start the Ontario Letter.

After the very able way that Mr. Gladstone Evans has so courageously expressed his thoughts, which often endorsed our own feelings, it is a difficult path to follow and whether one looks down from Parliament Hill with a "conveniently blind eye for the foreground" or from the Mountain with at least a dimmed eye for the none more inspiring view, the result is much the same and the far horizon holds at least a hopeful relief.

The deliberations of the James Committee has had its repercussions even in "Birdseye Center" and we have all become more or less Post-war conscious. The Hamilton Chapter, which by the way takes in ten counties not to mention the cross roads, started a movement to put the Architect and his services at the disposal of the various cities and villages for help in post-war planning. The letter sent out was carefully prepared and the response beyond our farthest dreams. It is hoped to follow this up and keep in touch with these municipalities and if possible have Architects appointed to the committees to help study their problems and be prepared to present a comprehensive scheme when the time arrives. In preparing the list of municipalities we were amazed to learn that under schedule "A" of the Architect's Act, the electoral district of Toronto covered innumerable counties and what is more "All places outside the Province of Ontario." Certainly the far horizon can be seen beyond Queen's Park.

With life membership, the Hamilton Chapter has at long last acknowledged, and honored itself in so doing, two of the oldest and most highly respected of its members, Mr. W. P. Witton of Hamilton and Mr. Frederick C. Bodley of Brantford, past treasurer of the Association. Their contribution to the Architectural profession over a number of years is far too well known to require mention. The high esteem and sincere affection however, in which they are held by all their associates is certainly well worth mentioning and it is hoped that they will be with us for many years to come.

It is with sincere regret that we learned some short time ago that McMaster University had decided to give up, at least for the time being, its course in Fine Arts and that Professor Hart was going back to Columbia to take up other post-war work. This will be a distinct loss to the community as Professor Hart has devoted his time not only to his duties at the University but has lectured in St. Catharines, Niagara Falls, Woodstock and a number of other places, in an effort to encourage the development and appreciation of the Fine Arts. It might be of interest to note that even in the "Outposts" Fine Arts is not an unknown quantity. Perhaps when peace comes again with the resumption of normal life, we may have him with us once more and enjoy his delightful and enlightening talks. It has been suggested (quite off the record) that perhaps our own Professor Arthur might take up the torch and give us a lecture or two if his seafaring ambitions do not get the better of him this year. (This paragraph should not be deleted by the Editor.)

H. E. Murton.

The next Ontario Provincial Letter will be written by Mr. L. G. Bridgman of London.

May 26th, 1943.

National War Labour Board,
Ottawa, Ontario.

Gentlemen:

Officers of the undersigned Dominion-wide professional organizations, whose combined membership totals over 15,000, have followed with interest the sittings of the National War

Labour Board and the submissions which have been presented by representatives of employers and organized labour bearing on labour relations throughout Canada.

It has been noted that the field of the professional man, although a large and important section of all employment in Canada, has not yet been brought to your attention. Therefore the committee representing this group is pleased to have this opportunity to place before you the professional point of view.

Since most architects, engineers and chemists are employees and at the same time are recognized as members of learned professions, they feel that they may be inadvertently involved in disadvantageous employer-employee relationships and in compulsory collective bargaining legislation. In fact, labour representatives in their recent presentations to the Ontario Legislature and before your Board, have by implication, indicated that the learned and scientific professions would be included in such legislation.

The national organizations represented by this committee are unanimously and unalterably opposed to the forcible inclusion of professional men in any compulsory collective bargaining legislation.

An important fact which we would emphasize is that these professions are already controlled by provincial legislation which has been enacted for that purpose.

Similar conditions exist in the United States, and in the case of the Shell Development Company and the International Federation of Architects, Engineers, Chemists and Technicians the National Labour Relations Board of the United States ruled that architects, engineers and chemists cannot be forced into a heterogeneous bargaining unit sought by a labour union in its negotiations with an employer unless a majority of the professional employees, through a vote confined to the professional group, express their desire to be included. (Case No. R.-3245).

The committee respectfully requests that these representatives be favourably considered by the members of your Board or other government bodies when recommending or preparing labour legislation. The committee will be pleased to submit any additional information that may be desired, or to assist in any other way that the Board may wish.

Respectfully submitted,

Canadian Institute of Chemistry.

Leon Lortie, President.

F. J. Hambly, Chairman,

Legislation Committee.

Canadian Institute of Mining and Metallurgy.

R. A. Bryce, President.

The Engineering Institute of Canada.

K. M. Cameron, President.

Royal Architectural Institute of Canada.

Gordon McL. Pitts, President.

Dominion Council of Professional Engineers.

W. P. Dobson, President,

M. Barry Watson, Secretary.

Corporation of Professional Engineers of Quebec.

A. D. Ross, Secretary.

Previous discussion on this memorandum and on the procedure to be followed in its presentation had taken place at a conference on May 14th, held at the headquarters of the Engineering Institute, Montreal, attended by representatives of various professional engineering bodies and Mr. Gordon McL. Pitts, on behalf of the R.A.I.C., and also at a meeting in Ottawa on May 25th of professional organizations attended by the Canadian Institute of Chemistry, the Engineering Institute, the Professional Engineers and Mr. A. J. Hazelgrove, on behalf of the R.A.I.C.