JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

Serial No. 257

TORONTO, JANUARY, 1947

Vol. 24, No. 1

PRESIDENT CHARLES DAVID (F)

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Editorial and Advertising Offices - - - - 57 Queen Street West, Toronto 1

SUBSCRIPTION RATES

Canada and Newfoundland—Three Dollars per year. Great Britain, British Possessions, United States and Mexico—Five Dollars per year. All Other Countries—Six Dollars per year. Single Copies—Canada 50 Cents; Other Countries 75 Cents.

R.A.I.C. JOURNAL JANUARY 1947

UNE tradition veut qu'à cette époque de l'année, le Président transmette aux membres de l'Institut Royal d'Architecture du Canada, un message annuel par l'intermédiaire du journal de l'Institut. En l'occurence, ce dernier comporte principalement mes salutations les plus cordiales et mes meilleurs voeux de Bonne et Heureuse Année.

L'ANNEE que nous venons de terminer fut sans doute, à son début, la plus prometteuse que nous ayons vue depuis quelques générations. Le plus humble des architectes de ce vaste pays, était comblé d'une infinité de projets. Malheureusement, les vicissitudes de l'après-guerre, l'instabilité de la main d'oeuvre, la rareté des matériaux de construction et les restrictions qui en limitaient leur fabrication, ont forcément retardés la réalisation de la majeure partie de ces projets, et ceux qui furent mis en oeuvre, se sont exécutés dans des conditions plutôt anormales et parfois décourageantes. Malgré l'état encore nébuleux des matériaux de base que requièrent la fabrication de ceux de la construction, certains indices sont plus prometteurs et plus encourageants. Il y a tout lieu de croire, qu'en un pays jeune et progressif comme le Canada, l'an 1947 ramènera à la normale toutes les améliorations si ardemment désirées.

THE Greetings and Good Wishes expressed in the foregoing paragraphs while directed to my compatriots in the Province of Quebec, are at the same time cordially extended to all members of the Institute from ocean to ocean. I have also mentioned, that although the year just ended may not have fulfilled all its earlier promises, the progress of the profession has suffered to no appreciable extent. While the Building Industry has had its post-war trials, in many unforeseen forms, the outlook for the coming year appears to be on a firmer basis, for all the various groups.

At the moment our thoughts and energies are concentrated on the Annual Assembly, and once again, the City of Montreal along with the Province of Quebec, will bid the R.A.I.C. "BIENVENUE". The Executive Committee of the Institute is leaving no stones unturned, in their efforts to maintain the high standards of the past and a programme of interest seems assured. An event of undoubted interest will be the presentation of an Honorary Fellowship to the Right Honourable W. L. MacKenzie King, Prime Minister of Canada. This honour is being conferred in recognition of his initiative and vision in the replanning of the new Federal Area surrounding the National Capital – dedicated as a memorial to the sons and daughters of Canada who served and died. An Honorary Fellowship will also be presented to Mr. Sylvester Sullivan, F.R.I.B.A. in appreciation of his invaluable services to the R.A.I.C. as their representative to the R.I.B.A. in England.

N conclusion, may I be permitted to offer a suggestion concerning a matter which I believe, is now pressing, especially in view of the amount of construction on hand and the undeniable opportunities offered by new types of materials. From all signs, we have now entered the long expected reconstruction period and the Institute is greatly interested in the establishment of permanent exhibition of Building Materials and Supplies in every important centre throughout the country. The establishment of such exhibits could provide useful service to our clients. They could also be of great assistance to the profession and would undoubtedly stimulate interest in the efforts of the Building Industry, in which we are definitely concerned.

Charles David, President.

BUILDERS AND DOERS

By WALTER DORWIN TEAGUE

An Address Given at the Fifty-Seventh Annual Meeting of the Ontario Association of Architects

AM deeply appreciative of the opportunity to meet with the Ontario Association of Architects to-night and have the honour that has been done me by your invitation, but after all the courtesy and hospitality that has been shown me to-day I am still slightly bewildered. Architecture, after all, is the Mother of Arts. One of the oldest professions in the world, I won't say the oldest profession, because I understand that the oldest profession is under a slight moral cloud. Certainly architecture is one of the oldest and most honoured professions and why it should single out for this type of recognition, a representative of the youngest and most non-descript of professions, I can't quite understand. I am often asked what is an industrial designer, and I have great difficulty in answering. I have come to the conclusion that an industrial designer is a pigeon hole in which you put men who do a variety of things, but nobody knows quite what. When you have a man who designs buildings, who isn't an architect and who designs machines, but isn't an engineer, and makes drawings and pictures, but isn't an artist, and carries on research, but isn't a scientist, and adds certain gay notes to the fashion element of the world, but isn't either a dress-maker or a milliner, then you call him an industrial designer. However, that profession of mine has certain compensations. It takes us into the most interesting and stimulating surroundings. In the course of a year we are required, in our professional work, to visit engineering departments and laboratories, research laboratories and department laboratories, where the future is being given its shape. That, to my mind, is one of the great privileges of these times and it is a source of spiritual salvation at a time when many people might easily become discouraged.

I had the privilege this morning of meeting a group of architectural students of the University. A more alert, keen and responsive crowd I have never encountered. I can say that the architectural profession of the future in this territory is in the most likely possible hands. But one young man asked a question which indicated the attitude that I have found among many of both the young and the old in these times. It indicated an attitude of bewilderment and a somewhat cynical discouragement. He wanted to know when this great new world that we have heard so much about was going to arrive, how long it would take getting here and whether any of us would be left to see it when it arrived. I can appreciate that attitude thoroughly. If my own impressions of present conditions of the world and the possibilities of the future depended on what I read in the newspapers of international controversy and domestic difficulties, I should feel the same way. Fortunately, for my own peace of mind, I have had the opportunity to spend most of my time in the workshops where the brave new world is actually being organized and prepared for us. That gives one quite a different slant on the future and it is a little of that feeling that I would like to convey to you to-night.

I think that all of us, being builders, are deeply concerned with that possibility of the future. It is our job when the better world is built, to build that better world, and, as builders, as designers, as moulders of the future, we should have confidence in the success of the task that we are undertaking. Now I realize that there are enormous difficulties facing us, principally through the lack of unity within the world. I know that these great possibilities that are within our grasp will not be realized unless we have a longer period of peace, of international tranquility and that there are many obstacles to such a long era of quiet in the world. Those obstacles arise principally, in my opinion, from the ideological conflict which splits world thought wide open to-day. The conflict is between two conceptions of human relationships. On the one hand is the idea that the individual citizen has certain inalienable rights which his government cannot take from him; that that government is the servant and that he must have every opportunity to develop his own possibilities, his own energies, his own initiative and his own creative ability. On the other hand we have the conception that the citizen has no rights except those which the State allocates to him. He has neither rights nor duties nor responsibilities except as the State allocates them. Both of these conceptions of human relationships have been earnestly embraced over large areas of the earth's surface by huge blocks of population. They are both held with a deep sincerity and within limitations they have both had a certain measure of success. We, certainly, who believe in the freedom of the individual and the potentialities of individual initiative and energy, have proven beyond a shadow of a doubt the fertility of such a conception as contributory to human progress. The other school feel that they have accomplished something in their own area with their own principle. Those ideas are incompatible and to-day the world is split between them with an iron curtain of silence between the two areas that can only be broken down by a freedom of communication and a meeting of minds which has not yet occurred.

However, in the meantime, we, in this area who believe in individual energy, in initiative, invention, imagination and the creative instinct, have a grave responsibility to prove the soundness of our principles. We must prove them all over again by creating a society that is so much better than any other in the world that it will ipso facto prove that we are working on the right principles. Now I feel that we have it within our grasp, the most tremendous and powerful tools with which to carry out that job and execute that proof.

My professional work has brought me in contact with this vast army of makers and builders who are not publicized, who are doing their job, slowly and carefully preparing a better world, better products, better services and better living conditions for all mankind and I, I am happy to say, am an optimist. I think we are going to overcome the difficulties that we have, and that we are about to enter the greatest era of human progress that the world has ever seen. If we do not do so, we will suffer endless ignominy and shame. If we do, we will not deserve any particular credit because the means are all ready for us. It is merely asked that we should have the intelligence and the discretion and the selfcontrol to use the tools that are in our hands.

All modern civilization is founded on power and the exact control of power. There have been happy oases in human history which got along without mechanical power. That is not possible to-day. Without abundant reserves of mechanical power under strict and delicate control, we find that the conditions of the people revert to that of great masses as in China and India and other backward areas of the world.

Now, look at what has happened to power and power production within the last generation. I don't know the statistics for Canada, but they are probably very similar to those for the United States. In the United States in the year 1898, we had a potentiality of power production of one-quarter horse power per person. To-day we have a potentiality of horse power production of eighteen horse power per man, woman and child of a very much larger population. In other words, per capita power production has increased here seventy-two times in fifty years. That is an almost fantastic amount of strength with which to subjugate this world that we must bring under our control. The problem of all builders and makers is to create in this world an environment in which people can live happily, comfortably, develop their potentials and realize the possibility of well-being that may exist for them and with that amount of power there is almost nothing that we can't do. However, that is only the beginning.

During the war, we developed new fuels that have vastly greater potentials than any we knew before and we have perfected new engines in which to use those fuels. We have developed new types of engines in the gas turbine, and the jet engine, which have vast potentials, and then we have gone far beyond that and

unlocked the cores of all power and released the might within the atom. It is the power from which the sun draws the strength that it pours down on the earth and wastes throughout the rest of the universe. We can build little suns now. I don't mean the two-legged kind, at which we have always been reasonably adept, but s-u-n, the little suns under our control which we can put to work for us. When you realize that even by the very early atom fission you could extract from one pound of uranium two hundred and thirty-five times as much energy as you could get from the burning of thirteen hundred and fifty tons of coal, you realize the fabulous increase in the ability to control nature that will come from atomic energy. There are frightful possibilities involved too, but if we can concentrate on these constructive potentialities we will be much less apt to use atomic energy for racial suicide.

The department of atomic energy is proceeding faster than we had anticipated. It is still in a crude form, but when you realize that aviation is only forty-three years old, you can look forward within the next ten or fifteen years to the application of atomic energy to work on a scale that is beyond our present conceptions. It will be possible to do practically anything that the human being wants to do. We can even control the weather with adequate reserves of power, and I am sure that some of us would find that a very gratifying change.

Out of this same scientific effort which has produced atomic fission, we have one of the most extraordinary methods of controlling power, electronics, the parent of atomic energy. In its other phases it also is used now to control power in a manner no one had ever dreamed of before. The most sensitive and delicate expansion and interpretation of power is now possible, so that by means of a pulsation fainter than a butterfly's pulse, you can swing a battleship in circles, you could magnify the gnawing of a worm on a leaf to a roar that could be heard in Ottawa. You can do anything with the transformation and magnification of power that a man wants to do through the use of electronics.

In the field of materials, if nature does not provide us to-day with material we need for our purpose, we can make it. The chemist, the metallurgist and the electronic experts have learned how to re-combine the atoms in a molecule in order to create a new molecule which will have the properties that are needed. You saw that during the war in the swift development of artificial rubber. It had taken a hundred years to develop the products of natural rubber to the point at which we entered the war. Within two years after the entry of the war, we were producing more artificial rubber than we had ever consumed annually at any time before. A new art had been suddenly developed based on, of course, prior research, but suddenly expanded and made practical to the point where we were supplying the needs of a nation purely out of the chemists' test tubes. We, no longer, are subject to nature for the things we use, we make it if we haven't got it. It is merely a question of

time and research, and the answer will be at hand. It is not sufficient merely to produce goods, to produce wealth. We must be able to distribute it. It must be possible to produce goods in one place to be used in another; to produce them at the point where it is most feasible and most economical to produce them, and distribute them to the points where they are most needed. In that too, we have seen, in the last few years an enormous expansion of capabilities.

The swift development of aviation in forty-three years, since that first flight in Kitty Hawk, has tied the world together in a network of transportation which is still only in its early stages of development, fabulous as it is already. We are working to-day on planes which will be flying this summer, eighty and ninety passenger planes with sleeping accommodations and cocktail lounge and all the comforts of home, they will cruise at three hundred and fifty miles an hour above the weather, at heights of fifteen and seventeen thousand feet, with pressurized cabins where the oxygen content of the air is maintained at a constant level throughout the flight. Those planes, again, are only the beginning. I have seen and been in the supersonic planes which will fly faster than the speed of sound. Those planes will be adapted to passenger use as soon as they have been tested in a more precarious field of military service. With those planes it will be possible to fly at speeds of seven hundred and fifty to a thousand miles an hour, again, in complete comfort, instrument flying, of course, with radar and all the safety protections that there may be.

Our railroads are undergoing a re-adjustment but they must go still further. Railroads and steamships for many, many years will be our prime carriers of bulk loads and large numbers of people but they again must undergo a revolutionary change and these changes are under way.

We have a vast job to do in the reconstruction of our cities. They are not adapted to our life to-day, as we all know. We are all struggling with that problem, but I see the city of the future as a place where a very few people live. The city will be a place where people come together to transact business, for mass activities, for education, for the theatre, for concerts, for amusement and for various forms of cultural activities, but it will not be a place where people live. With the air full of helicopters and private planes, transportation bringing all parts of the country closer together within a few minutes of each other, you will see a decentralization of manufacturing activities; factories moving out to the countryside and factories that will not in any way deface those countrysides-crystal palaces that emit no smoke and produce no unusable by-products; that are not in any way detrimental to the countryside. The workers in those factories will live under rural conditions but with urban comfort, conveniences and opportunities. I look to see tall crystal towers rising in the country here and there as the nuclei of communities which will be grouped around them. Those communities will be served by arterial highways but they will not be penetrated by

those highways. There will be vast stretches of the country that will be completely untouched by either industry or urbanization for recreation, for wild life and for the enjoyment of solitude. There will be no point in anyone living under conditions which are not the most healthful and the most pleasant when the problem of transportation is solved and we shall have the means to solve it within the next generation.

There alone in the reconstruction of our communities is a vast work to be done now. There is no use in building a better world unless we have better men who populate it and we have every means to do that. In the United States we were shocked by the health statistics, and the literacy statistics which were accumulated as a result of the Selective Service Act. There is no reason why the bulk of our people should not be healthy, well developed, completely nourished; why they should not have an ample and varied diet; why they should not have a proper medical and dental care from the beginning of their lives to the end, and why those lives should not be much prolonged over what they are to-day. People will live longer, but there would be no point in that if they did not preserve their youth, vigour and creative ability longer. That will come too. Our people will be better educated. With all due respects to the universities and schools of to-day, I think they have a great deal to learn about methods of education. In the army during the war, the most effective methods were developed. In a short time visual methods and every possible aid were used to inject information, not only information, but comprehension into the minds of untrained men and they were amazingly successful in doing it. We had a part in one of those courses in which gobs came in from the Navy, and, in two weeks of instruction, were given the equivalent of a first year college course in basic hydraulics. I admit that they were "cramming" and they did nothing else during those weeks but eat and sleep, but they went out with a very sound and thorough comprehension of basic hydraulics. With that brief training they could undertake to service and control the extremely elaborate and delicate machinery of the warship with a great deal of competence.

Now as I say, I don't know when all these fantasies are going to be realized. I see that these rough notes that I made for this talk begin and end with a question mark. That is indicative and significant of so many of our discussions and our speculations to-day. But the good will of the people and the desire to accomplish this betterment of human living is the basic factor in the whole situation. The responsibility rests not with the politician or the economist or the sociologist, it rests with the makers and the doers and the builders. They are the people who are going to accomplish this transformation of our world. Whatever is done of a physical nature is done by some man, who wills it and who comprehends what its objective is and who has the capacity to do it. We represent one of those great classes of builders, and doers, and, gentlemen, the future is in our hands.

REPORT OF THE JUDGES

CANADIAN SMALL HOUSE COMPETITION

Professional Advisor, Harold Lawson, Montreal. Board of Judges: Humphrey Carver, Toronto; Ernest Cormier, Montreal; L. R. Fairn, Wolfville, Nova Scotia; William Fredk. Gardiner, Vancouver; L. J. Green, Winnipeg; Ernest Ingles, London; Mrs. Monica McQueen, Winnipeg; and W. Bruce Riddell, Hamilton.

I N the opinion of the judges, this competition produced an extraordinary variety of plan arrangements. Competitors made a most exhaustive study of different ways of putting together the elements of the small house plan. In previous competitions there has been some concentration on pretty elevations to make nice exteriors, but in this competition the concentration of the designers on plan arrangements was very noticeable. The plan arrangement was superior to the architectural form in which it was expressed. In fact, perhaps the great outstanding outcome of the competition was the tremendous variety in the architectural character. It is apparent that we are moving away from what is generally considered to be a house of orthodox appearance.

The judges doubted whether there had emerged any great distinction between the regions in the form of plan. It is quite possible that the designs contributed in any region could have been suitable and successful in any other region. The general quality of entries was not up to expectation. The judges felt some disappointment that many experienced firms of architects had been unable to contribute on account of the pressure of present business. The hope was expressed that in any subsequent competitions it would be possible to draw in the practising architectural firms in greater numbers than had been possible on this occasion. Nevertheless, it was obvious to the judges that a great deal of fundamental thinking on Canadian small house planning has now been done.

Much discussion took place concerning the ability of small contractors and speculative builders to carry out some of the designs. It was recognized that a few of the best designs would require careful supervision and skillful craftsmanship for execution. The fear was expressed that if left to second class firms of contractors some designs which looked beautiful might result in very poor creations.

A fundamental issue of consideration was, of course, land coverage, since the bungalow type occupies a large proportion of the lot while a two-storey house economizes on roof and lot areas. Preference was given to the house with a basement, particularly on the urging of one of the jury members. The overflow of storage space was regarded as very important in a house of minimum room sizes.

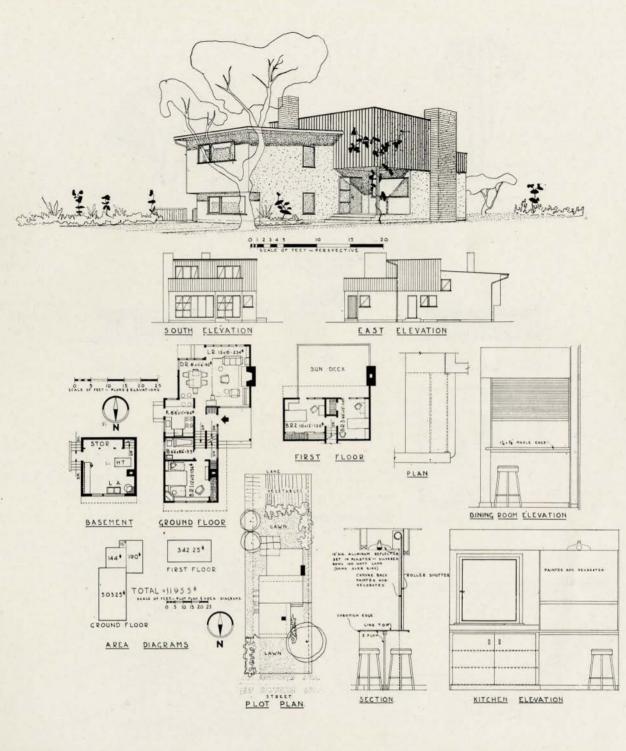
Other plan features most carefully examined by the judges was the communication from front entrances to the rest of the house. Preference was given to those designs which avoided using the living room as a passage. The judges continually considered the difficulties of the housewife in keeping floors clean and keeping the mess left by children away from the living room. The ease of access from the kitchen, as the working centre of the house, to all other parts was a very important factor in decision.

Some difficulty arose concerning the question of garages. It was noticeable that many plans occupied the greater part of a forty-foot lot and, therefore, made it necessary to place the garage either in front of the house or on the back lot line, assuming a rear lane in many municipalities. Either of these locations would not be very satisfactory within present restrictions.

Another important factor considered was the cost of maintenance throughout the life of the house. A design with a simple roof has obvious advantages, since breaks in roofline, pitch, etc., are obvious causes of future maintenance trouble.

It is felt by the judges that the first three choices in each Region would well provide the Canadian public with some novel and interesting designs for future house construction. It is hoped that further Competitions will be held to stimulate thought and interest in house design and in the development of an architecture which will express the Canadian way of life.

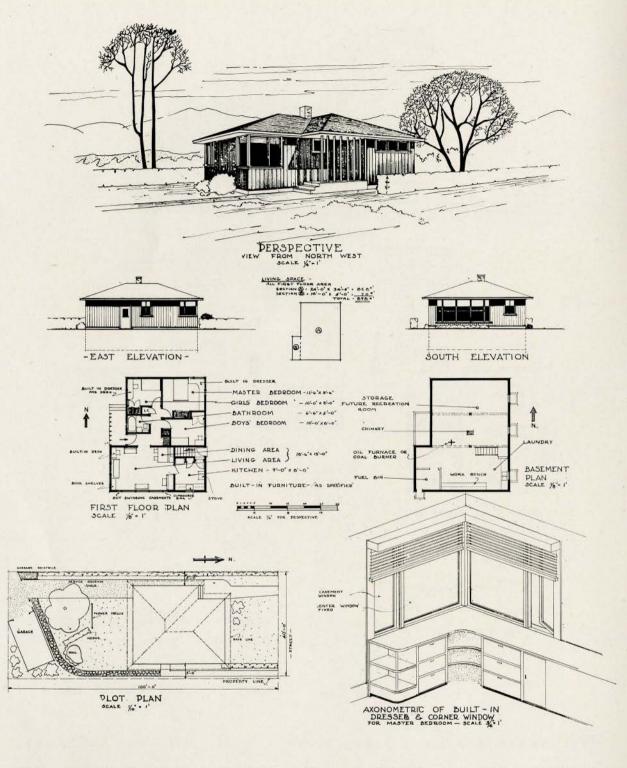
In general the judges believe that this Competition was well worthwhile, even though no new building techniques or materials evolved. Three hundred and thirty-one designs were submitted. It is gratifying that the Competition obtained such a wide response throughout the Dominion.



WEST COAST REGION . FIRST PRIZE . E. A. MULFORD, VANCOUVER

This design was the most controversial of all. It provoked the greatest discussion and was finally selected because of its unique features. The split level plan results in good circulation. The exterior design, while original, impressed the Jury as not having been given sufficient study. It was also felt that careful supervision and craftsmanship would be absolutely necessary in the execution of this house. Some concern was expressed regarding its cost.

7



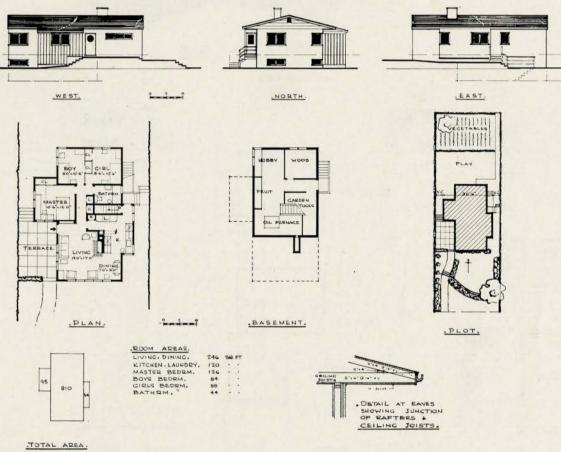
WEST COAST REGION * SECOND PRIZE * HARRY LeBLOND, WINNIPEG

An economical West Coast type bungalow. The circulation while good requires passage through the living-dining room to reach any part of the house from the kitchen. A higher ranking prize might have been awarded had the design been more distinctive.



SOUTH.

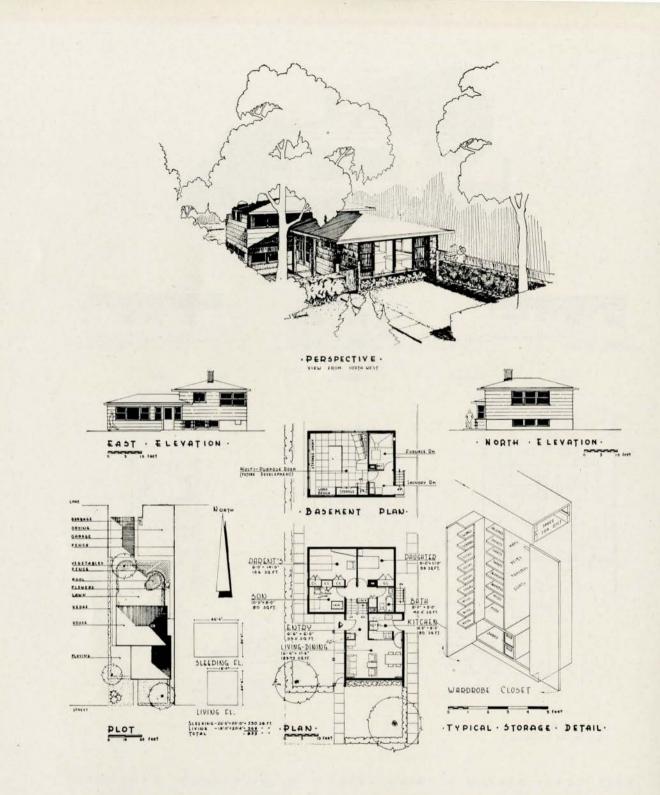




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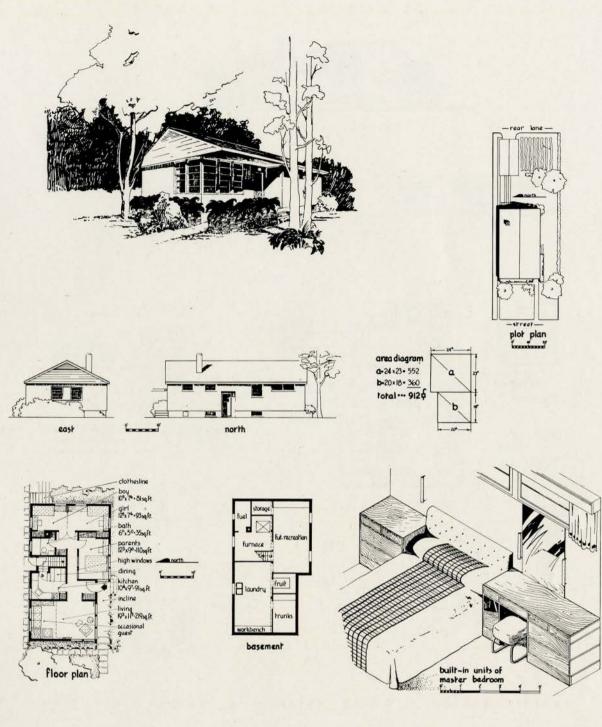
VANCOUVER WEST COAST REGION THIRD PRIZE FARMER, . н. Μ.

One of a large group of similar plans submitted in this Region. The plan provides good circulation. The opening between the kitchen and living-dining room was considered unfavourably. The plan is practical and efficient and meets the requirements set forth in the program.



PRAIRIE REGION • FIRST PRIZE • ANDREW P. CHOWICK, WINNIPEG

A three level house rather more successfully planned than the West Coast prize winner. The junctions of roofs and walls would be much easier to construct. The circulation is very good, except that it is necessary to pass through the living-dining room and main entrance hall to reach the basement from the kitchen. However, the judges believed that this defect could be easily overcome by a minor change such as opening a door from the kitchen to the front hall. A vestibule would have helped this design, particularly in the Prairie Region. The handling of the multipurpose room in the basement was considered to have unusual merit. Some concern was expressed regarding the large glass areas for the Prairie Region.



PRAIRIE

• **SECOND**

REGION

A. B. STOVEL,

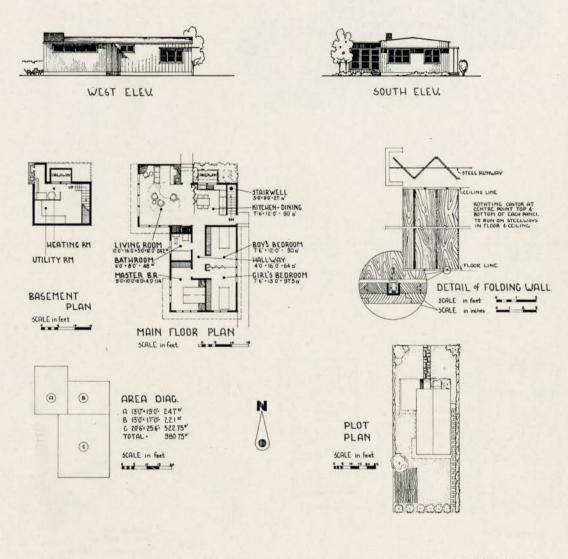
WINNIPEG

A well planned house with good circulation and accommodation that meets the requirements of the program. The provision of dining space in the kitchen was favourably commented upon. However, it is of a larger size than some of the other prize winners.

PRIZE



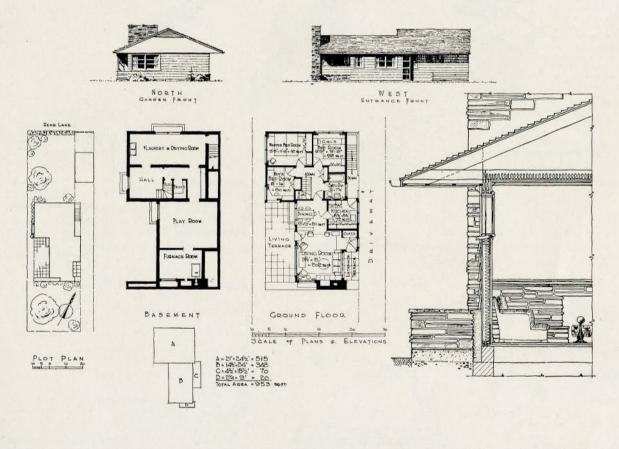
PERSPECTIVE from NORTH-EAST



PRAIRIE REGION • THIRD PRIZE • E. RAINES, WINNIPEG

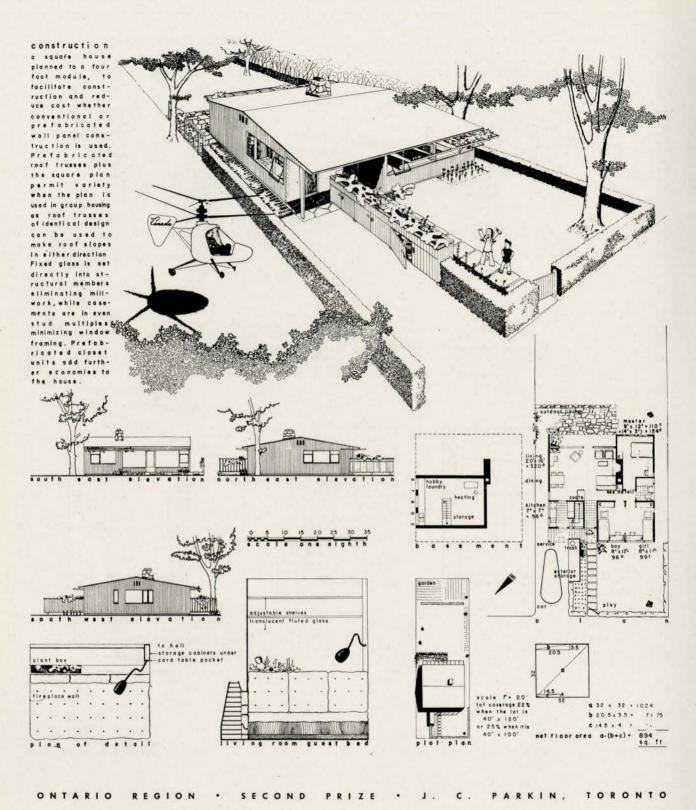
This design of unusual appearance contains a very spacious living-dining-kitchen area. A fixed partition or screen between the kitchen and living room might have been an improvement. No vestibule is indicated, but this could be easily provided. The glass area was considered to be slightly excessive for the Region and the type of heating equipment which might be considered normal for houses in this price range.



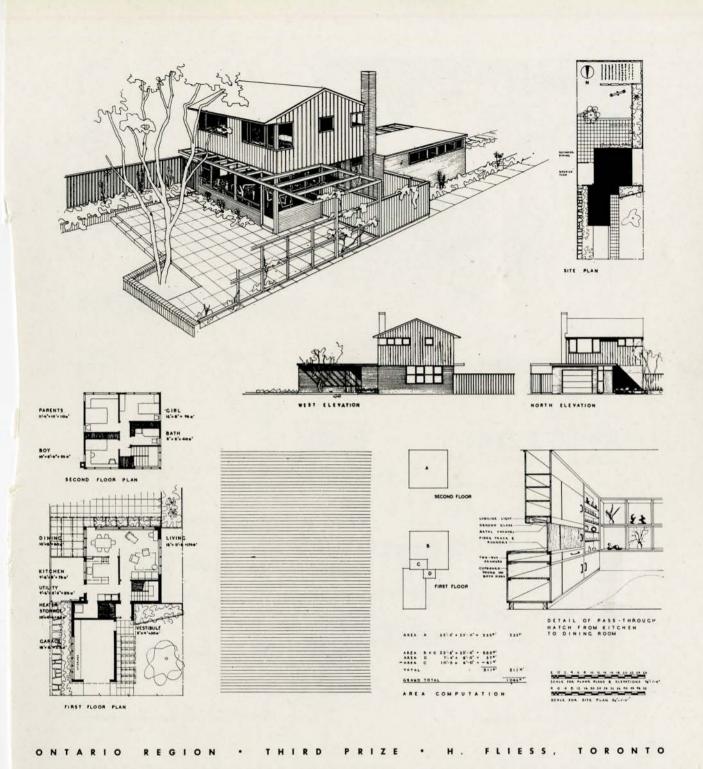


ONTARIO REGION · FIRST PRIZE · E. C. S. COX, ISLINGTON

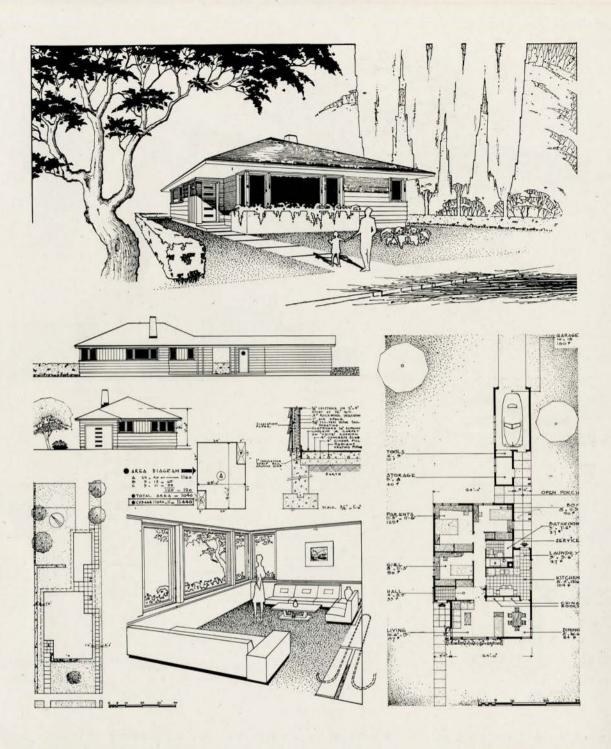
The display of good taste, distinctive design and general pleasant appearance were the underlying factors that led to its selection. Some of the judges felt that it did not meet the problem since it would suit a corner lot more favourably. There was also some criticism concerning the necessity of passing through the living and dining rooms to reach the kitchen and rear bedroom hall from the front entrance. The arrangement of the kitchen and bathroom plumbing was considered to be very economical and the rear entrance to the kitchen is very well located.



This design was carefully considered for first place but the plumbing arrangements and the small size of the kitchen and its general design characteristics relegated it to second place. It has a very compact functional plan.

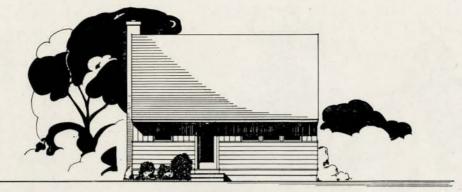


This design reduced the two floor square plan to its simplest terms. It has excellent arrangements of side delivery with access to kitchen and heater room. Generally the circulation is very good. The architectural quality is good, although the excessive amount of glass area was questioned for some parts of the Ontario Region.

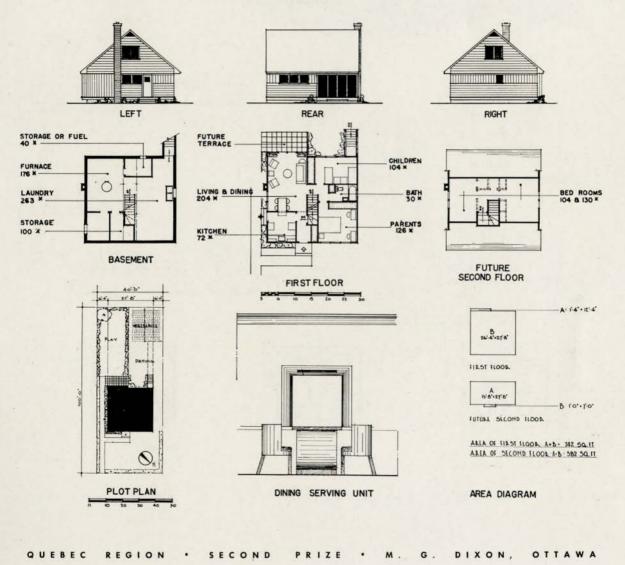


QUEBEC REGION . FIRST PRIZE . ROLAND DUMAIS, MONTREAL

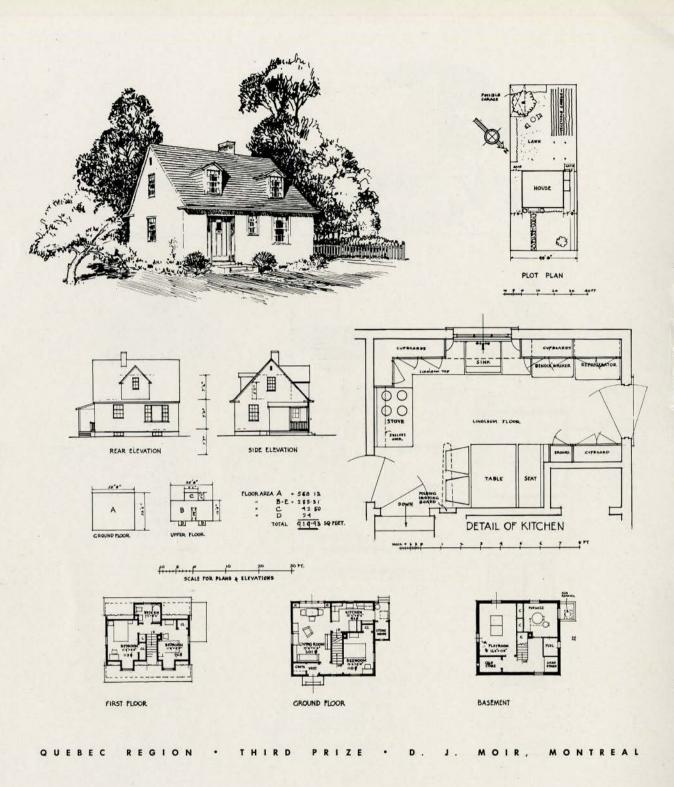
An excellent design with good circulation and good architectural features. It raised a great deal of discussion regarding the acceptability of a basement-less house without characteristics common to the Quebec area. This house was given a first prize, not because of its particular suitability to the Quebec Region but because of its faultless plan arrangement and good architectural features. The judges considered this design to be outstanding and as nearly ideal as possible.



FRONT



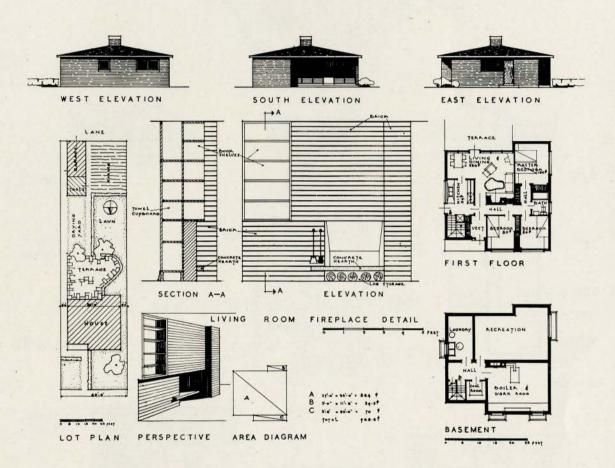
Another house design which could be built anywhere in Canada. The judges were impressed with the provision of a potential four bedrooms. The provision of closet space is excellent. It was felt that the dining table and wicket arrangement could be improved by providing a continuous counter on the kitchen side. The exterior proportions are very simple and pleasing. The outside stair with no provision for covering was questioned.



This design closely approaches the traditional Quebec domestic architecture. It would undoubtedly be acceptable to many families in Quebec. Three bedrooms are provided, but it is necessary for the occupants of the first floor bedroom to pass through the front hall in order to reach the bathroom on the second floor, but this could easily be altered to provide the privacy required.

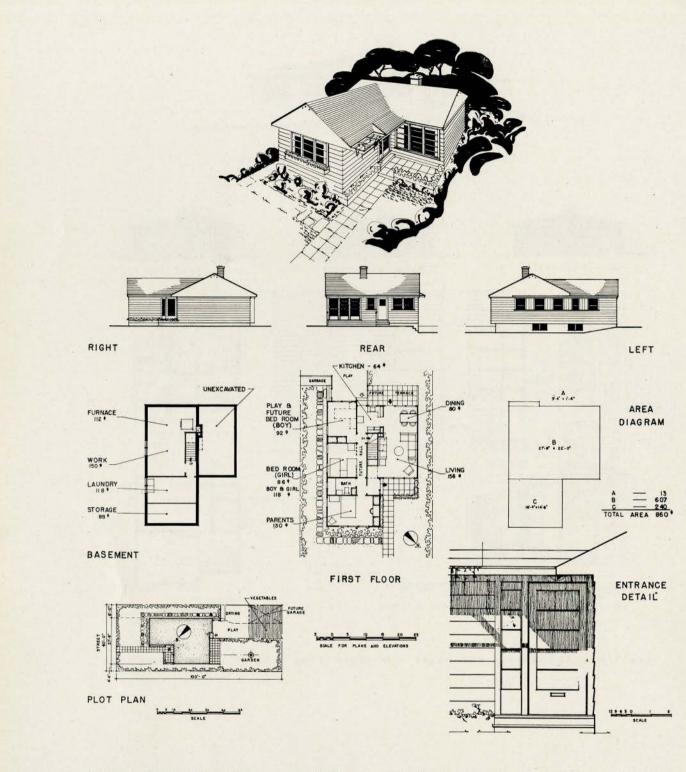


PERSPECTIVE OF NORTH & EAST ELEVATIONS



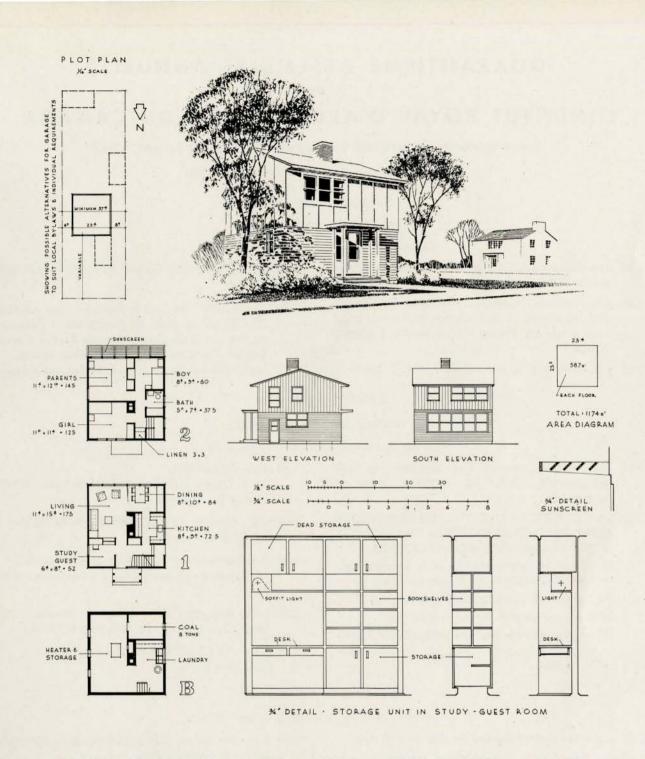
MARITIMES REGION . FIRST PRIZE . G. BURNISTON AND J. STOREY, TORONTO

This design was thought by many of the judges to be amongst the best submitted. It can be built anywhere in Canada. The plan circulation is excellent and the living-dining room with its large glass area to the south should provide attractive living conditions. The exterior design was considered to be of utmost simplicity and of very fine appearance.



MARITIMES REGION . SECOND PRIZE . M. G. DIXON, OTTAWA

Another attractive design which could be built anywhere in Canada. A feature is the provision of a playroom which could become a bedroom when the children grow older. The circulation is not as good as in the first prize winner, although it will be possible to have access to any room in the house without going through another habitable room when the house is finally completed. The plan has a very small area but is not as compact as the first prize winner. The circulation from the front door to the kitchen and from the basement stair to the outside could have been better and the long distance around the house to the rear entrance was commented on. The chief factors responsible for this design being premiated were the accommodation obtained in a small floor area and the pleasant exterior design.



MARITIMES REGION . THIRD PRIZE . KENT BARKER, TORONTO

This design provides good circulation and the essential accommodation required by the program. It would be popular anywhere in Canada. It was believed that a door from the living room to the rear garden might have been desirable. The judges felt that in this Region a vestibule should have been provided. The provision of an extra study room within the small confines of this house was considered to be excellent.

QUARANTIEME ASSEMBLEE ANNUELLE

DE

L'INSTITUT ROYAL D'ARCHITECTURE DU CANADA

Tenue à Montreal, vendredi et samedi, les 21 et 22 février, 1947

(Les séances seront tenues à l'Hôtel Windsor)

Séances Préliminaires

Jeudi, le 20 février, 1947

(Les réunions seront tenues dans le Salon "B")

- 11.00 a.m.-Réunion du Comité de la Rédaction du Journal de l'I.R.A.C. avec représentants provinciaux.
 - ux. tecture. seil 7.00 p.m.—Dîner offert par le Président aux membres
- 1.00 p.m.-Déjeuner pour les Membres du Conseil 1946, du Comité de la Rédaction du Journal et du Comité sur les Etudes d'Architecture à l'Hôtel Windsor.
- 2.00 p.m.-Réunion du Conseil de l'I.R.A.C. 1946.

Séances Régulières

Vendredi, le 21 février, 1947

(Les réunions seront tenues dans le Salon "E")

- 9.30 a.m. Enrégistrement des membres et des Délégués de l'I.R.A.C. et celui des élèves en Architecture.
- 10.00 a.m.-SEANCE D'OUVERTURE DE LA QUARAN-TIEME ASSEMBLEE ANNUELLE DE L'INSTITUT ROYAL D'ARCHITECTURE DU CANADA.
 - (a) Lecture du procès-verbal de la Trente-Neuvième Assemblée Annuelle, tenue à Québec.
 - (b) Rapport du Conseil: le Président.
 - (c) Discussion sur le Rapport du Conseil.
 - (d) Rapport de l'élection des Délégués au Conseil de l'I.R.A.C. pour 1947 par le Secrétairehonoraire.

- 1.00 p.m.-DEJEUNER. Dr. A. Frigon, Directeur Général de Radio-Canada, sera le Conférencier.
- 2.00 p.m.-Reprise de l'ASSEMBLEE ANNUELLE. (e) Affaires nouvelles.
- 5.00 p.m.Convocation du Collège des "Fellows". (Ces derniers porteront leurs médaillons distinctifs).
- 6.30 p.m.-Réception de la revue Architecture, Bâtiment, Construction aux Membres et invités.
- 7.30 p.m.–DINER INTIME à l'Hôtel Windsor. Divertissements.

Samedi, le 22 février, 1947

(Les réunions seront tenues dans le Salon "E")

- 10.00 a.m.-Réunion du Conseil de 1947 de l'I.R.A.C.
- 11.00 a m —Reprise de l'ASSEMBLEE ANNUELLE (f) Autres affaires.
- 1.00 p.m.—DEJEUNER. A cette occasion les Membres étrangers seront les invités de l'A.A.P.Q. Le Conférencier sera Monsieur Herman Voaden, Président du Conseil des Arts du Canada.
- 2.00 p.m.–Visite de l'Exposition des Travaux d'Elèves des cinq écoles d'Architecture du Canada, à l'Hôtel Windsor.

- 6.30 p.m.—Réception du Président aux Membres, Invités et leurs épouses.
- 7.30 p.m.—DINER ANNUEL (Tenue: Smoking et les Fellows porteront leurs médaillons). Les membres seront accompagnés de leurs épouses et autres invités. Il y aura remise de diplômes aux "Fellows" nouvellement élus. L'élection des nouveaux dignitaires de l'I.R.A.C. sera proclamée. Le conférencier d'honneur sera Major-Général H. A. Young, C.B., C.B.E., D.S.O., Vice-président de la Société centrale d'Hypothèques et de Logement.

Mademoiselle Anne M. Cory, Institut Royal d'Architecture du Canada, 74 est, rue King, Toronto.

du Conseil de 1946, du Comité de la Rédaction du *Journal* et du Comité sur les Etudes d'Architecture. Ce dîner aura lieu à l'Hôtel Windsor, et les invités seront accompagnés de leurs épouses.

4.00 p.m.-Réunion du Comité sur les Etudes d'Archi-

THE FORTIETH ANNUAL ASSEMBLY

THE ROYAL ARCHITECTUAL INSTITUTE OF CANADA

in Montreal, on Friday and Saturday, the 21st and 22nd of February, 1947

(All Sessions to be held in the Windsor Hotel)

Pre-Assembly Meetings

Thursday the 20th February, 1947

(Unless otherwise noted Meetings will be held in Salon "B")

- 11.00 a.m.-Meeting of the Editorial Board of the *Journal* with Provincial Representatives.
- 1.00 p.m.—Luncheon for members of the 1946 Council, the Editorial Board, and the Architectural Training Committee at the Windsor Hotel.
- 2.00 p.m.-Meeting of the 1946 Council of the R.A.I.C.
- 4.00 p.m.—Meeting of the Architectural Training Committee.
- 7.00 p.m.—President's Dinner to members of the 1946 Council, Editorial Board and Architectural Training Committee at the Windsor Hotel. Wives of the members are invited to attend.

Programme

Friday the 21st February, 1947

(Unless otherwise noted Meetings will be held in Salon "E")

- 9.30 a.m.—Registration of Members and Delegates of the R.A.I.C. and Architectural Students.
- 10.00 a.m.—INAUGURAL SESSION OF THE FORTIETH ANNUAL ASSEMBLY OF THE ROYAL ARCHI-TECTURAL INSTITUTE OF CANADA.
 - (a) Reading of the Minutes of the Thirty-Ninth Annual Assembly held in Quebec City.
 - (b) Report of the Council: The President.
 - (c) Discussion of the Report of the Council.
 - (d) Report of the Election of Delegates to the 1947 Council of the R.A.I.C. by the Honorary Secretary.

- 1.00 p.m.–LUNCHEON. Dr. A. Frigon, General Manager of the Canadian Broadcasting Corporation, will be the Guest Speaker.
- 2.00 p.m.-Continuation of the ANNUAL ASSEMBLY.(e) New Business.
- 5.00 p.m.—Convocation of the College of Fellows. (Fellows will wear insignia.)
- 6.30 p.m.—Reception by the A.B.C. to Members and Delegates.
- 7.30 p.m.—INFORMAL DINNER at the Windsor Hotel. Entertainment.

Saturday the 22nd February, 1947

(Unless otherwise noted Meetings will be held in Salon "E")

- 10.00 a.m.-Meeting of the 1947 Council of the R.A.I.C.
- 11.00 a.m.-ANNUAL ASSEMBLY.(a) Unfinished Business.
- p.m.-LUNCHEON. Members will be the guests of the P.Q.A.A. Herman Voaden, President of the Canadian Arts Council, will be the Guest Speaker.
- 2.00 p.m.-Visit to the Schools of Architecture Exhibition at the Windsor Hotel.

- 6.30 p.m.—President's Reception to Members, Guests and Ladies.
- 7.30 p.m.–R.A.I.C. ANNUAL DINNER. (Dress: Dinner Jackets.) (Fellows will wear insignia). Members, their Ladies and Guests are invited to attend this Dinner, during which the Fellowship Diplomas will be presented. Announcement will be made of the newly elected R.A.I.C. Officers. The Guest Speaker will be Major-General H. A. Young, C.B., C.B.E., D.S.O., Vice-President of Central Mortgage and Housing Corporation.

Miss Anne M. Cory, Secretary, R.A.I.C., 74 King Street East, Toronto.

OF

THE BUILDING RESEARCH STATION

By WILLIAM ALLEN, B.Arch., A.R.I.B.A., of the Building Research Station.

Reprinted from The Architects' Journal, November, 1946

THE Building Research Station was established shortly after the last war as one of several new laboratories set up under the new Department of Scientific and Industrial Research. At first it concentrated, as one would expect from its genesis, upon improvements in materials and methods of building construction, though it was not long before attention was directed to physical problems such as acoustics and heating. Largely through these it first found intimate contact with architectural ideas, though the interdependence of architecture and the whole of building science had for some time been recognized, of course.

Its organization from the outset has been unique in important respects. It has certain natural scientific divisions, chemical, physical and engineering; but they were never divisions in the sense of being divided from one another, and recognition of the fact that most building problems need to be studied comprehensively to get an answer that means anything in practice has succeeded in nearly obliterating any sense of division whatever. Esentially, the science side is one unit, not three; and in the interest of efficiency every effort is made to foster unity. This is where the Station finds much of its strength.

Another important development was the establishment of a section midway, as it were, between the scientific groups and the Industry (taking that term to include professional bodies such as the architects). In the early days when the industry and science were much farther apart than now, this Section was to some extent a bridge between the two; but it has always responded to changes in the relationship between science and the Industry, and now, as at present organized, its main functions concerns Codes of Practice (for which the Station bears a large responsibility), inquiries (always one of its main functions) and the Station's particular services in connection with housing.

A third important side at the Station is the library, which has been built up in intimate association with the laboratory activities. This is distinguished by a fine translation service which provides for the scientific staff a continuous and remarkably good picture of world-wide developments in all subjects of interest to the Station. All the important building journals are to be found there, and translations are made from every major European language. Some idea of the scale of the work can be obtained from a recent effort in which some 20-odd books and major papers in Russian were translated in whole or in part for the Department's District Heating Committee. Naturally the wide knowledge of European and Eastern building which had been built up at the Station provided much useful material for war purposes in recent years.

The library prepares abstracts of all papers thought to be of interest outside and issues them monthly in the form of the Building Science Abstracts, published by H.M. Stationery Office.

Perhaps a word here about the work of architects at the Station would complete this preliminary description. In the early days the architectural corps was very small, mainly due to the difficulty of finding the best way to use architects in co-operation with scientists. Subsequently the corps had grown, especially in recent years, as the Station has increased its interest in problems having a direct bearing on the design of buildings. Indeed, the pace at which the architectural corps now grows at the Station is now the pace at which suitable personnel is found. The most significant step in this direction has been a recent reorganization in which the physicists are formally associated with the architects on equal terms for studies of the classic architectural problems of lighting, heating, acoustics, and so on. The building science laboratory has always been a strong potential nursery of modern architecture, but historically has never been able to fulfil this function properly; now it looks as though this will develop rapidly. A great architectural opportunity is opening up.

The flexible nature of the divisions of the Station has sometimes made it difficult for visitors to grasp the organization of research, and when one comes to write something of the work of the Station, one has to do so mainly in terms of the problems rather than the scientific divisions.

Of building materials, for instance, one could catalogue them and one would find that the catalogue would appear to be more or less a catalogue of the work of the Chemistry Division. But then one would shortly discover that emphasis in the research rests not upon materials as such but upon their natural properties, some of which, being mechanical and physical, carry the studies well beyond the confines of orthodox chemistry. The real way to understand the work of the Station in this field, therefore, is to catch the significance of these natural properties.

They also provide, of course, the real key to architectural mastery over the use of materials in practice, and have a close bearing upon the development of the modern vernacular of design. We have heard much in recent years of structural continuity, and architects have somewhat too easily extended the idea from its legitimate engineering application to other aspects of structure where it comes into conflict with these natural laws. For instance, there is the idea of the uniform, plane, smooth surface from which a certain aesthetic satisfaction is derived on account of these characteristics. But this is often attempted in the face of the influence of temperature differences, shrinkage movements, settlement, and so on, which will cause every building of any appreciable size to undergo almost continuous dimensional change in detail and as a whole, throughout its life. We cannot claim to have adjusted the vernacular of modern design to such forces, and until we do we will have trouble with our buildings.

What, then, are the main points? Plastic flow, which occurs prominently in concretes, asphalt, and timber; reversible moisture movements such as take place in timber and products incorporating timber, and in concrete products; shrinkage, which is an important factor in concrete, rendering, plastering and clay soils; and thermal movements, occurring to a different extent in different materials (but always occurring in all of them). In a slightly different category we have the chemical constituents of materials, which sharply affect their use in combination; most chemical reactions require the presence of moisture, and in an island climate such as ours chemical reactions are bound to be frequent and rapid in buildings. They are, in fact, at present one of the most prolific causes of building failures, and this ought to warn us not to depart from design which is naturally protective without being pretty sure of our chemical factors. Finally, one should mention the weathering properties of facing materials, always an important aspect of Building Research Station work.

There are other studies one might mention, but these will serve for illustration. At the same time one should say that the fundamental research is usually done with the object of improving our knowledge of specific materials, and the Station is naturally conversant with all the orthodox types as well as most of the unorthodox.

Apart from its significance in building design, the work on materials plays an important part in industrial development, instances of which are found in co-operative researches on sand-lime bricks, and in the use of blastfurnace slags, from which, comparatively, very large financial returns have been derived. In another direction, the Station assists in selecting and specifying materials for special uses — for example, the stone for the repair of the House of Commons, which raised very awkward problems resulting from the requirements of appearance and chemistry. In fact, the repair and maintenance of ancient buildings is no inconsiderable side line. The cleaning of buildings in urban atmospheres is another specific aspect of the study of materials.

In this discussion we have already of necessity wandered into part of the work of the Engineering Division, but, of course, the central studies in that Division are structural and concern particularly the mechanical properties of elements and methods of construction. Examples are work on reinforced concrete (which played a large part in the development of the important Code of Practice published some years before the war), work on steel frames, and on reinforced brickwork. More recently a special team was built up to deal with the immediate problem of alternative methods of house construction. Because of its topicality, this is worth describing in a little more detail to illustrate how the Station works on a new interest from first principles.

Before the war, the orthodox brick-built house automatically had such a large structural factor of safety that there was no incentive to study its problems. With the development of new systems, particularly of the frame-type, the problem arose at once of providing a basis of design which would meet the needs of economy and safety. A particular aspect of the problem was to find the contribution made to stability by elements like the stairs and the cladding, as well as the partitions and floors. The team embarked on studies along two main lines, the general field testing of the prototypes of alternative forms of construction, and the detailed examination of full-scale frames erected on a special test bed at the Station. Much special equipment had to be obtained, of course, among which an outstanding item was a new mobile electrical laboratory. As a result of all this work it has been possible in the course of eighteen months to arrive for the first time at a reasonable and comprehensive group of acceptance criteria for the structure stability of houses.

It is in accordance with the flexible organization of the Station that the limits of the Engineering Division should be modified as necessary to accommodate what may be described as peripheral subjects. Thus one of the major new developments - the study of Soil Mechanics - has grown from it, though its antecedents are as much physical as mechanical. Architects are somewhat prone to regard what goes on beneath ground level as being acts of God rather than the rational behaviour of materials amenable to precalculation; but such is now the case with soils, and the work of this section is partly devoted to the study and development of foundations for buildings. However, much fundamental research is done, as one would expect, and accordingly its influence extends to large-scale civil engineering works such as dams, docks and harbours, and touches, too, upon the academic field of engineering geology. Another division of the Station closely allied to engineering is the Mathematical Division, though its work extends to problems arising throughout the Station.

A very recent development at the Station has been a joint architectural-scientific attack upon mechanical plant for house building and other similar work. The prime responsibility for the study now rests with the Engineering Division, which works in close co-operation with the Chief Scientific Adviser's Division at the Ministry of Works. A topical example of the work of this section has been development work in association with an outside firm to produce a rising scaffold. As a result, a climbing scaffold jack is about to be marketed which appears likely to solve, for the first time, the classic problem of always having a scaffold at the optimum height.

Turning to the work of the Physics Division, one finds now, as mentioned earlier, a formal association of architects and scientists on equal terms. The core of their studies is formed by the classic group, light, heat and sound, though the field is so large in these subjects that good contacts have to be maintained with such bodies as the National Physical Laboratory, where many of the studies have been made - specially those of a more purely physical character - and with the Medical Research Council on physiological and psychological aspects. The essence of the light-heat-sound groups lies, of course, in the fact that ultimately the criteria are mostly those of the human body, and since changes in this do not lie within the scope of normal design practice. the latter has ultimately to conform to the former. The new developments should lead, during the next few years, to the establishment of physiology in an important position among architectural studies.

During the past two or three years the main part of the Division's work has been related to three of the Post-War Study Reports - the Lighting of Buildings, Heating and Ventilation, and Sound Insulation and Acoustics, and subsequently the Station has taken a major part in helping to get the recommendations carried out in new house types. As a result of the co-operative efforts of the Station, the National Physical Laboratory and the Ministries of Health and Works, it looks now as though a great improvement in such matters as the heating and heat insulation of houses and the sound insulation of party walls is being effected in our housing. Indeed, the standard of sound insulation which is being aimed at - and reached - is higher than has been obtained anywhere in the world on any appreciable scale outside a laboratory.

Another activity – the study of natural lighting, particularly in relation to town planning—has given this subject a firm place in urban development studies, and much useful co-operative work has been done jointly by the Station and the Ministry of Town and Country Planning.

The responsibility for work on fire protection also lies with this Division. The studies have important economic ramifications, and touch widely upon building construction, planning and site development. The Fire Offices' Committee is associated in the work, and the researches are carried on at a special laboratory at Elstree.

In addition to the three main groups, the Chemists, Physicists and Engineers, there are two small but growing sections, as yet unattached to the major ones. The first of these, which deals with plumbing and drainage, concerns itself with the principles of design, materials, and labour economy. The second section is the nucleus of a group to study economy in building, its first tasks being connected with time-and-motion studies, or, better, method studies. These impinge upon the size and shape of individual products, the organization of building works, and so on. These particular inquiries are closely co-ordinated with work in the Chief Scientific Adviser's Division of the Ministry of Works. Related to this development is a recent extension of the Station's direct building work. A 50-acre site has been purchased for large-scale experimental building projects, the first of which is a group of twenty houses.

Finally, we come to the division dealing with inquiries, Codes, etc., through which most of the Station's information is tapped for ordinary professional purposes. Some of the outlets are indirect, the most important of which is the Codes of Practice work and assistance in the preparation of British Standard Specifications. The general structure of the Code organization has been amply described in the press, and here it is sufficient to say that the Station provides servicing officers on the majority of the Committees dealing with the specific aspects of building, and is largely responsible for what are called the Functional Codes. Another important outlet is via publications such as *The Principles of Modern Buildings*, Vol. I of which came out just before the war.

A major part of the Division deals specifically with housing problems. Its history deserves a few words, because it illustrates an important new type of development.

It was established as a separate entity in the middle of the war, and its first work was to make a survey of the alternative house types erected after the last war. No adequate study of them had ever been made, and it was felt that this was the proper way to begin preparations for this post-war period. The second stage was to determine a comprehensive set of functional standards so that we would have yard sticks with which to measure alternative types of construction The greatest single source of weakness after the last war was the absence of criteria for new houses. Of course, the setting of standards was a task which in most cases could not be done properly without adequate discussion among the related interests, and this therefore became a part of the duties of the group of Post-War Study Committees formed under the aegis of the Ministry of Works. In due course most of the standards and the results of the survey of the post-lastwar houses were incorporated in the first Report of the Burt Committee, which is the Interdepartmental Committee dealing with alternative types of house.

The next problem was to see that the alternatives came up to the desired standards, most of which were founded partly, at least, on very recent and advanced researches. The standard of sound insulation for party walls, for instance, rested almost entirely on new findings. It was clear, therefore, that designers would often have to be given special help, and it was arranged that whenever a promising scheme was put forward to the Burt Committee, the assistance of the Station should be available to the designer in every way necessary to enable the prototype house to reach the desired standards. This work has involved the detailed study of over a hundred new (Continued on page 32)

Journal, Royal Architectural Institute of Canada, January, 1947

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

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5.2

INSTITUTE NEWS

The last Meeting of the Executive Committee of the Council was held in Montreal on Saturday, Nov. 18th, as usual this Meeting was well attended.

Particular credit is due to Messrs. Hazelgrove, Murray Brown and Beaulé, out of town Councillors who rarely, if ever, fail to attend these Meetings. The soundness of Councils' deliberations are in no small measure due to the excellent advice and able assistance of these gentlemen.

As these Meetings generally take up the whole day, a word by word account of the proceedings, while interesting, would be too long for publication. The Minutes have therefore been condensed and those items of general interest picked out and summarized as follows:

National Film Board Library

A request from the Ontario Society of Photographers that a meeting be held between Representatives of the R.A.I.C. and their Society to discuss the proposed Film Board Agreement, was approved and the Society requested to contact Mr. Murray Brown, who would represent the Institute.

Civil Service Commission

Mr. Forsey Page was appointed the R.A.I.C. Repre-

sentative to the Civil Service Commission as Consultant and Advisor. Mr. Hazelgrove, however, is to act for Mr. Page at a meeting to be held on December 19th in Ottawa on a local matter.

This Institute has offered its assistance and co-operation to the Deputy Minister of Public Works in the matter of appointments to the Architects' Branch of the Department.

Department of External Affairs

Further to the Institute's request that Canadian embassies and legations be designed by Canadian Architects, a letter had been received from the Under Secretary of State for External Affairs, stating that the Department had on strength a Canadian Architect, who would be responsible for the planning of Canadian buildings in foreign countries.

Contract Forms

Owing to increased costs of printing and production, effective January 1st, 1947, the price of all documents sold by the Institute will be raised to twenty-five cents apiece, with a special rate to component societies, of twenty cents apiece for quantity orders.

Report of Standing Committees

Architectural Training

Mr. Brown, Chairman of the Committee, reported that copies of the Architectural Training Brochure had been forwarded to members of the Executive Committee, all the Schools of Architecture, and to the Deputy Minister of Education in Ontario.

The Institute has been authorized to forward copies to Secondary School staffs in Ontario.

It was decided to forward copies of the Brochure to all Provincial Departments of Education for distribution. Two thousand copies are to be translated into French and printed for the Schools in the Province of Quebec.

Arts, Sciences and Research

Mr. Amos, Chairman of the Committee, gave a summary of the Project A62 of the Modular Service Association and the American Standards Association in the United States and reported that the project is a system of design whereby dimensions are kept to multiples of a 4" unit known as a "Module", thereby permitting the use of building materials of Standard dimensions based on identical units. Mass production of building materials thus becomes practical; cutting and fitting on the job is eliminated; construction is accelerated and cost is considerably lowered.

In Canada, progress on the Standardization of building materials is extremely slow and unsatisfactory. However, until such time as Official Standards are established little progress can be made.

Duty on Plans

Mr. Payette, Chairman, reported that Mr. W. J. Abra, representing the Institute, and representatives of the C.C.P.E.S. held a meeting with officials of the Department of Finance with respect to the amendment of item 180 (e) of the Customs Tariff. This amendment will be further studied by the Committee at their next meeting, when it is expected that additional information will be available.

Mr. Payette also reported on a \$5,000,000.00 plant extension job in Cornwall, Ontario. It is understood that a Philadelphia firm of Architects made the plans. This will be investigated.

Exhibitions and Awards

Mr. Lawson, Chairman, reported that there had been 331 entries to the competition of the Central Mortgage and Housing Corporation Competition. First prizes of \$1,500.00 each were awarded to E.C.S. Cox of Ontario; E. A. Mulford, Vancouver; Andrew P. Chowick, Winnipeg; Roland Dumais, Montreal; G. Burniston and J. Storey both of Toronto.

The Competition had not resulted in any new construction techniques, nor had there been any marked differences between the various regions. The Corporation was planning to publish the prize-winning designs in a booklet.

Public Information

Mr. J. Roxburgh Smith, Chairman, reported that it appeared impossible to obtain sufficient funds to finance the proposed "Appreciation of Physical Environment" lecture tour in Canada, by the English Architect, Mr. Oswald P. Milne.

The situation was discussed in all its aspects and, no solution being found, it was reluctantly decided to abandon the project.

Annual Meeting

The tentative Programme for the Annual Meeting was approved and is published in this issue of the Journal.

An Exhibition of Students' Work is to be held at the Windsor Hotel at the same time as the Annual Meeting. Professor John Bland and Mr. P. C. Amos were placed in charge and requested to make the necessary arrangements.

Guest speakers for the Friday and Saturday luncheons and the Annual Dinner, were tentatively chosen.

The President reported that, on instruction by the Committee, he had written to the Prime Minister, advising him that the Institute wished to offer him an Honorary Fellowship in the R.A.I.C. A reply had been received from Mr. King, expressing his great pleasure and honour in accepting such a Fellowship, and regretting that he could not definitely accept the invitation to receive this Fellowship at the Annual Dinner of the Institute, since Parliament would be in session at that time. It was decided that the President should write to the Prime Minister, expressing the hope of the Institute that it would prove possible for him to attend.

Other Business

Letter from the R.I.B.A. advising that the next Meeting of the Allied Societies Conference would be held in March, 1947, and that Mr. Sullivan could represent the Institute if assurance was given that he held Membership status prior to that date.

Mr. Payette submitted a revised report of the Quebec Committee on Blue Cross Health Insurance. It was decided that this matter should now be forwarded to all the Provincial Associations for discussion at their Annual Meetings.

Various Letters to the Institute were read and discussed and appropriate replies formulated.

The next Meeting of the Executive Committee is to be held on Monday, January 27th. P. C. Amos

ALBERTA

The November issue of the *Journal* was devoted practicaly entirely to city planning. This indicates a rising tide of interest in the subject. No less than fourteen projects were discussed in that issue alone. Besides these, in Manitoba a wider expansion is being given to the subject by proposals for the planning of four small towns in the province. Vancouver, which undertook an ambitious and far-reaching town planning in 1928, has returned to the question with vigour. Many other towns are turning their attention to the same matter. The occasion of this tide of interest is, without doubt, the realization of the steadily increasing chaos into which all cities see themselves drifting under the habit of inadequately directed development.

It is well at this time to recall that a wave of town planning passed over this continent about the years 1910-1914. This was finally arrested by the outbreak of the first great world war; but even after that it had become evident that something was wrong with the method of procedure. Already many fine plans had been pigeon-holed. After the war few of the plans were revived. The present fervour for planning received its impetus during the course of the second world war. It is not a renewal of the same enthusiasm as that which at first supported and later failed to carry on the work. It is more broadly founded on careful overall studies and surveys. It is better furnished with methods of procedure and knowledge of technique and expedients.

Yet there are evident difficulties and pitfalls in the way of the actual accomplishment of the fine schemes now being proposed owing to which there is danger that some may be abandoned. The general source of these difficulties lies in the fact that there exists a great potential opposition in the routine of life and thought, in the customary ways of carrying on business and the other activities of life both on the part of the public and on the part of city managements. These must change. A general routine cannot be changed overnight or at a word of command. Time and propaganda must do their work. Town planning calls for a fresh view of the purposes and values of life, - a smaller regard for immediate money values and a greater regard for life values. A trickle of this is flowing but it has not yet worn a channel. It has not yet seriously affected the general practices of the citizens or of administration. The money motive is still in control of the situation. Quick land sales at high prices command more respect and interest than the good individual life or public convenience in business. People generally still take an insensate pride in mere increase in population and in high prices of land, especially when they are selling at a profit.

An obvious instance of the existing routine channelling of thought is the gridiron plan. This sort of lay-out has laid strong hold on the public and still more on official executives and it will not be easy to eradicate their attachment to it. It is widely believed to be rational, simple and good and to be a panacea for overcoming difficulties. It is frequently stated that no other is thinkable because it provides a regular street numbering system. The layer of water and sewer pipes and the stringer of power wires look with dismay upon any divergence from it. Business and social convenience, privacy of life, safety of children and other pedestrians, beauty of surroundings are matters outside their range of vision. To the town planner and to the ordinary citizen whilst they are considering the new schemes merely as plans the arguments in their favour are overwhelming. But, when processes and costs of work are faced in detail, the immediate effect on the pocketbook has a strong pull over long range economies and social advantages.

Let us remember former shipwrecks and keep a wary eye on rocks ahead. Cecil S. Burgess

BRITISH COLUMBIA

The annual meeting of the Architectural Institute of British Columbia was held in the Hotel Vancouver on Friday, December 7th.

The establishment of the Department of Architecture at the University of British Columbia was one of the main subjects of discussion and it was generally agreed that the support of the Institute should take a practical form, and that assistance in the form of prizes or scholarships should be established. This was submitted to a committee for recommendations.

The subject of hospital and sickness insurance under the "Blue Cross" scheme was discussed and it was generally felt that it was advisable, especially in large offices.

Messrs. Jos. F. Watson, John S. Porter, Jack Mercer, Percy Underwood and Harry Barratt were elected to the Council for 1947. Bob Berwick was appointed Honorary Secretary and H. H. Simmonds Honorary Treasurer.

Many subjects of interest were taken up and news of these developments will follow from time to time in the monthly letter.

A well attended dinner was held later and an excellent address was given by Dr. Norman A. M. MacKenzie, President of the University of British Columbia.

R. A. D. Berwick

ONTARIO

Well, the Toronto Chapter managed to forget some of the headaches of 1946 at their Christmas "do" on Saturday, December 28. Despite an appreciable lapse of time since the last war (real or apprehended) it was the first time many of the old guard had really got together since away back, and (may the Modernists forgive us) traditionalism seem to hold its sway in some of the really good old stories, re-told.

Being the time of year that it is, with an old year under our feet and a new one (with all its problems) coming up, it would appear time for a modest orchid or two.

The first orchid should unquestionably go to the staffs of the Schools of Architecture of our Universities, doing a magnificent job with an absolutely unprecedented enrollment. In the University of Toronto, for example, the first and second years average something over one hundred each, as opposed to a usual pre-war enrollment of ten or twelve. That a slightly augmented staff can put these thundering hordes through their paces as efficiently as they appear to be doing should excite the admiration of the entire profession. In this regard, we must all remember that these youngsters will be let loose about April, looking for jobs. Remember, they have to put in their twelve months of practical work, just the way we did. And despite our crowded draughting rooms, I think we should make a very special effort to take in as many of the boys (and girls) as we can. After all the Universities have done it, despite odds, and certainly the practising graduates shouldn't let the youngsters down. We can't live forever, you know.

Now, back to the orchids. How about one for the voters of Toronto who, despite rather strenuous counterpropaganda, voted approval for probably the first large scale slum clearance and re-housing project in this Country. And this, mind you, after the project had been bandied about by a few office-seekers, without any clear professional statement as to what it was all about. Why are Architects so generally inarticulate! Doctors rush into print at the slightest provocation; Lawyers are always before our eyes, but the Voice of the Architect (unlike that of the Turtle) is not heard in the land.

Another orchid, to a Canadian magazine which retained some architects in Montreal, Vancouver and Toronto to design small houses, had models made, and is now exhibiting them across Canada. This is seriously good missionary work, and its scrupulous adherence to the ethics (and fee schedule) of the Institute should merit the admiration and approval of all members in Canada.

All architects in Canada, and for that matter, all over the world, must have been stirred when they read that the site had finally been cleared for the headquarters of the United Nations in Manhattan. Whatever soaring towers are eventually designed to house them, and by whom, we don't know, but every architect, everywhere, will wish good luck and good inspiration to the author of the most important job in our generation!

Richard A. Fisher

QUEBEC

Des notes écrites en fin d'année prennent sans misère une nuance particulière, comme la pensée. Ou bien l'on s'efforce d'établir un bilan, ou bien l'on jette un regard vers l'avenir. Cela pour les idéalistes. Les terre-à-terre, "matter-of-fact", adressent des cartes de visite et des bons souhaits, histoire de se rappeler à la mémoire de qui serait tenté de les oublier.

J'ai donc conscience de remplir ici mon premier rôle en formulant à nos confrères, et en leur nom auxuns et aux autres, les voeux de leurs propres désirs. Il me semble qu'ils soient de deux sortes. La prospérité matérielle, ce qui est très légitime. L'architecture – tout simplement l'architecture – ce qui est de l'idéal pour la joie de leurs concitoyens, présents et à venir.

Il y a quelques années les architectes subissaient de graves préoccupations: les travaux étaient rares pour les artisans. Naguère, on devait justifier son travail par une argumentation artificieuse, où les termes, "utilité, dépense restreinte, économie, etc.," revenaient en leit-motiv. On n'osait quère en certains milieux – et même parmi nous-prononcer le mot "art". Les préoccupations avouées furent de matériaux, de procédés, de moyens ... Il fallait démontrer que l'on était meilleur plombier que le plombier, meilleur "teneur de livres" que le comptable agréé, plus inventif qu'un "builder-owner" à découvrir des substituts à la véritable qualité; employer du carton pour simuler des monolithes; ou imaginatifs pour convaincre que le béton aparent peut avoir une beauté supérieure à la pierre; utiliser des bois de 2 x 3 au lieu de 3 x 4 et prétendre que c'est plus solide . . . que sais-je? Et qu'estce que je veux savoir? En tout cas, il convenait d'étonner, car il fallait durer . . . vivre . . . manger! Ce fut d'ailleurs assez mondial, cet état d'esprit.

Aujourd'hui. Constatons que les travaux à faire sont de beaucoup plus nombreux que les artisans. Il y aurait peut-être lieu de s'efforcer de rendre à l'architecture son véritable lustre, celui d'être un art, le premier des arts.

Et pour commencer, regardant froidement le problème, oser dire que ce n'est pas vrai que l'architecture – en tant qu'architecture-est un art d'utilité. L'architecture, en soi, a la même utilité que la musique – mais à un degré très supérieur comme elle dure et demeure face à la vue des hommes – celle de plaire.

Ce n'est pas une question de matériaux, de moderne, de logique, ou de nouveauté; c'est une question de beauté.

Donc, au début d'une année nouvelle, début ellemême d'une ère de construction, il peut être utile et bon de méditer ce texte que Fénelon écrivait des beautés du discours et que Rémy de Gourmont, dans son Problème du style, cite en disant: "en trente mots, Fénelon nous a donné toute la théorie de l'architecture et peutêtre de l'art tout entier": Il ne faut pas admettre dans un édifice aucune partie destinée au seul ornement, mais visant toujours aux belles proportions, on doit tourner en ornement toutes les parties nécessaires à soutenir un édifice."

Et d'ajouter à nos réflexions, les lignes suivantes d'Auguste Perret: "En un mot, l'architecte devra donner satisfaction au programme, grâce à tous les matériaux dont il dispose et qu'il soumettre aux conditions permanentes qui confèreront à son oeuvre la durée, qui la rattacheront au passé: satisfaire au passager par le permanent. Il ne devra pas s'attacher à la nouveauté; comme l'a dit Gide: "Ce qui paraîtra bientôt le plus vieux, c'est ce qui d'abord aura paru le plus moderne; chaque complaisance, chaque affectation est la promesse d'une ride.

"Qu'on ne nous dise pas que l'édifice qui a cessé de plaire sera démoli demain; ce sont des illusions de la période d'inflation. L'édifice doit durer, il doit créer du passé, le passé qui allonge la vie. L'architecte qui, sans trahir les conditions modernes d'un programme, ni l'emploi des matériaux contemporains, aurait produit une oeuvre qui semblerait avoir toujours existé, qui en un mot serait banale, oui, celui-là pourrait se tenir pour satisfait."

Je m'excuse de ces rappels. J'aurais pu vous annoncer que l'A.A.P.Q. tiendra, en janvier, sa réunion générale annuelle en la sympathique Ville de Champlain, notre Québec; que M. Oscar Beaulé, son actuel président a très bien et très honorablement accompli ses fonctions; que le conseil, avec lui, a sérieusement et efficacement veillé aux choses de l'association en vue du bien public; qu'il y a disette de dessinateurs sur le marché; qu'une conférence sur l'urbanisme, par M. Jacques Gréber prèsente par M. Aimé Cousineau, sous les auspices des anciens de l'Ecole Polytechnique, a fait salle comble. Disons-en un mot. D'abord un film sur Rouen dévastée - de quoi s'apitoyer. Des clichés de quelques projets de reconstruction. Le moins qu'on en puisse dire est qu'on s'efforce avec assez de bonheur de conserver le bon en résolvant les problèmes posês par les temps prèsents. Le seul malheur de ces conférences est que, bien faites pour une bonne propagande, pour éveiller l'intérêt chez le grand public, elles sont présentèes à des gens, architectes, ingénieurs, etc., qui de par leurs fonctions sont déjà convaincus.

Beaucoup d'autres, faits d'au jour le jour seraient encore à signaler, mais j'ai crû qu'aujourd'hui il pouvait n'être pas inutile de souligner surtout le fait "architecture" et le fait que l'architecture est un art. On a tendance à l'oublier; il n'est peut-être pas mauvais que quelqu'un se sacrifie à le rappeler. Ca peut lui donner un petit air niais aux yeux de certains. Tant pis! il faut bien risquer d'avoir du courage, une fois en passant.

Émile Venne.

SASKATCHEWAN

The Saskatchewan Association has been urged to contribute a monthly letter. Some years ago an attempt was made to do just that. Members were appointed to make contributions for certain months. This was designed to make the work less arduous and the reading less monotonous. A few faithful contributed on schedule. The others developed stiff elbows which only limbered up in time for the next annual banquet.

Few Easterners have visited Saskatchewan. In order to know the peculiar race of architects who inhabit the land, and to understand something of their problems, a short description of the Province will help.

Saskatchewan lies between the Provinces of Manitoba and Alberta, with its base resting on the international boundary and its top in the general vicinity of the north pole. If the southwest corner were planted on Amherstburg, Ontario, and the southeast corner in the vicinity of Brockville; Saskatchewan would cover Southern Ontario, parts of the State of Michigan and the Province of Quebec, all of Lake Huron and parts of Lake Superior and James Bay. The agricultural area would reach 50 miles beyond Sault Ste. Marie. North of the agricultural area lies the pre-cambrian shield which is just as valuable in Saskatchewan as it is in Ontario and Quebec.

That expansive territory contains a population not much greater than the City of Toronto, and smaller than the City of Montreal. When you deduct the Jerry Builders and others who have no use for an arch-a-teck, there is not much left to work on. That is the reason so few architects have selected Saskatchewan as a suitable place in which to starve.

Saskatchewan is not really your poor relative. She has coal, clay, minerals, oil, natural gas, salt, forests, fisheries, glass-sands, water-power, prairie chickens and dust. The prairie chickens use the dust as an insecticide. Dust is also used to mix with wind and make dust storms which were very prevalent in the 1930's. Dust storms are the result of drought. It has been definitely established in some quarters that the Great Drought was caused by the Conservatives, who were in power at that time.

Saskatchewan's main source of income is wheat. Wheat is sold for money which immediately flows East and builds great cities like Montreal and Toronto. This is known to Economists as the "Velocity of Money". Saskatchewan, properly organized, could support a population as great as that of Ontario without assistance from the outside. That is more than Ontario can do.

Also Saskatchewan has a climate. There can be no argument on that point. All things considered it is more pleasant than that of Eastern Canada. Ask anyone who has lived here. It gets hot in the Summer but you don't feel the heat. It gets cold in the Winter but you don't feel the cold, but that does not mean you won't freeze to death.

Saskatchewan architects know the limitations of building materials and building methods in this Province. If the Saskatchewan architect does not follow architectural fads developed in balmier climes, and shall we add, balmier minds, it is not because he has never heard of them. He knows they would not suit the climate.

The Editor once said he would like to see some contentious subjects introduced to the Provincial Page. The foregoing may be considered to be contentious and should start the new year right. Confidentially, every word is true.

It is hoped that some of the brighter members of the fraternity will contribute to future issues, but no promises are made. E. J. Gilbert

COST OF CONTRACT FORMS

Since the cost of printing and production has increased, it has proved necessary for the R.A.I.C. to raise the price of the Documents sold through the Institute Office.

Effective January 1st, 1947, the price of all Documents sold by the Institute will be twenty-five cents each, or three dollars a dozen. Provincial Associations submitting quantity orders will pay two dollars and forty cents per dozen. The Documents included in this new price schedule will be:

R.A.I.C. Document No. 6–Agreement between Client and Architect. R.A.I.C. Document No. 10–Construction Tender. R.A.I.C. Document No. 12–Construction Contract–Stipulated Sum. R.A.I.C. Document No. 13–Construction Contract–Cost Plus or Fixed Fee.

THE BUILDING RESEARCH STATION

(Continued from page 26)

schemes. In subsequent tests of many of the prototypes it has become clear that in the main the new standards are being reached, and therefore there is every reason to expect that the alterantive houses built after this war will in many ways not only equal but surpass even unusually good pre-war houses.

Now finally we come to the means by which the dayto-day inquiries are handled.

It is, of course, open to anyone, layman, or professional, to address an inquiry to the Station, and just before the war the annual number of these had reached between three and four thousand.

The policy which guides the replies to inquiries can be quite specifically put down as follows:—

(1) If the answer can be put conveniently in a letter, and involves no laboratory work or visits to the site, no charge is made.

(2) If laboratory work is required, a charge is made pro rata, and if a site visit is necessary, together with a report, a fee is usually charged on the same general basis.

(3) The Station is not normally willing to carry out routine standard tests where professional consultants and facilities are available outside.

(4) Where the inquiry concerns a product which the Station has examined for the manufacturer. it is usual to refer the inquirer to the manufacturers for the information, although the Station reserves the right to use the results of such tests when necessary.

The Station is, of course, prepared to receive visits from inquirers by appointment when they feel that this is the best way of getting the information they want.

In addition to these services, every effort is made to accommodate any reasonable request for other kinds of help, such as the examination of drawings or specifications, or collaboration in design where special problems are being dealt with. In fact, it is a major concern on the part of the Station to make its knowledge as widely available as possible, and it welcomes any kind of opportunity to do so.

At the same time, it is equally anxious to have information from practising builders and architects, and to draw to the fullest extent on their experience. The various professions serving the Industry, therefore, have a great opportunity to help the Station in this respect.

After this picture of the Station's work-and it is a very sketchy picture-one ought by way of summary to draw attention to one or two rather salient features about the way the Station works. One ought, for instance, to point out that it is one of the several examples in the Department of Scientific and Industrial Research of the Combined Operations technique. This is a development in scientific organization which has paid, and is paying, handsome dividends, but no other country in the world as yet tackles its building problems in the comprehensive way which has become the tradition at the Building Research Station. At the same time, there is no other way by which the problems can be solved in any reasonable time, for part-answers mean nothing to building practice. A solution must satisfy all the main requirements or it will be found wanting. It is the constant aim of the Station to see that its work has this practical character.

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CONTRIBUTORS TO THIS ISSUE

Mr. Walter Dorwin Teague, who has his offices in New York and Los Angeles, is the Dean of American Industrial Designers, in whose Society he is a founder and first President.

Mr. Teague's range of interests extends from objects of daily use through motor cars and railway coaches to some of the outstanding buildings at the New York World's Fair.

During the late war, Mr. Teague's firm received the Naval Ordnance award for distinguished service to the U.S. Navy and its research branches.

He is best known to architects in Canada for his book "Design This Day", which ranks high among the three or four best books on modern design. This book will shortly be reprinted in England.

Mr. William Allen is a graduate of the Manitoba School of Architecture. Since 1937 he has been with the Building Research Station at Garston, Watford, Herts, England. Readers of the *Journal* will remember a series of articles, which Mr. Allen wrote in 1938.

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PROFESSIONAL COLUMN

Mr. Harold C. Beckett announces that he has re-estab lished offices in Windsor. Address: Equity Chambers 52 Chatham Street West, for the general practice o architecture.

Journal, Royal Architectural Institute of Canada, January, 194