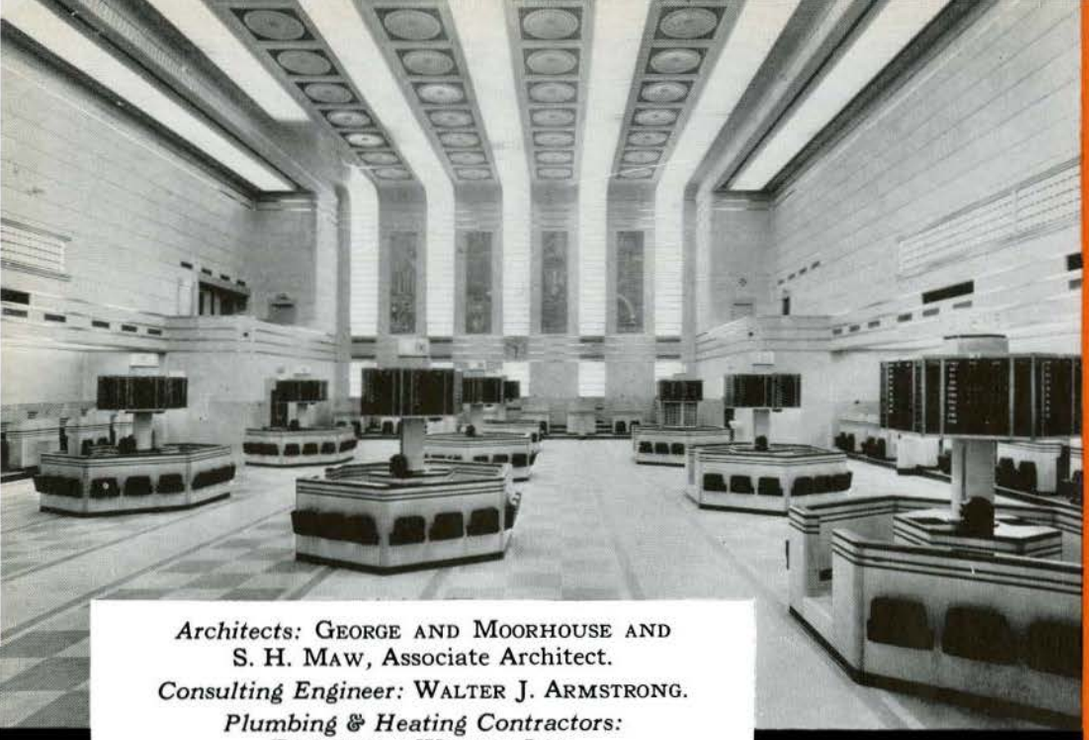
JOURNAL

ROYAL ARCHITECTURAL
INSTITUTE OF CANADA

VOL. 16 MARCH, 1939 NO. 3



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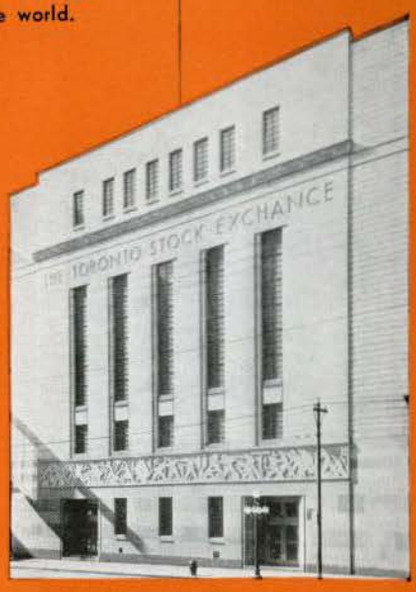

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roofing and siding is the most modern shingle material in the world today. ★ Yet, strange as it may seem, Charlemagne the Great had much the same idea . . . .

JOHNS-MANVILLE JM PRODUCTS

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CENTURIES ago, in one of history's tense moments, Charlemagne the Great faced a stormy council. His enemies the Moslems had sent envoys with dire threats of war. Vulnerable, Charlemagne tried all the guile and wiles of ancient diplomacy to avert calamity. But words proved of no avail; still his opponents threatened and demanded, unabashed. Then, in a sudden flash of genius, Charlemagne had an idea . . .

Eyes flashing, he swept the white cloth from the table before him—turned, and threw it into a raging fire nearby. Minutes passed in startled silence. The flames roared and crackled around the fragile cloth. Then Charlemagne lifted the

"Black magic" that changed history's course . . . Charlemagne puts a tablecloth of asbestos to the test of fire.

cloth from the fire and flung it—gleaming white, unscorched — into the laps of the mystified envoys. Fear-stricken at such black sorcery, they speedily made peace and fled.

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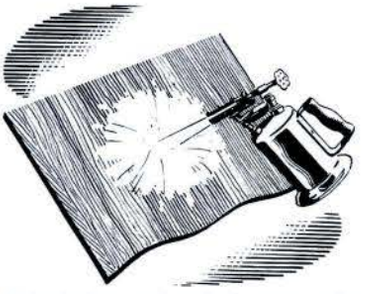

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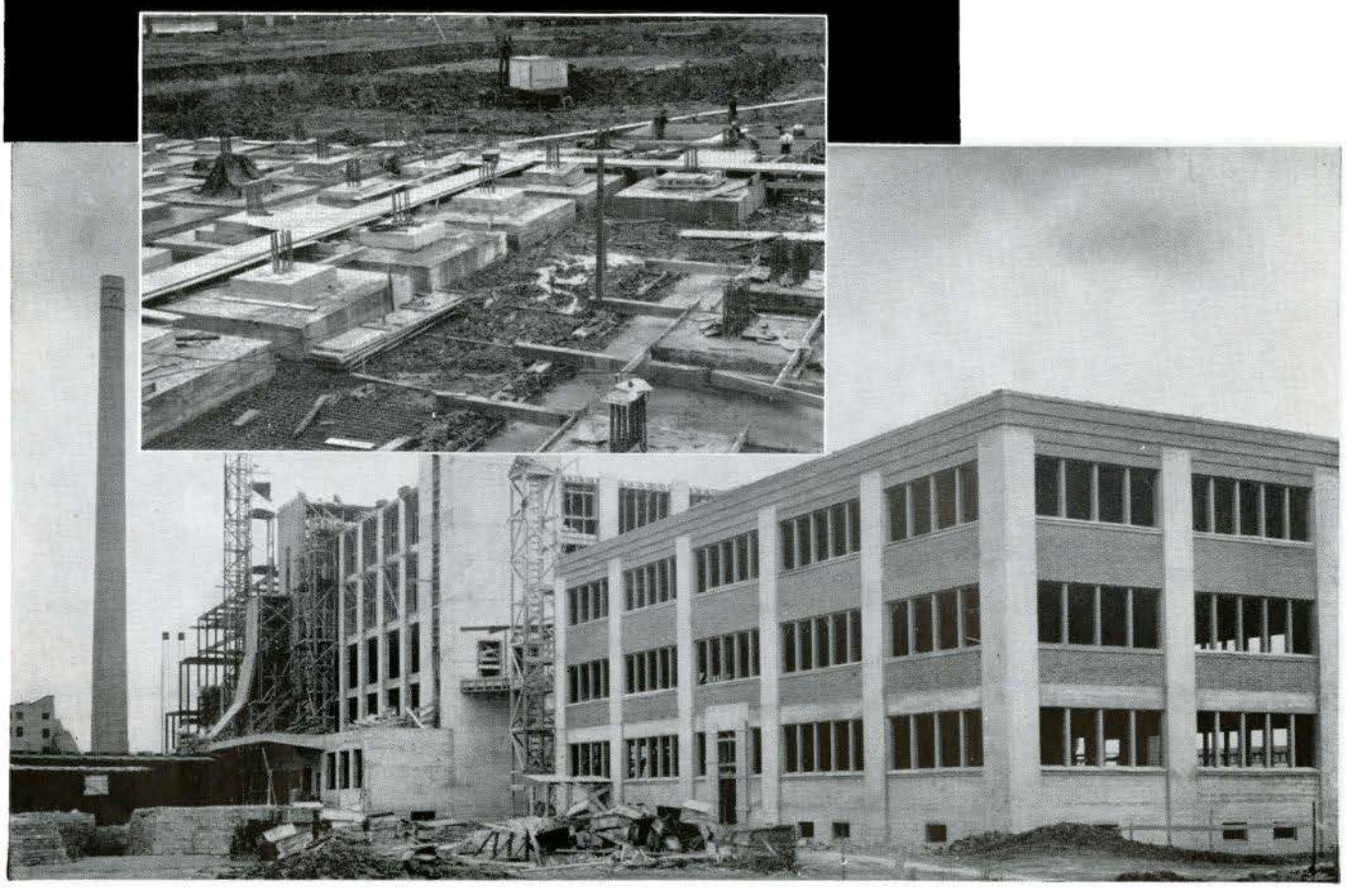

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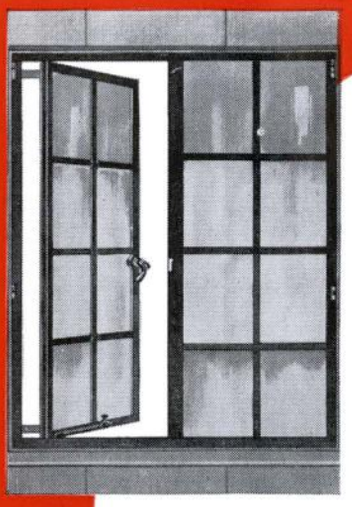

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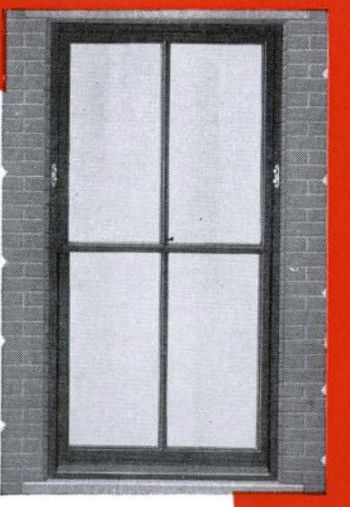

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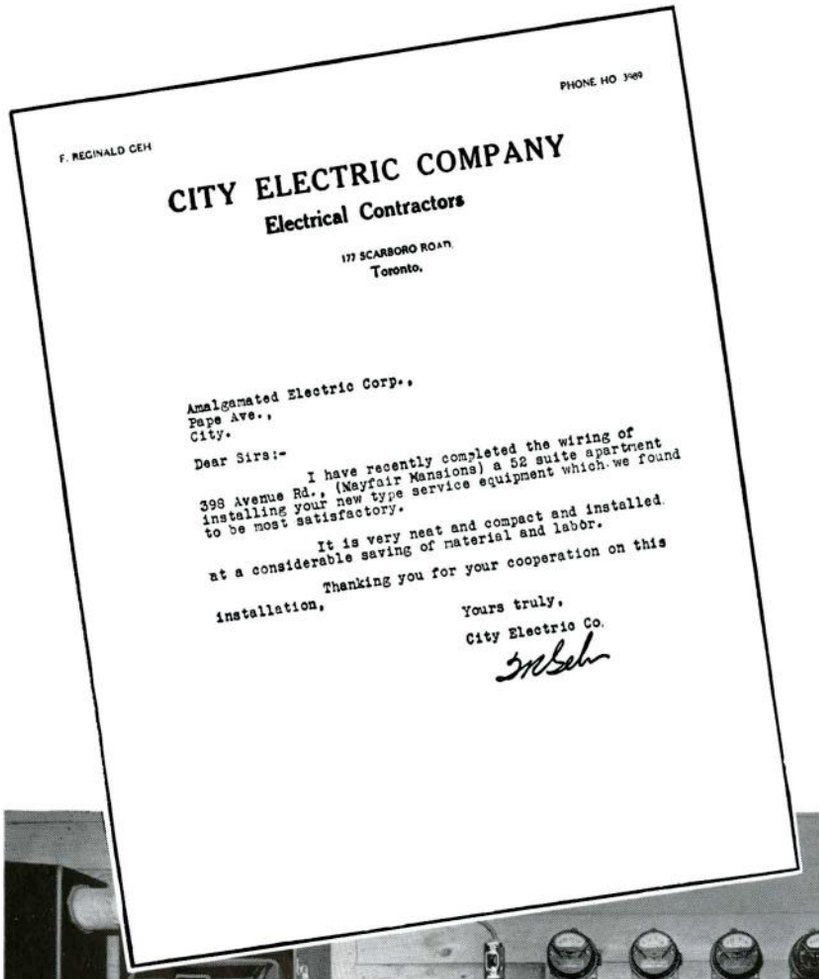

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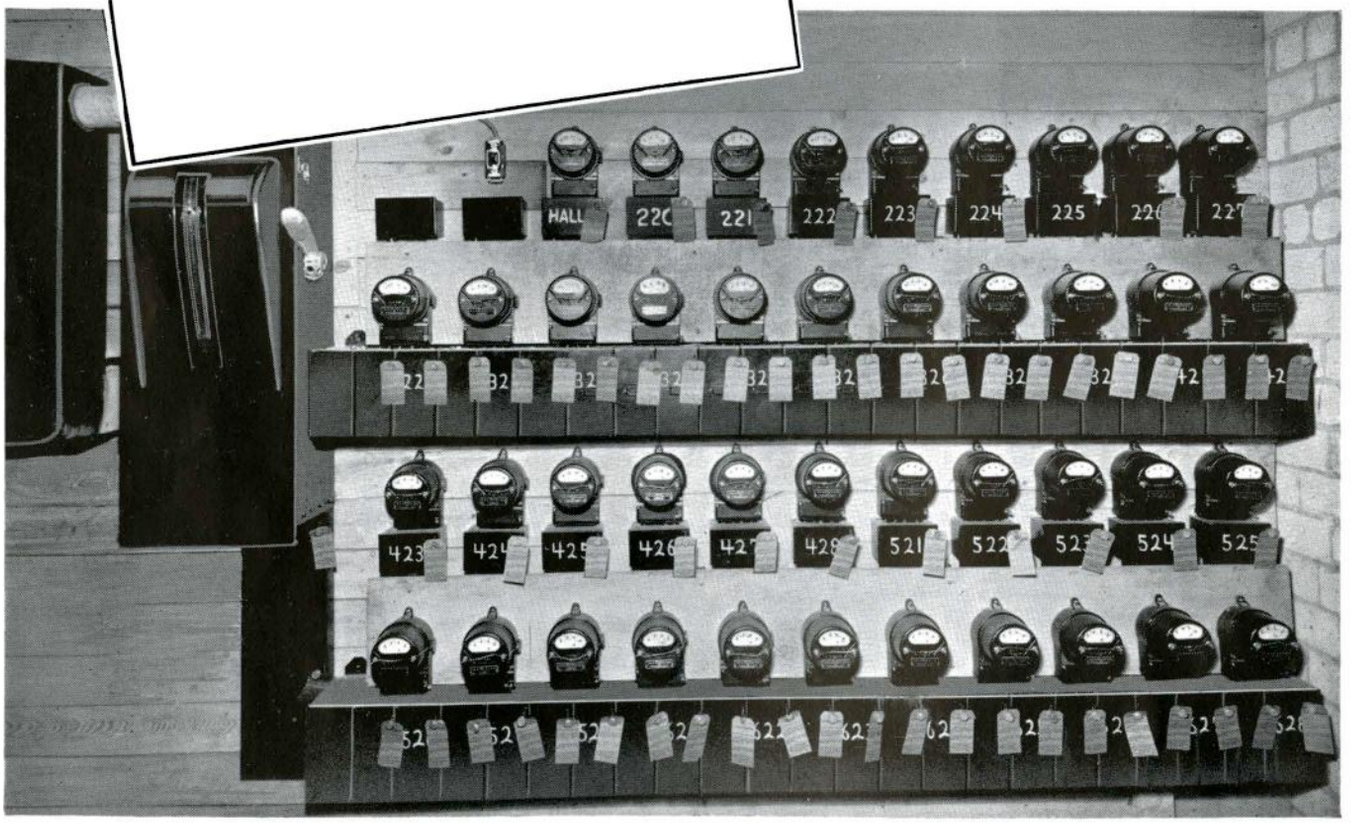

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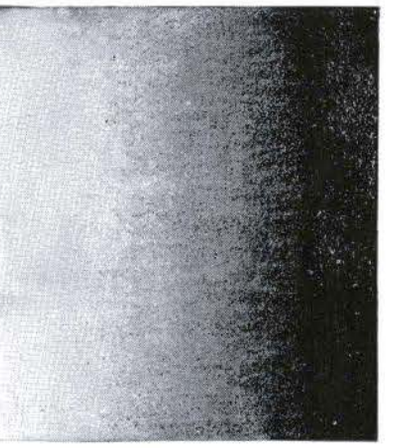

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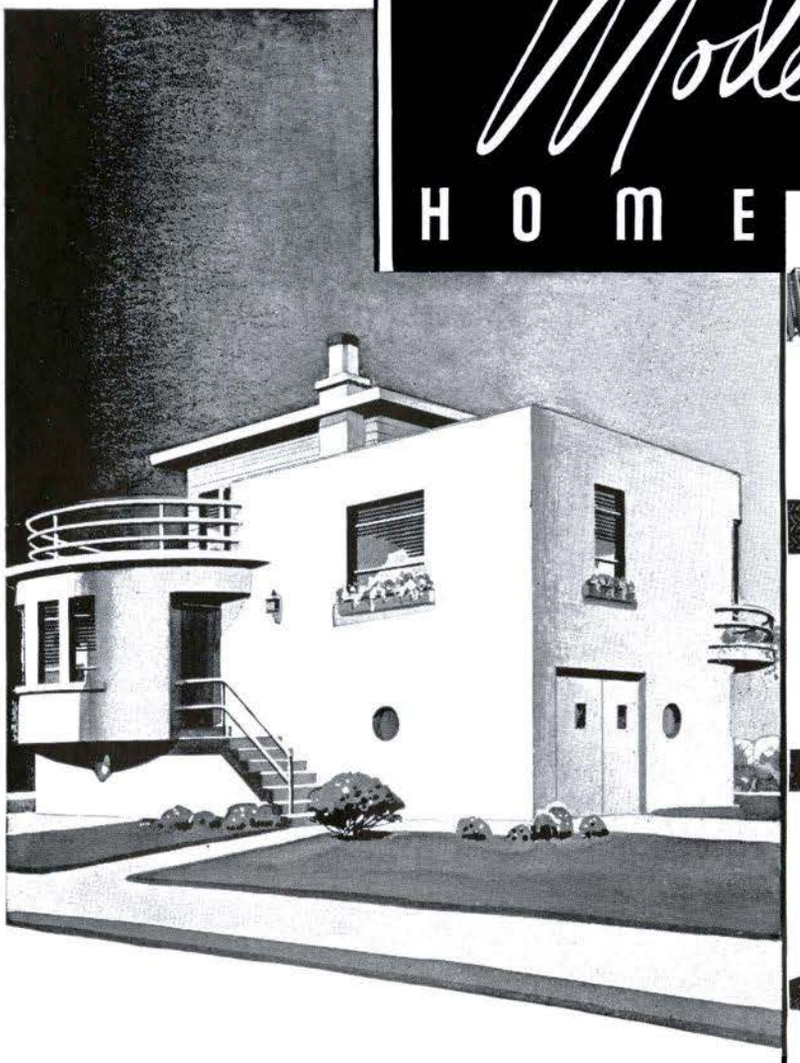

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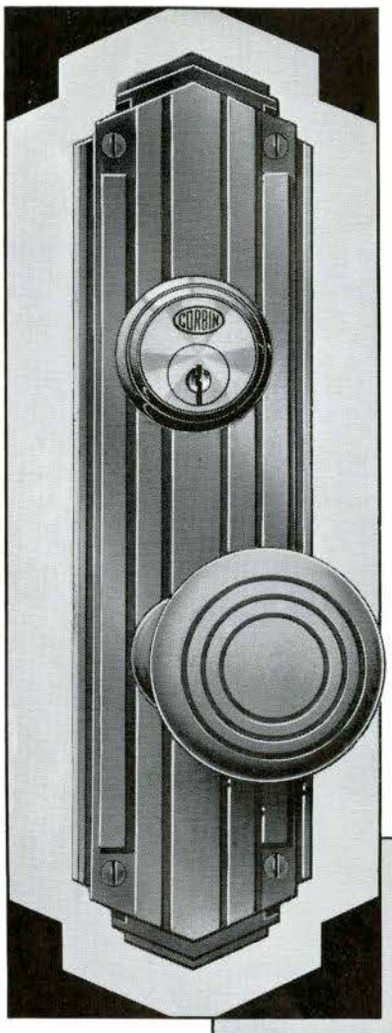

MODERNE

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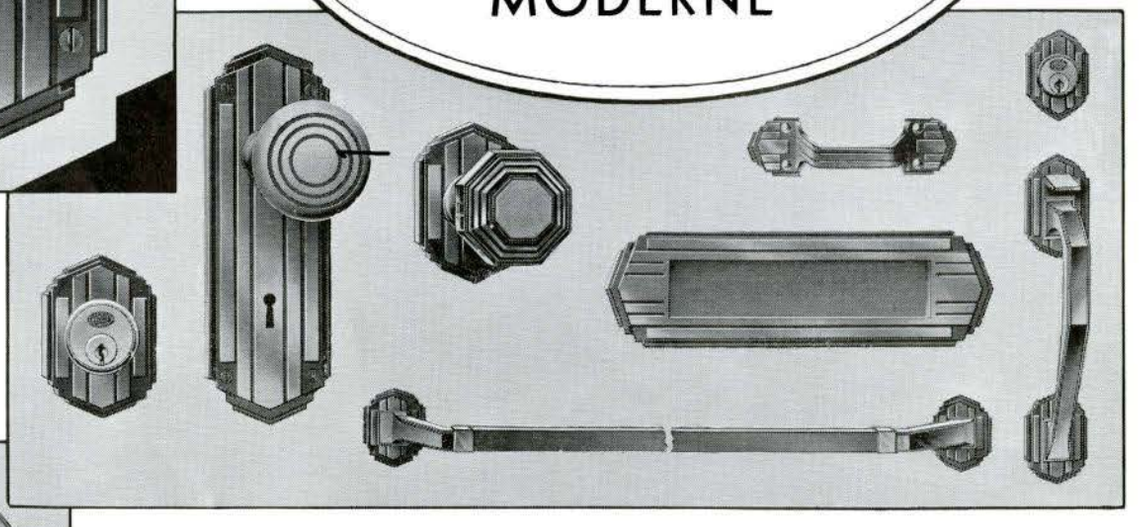

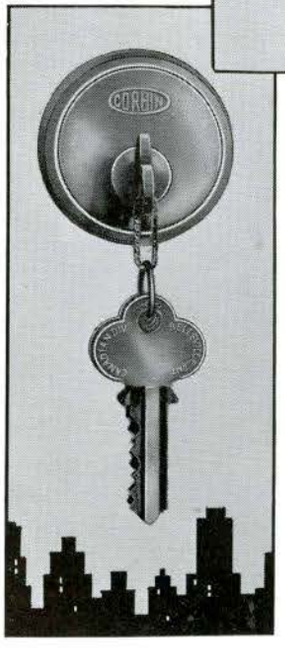

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BELLEVILLE ONTARIO

Journal, Royal Architectural Institute of Canada, March, 1939.

Architect: A. T. Galt Durnford, B. Arch., A.R.I.B.A.

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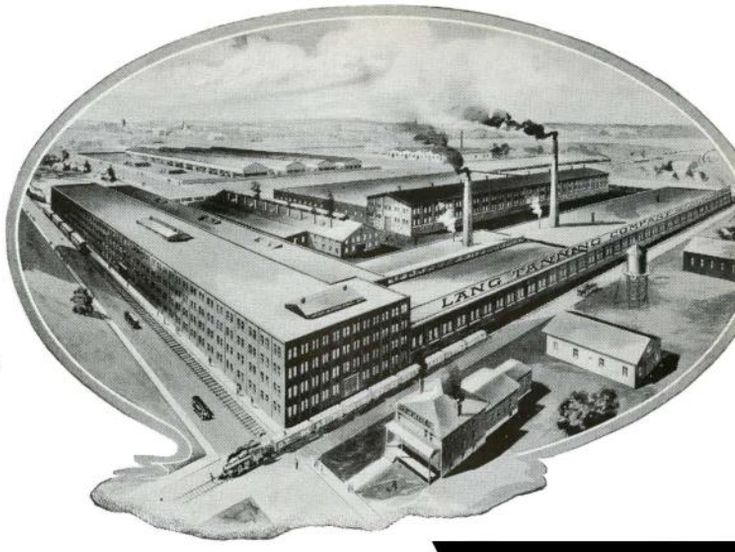

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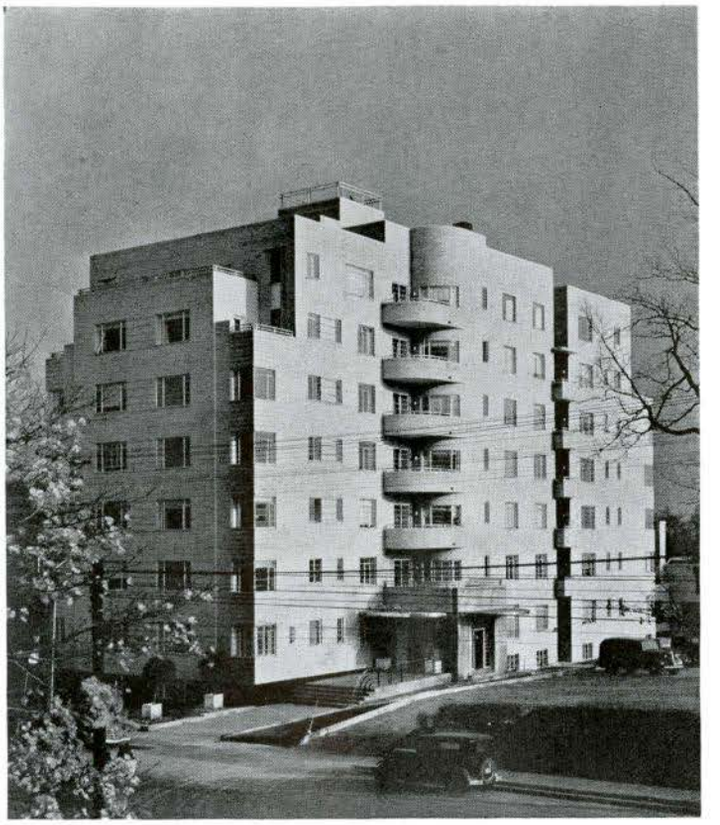

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Sturdy construction that gives extra margin of safety for highest pressure ratings.

Independent lift and strain adjustments make installation and subsequent adjustments simple and accurate.

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JOURNAL

ROYAL ARCHITECTURAL INSTITUTE OF CANADA

Serial No. 163 TORONTO, MARCH, 1939 Vol. 16, No. 3

CONTENTS

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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.

ONE of the most useful suggestions made at Ottawa was that the R.A.I.C. Exhibition should go on tour. We heartily agree, but it would be a tragedy if it went out in its present form. The Exhibition is now so large that it is of interest only to the commercial photographers who fattened on it, the makers of mats, and a small section of the general public who collect data like the weight of an exhibition.

No sensitive person—no one interested in architecture is going to spend half a day or half an hour gazing at buildings, however fine, packed like posters in a tube station. We have persuaded ourselves for some years that this was a Dominion wide Exhibition; yet on examination of the figures we find this year that twenty-five architects exhibited and of them twelve came from Ontario and thirteen from Quebec. In other words, we have been fooling ourselves and the public that we have an Exhibition of work across Canada.

We take it that the Exhibition is part of the Institute's general scheme of raising the standard of architecture in Canada and that its usefulness extends beyond the giving of medals. It never changes its character because no one has ever criticised it, and insufficient preparation is given to it. We would suggest that a committee be formed *immediately* to arrange for next year's Exhibition and that the committee be told frankly that it will have failed in its duty if all 9 Provinces are not represented. We would limit any firm or exhibitor to *four pictures as a maximum.* That would encourage the architect with a small practice who would not be made to feel small either in a catalogue or on the wall. We have been accustomed for so long to be pleased with a big show without realizing that there are few rooms in Canada that will take it except where the photographs are used like bricks in a wall. It must not be forgotten either that a show, however big, by 3 or 5% of the architects of Canada is, from the Institute point of view, a very small show. We should like to see an exhibition of half the size from all the Provinces.

The Council should seriously re-consider the advisability of giving medals. To our mind they are seriously endangering that "closely knit relationship" which a visiting architect noticed in us at our meetings. The present hysteria with regard to medals strikes us as being quite indecent. The architect normally thinks no more seriously of prizes than a painter, but some do live in an aogny of dread at the thought of a client whose building received no comment at all from the judges. Publicity following the awards should be prepared by the Exhibition committee and given to the press through the Secretary's office and paid for. In the past it has been handled in the most slip shod sort of way and varies from the wildly extravagant to the non-existent. We said above that an American architect was struck chiefly by "our close knit relationship". That is something we should guard and cherish. Individual publicity arising out of exhibitions is rapidly undermining both friendship and the corporate spirit which years of effort have built up. If the Institute office handled all publicity including photographs, and paid for what publicity we got, we should have a greater respect for ourselves, and the newspapers, which have long protested against our "Holier than thou" attitude, would respect us. At the same time we would effectively curb newspapers which function as selection committees in choosing the illustrations they like, rather than the ones we think deserve the honour of reproduction. If steps are not taken at once to change the Exhibition it will be the same as in all previous years except that it may be hung in Flemish bond.

The 32nd Annual Meeting is over without incident or accident. We must be honest—there was one incident. Childish as it may seem, it occurs too often at our Annual Dinner. Someone from Ontario always sings the National Anthem after the King. We know of no law against it, but there are even sounder unwritten laws that a citizen should avoid embarrassing his fellows. When a quavering voice starts "God save—", the knees of the military begin to shake and the bowels of the non-military turn to water. The beginning is always so pathetic that everyone joins in, lest distinguished guests, who don't know our funny architectural ways, should think the Empire was being let down. The soloist (sic) knows that by a kind of blackmail he will have us all in. We would not be the least disturbed if it were known in advance that we were going to sing the National Anthem, O Canada, Rule Britannia, et al, but we do resent being shamed into singing after the King merely to satisfy the vanity of a few who confuse the Annual Dinner of a Royal Institute with the possibilities for loyal vocal exuberance to be found in a church social and bazaar.

— EDITOR

ADDRESS OF MR. H. P. HILL, K.C.

at the thirty-second Annual Dinner of the Royal Architectural Institute of Canada
The Quebec Room, Chateau Laurier, Ottawa

Mr. W. J. Abra, Chairman of the Ottawa Chapter: Mr. President, Your Worship, ladies, and—the rest of you:

THERE are one or two things in the world that are unnecessary, and I am one of them tonight. Last night was my night to howl, and I think we have put over a good job. (Hear, hear and applause.) However, after inviting everybody from the Governor-General, the British Commissioner, the Prime Minister and the Leader of the Opposition down, and doing God knows what all to get somebody to speak to us tonight (laughter), they said, "Well, Bill, can you get a speaker?" I said, "You're darn right I can." I didn't want to bring politics into this, but there is a good Conservative who will always speak. "Well," they said, "what will he speak about?"

I was reminded of a story. (Laughter.) There was a fellow who used to boost the Ottawa Exhibition right along.

A Voice: Can anybody control him?

Mr. Abra: Certainly not. She's not here anyway. We had a fellow here who was President of the Central Canada Exhibition and he boosted this exhibition at every opportunity. One day he was up in a small town and one of the big lights of the town died. The minister of his particular faith had just landed in town and did not know anything about him. So they were having the funeral service, and J. K. was in the town and went to the funeral while he was waiting for the train. (Laughter.) The minister did his best, and at last he said: "If there is anybody who knows our late friend better than I do, why, I give him a chance to utter a eulogy right now." All was quiet on all fronts. At last J. K. got up and said: "Well, if the rest of you have nothing to say, I would like to tell you about the Ottawa Exhibition." (Laughter.)

That is just the way I feel tonight about introducing our guest speaker. To anybody living in Ottawa he doesn't need an introduction, and after he is through there will be nobody in the Royal Architectural Institute of Canada who will need an introduction. He is just one of our institutions. As Mr. Hazelgrove said the other night, "What's the use of a barrel if it hasn't a bung?" Ottawa is just chuck-full of . . .

A Voice: Bungs.

Mr. Abra: . . . of real good fellows, but there is only one fellow who can unbung that barrel. He knows everything that has happened in Ottawa since Hector was a pup, and he can tell it to you, and I think he is going to. So Hammy Hill is going to talk to us right now.

THE ORIGIN OF OUR CAPITAL

H. P. HILL, K.C.

Mr. Chairman, Your Worship, Ladies and Gentlemen:

I MUST confess that I feel highly flattered indeed to be asked to address so important an organization as the one that I see before me. As my friend Bill Abra has explained to you, I am God's gift to Ottawa. (Laughter.) I may not look like God's gift, but I really am. Whenever any organization, whether it be church or political or anything else, is finally stuck and cannot get a speaker, they fall back on me and ask me to talk on the history of Ottawa.

On looking around this assembly I have been puzzling and wondering to myself why there should be a joke continually carried on about us lawyers. You know, the mother-in-law joke and the lawyer's joke have come down to us, I think, from the time of the Romans. When I look around this hall it seems to me you might just as well be lawyers as architects, for you all look like lawyers; and yet I don't recall any continual jokes about the honesty and uprightness of architects in comparison with the dishonesty and unrighteousness of lawyers.

I read in the paper the other day a story about two burglars who decided to rob a house. One burglar stayed on the sidewalk to look out for the police. The other burglar went into the house. In a few minutes he came running out, and his mate on the sidewalk said, "Bill, did you get anything?" Bill said, "No, it was a lawyer's house." His mate said, "Gee! Did you lose anything?" (Laughter.)

My experience as a lawyer has been that I very often have a great deal of difficulty over architects, and I do not see that architects are any more honest than lawyers, and I do not understand why this reference to lawyers' lack of a high sense of honour is continually thrust forward. I think we look like you and we act like you, and we hide our mistakes just as you do, and we blame the other fellow just as you do. (Laughter.) So I think there is a good deal in common between us lawyers and you architects.

When my friend Bill Abra came to the office the other day he did not tell me that he had already asked the Governor-General and the Prime Minister and the Deputy Minister of Public works, and so on, to speak; but, with the usual flattery that accompanies that type of invitation, he told me that the entire body of architects of the Dominion of Canada were waiting to hear me speak. I actually fell for this... (Laughter.)

Mr. Abra: Took it like a trout.

Mr. Hill: . . . the broad, expansive smile and everything; and ever since I fell I have been puzzling my head what to speak about. Bill rang me up the other day and said, "Have you decided what you are going to speak about?" I said, "No, but you may as well put in your programme something about Ottawa." So I see I am to speak on "The Origin of Our Capital".

To those who have not the inestimable advantage of living in Ottawa I might explain that Bytown, the village from which Ottawa sprang, has always intrigued me, and for some years I have been making Bytown my hobby. I felt that possibly, as so many of you were here from outside of Ottawa and naturally would be interested in the origin of our Capital, I might take the liberty for a few minutes of speaking to you about how Ottawa came into existence and how it was that it grew to be what we consider the most beautiful city on the continent of North America. (Hear, hear and laughter.) Not a clap! Not a clap!

Mr. Abra: Well, you didn't take in enough territory.

Mr. Hill: In order to get at the background of this city one has to go away back to Holstein in Germany. As you know, Holstein is where the cows or the bulls come from. (Laughter.) Away back in Holstein, back about 1750, there was a man named Carman, a German, residing. He decided to come to what is now the United States. He came out and settled in the State of New York. When the Revolution broke out, he, with a number of other United Empire Loyalists, came to Canada and settled down on the banks of the St. Lawrence

river. In due course the British Government rewarded these United Empire Loyalists by giving them grants of land, and Carman was given the land on which the Parliament Buildings now are built. This grant of land stretched along the banks of the Ottawa river from the Rideau river up to the foot of the Chaudiere Falls. Jacob Carman became the owner of this property. I should like to point out to you that the first owner, therefore, of the site of Parliament Hill, the centre of our legislative and administrative activities, was a United Empire Loyalist.

I do not think Carman was tremendously impressed with the gratitude of the British Government in giving him these few acres of rock and swamp in the backwoods of Canada, for at that time the cliffs facing on the Ottawa river were as remote from civilization as the banks of the Hudson's Bay are today. So I think we may assume that Mr. Carman was not unduly grateful to the British Government for their kindness in thinking of him as one who gave up his position in the United States to come to this country.

In due course Mr. Carman sold his property to a man named Hugh Fraser. Hugh Fraser was a veteran of the War of 1812-15. He resided in Three Rivers and was a notary public there. He had taken an active part in the War of 1812, and had shown his patriotism and his desire to serve under the British flag. Mr. Fraser became the owner of this property about 1823. Then Lord Dalhousie, who was the Governor-General of Canada, began to take an interest in this part of the world.

After the War of 1812 the eastern portion of the province of Ontario became very important from a strategical point of view. During the War of 1812 it had been necessary to bring troops and munitions of war up the St. Lawrence river in order to protect the settlement at the Niagara frontier, and at that time the eastern portion of the province had no settlers. The soldiers and the munitions and other necessities of warfare had to be towed up the St. Lawrence river as best they could be. There were no canals around the waterfalls and the rapids, and bringing these troops and munitions up the river was a very expensive and very slow operation, and there was always the possibility that the Americans might throw an army across the river anywhere and completely block the defense of the western settlements. So the British Government, after the war, inspired by Lord Dalhousie, Governor-General of Canada, took a great interest in the eastern portion of the province and it promoted the settlement of retired army men and navy men in this section. The town of Perth, the town of Lanark, the town of Richmond, all sprang up as a result of this policy.

Lord Dalhousie, after the little settlement of Richmond had been established, felt that it was necessary to obtain property at the foot of the Chaudiere Falls for the purpose of fortifying the settlement and defending the approach to it. Accordingly, he purchased from Fraser that property which now comprises Parliament Hill and the land lying to the east and west of it. To those of you who know Ottawa I might say, roughly, it was the land between Wellington street and Rideau street and the Ottawa river. Lord Dalhousie, representing the British Government, purchased that property by deed just as any ordinary individual would purchase property, and the British Government became the owner of that site.

In order to promote easy passage from tide water to Lake Ontario and to escape the rapids and the difficulties on the St. Lawrence a back-water route was conceived. Surveys were made and it was found that a back-water route could be obtained at a moderate price by improving the navigation of the Ottawa river between here and Montreal and improving the navigation of the Rideau river, the lakes at the height of land, and the Cataraqui river, running down into Lake Ontario. Accordingly, the British Government decided to undertake this work, primarily for the benefit of the western settlers around Niagara and York.

So a man named Colonel John By was sent out by the British Government to undertake and carry out this improvement in navigation. In the autumn of 1826 Colonel By came up to the foot of the Chaudiere Falls, which would be the natural entrance to this new waterway. When Colonel By came here he was accompanied by the Governor - General, Lord Dalhousie. Lord Dalhousie, who was the owner of the site that I have just referred to, gave instructions to the Colonel to lay out a little village on the site, and Colonel By, with the assistance of his engineers and surveyors, laid out really two little villages. He laid out one to the west of Parliament Hill, between Wellington street and the river, and another to the east of Parliament Hill, which we roughly call Lower Town, and reserved what is now Parliament Hill for the barracks for his troops. He built on Parliament Hill three barracks buildings around the curve facing the river, and a hospital. The little subdivisions which he made to the east and the west of this area gradually developed into a village.

A year later, this village was christened Bytown. Lord Dalhousie had again come up the river, and a dinner was given to him by Colonel By. At this dinner—which was very much like the one we are having here, except that there were no ladies present—after a considerable quantity of liquor had been drunk and those present were, as Aristotle or Plato says, "warm with wine", the village was jocularly christened Bytown, after the Colonel.

But what I want to tell you about this village is to me most interesting because this village ultimately developed into the capital of the great Dominion of Canada.

This village was created as a direct result of the War of 1812-15. During that war the Americans invaded the western part of this province, and the British troops were sent out to repel that invasion. It was as a result of the invasion between Niagara and Detroit that this little village away off in the backwoods, three hundred miles from the scene of activities, sprang into existence. And what is particularly interesting to me is this, that the village was a wholly owned British village; the British Government owned the land on which the village was erected. No deeds were given of the area. The lots were all leased on long leases. So for the first twenty years of Bytown's existence it was a British-owned colony. I have never heard of any other city in the Empire that had a beginning as a British-owned village. It is, I think, particularly interesting to us Canadians that the future capital of Canada was in its infancy an entirely British village built on a site that was owned by the British Government; and I think Ottawa is unique in that particular.

When this village was created it was supported at first entirely by the building of the canal. Merchants and enterprising people of that kind flocked to the place, which was the scene of a great public work, for the building of the canal at that time, in 1826 to 1832, was almost as big an undertaking as the building of the Panama Canal was a great many years later. It was justly regarded as one of the greatest engineering feats carried on during that period.

For many years this little village owed its prosperity and its life to the work on the canal, but the development of the lumbering industry on the Ottawa river brought it further prosperity, and it gradually grew. It ultimately became the district seat of the old District of Dalhousie, and when it came to the time when it actually had a jail built in it, and a court-house, it felt it had reached manhood.

During the late thirties and the beginning of the forties there was great agitation in the village that it should be created the capital of Canada. Those of you who have gone to school—and I assume that most of you have (laughter)—will remember that in 1840 the two old provinces of Upper Canada and Lower Canada were united to make the Province of Canada. Up to that period Ottawa had been merely a frontier village in Upper Canada, three hundred miles away from the capital. It had amounted to really nothing at all. But when the Union took place and Upper and Lower Canada were united under one parliament Bytown found itself right in the very centre of the new province and immediately became a place of some prominence and some importance. A great agitation started in Bytown for the purpose of having it selected as the capital of the new province.

The reasons advanced why this little backwoods village should be so selected are very interesting. The main reason advanced by the Bytown Gazette, which was the organ of public opinion in the little village, was that Bytown was far removed from the boundary of the United States. Montreal, Kingston and Toronto were too close to the boundary. There was great danger of the archives of government being seized by an invading army. It was particularly important that the capital should be so far removed from the boundary that it would not be affected by republican views. Today we are not so worried about that, but in those days it was very important. It was also pointed out that it was right on the boundary between French Quebec and English Ontario, and therefore that it was a desirable spot because the choice of any other city or town would create a certain degree of jealousy. And the third reason advanced was that the Government already owned a perfectly good site for the parliament buildings and therefore it would be a saving of expense to take it as the site of the future capital.

However, the good people of Bytown who urged these reasons at that time only created laughter and derision in the other parts of the country. Montreal and Toronto and Quebec and Kingston were far too important to be cast aside in favour of this little pioneer village, no matter how ambitious the residents of Bytown might be. It was not until 1858 that a dicision could be made as to where the capital should be. In 1858, the story is, Queen Victoria herself selected what was then the town or city of Ottawa as the capital.

When Ottawa was selected as the capital the selection created a great deal of amusement and derision not only throughout Canada, but throughout the United States as well. The New York Times explained that Ottawa was selected because it was the first place that anybody travelling south from the North Pole would come to in his journeyings (laughter), and also pointed out that it was a good, safe place to select because if an American army invaded this country they would get lost in the woods before they were able to find the capital. (Laughter.)

However, Ottawa was selected, and the interesting fact which I am leading up to in all this preliminary conversation is that it was decided to build the legislative halls here—the departmental buildings and the main building to house the Commons and the Senate. The government at that time were very far-sighted and erected buildings that were far beyond the needs of the time. I am going to take the liberty of reading to you a letter that the Honourable George Brown wrote to Sir John Macdonald in 1864, when the buildings were under construction. You will recall that as a result of a great deal of political acrimony the Reformers under Brown and the Conservatives under Macdonald united to put through Confederation. Macdonald and Brown, who had not been speaking to each other for years, so bitter was the contest, had sunk their personal differences and had come together to form a government for this purpose. While this Union Government was in existence Brown came up to Ottawa to look over the buildings that were being erected, and this is the letter that he wrote to Sir John Macdonald:

"My dear Sir:

McDougall and I made an examination of the Ottawa buildings on Friday night and we came to the conclusion that it was utterly impossible to take possession of the departmental buildings this fall. By paying an enormous sum, say, $75,000 or $100,000 extra to the contractors, the thing might be done in December, but it would be at the risk of the floors bursting up, and sickness to all who take possession of the rooms. What can be done is to have the departments move early in the year and Parliament summond on the 1st of May. If that is thought to be better than another session at Quebec, it is open for adoption. But removal this fall would bring great discredit on us all.

"I write this very unwillingly. It would suit us vastly better to go to Ottawa at once, and I know how anxious you all are about it, but it is impossible to come to any other conclusion after seeing the works and conversing with Mr. Haig and the contractor."

Now, this is what he says about the buildings:

"The buildings are magnificent. The style, the extent, the site, the workmanship are all surpassing fine. But they are just five hundred years in advance of the time. (Laughter.) It will cost half the revenue of the province to light and heat and keep them clean. So monstrous a folly was never perpetrated in this world before. But, as we are in for it, I do think the idea of stopping short of completion is out of the question. I go in for tower, rotunda, fountains and every conceivable embellishment. If we are to be laughed at for our folly, at least let us not be riduculed for half-finished folly. I go in for making it a superb folly that will bring visitors from all countries to see a work they cannot see elsewhere. To say the truth, there is nothing in London, Paris or Washington approaching to it. (Laughter.)

"The Governor-General's residence is a miserable little house and the grounds those of an ambitious country squire." You know, we think it is rather nice.

"To patch up that building will cost more than a new one. Ten or twelve acres on the river ought to be taken into the grounds."

However, the work proceeded and the buildings were erected. They were not five hundred years ahead of their time. In fact, they were not fifty years ahead of their time, for the extension of government service and the necessities of government have been such that they have far, far outgrown the buildings that were erected at that period.

In 1864, King Edward VII, as Prince of Wales, made a tour of Canada and he came here and laid the foundation stone of the main building. That is the building that was burned during the War. You probably all recall its appearance. He was accompanied by a representative of the London *Times,* who wrote articles describing the trip and the places that they visited. I must confess that the correspondent of the London *Times* looked at Ottawa with that superior air that Englishmen sometimes adopt. In fact he did not think very much of Ottawa. What he said about Ottawa at that time was this:

"Ottawa as the capital of Canada seems such a monstrous absurdity. Like all those who have penetrated to it, I can never treat its metropolitan future as anything more than a bad practical joke in which no one ever saw any meaning, but which, now that the Prince has solemnly laid the foundation stone of the intended parliament buildings, is considered as having gone rather too far and is awakening a feeling of almost indignation throughout Canada.

"In all and every point of view, either commercially, strategically or legislatively, the choice of Ottawa seems to have been a grand mistake, and, if persevered in, at no distant date will give rise to ill feeling in Canada. Throughout the whole province there is dissatisfaction with the choice, and the expression of this each day grows stronger and stronger. The mere fact of the parliament buildings having been begun there is really of no weight at all in the consideration of this question. Parliament buildings have, in a manner, been scattered broadcast throughout the province. These buildings at Ottawa will be admirably suited for lunatic asylums whenever the town is sufficiently prosperous to require them for that purpose." (Laughter.)

Despite this rather pessimistic outlook of the correspondent of the London Times, I think you will agree with me that the parliament buildings are a credit to this country and that they are something that we can be proud about.

If I may mention politics in a gathering of this kind, I am not exactly what might be termed a very warm supporter of the present Government (laughter), but I do find myself very heartily in agreement with the present Prime Minister in his desire to beautify the capital.

Ottawa has what might be called a twofold aspect: Ottawa is the capital of the Dominion of Canada, and Ottawa is a municipality incorporated by an Ontario statute. It is therefore Ottawa the capital and Ottawa the municipality. The beautification of Ottawa the capital is a duty that devolves on the people of Canada through their representatives in the House of Commons. The duty of administering Ottawa the municipality devolves on His Worship the Mayor and the other municipal representatives. The distinction must always be clearly drawn between Ottawa the municipality and Ottawa the capital. I feel that if we benefit in Ottawa from the beautification of the capital we are in no different position from other municipalities, that are benefited by the Dominion Government, for instance, in the erection of docks, etc. for the benefit of Canadians generally. The municipality that happens to be situated where the docks are is naturally benefited thereby. We are, I think, in a similar position. The money that is spent for the beautification of the capital is really spent for the Dominion of Canada.

We do our duty in administering our municipal affairs in the very best possible way. The money that is spent on the beautification of the capital, I should like to explain to those who do not live in Ottawa, is not altogether found money for Ottawa. The taking over of large sections, right in the centre of the city, deprives the municipality of a very large revenue, because all government property is exempt from taxation. When the Dominion of Canada, through the Government, expropriates large portions of the centre of Ottawa it throws a burden on the citizens of Ottawa in the administration of its affairs. We benefit, of course, from the beautification. It brings tourists here. The seat of government being here brings in members of the Commons and senators and a large number of people who are anxious or who find it necessary to do business with the government. But do not feel and do not consider that we residents of Ottawa are not paying for this. We are. When large sections are taken away and we receive no taxes from them, the burden of taxation falls on the rest of us, and I think I can safely say that the citizens of Ottawa are doing their best to administer the purely municipal affairs of Ottawa just as capably and at just as high a standard as any other city in the country.

The expenditure of money for the beautification of Ottawa the capital is something that devolves on the whole of us, and the beautification of the capital is something that the citizens of Canada generally should be proud of; and I know they are. (Hear, hear.) For that reason I think we all, whether or not we happen to support the administration of Mr. King in a political sense, feel a great deal of sympathy with his efforts to make the city of Ottawa a capital that the whole of Canada can be proud of.

I thank you. (Loud applause.)

THE PRESIDENT: M. Henri Labelle will express our thanks to Mr. Hill.

M. LABELLE: Monsieur le Président, Mesdames, Mesdemoiselles et chers confrères,—

C'est avec un grand plaisir que je réponds à l'invitation qui m'a été faite de remercier M. Hill de la charmante conférence qu'il vient de nous donner sur la ville d'Ottawa. Un des points qui m'a particulièrement intéressé dans sa conférence et dont nous sommes d'autant plus à l'aise de parler, nous qui sommes de Québec et de Montréal, c'est le fait que, quoique fondée quelque 200 ans après ces deux villes, nous avons vu avec intérêt cette soeur cadette, la ville d'Ottawa, grandir et devenir une jeune fille d'une beauté resplendissante.

Un autre point qui m'a aussi intéressé, c'est que le Colonel By, fondateur de la ville d'Ottawa, ait demandé à ses ingénieurs de faire le tracé de la ville future. Une centaine d'années plus tard vous avez cru bon de demander au génie français, dans la personne de M. Jacques Gréber, de refaire un plan d'ensemble pour l'embellir encore.

Je désire attirer votre attention sur un troisième point. Lorsque les bâtisses du Parlement ont été construites, on a taxé d'extravagance les travaux des architectes, en déclarant qu'ils avaient bâti pour 500 ans à l'avance; mais à peine cinquante ans plus tard, il était reconnu que le projet conçu par ces architects, ce que l'on avait appelé leur folie, prouvait qu'ils avaient vu juste dans la vision de l'aménagement de notre capitale fédérale. Il arrive encore fréquemment que nous soyons taxés d'extravagance ou même d'utopisme; espérons que le temps, ce grand maître, saura encore nous rendre justice.

Mesdames et messieurs, au nom de l'Institut Royal des Architectes du Canada, il me fait extrêmement plaisir de remercier M. Hill de sa très intéressante conférence.

THE THIRTY-SECOND ANNUAL MEETING ROYAL ARCHITECTURAL INSTITUTE OF CANADA

THE inaugural session of the Thirty - Second Annual Meeting of the Royal Architectural Institute of Canada was held in the Chateau Laurier, Ottawa, on Saturday, February 18, 1939, at 10 o'clock a.m.

Mr. H. L. Fetherstonhaugh, President, in the chair.

The President: Gentlemen, in declaring the Thirty-Second Annual Meeting of the Architectural Institute of Canada open, the first thing I should like to do is to read a message from His Excellency the Governor-General:

"Ottawa, 13th February, 1939.

"Dear Mr. Fetherstonhaugh,

"The Governor-General sends his best wishes to the Royal Architectural Institute.

"It is a great disappointment to His Excellency not to be able to accept your kind invitation to be present at the dinner on Friday night, but he wishes me to assure you that he follows with great interest and admiration the work of the Institute and he warmly commends its manifold activities.

"Yours sincerely,

"A. S. Redfern,
"Secretary to the Governor-General."

(Applause.)

REPORT OF THE COUNCIL

On behalf of the Council, I wish to welcome our members most heartily to the Thirty-Second Annual Meeting of the Royal Architectural Institute of Canada. Those of you who, like myself, come from cities within a day's distance of Ottawa will join with me in particular appreciation of those who have come from the far East and the even more distant West.

We are here at the invitation of the Ottawa Chapter of the Ontario Association of Architects, and it may be news to some of you when I tell you that according to our charter Ottawa is the headquarters of the R.A.I.C. Montreal and Toronto are permissible only under a qualifying clause which reads: "In such other place as is from time to time determined."

We wish to express our thanks to the Ottawa Chapter for the arrangements they have made to make this meeting both interesting and enjoyable. On your behalf I would also thank them for including the ladies—which no doubt accounts for the large number of gentlemen present.

This report of Council will not cover in detail the work of its different committees, but is more in the nature of comment on particular activities of the R.A.I.C., which we trust will prove of interest to our members.

This meeting being in Ottawa, one of the first interests which we wish to mention is the increased opportunities for co-operation with the Federal Government which have occurred in the last few years. As evidence of this may I call to your attention the greater proportion of public buildings entrusted by the Government to architects in private practice, the competition for low-cost housing sponsored by the Housing Branch of the Department of Finance and the competition for the Canadian Pavilion at the World's Fair, 1940.

There is also the important work which has been entrusted to members on the various committees of the National Research Council. The proof of our desire to co-operate was clearly shown by the large number of architects who entered both competitions and the time and careful thought which the drawings displayed. It was a contribution of which the Institute may well be proud. We wish to convey our thanks and appreciation for these increased opportunities, and to state that the R.A.I.C. hopes that on matters of architectural interest in this country, governments, both federal and provincial, will continue to employ the services and talent of Canadian architects.

Much time and thought were given to the question whether we should retain our membership in the National Construction Council or resign from it. We may have exceeded the instructions given at the last annual meeting, for we tendered our resignation and later withdrew it. A brief explanation of these actions is in order. Our resignation was forwarded after a careful study of the situation, which showed we were assuming responsibilities for policies and expenditures, with no representative directly responsible to your Council. In November special meetings were arranged in Toronto and Montreal to receive a delegation from the N.C.C. In discussion with them we were informed that the representation we desired would be arranged and that a restudy of policy and organization was being considered by certain other of its members along lines very similar to those suggested by your Council at the time of their resignation. In view of this we withdrew our resignation. It would be well to recall the splendid work the N.C.C. performed when emergency measures were taken by the Federal Government to meet a crisis in unemployment, and let us recall the Brief on Real Estate and Taxation which they so ably presented to the Rowell Commission. The problems of unemployment and over-taxation of real estate are by no means ended, and the situation today calls for a strong organization to present the views of the construction industry on these and other pressing problems. Any changes in the N.C.C. would probably take place in the course of the next few months, but it is impossible to prophesy what they will be; but there is clearly a strong feeling among certain members that there is most important work for it to do and that it must become more influential and national in character to obtain success. Under the conditions outlined a quick decision appears impracticable.

Housing is a social responsibility and, with the possible exception of medicine, I cannot think of any profession upon whom the responsibility for continuous pressure on public opinion and government falls than our own. We received our charter as a body with responsibility toward society and, in my opinion, we can best justify it at the present time in wholehearted effort in this branch of public welfare.

And now, if I may turn for a moment to another matter, we must express our thanks to the government, both federal and provincial, for the excellent work they have done on the restoration of ancient and historic monuments. Under expert architectural supervision some of our ancient buildings have been made to live, if not to walk, and in some way to shed the glory which was theirs a hundred or more years ago.

We hope that the work done on military buildings is but a beginning and that the government, wise in its generation,

will see fit to rehabilitate our ancient churches and fine old houses. In doing so it would not be for us but for posterity, and if we are not mistaken the gain commercial can be reckoned also with the spiritual, and that in this day and age is not to be forgotten.

It is proper that on an occasion like this some mention should be made of the many architects who, in a spirit of public service, often at the expense of their practice, are giving their time on committees to a study of slum clearance, town planning and low-cost housing.

The general public, as never before, is aware that housing is necessary and that in some form or other it will inevitably be attempted in Canada. We cannot lag behind the rest of the civilized world in that respect or in any other. Unfortunately many quite worthy people who are giving their time in a laudable attempt to stimulate an interest in housing do not realize that without preliminary work in town planning and zoning, housing is likely to end in greater slums and eventually in financial disaster. At present, the road to housing is paved with good intentions. The professions of town planner and architect are inseparable, and it is our obvious duty to state the claims of town planning wherever the opportunity arises.

Certain members may feel that our activities are extending far beyond those which were visualized when the Royal Institute was formed, but may I assure our members that your Council still considers its prime interest the fostering of those activities which promote the original objects of the R.A.I.C. The interest of our members is evidenced by the difficulty in combining all their wishes and requests concerning them. We should realize that there is no final stage in our development, but we must keep always in view an objective which marks an advance. Our most striking example of this is the *Journal.* The enthusiasm, ability and energy of a small group reorganized its publication and realized an immediate success. It has changed the *Journal* from a liability which was depleting our resources to a source of revenue which is helping greatly to restore our financial position. The measure of its success is very dependent on the general conditions throughout this country. If its success continues it will enable the Institute to strengthen certain features of the work which at present cannot be undertaken with the present revenue. We wish to thank the Editorial Board, our editor and our publisher for the splendid work they are accomplishing.

We continue to attach great importance to the student competitions. They form a valuable link between the practising architect, the architectural teaching staffs and the student. The form of the competition is different this year, and we appreciate the attendance of representatives of all schools to again discuss the conditions. The future development cannot be prophesied, but a national students' competition, with a travelling scholarship to the winner, is an objective we strive to attain.

Our annual exhibition of architecture calls for serious study. It is not sufficiently representative of the work of each year, geographically, in quantity or in quality. It is only on view in one city each year and is never seen outside of the provinces of Quebec and Ontario. It is easy to form a new objective—an exhibition of sufficient merit to warrant sending it from coast to coast. The advantages of doing so are the interest it would give to all our members, and the publicity it would bring to architecture generally if properly organized. If this is desired the Institute would gladly study this scheme, and it would be the natural medium to co-ordinate the necessary arrangements. I have no doubt there would be a generous response on the part of architects to such a scheme, and if the schools of architecture and the architectural associations are in sympathy with this, the financial contribution would not be a large one.

There is the work of a one-man committee which calls for special comment. A short history of the R.A.I.C. since its incorporation has been increasingly required for reference and record, and one of our oldest and most experienced members was requested to write it. This history is now complete, and I do not believe any other member could have given such care and skill to its preparation as our good friend Mr. Alcide Chaussé, Honorary Secretary. We congratulate him on his work and thank him sincerely for it.

In receiving the reports from chairmen of committees you will realize they are purposely brief. They convey little idea of the time your members of council have given to their work. May I express my thanks to them and the pleasure it has been to work with them. We regret that we shall not have the friendly and wise counsel and enthusiastic help of Mr. W. S. Maxwell this year as a representative, as he wishes more freedom from administrative work to devote to the many sides of art in which he is so proficient. He has been an example to all in his devotion to those matters which help to advance the knowledge or appreciation of architecture. We still feel that we can call upon him when some particular activity of architectural interest has need of his willing hand to help it along, and we thank him specially for all he has done for the R.A.I.C.

I sincerely appreciate the honour I have enjoyed this year as your president. It has been a very broadening experience. As a member of this Institute I had never realized the particular difficulties and problems which confront the architects of this Dominion. One cannot be president of this Institute without feeling very keenly that the problems of the architects of any province are the problems of the profession as a whole. Our interests are mutual and I can assure you that your executive has shown such a willingness to work and such a desire to understand the problems of the architects that it has been a strength to me as president and a pleasure in which to take a share.

Unity today is less of an aim than an accomplished fact. With that assurance we should go out from meetings like this with an enthusiasm and a desire to help solve the large problems which beset this country. Toward many of them, the architects, by their training, are specially fitted to give leadership and assistance, and we should not be found wanting when our help is sought.

H. L. Fetherstonhaugh, *President.*

REPORT OF THE COMMITTEE ON ARCHITECTURAL TRAINING — 1938-1939

During last year's convention a conference was held of representatives of architectural schools that have participated in competitions of our institutes. It proved to be a valuable medium for a free discussion of past and future problems and resulted in recommendations which proved helpful to the committee and in a modified form were adopted, with the result that all schools have agreed to take part in this year's competition.

This complete participation has been an ideal the Institute hoped to realize. It has involved a great deal of correspondence and several interviews with directors of schools of their staff. It is apparent that a continuance of the annual competitions is desired by all, and while the evolutionary changes of this year have been agreed to, this has been attained by mutual concessions.

Professor Arthur, of Toronto University, has undertaken all arrangements for another conference of the schools of

architecture to be held in Ottawa during the convention. It will be attended by directors, their teaching staffs and appointed delegates. Professor Madill, of Toronto University, has prepared a paper on the "First Year" to be read and then discussed along with other matters. This will be followed by a paper on competitions by Professor Osborne, of the University of Manitoba. The advisability of holding yearly conferences will be considered.

The essential features of this year's regulations for the competitions are:

Programmes have been written by practising architects who are not actively connected with any of the schools.

The programmes were confidentially issued during the fall to directors of schools in order that questions might be sent in and answers received before December 31st, 1938. Directors were also sent a concise statement of the kind of building in each class and instructed to issue the information to their students three weeks before the commencement of the "Esquisses en loge". This arrangement enables students to do research work covering broadly the theory and practice of the buildings they will have to design.

This year the complete designs are to be judged in the schools where they are made. (This differs from past precedent where designs of all schools were placed in open competition and judged by a jury appointed by the Institute.) The personnel of each jury is to be composed of members of the school staff and, in addition, one practising architect to be appointed by the President of the affiliated Society of Architects of the province in which the school is situated.

The awards in each school to consist of first prizes for Class "A" and Class "B" for which the Institute will present inscribed bronze medals. In addition, first mentions and mentions are to be awarded.

All premiated designs will be exhibited at the convention and subsequently be shown in the competing schools.

The Institute will illustrate the prize-winning designs in its *Journal* and send copies to all who have received awards.

This year's regulations are in sympathy with evolutionary changes which, to a limited extent, have taken place in Great Britain and in the United States. The thrills and disappointments of open competition will be lacking, but the experiment is well worth trying.

In the past some of the Class "B" programmes have been, or have been interpreted as being, decidedly modern in their intention. Architectural education of today recognizes the influence brought to bear on design by new materials, modern methods of construction, etc., and for this reason advanced students become familiar with current work. Students in their first and second year receive instruction in the fundamental verities of sound design and building based on what the past has so richly endowed us with, such knowledge as they acquire of modern trends is comparatively superficial.

As a result of representations from some of the schools, the Class "B" programme for this year calls for a building situated in a small city where traditional architecture predominates.

The Class "A" problem ably drawn up by Mr. W. L. Somerville, P.P.R.A.I.C., differs from the Class "B" problem prepared by Mr. M. W. S. Maxwell, in that it calls for a building in which the use of modern materials will inevitably influence design.

Owing to the competition drawings being judged in their respective schools, there will be no publication of jury reports in the *Journal.* It is suggested that arrangements be made for a review of the competition drawings and for other condensed articles related to architectural education, and the findings of the convention conference of school representatives.

It is a pleasure to refer to the splendid co-operation and interest shown by all members of the Architectural Training Committee. We thank our President for functioning during the illness and convalescence of Mr. Galt Durnford, who, we are happy to report, has fully recovered.

Respectfully submitted,

W. S. Maxwell, *Chairman.*

REPORT OF THE COMMITTEE ON SCHOLARSHIPS AND PRIZES

During the past year there were no acquisitions to the scholarships and prize funds. It is gratifying, however, to learn and to report that it is hoped that at an early date the Scholarship Fund, which was drawn upon at a difficult period to maintain the *Journal,* will be restored as a result of the increased financial prosperity of that publication.

Medals to outstanding graduates in each of the following schools of architecture were suitably engraved, awarded and presented to the following winners:

University of Alberta—Ross Meredith Stanley.
University of Manitoba—Donald P. Logan.
University of Toronto—A. H. Taylor.
McGill University—George Bennett Pope.
Ecole des Beaux-Arts, Montreal—Elio Vincelli.

Respectfully submitted,

R. H. Macdonald, *Chairman.*

ART, SCIENCE AND RESEARCH — NO REPORT

PROFESSIONAL USAGES — NO REPORT

REPORT OF THE COMMITTEE ON PUBLIC RELATIONS

The main activity of the Public Relations Committee was concerned with the arranging of a competition sponsored by the Department of Trade and Commerce, for the design of the Canadian Pavilion at the New York World's Fair.

This Committee was in consultation with the Department from the inception of the idea and acted as an intermediary between the Minister and the Institute.

Although a very comprehensive file of correspondence was built up regarding this matter, there is little more that one can say at this date than to record that the competition was a complete success; the response from the members of the profession was very satisfactory, and we feel that the resulting impression in government circles will be of great future value to the Institute.

Subsequent to the awards, the drawings were exhibited in various centres throughout Canada after this committee had made the necessary arrangement with the Department.

May we suggest that it would be in the interest of future Dominion-wide competitions, if the Institute formulated a set of conditions which would be applicable to such forms of competition. There might be some difficulty in reconciling differences between the various provincial codes, but it is for that very reason that an Institute code applicable throughout the Dominion is necessary.

Your Committee also represented the Institute in minor matters dealing with the Government Departments.

All of which is respectfully submitted.

E. W. Haldenby, *Joint Chairman.*
A. J. Hazelgrove, *Joint Chairman.*

REPORT OF THE EDITORIAL BOARD — "THE JOURNAL, R.A.I.C."

After taking over the publication of the *Journal* in June, 1937, and feeling our way for the initial six months, your Board approached 1938 with some degree of confidence.

In order to make the *Journal* pay, there must of necessity be a balance between the advertising and the remainder of the contents. Some months are preferred by advertising agencies to others, and some of the Canadian buildings we publish offer greater opportunities to sell advertisements for materials used than others do. Consequently, in order to keep the publication fairly constant in size, a discrepancy is shown in the monthly earnings which may appear out of place.

We are gradually approaching a state whereby the illustrations are chosen far enough in advance of the month of issue to enable the publisher to arrange for any advertising which may have the additional value of having the building itself illustrated and described in some detail.

The most illuminating venture of the past year was the questionnaire which you all received. As has been pointed out editorially, answers have been returned by a large percentage of our members and, what seemed to me a more healthy sign, was the advice tendered by so many in addition to the specific questions asked. These remarks have been most carefully analysed, and where the majority of opinion was opposed to any existing policy, recognition of the fact was immediately taken.

When material comes in, your Board examines it, acknowledgment is made, and if it is not usable at once, it is recorded and returned to the sender. As we are working with a very limited staff, there may be delays and slip-ups from time to time, so I would ask the contributors to have patience and bear with us.

We are indebted to those who write the provincial letters, as they provide a much-needed hook-up across Canada. At times we are crowded for space and have to cut, but this is only done in cases of absolute necessity and in no circumstances do we edit.

As the purpose of the provincial page is to exchange news of architectural interest, it is hoped that contributors will restrain themselves when giving statistics and dealing with matters dealt with in the daily press or other journals.

We are on excellent terms with practically all architectural publications in the world, and exchange material from time to time.

The R.I.B.A. *Journal* has praised us editorially as one of the best professional journals in the world, and we have been quoted by other architectural publications.

All universities in Canada and many in the States subscribe to your publication, also many public libraries in each country; in fact, we have sixty private subscribers.

This report cannot of necessity include all our activities, but in submitting it I hope that it is sufficiently complete to provoke discussion and I will do my best to answer any questions put forward.

Mackenzie Waters, *Chairman.*

REPORT OF THE COMMITTEE ON EXHIBITIONS AND AWARDS

This Committee was composed of members representing the various provincial societies across Canada.

Particulars governing the submission of photographs for the Eighth Annual Exhibition were published in the December issue of the *Journal,* and were carried in the news columns of the *Daily Commercial News.* Instructions to exhibitors contained a new clause permitting the exhibition of work done in the past three years, which had already been shown in an annual exhibition. This work, of course, was to be ineligible for awards.

Unfortunately, the date of the Provincial Show in Toronto coincided with the date of the Royal Architectural Institute of Canada Show in Ottawa; some duplicate enlargement of the photographs chosen for the Toronto Show were made for showing in Ottawa.

Photographs were received from twenty-five Canadian architects.

The arrangements for our Annual Exhibition are not successful in attracting a volume of exhibits at all representative of the character and scope of architecture across Canada. We have all seen illustrations of interesting work done in the past year which has not been entered in our exhibition in competition for our annual awards. The fault must lie either in the indifference of architects or in the organization of the exhibition. There is no doubt that there is enough work done across the country to make a diversified and stimulating show every year.

The incoming Exhibition Committee might very well be given the job of making a study of architectural exhibitions elsewhere. Such a study should examine the actual intent of our annual show, and determine if the present form is adequate; it should suggest a framework for organizing dependable support across the country.

Among the weaknesses of the existing procedure are the following:

Activity in soliciting exhibits is not started until late in the year. It is based on the hopeful assumption that Canada's architects have had their work thoroughly photographed under ideal conditions during the summer before.

Supposedly representative of Canada, the country as a whole is not given the opportunity to see the exhibition. It should not be impossible to work toward a system whereby the annual exhibition could be sent to each of the provincial associations in turn.

Regarding the selection of exhibits, it might be practical to have an exhibition jury appointed by each of the provincial societies to assemble the provincial entries and forward them to the Central Committee at a much earlier date.

(Signed) E. I. Barott, *Chairman.*

Read by the Secretary.

REPORT OF THE COMMITTEE FOR DUTY ON PLANS, R.A.I.C.

The Committee for Duty on Plans received an inquiry from the Ontario Association of Architects as to whether Customs duty had been paid on plans and specifications for a packing plant for Dumarts, Limited, in Kitchener, Ontario. We were informed that these plans and specifications have been entered at Customs in accordance with the Customs laws and regulations.

Alcide Chaussé, *Chairman.*

REPORT OF THE COMMITTEE ON HOUSING

The stimulating effect of the earlier efforts of the R.A.I.C. have been noted in the large increase in loans through the Federal Housing Administration and the lending companies, under the Dominion Housing Act, 1935, the National Housing Act, 1938, and the Home Improvement Plan. It is to be regretted, however, that the provision made in the Act of 1938, by which municipalities could borrow from a loan fund of $30,000,000 has not been taken advantage of for low cost housing.

One encouraging factor in the reduction of "building cost" has been the removal of the eight per cent. tax which formerly applied on building materials. This advantage does not yet appear to have produced the much-desired result, probably due to the fact that municipal tax burdens remain.

Your representatives have been consulted in connection with amendments to standards and also to specifications, made by the Housing Administration to meet demands presented at Ottawa. These changes have been made without loosening the regulations set up to ensure good construction.

It is gratifying to note that it is now realized that "low cost" homes can be built within a price range of $3,500 to $4,500, and that these costs can be further reduced where local need and regulations, also where financial considerations make possible developments which contain from 10 to 50 housing units.

Respectfully submitted,

R. H. Macdonald, *Chairman.*

REPORTS ON CANADIAN ENGINEERING STANDARDS ASSOCIATION

Having the honour to represent the Royal Architectural Institute of Canada on the Main Committee of the Canadian Engineering Standards Association, I beg to submit a report upon the activities of this Main Committee and its functional relation to the several other committees operating under the Canadian Engineering Standards Association.

This Main Committee acts in an advisory and supervisory capacity in relation to the several Working Committees.

The Working Committees work each in its own line of endeavour in the investigation of the necessary material for and the preparation of standard "codes", which will govern in the application and employment of the several subjects so "coded".

The functional contact between the Main Committee and the several Working Committees is maintained by means of letter-ballots sent to members of the Main Committee for decisions on matters of Main Committee interest—primarily, approval of and authority to publish proposed standard codes.

A copy of the Secretary's Report No. 33, 1st April, 1937, to 31st March, 1939, is attached, not to be read into my report but for reference, if desired. Appendix "A" of this report No. 33 comprises a list of twenty-five such letter-ballots, all items of which list have since been published.

Since the above list was compiled, about fiteen other items have been approved and published. (See attached "Quarterly Bulletins" of June 30th, 1938, and of September 30th, 1938.)

Respectfully submitted,

C. J. Burritt.

As representing the Royal Architectural Institute of Canada on the Canadian Engineering Standards Association Committee on Safety Code for Mechanical Refrigeration, I big to report the activities of this committee as follows:

This committee has held four meetings since reorganization ten months ago. The results of its efforts have been summed up in the submission to the Main Committee of a most excellent and comprehensive code, or specification, for their approval prior to publication. The application of this code is intended to insure the safe design, construction, installation, operation and inspection of every refrigerating system, from the smallest to the largest, employing a fluid which is vapourized and liquefied in its refrigerating cycle, which may be used for the extraction of heat for any purpose and/or dehumidifying air.

When approved by the Main Committee, the code will be published and available for sale on application to the Secretary of the Canadian Engineering Standards Association.

C. J. Burritt.

Lieut.-Col. C. J. Burritt was re-appointed in April, 1938, to represent the Royal Architectural Institute of Canada on the Executive Committee of the Canadian Engineering Standards Association for a period of three years.

Mr. R. H. Macdonald was appointed in June to represent the Royal Architectural Institue of Canada on the Committee on Standard Fire Tests on Building Materials and Construction, and on his acceptance became Chairman of that committee.

For representation on the Working Committee on Building Materials, Mr. R. H. Macdonald and Mr. H. E. Moore, as alternate, were appointed to represent the Royal Architectural Institute of Canada.

The above committees are actively at work and progress is recorded in the proceedings of this association.

Respectfully submitted,

R. H. Macdonald.

REPORT OF THE REPRESENTATIVE ON THE NATIONAL CONSTRUCTION COUNCIL

Mr. Coon: Mr. President, I am the representative of the R.A.I.C. on the N.C.C.—if you follow all those letters. I did not prepare a report, because the President covered it pretty completely in his report of Council, and also we had Mr. West yesterday, who spoke at some length on the matter. But if you are as vague on this matter as I am, even after having attended several executive meetings, it might be well to say what this N.C.C. is. I have the information here and I think it might be interesting for me to tell you who the members of the National Construction Council are.

These are the members of the Council, that is, of the organization:

Canadian Construction Association, which have been referred to, and apparently, as Mr. Haldenby said, they do not represent the contractors of the Dominion; that is, not fully.

Canadian Institute of Plumbing and Heating.

Canadian Manufacturers' Association. A great many of their members have nothing whatever to do with construction; a great many manufacturers of boots and shoes, and drugs, and what not, may very well be amongst the members of the Canadian Manufacturers' Association; but there are also those who are members and who do have something to do with the construction industry in Canada.

The Engineering Institute of Canada.

The Royal Architectural Institute of Canada.

The Trades and Labour Congress of Canada, a very necessary and useful body to belong to such an organization.

The Dominion Council of Professional Engineers.

The Asphalt Roofing Manufacturers of Canada.

The Canadian Lumbermen's Association.

The Canadian Paint, Oil and Varnish Association.

The Brick Manufacturers' Association.

The Canadian Council of Master Painters and Decorators.

The Canadian Founders and Metal Trades Association.

The Structural Clay Tile Association.

Those are the organizations which make up this National Construction Council. I have been at certain executive and Council meetings. Mr. Craig, who is now present, has been a member of that organization for some years and was one of the fathers of it, I believe.

A Member: He was the father.

A Member: Who was the mother?

Mr. Coon: Mr. West. Now, it is very interesting. You have asked what the objects of this thing are. These are the objects as set forth, and I shall read them if you wish me to take the time. There are nine objects, and they are quite idealistic, and if we follow them it is splendid.

1. To unify and express the collective views of organiztions connected with the construction industry, upon subjects recognized as affecting the industry as a whole.

2. To stabilize the industry, eliminate waste, improve its ability to serve the public, minimize unemployment and consolidate parallel endeavours.

3. To enable leaders of national bodies to automatically confer together for mutual benefit and industrial progress.

4. To encourage constructive measures for or within the industry and oppose destructive measures against or without the industry.

5. To promote fair professional ethics and business practices.

6. To promote higher standards of living, foster and support timely movements for proper and efficient public works and encourage sound financing and investments in construction projects.

7. To promote better public relations.

8. To collect and disseminate such data and information as may be deemed necessary or advisable from time to time.

9. To foster and co-ordinate industrial and scientific research in the construction industry and its component parts.

Of course you know these objects coincide with many of our committees' objects and we are duplicating in many ways.

I have been at several of these meetings. The membership is composed of very earnest men of ability, and representative men from these various organizations are present and spend a lot of time and effort in connection with this business, but without reading this outline I should not have known just what it was all about.

After some discussion Mr. McDonnell moved that we retain our membership in the N.C.C. for the time being.

Mr. Page seconded the motion.

The recommendation was agreed to.

REPORT OF THE HONORARY TREASURER

Mr. Coon read his financial statement (of eleven pages) of which the following paragraph is a brief summary:

Mr. Coon presented the auditor's report for the year 1938. which showed a total revenue of $5,883.04 and expenses of $4,817.41, leaving a surplus of $1,065.63.

The typewritten report of the Annual Meeting consisted of one hundred and sixty-nine pages. With drastic cutting the editor reduced this matter to twenty-seven pages of the Journal, which was neither economical nor practical. After much discussion it was decided to include only the reports, and apologies must be made to Mr. Gardiner, Mr. Ham and others who came so far and added so materially to the discussion.

EMIL E. DELAY

The death of Emil E. Delay, Architect, occured at Wolseley, Sask., on February 16th. His passing will recall many reminiscences of the earlier days of the Province.

Mr. Delay was born in France, and would have been 75 years of age on February 24th. He graduated from the Ecole Des Beaux Arts, Paris, and practised architecture for 28 years in Lausanne and Paris, before coming to Saskatoon, about 1912.

He practised in Saskatoon in partnership with F. J. O'Leary, later going to Regina where he held the appointment of Provincial Architect for some years. He later conducted his own practice in that city.

Mr. Delay designed many buildings, including the Technical University, Railway Depot and large hospital at Lausanne and numerous works in Paris. One of his best known buildings in Saskatchewan is the Humboldt Court House.

In 1934 Mr. Delay was elected an Honorary Life Member of the Saskatchewan Association of Architects, being one of five on whom this honour has been conferred.

— *Robert F. Duke.*

NOTICE

MAY will be a domestic number of the *Journal.* The Editorial Board appeals to Provincial Representatives and members to send in as many houses as possible. There is no limit of size or price in the houses to be shown, but smaller houses will be given a preference. This should be a particular challenge to the western architects who have hinted that their work was not shown. Do not prepare plans for publication until you have been told that your house has been selected. Photographs must be in Toronto April 10th.

JULY will be a "Vacation" number and will include boat houses, summer cottages, cabanas, hot dog stands, roadside inns, etc. This material should be in the Editor's hands not later than June 10th.

The Department of Finance will shortly issue to all architects the documents relating to housing, financed under the National Housing Act, 1938. A careful study of these documents will familiarize all architects with the work which the Dominion Government is doing to promote housing.

The Architectural Library of the University of Manitoba wishes to enlarge its stock of samples of building materials and accessories, and would welcome, from every manufacturing firm, samples of all materials related to architecture and interior decoration.

AWARDS AT THE EIGHTH ANNUAL EXHIBITION ROYAL ARCHITECTURAL INSTITUTE OF CANADA

THE NATIONAL GALLERY, OTTAWA—FEBRUARY, 1939

The Judges were H. A. Richards, Ernest Cormier and L. Gordon Bridgman

Silver Medals were awarded to:

Bank of Canada, Ottawa, Marani, Lawson and Morris, and S. G. Davenport, Associated Architects

The William H. Wright Building, Toronto - - - - - - Mathers and Haldenby, Architects

Bronze Medal was awarded to:

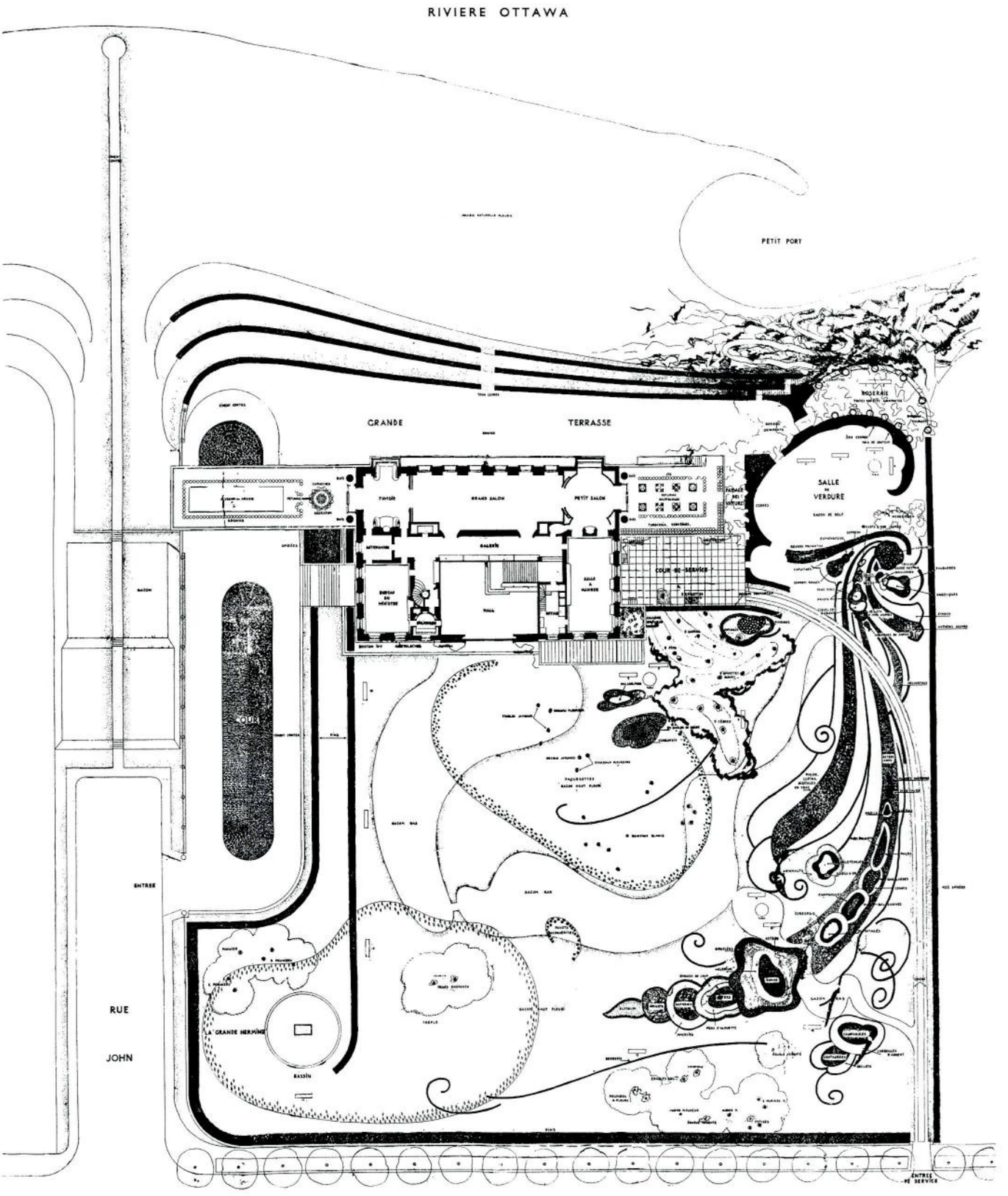
Garden at "Parkwood" for Colonel R. S. McLaughlin, Oshawa - - - John M. Lyle, Architect

The Buildings listed below received Honourable Mention in their various classes:

APARTMENTS - - - - -	Park Lane Apartments, Toronto - - - - - -	Forsey Page and Steele
DOMESTIC - - - - - -	Alterations to house of Mr. H. W. Strudley, Stratford	Wilkes and Fisher
EDUCATIONAL BUILDINGS -	Gymnasium for Upper Canada College, Toronto -	Mathers and Haldenby
PUBLIC BUILDINGS - - -	Postal Station "K", North Toronto - - - - -	Murray Brown
	Garden Pavilion, Clifton Gate, Niagara Falls - -	W. L. Somerville, associated with H. B. Dunington-Grubb, Landscape Architect.

The Council has been pleased to confer an Honorary Fellowship in the Royal Architectural Institute of Canada on The Honourable Vincent Massey, P.C., LL.D., M.A., High Commissioner for Canada to England.

The Council has been pleased to confer fellowships in the Institute on the following: Louis N. Audet of Sherbrooke, Quebec; Leslie R. Fairn of Wolfville, Nova Scotia; Eric Haldenby of Toronto, Ontario, and Forsey Page of Toronto, Ontario.



GENERAL PLAN

FRENCH LEGATION, OTTAWA

The building was designed by Eugène Beaudouin, Grand Prix de Rome, Architect-in-Chief of the French Government and Professor of Architecture at the Beaux-Arts School in Paris. Associate Canadian Architects were Antoine Monette and Marcel Parizeau. General Contractors were Collet Frères Limitée of Montreal. Consulting Engineers on heating and air conditioning were Pitt, Leblanc and Montpetit of Montreal.

WALLS—The outside walls are of granite from "la Rivière-à-Pierre", 8 to 10 inches thick, rockfaced with a backing of brick. On the brick an inch-and-a-half of cork insulates the outside walls. The plaster, marbles or woodwork are set on terra-cotta. Between the terra-cotta and the outside walls an air space of three inches is provided.

STRUCTURE—The structure is reinforced concrete. In all the reception rooms the concrete was poured in "Masonite" forms and left apparent.

MARBLEWORK—The floor and the walls of the hall of honour are finished in marble slabs. On the floor Saint-Maximin stone was used and the walls Salamandre travertine. In the dining room and in the Minister's office, the doors and windows have architraves and bases of marble.

All the marble used was imported from France.

The windows throughout the building are bronze. Double windows are provided and in the biggest windows, as in the hall of honour, three plates were used. During summer the inner panes are replaced by flyscreens.

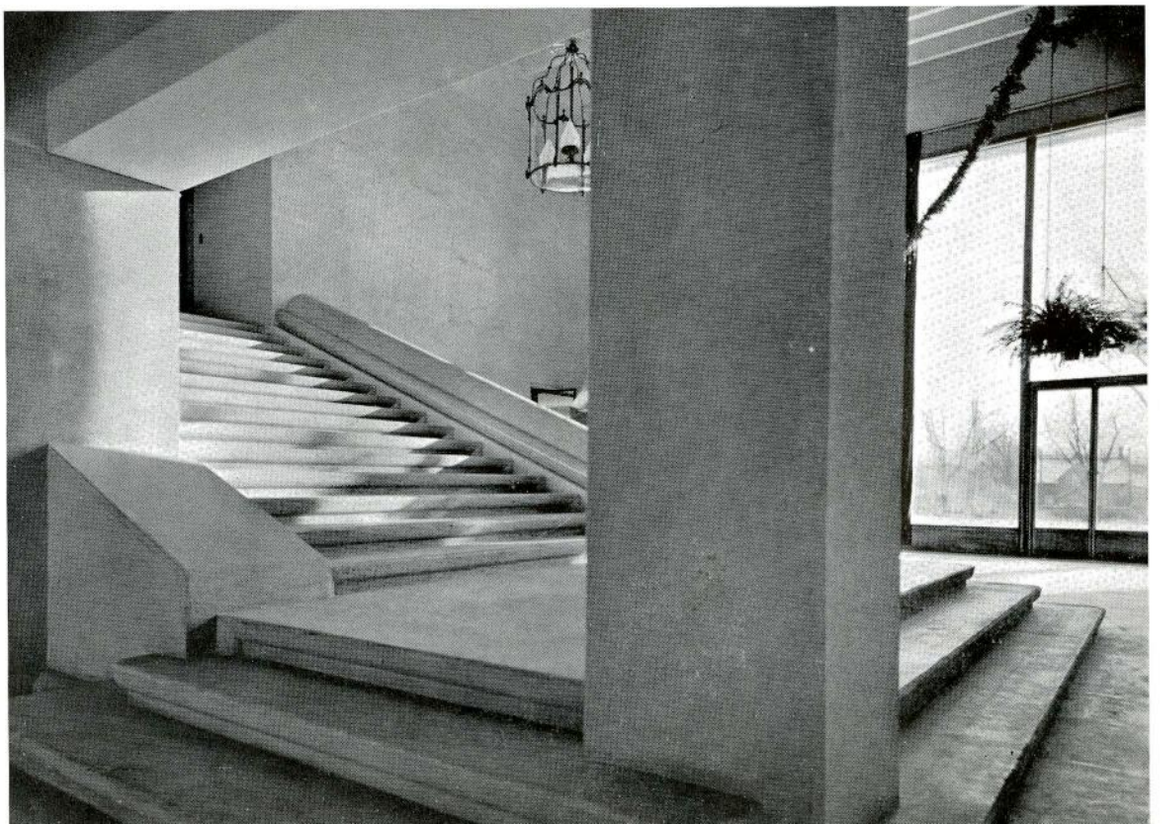
These windows were designed and built by Jean Prouvé of Nancy. They are very fine examples of craftsmanship and design.

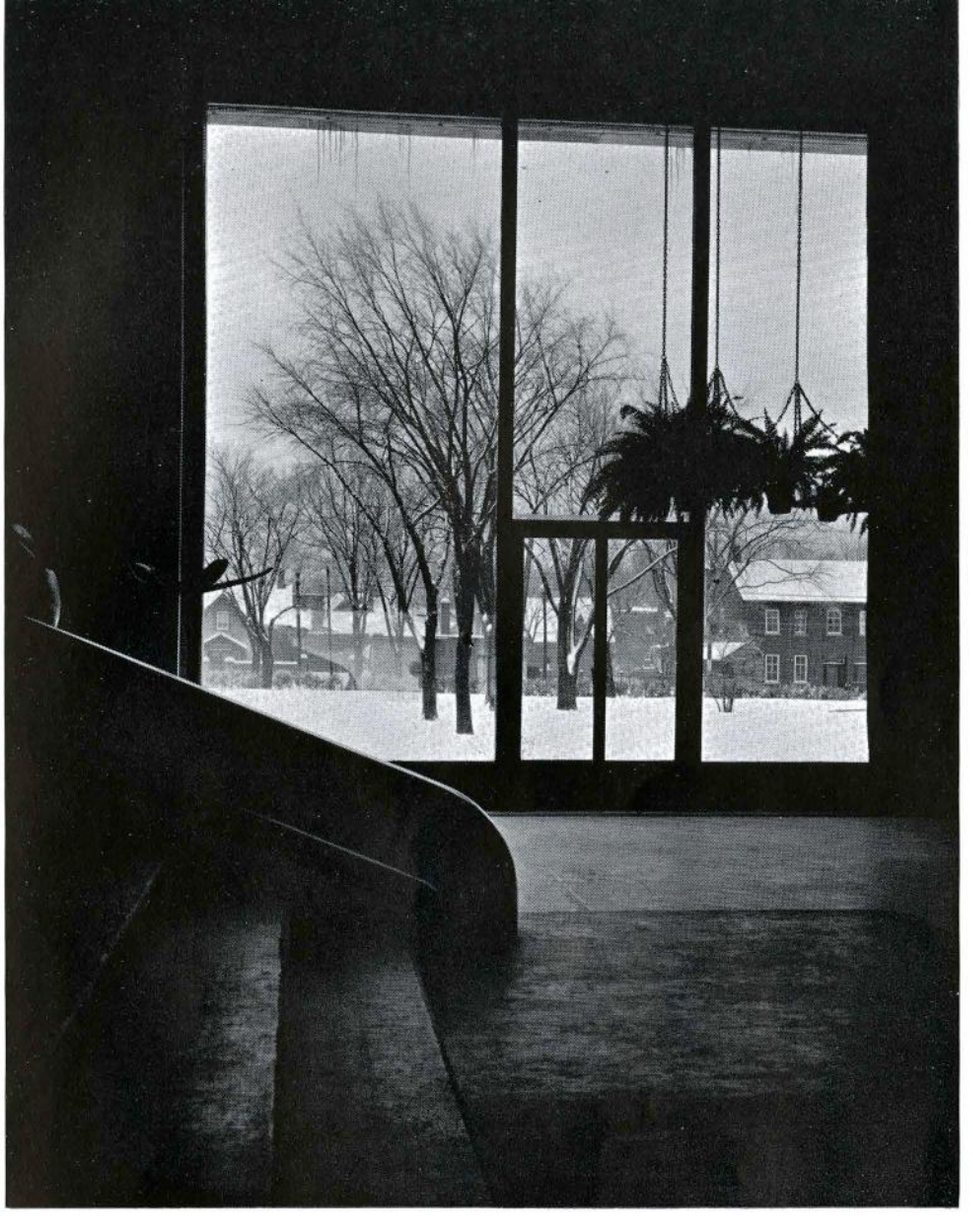
HEATING—The reception rooms are air-conditioned. The living quarters are hot water heated. Two steel boilers are used and are fired by crude oil. All the controls of the air-conditioning and the hot water heating are fully automatic.

The roof is supported by steel trusses. Pre-cast cellular concrete slabs were used as a roofing base. On this base a planking of one and one quarter inches was fixed and the copper laid. The concrete slab of the upper floor was also insulated by a four-inch thick layer of mineral wool.

DETAIL OF ENTRANCE

THE HALL AND PRINCIPAL STAIR





WINDOW IN THE HALL

GYMNASIUM OVERLOOKING THE OTTAWA RIVER

THE STATE DINING ROOM

THE MURAL IS BY ALFRED COURMES

THE MINISTER'S OFFICE

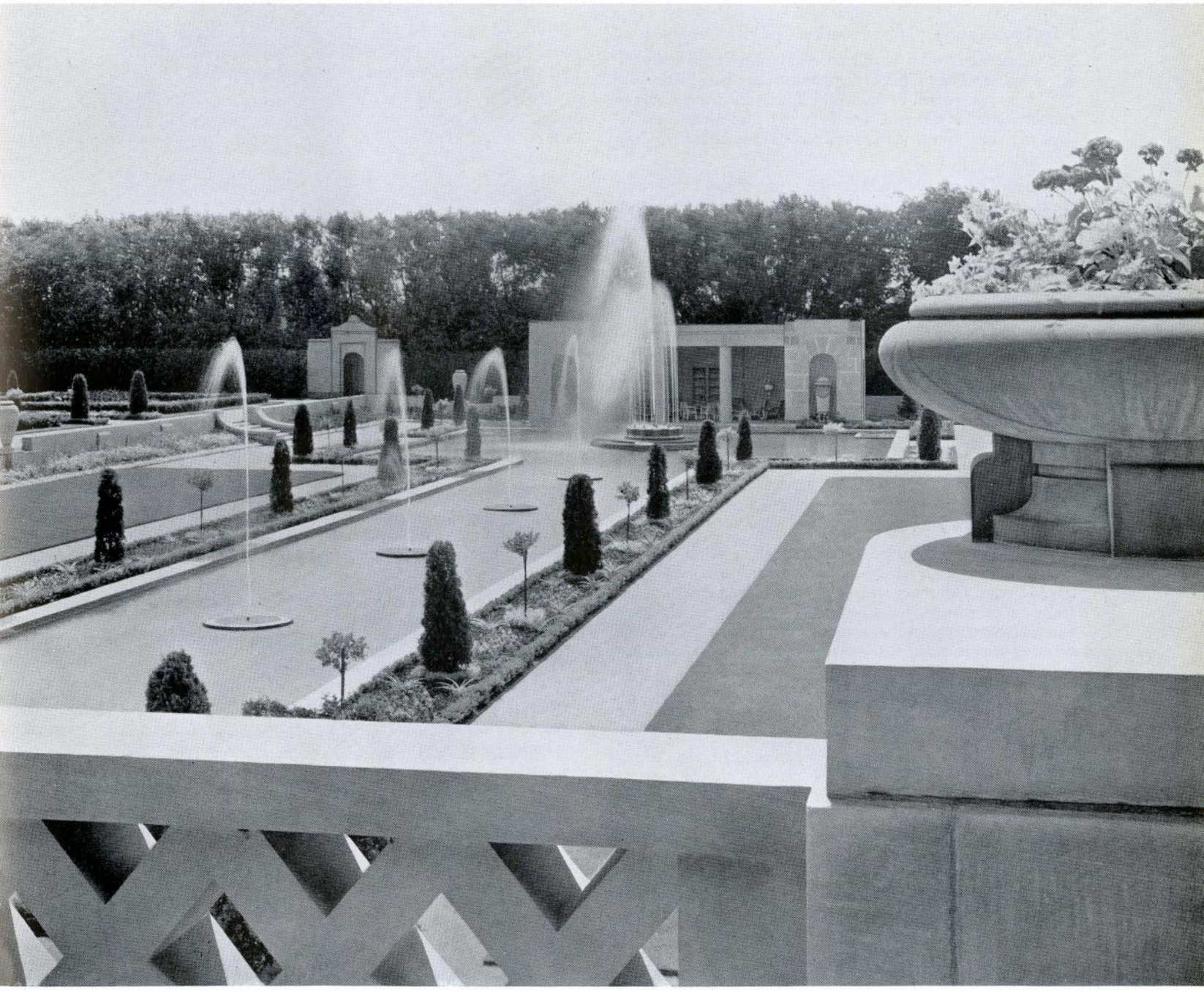
THE ENGRAVED DECORATION ON MARBLE IS BY CHARLES PINSON

PETIT SALON DE MADAME

The sculpture representing "La chanson de Rolland" is by Bizette Linder.

The Gobelin Tapestry is "Le triomphe de Constantin" after the design of Raphael. The sculptures continuing the composition of the tapestry are from Louis Leygues.

THE BALL ROOM



GARDEN AT "PARKWOOD" FOR COLONEL R. S. McLAUGHLIN, OSHAWA, ONTARIO

JOHN M. LYLE, ARCHITECT

Awarded Bronze Medal at the Eighth Annual Exhibition of the Royal Architectural Institute of Canada.

FLAT CONCRETE ROOFS

By WILLIAM ALLEN

1. *Preliminary*

IN Canada is to be found an extraordinary diversity of weather. The ranges of temperature are very great, perhaps unsurpassed in the world, and in many districts the annual rainfall is quite reasonably heavy; and the two conditions together represent a difficult sort of climate for building materials.

The roof of a building bears the brunt of the battle with the elements. It gets the worst of the sun's heat at the hottest time of the year, and it receives all the rain and snow. Protection against the elements, then, is a roof's principal purpose. It is proposed to show here how a flat concrete roof commonly fails in this respect, but also how it can be so built that it will be reasonably satisfactory.

2. Thermal Expansion of Roofs

One feature of a flat concrete roof that has to be kept in mind is its liability to gross expansion under the influence of solar radiation. When expansion takes place, two common types of failure can be expected:

(*a*) Damage to the parapet and cornice treatment, including waterproofing or to exterior brickwork at the roof level;

(*b*) Damage to the internal partitions immediately beneath the roof level.

The first type of failure usually results in damp penetration at the cornice level. No doubt many of us associate this trouble with flat roofs and parapets instinctively, without realising the cause, but the experience of the Building Research Station has brought out time and again the coincidence of expansion of flat concrete roofs and damp troubles with brick or stone parapet and cornice treatment.

The development of the damage can be visualised as follows: Shortly after the building is completed a very hot day occurs and the roof moves a certain amount. Owing partly to the fact that they are less exposed to the full effect of the sun, and partly to other causes, the parapets and cornices do not expand to the same extent as the roof. The result is a differential movement which may open up a series of minor cracks or two or three major cracks, depending on the type of construction. The waterproofing membrane may or may not suffer in the first day, and as evening comes, the cracks close up again to a large extent. Succeeding hot days, and dust, and other things usually enable the damage to progress, however, and by the time autumn rains and winter frosts arrive, conditions are right for extensive trouble. This may be successfully patched up in the spring and to a large extent the damage may be finished. It is not uncommon, however, to have the trouble recur year after year, and cases have come to our notice at the Station where pieces of stone or brick finally get dislodged, or even the entire parapet comes off, as has happened at least once. In such instance the building owner will be in a real quandary to know what to do next.

The internal partition problem is less serious, but quite annoying. If the partitions on the top floor engage the roof slab directly, or the beams connected with it, and movement of the slab occurs, the partitions are certain to be cracked. Again this may be a seasonal trouble or it may prove to be permanent, in which latter case the appearance of the walls will be very difficult to maintain.

Roof expansion can be a cause of trouble principally where large areas of roof occur. By large is meant upwards of say fifty or one hundred feet. The actual construction matters very little. Concrete hollow blocks, solid reinforced concrete, and clay tile combinations all behave much alike.

There are several ways of preventing or reducing expansion, and also several ways of constructing a building which allow minor expansions to occur without damage to the building resulting.

Treatments to prevent or reduce the expansion usually take the form of a film or external covering which does not permit the solar radiation to reach the slab. Perhaps the treatment most obvious to Canadians would be the application of insulation material to the upper surface of the slab, with the waterproofing on top of it. A layer of one or two inches of cork is quite effective, and will serve other purposes as well, forming as it does part of the overall insulation. This will be mentioned again.

An alternative treatment is to apply a white surface to the waterproof covering. This will serve to reflect the sun's rays and in that way prevent excessive heating up of the roof slab.

There are practical difficulties to be met if the waterproofing layer is bituminous, however. Oil-bound pigments cannot be used on account of the softening action of the oil on bitumen, while the shrinkage of any adherent coating such as a cement wash almost invariably causes crazing. An ordinary limewash, commonly known as whitewash, with a little tallow as a binder, is quite safe, but must, of course, be renewed annually or oftener.

Other screening methods have met with some success. A simple layer of gravel about 2 inches thick has been found effective, but would not be desirable where traffic is to be expected.

White marble chippings, well rolled into the asphalt, can produce a very pleasant surface both for traffic and appearance, and can be an effective treatment.

Another method, particularly suitable with felted roofs, has been placed on the English market in two forms. In one, porous concrete tiles, faced with asbestos cement, are stuck down on to the felt with bitumen, and in the other an inch of porous mortar is laid on the felt, and divided by means of raked joints into a series of small slabs. The joints are subsequently filled with an elastic bitumen compound.

A method of screening has been recently devised for use with asphalt or felted roofs, in which slabs of light-weight concrete are carried loose on patent resilient pads which in this way serve to shade the entire roof area. These are satisfactory for traffic as well. A cheaper treatment of the same nature could be had by covering the roof with duck-boards, but resilient pads would again be desirable to prevent damage to the asphalt.

To these notes it is necessary to add a general caution. A case has come to the notice of the Building Research Station where a layer of hollow insulating blocks or clay tiles was used to prevent the rise in temperature of the roof slab, and finished off with a strong mortar. Subsequent movements of this insulating layer eventually pushed a parapet wall off the building.

It is obvious that the material used to prevent gross expansion should not itself in any way be capable of it.

None of these treatments varies greatly in efficiency. Whereas a concrete slab directly beneath exposed asphalt will

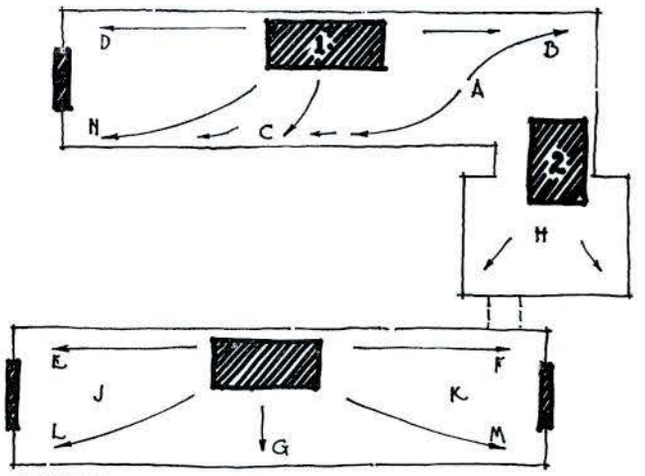
frequently become 30° F. hotter than the surrounding air, a slab treated in any of the ways described will not rise appreciably above air temperature.

It may also be useful to observe at this point that a treatment which acts by screening or shading the roof may be expected to have a beneficial effect on the life of any bituminous materials used for waterproofing.

The use of expansion joints in a roof has been known to provide a successful solution of the troubles. Some care and expense is necessary if a construction of this nature is to be carried out with complete success, however. Waterproofing will be difficult, and the roof design considerably complicated.

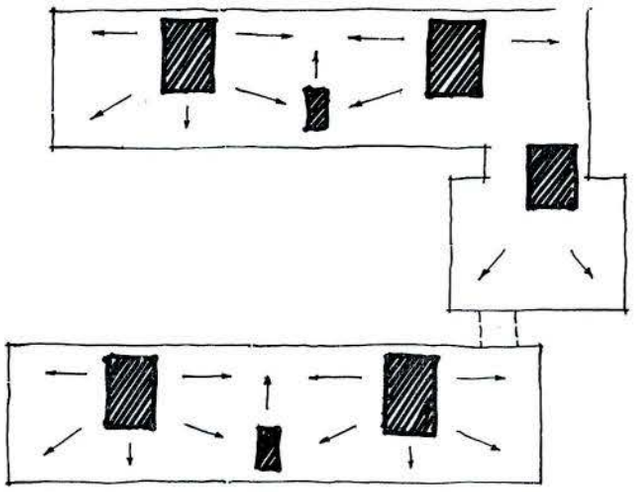
A technique of planning to reduce expansion in flat roofs has occurred to the author as a result of inspecting certain buildings in which this had been a cause of failure.

In some of the buildings inspected it was found possible to anticipate roughly the amount and type of partition cracking in the top floor by a study of the roof plans. Upon one of these plans the various projections, water tank enclosures, lift machinery rooms, chimneys and so on were located as shown on the sketch in part 1 of figure 1. Lines were drawn, indicating roughly the direction of the expansion movements which would take place about these fixed points. One could then form an idea of the regions where expansion would be expected to be greatest, and where one could expect little or none. In the particular case which is illustrated, the following conditions were more or less roughly anticipated and later found to exist: in the area marked "A", no cracking, apparently due to the restriction of movement by points 1 and 2 along a line between them; expansion took place to either side of this line, however, giving mild cracking under area "B" and severe cracking under area "C"; the conditions at "D", "E" and "F" are very much alike, and moderate cracking was found in all three cases; under the areas marked "G" and "H" practically no cracking occurred, probably due to the comparatively small dimensions of the roof at these points; in areas "J" and "K" no serious cracking occurred, probably due to restriction by the chimneys, although these were subject to slight movement themselves, having nothing to buttress them on their outer faces; areas "L", "M" and "N" had severe cracking, as would be expected.



PART 1

A TYPICAL CASE OF ROOF EXPANSION



PART 2

ROOF RE-PLANNED TO REDUCE EXPANSION

FIGURE 1

This is all food for thought. It is obvious that some arrangements of those portions of the building above the roof level can be conducive to extensive expansion, and that other arrangements will restrict the movement. Suppose, for instance, that it had been convenient to plan the building so that the roof projections occurred as in part 2 of the figure, it seems very doubtful if any serious cracking of partitions would then have occurred. Practically any roof treatment which reduces the slab temperature appreciably should become more or less completely effective under such conditions, and the treatment of almost unlimited expanses of concrete should become possible.

From this point it is but a short step to study the construction of the building where the roof and outer walls meet. *This is where most of the troubles occur, and clear thinking is needed if they are to be avoided.*

The provision of a waterproof covering to the building is one of the problems described earlier as a primary function of the roof. *Many troubles associated with flat roofs and parapets result from the fact that the waterproof membrane is interrupted by the parapet, and not carried intact to the outer face of the building.* It is not safe to assume that the parapet can itself provide sufficient protection to prevent moisture penetration, for, as it has been pointed out, the roof expansion is almost certain to cause structural movement in the stone or brickwork at the edge of a building and, if nothing more serious is done, hair cracks in the mortar joints will be accentuated. This can provide a capillary path for moisture, which, assisted by the action of forces of gravity, and the extreme exposure to which a parapet is subjected, may be sufficient to force penetration. Even supposing elaborate damp courses are provided in the parapet, the expansion movements may break or damage these, or capillary action at the joints of damp courses and flashings with the roof waterproofing itself may effect the penetration. Indeed, it certainly seems safe to say that the continuation, entirely uninterrupted, of the waterproofing membrane clear to the edge of a building should be termed an essential of good construction.

Having come this far, let us consider what happens at the *outer face* of the building at this point. Suppose that expansion in the roof occurs, and differential movement of the face brick or stone-work results, then again the hair cracks in the mortar joints will be accentuated or serious cracking occur. This, then, is another vulnerable point.

The obvious safeguard to provide here is an overhang, or hood, or in classic design, a cornice. Then, assuming that

the waterproof roof membrane is now made continuous to the edge of the overhang, the conditions will be so modified that one would not expect trouble.

The next point to consider is the possibility of differential movement causing portions of the parapet or cornice to be dislodged. Look at it this way. Here is a roof, which, on a hot day, may be said to practically "squirm". It is surrounded by a large number of individual units of stone, or bricks, more or less balanced on the top of the wall, and having a jointing material which, if not fractured by the roof movements, can provide little cohesive effect in any case. Is it any wonder that dislodgements occur? It seems on the face of it that the construction is open to question in principle; and the Station's experience apparently confirms the view. In fact, it seems to come down to this, that *a concrete roof, so constructed that it expands and contracts as one piece, would be best finished with an edge treatment which is part of it;* or, in other words, "monolithic" with it, which will take part in the movements without itself suffering fracture, dislodgement, or irreversible effects.

Let us examine the possibilities of such a construction more closely. First of all, the waterproofing membrane; this can undoubtedly be successfully applied so that it continues to the edge of the overhang (where it should be formed into a drip). In cases where this has been done no trouble has been observed. Then the parapet: if a parapet is necessary, and it is usually very desirable, then the concrete at the roof edge can simply be turned up at this point before carrying it out for the overhang. There are safe methods of turning felted or asphalt waterproofing membranes up such a construction, but it is wise to form the inner parapet surface so that a slight slope is provided, to assist the adhesion of the material.

Dripping rainwater is not a serious thing, but it is annoying: it disturbs passers-by beneath, and it dirties the building face. For this reason it seems desirable to cant the upper surface of the overhang to carry rainwater back to the roof where it can be drained away without any unpleasant effects.

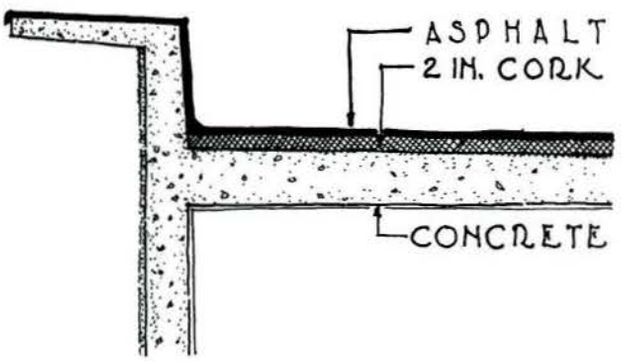
It might be noted here that the provision of a parapet will serve an unexpected purpose, in that by breaking the wind across the top of the building, the possibility of sheets of water being blown over the roof edge is avoided.

What appears to the author to be a most successful roof, parapet and overhang construction is shown in Figure 2. The construction of the remainder of the building in this case was monolithic concrete, but the design could have been equally well applied to a solid load-bearing brick construction, or one of the frame-and-panel types. The waterproofing membrane was aphalt, with the horizontal surfaces, both of the roof and overhang treated with white marble chips well rolled in. The drip at the outer edge was actually formed in the asphalt. A 2-inch layer of cork provided a bed for the asphalt, and insulation for the roof, as well as a secondary protection against expansion. The asphalt on the side of the parapet was said to be reinforced and well keyed to the concrete.

A very pleasant aspect of this particular piece of construction was the comfort and safety one felt in sitting on the edge of the parapet. The seat was the right height, and one had no sensation of danger.

3. *Other Thermal Problems*

One could not consider that the problems of flat concrete roofs had been adequately dealt with unless some mention of other common thermal troubles was made. Heat transmission, condensation, and pattern staining should all receive some attention.



SECTION THROUGH R. C. PARAPET AND HOOD

FIGURE 2

To Canadians heat transmission often takes priority over all other considerations; which is, of course, what one would expect. Thermal transmission is, however, to a large extent, simply a matter of amount and efficiencies of materials, and, rather than deal with this problem, with which Canadian architects are already quite familiar, it is proposed to concentrate on how the thermal insulation can be so located in a concrete roof design, that the other troubles will be more or less automatically obviated.

Condensation

Condensation will occur when the heat loss to a surface is sufficient to lower the temperature of the air in contact with it below the dew point. For this reason it seems advisable to have the inner surface of a roof or exterior wall such that it will readily respond to changes in the room temperature. The ability of a surface to behave in this manner is dependent on its *thermal capacity;* the more heat it needs to warm it, the longer it will take to respond to a temperature change, and so the possibility of condensation increases. As a rule, porous masses and thin membranes, such as plaster on lath, and fibre boards, have a low thermal capacity, and larger, more dense masses have a higher capacity. Since concrete slab roofs are obviously of the latter type, it will be advisable to devote a portion of the overall thermal insulation to the purpose of providing a ceiling surface out of direct contact with it. An air space would be sufficient for this purpose, and suggests at once something of the order of a suspended ceiling.

Of course this will not necessarily prevent condensation from occuring on the underside of the slab itself, where it will not normally be seen.

One way to reduce the danger of this would be to prevent the slab from following the extremes of outdoor temperature: in other words, it should have thermal insulation on its upper surfaces. It has already been pointed out that this is a useful treatment for the prevention of expansion. The connection between the two problems will be readily seen, and is an example of how the careful disposition of the thermal insulation may be made to serve several purposes at once.

It will be an additional safeguard in dealing with condensation on the underside of the roof if the air between it and the ceiling surface, from which the condensation must be taken, remains stagnant. Ventilation of this space would apparently be inadvisable.

Pattern Staining

Pattern staining is due to temperature differences over the surface of a non-homogeneous structure as a result of differences in the thermal conductivity of its parts. A cure can be effected to some extent by increasing the plaster thickness,

by adding thermal insulation on the cold side of the plaster, or by employing a plaster of low thermal conductivity. From the point of view of the utilisation of thermal insulation to deal with other problems, either the second or third methods might be preferable, since an increase in the thickness of ordinary plaster would not materially affect the overall insulation.

Comfort

Comfort is not a readily measurable condition, but to a very large extent the individual sensation of warmth is obtained when the heat generated by the body achieves a certain relationship with the heat received by the body from its environment, walls, floors, sunshine, and so on.

The rapidity with which a room surface will warm up, and thus become a useful part of the environment for the supply of radiant heat is obviously a factor in the time it takes for a room to become comfortable. The provision of a ceiling surface of low thermal capacity becomes of even more importance when this is realised, and, in addition, by reducing the time lag for comfort conditions, the heat requirements of a building which is occupied intermittently will be usefully reduced.

Sound Transmission

The use of flat roofs will finally involve a problem of impact sound insulation where traffic is to be anticipated.

Readers referring back to the article dealing with sound transmission by this author in the November, 1938, issue of the *Journal* will find reasons for the assumption that a floating surface is the best way known at present for dealing with impact sounds.

What is virtually a floating roof has already been described in the form of shade slabs or duckboards mounted on resilient pads, originally intended to reduce roof expansion. These serve the purpose of impact sound insulation very well, and there seems no reason why they, too, should not be made to serve both purposes.

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PROVINCIAL PAGE

ALBERTA

The unusually mild weather of October last favoured the start of the $800,000 building now being erected for the T. Eaton Company on which rapid progress is now being made. This building and the new Hudson's Bay store swelled the value of building permits of the City of Edmonton during the past year to a highly respectable total. Figures in the automobile trade in the daily papers indicate a revival of business in the province. These figures show that 8.7% of all Canadian business in new motor vehicles was done in Alberta, thus placing Alberta after Ontario and Quebec only in this line, Ontario doing 46.6% and Quebec 19%. Proportionately to population Alberta's share was equal to that of Ontario.

Mr. W. F. Nicholls, Administrator of the Dominion Housing Acts, visited Edmonton on February 3rd. The Edmonton Chapter of the Alberta Association of Architects invited him to have a special meeting with them. This he willingly accepted and an interesting conversation ensued.

Mr .Nicholls explained in general terms the Housing Act and the difficulty in putting the Act into operation in Alberta due entirely to the lack of confidence of the lending institutions on account of legislation in effect in Alberta.

Mr. Nicholls said he had that day had an interview with Premier Aberhart, who had advised him that it was the intention to submit legislation during the approaching session by which it was hoped to further the operation of the Housing Acts in this province, but a copy of the proposed legislation was not made available to Mr. Nicholls.

Some discussion took place as to the part architects might play in the event of housing loans becoming available. Mr. Nicholls advised that the federal authorities favoured loans on houses designed by architects, but regretted that the architectural profession as a whole was doing nothing to make their services available at a cost within the reach of prospective home builders. He admitted that the ordinary fee charged by architects was not sufficient to cover their services, but suggested that some method of performing the work on a quantity basis at reduced fees per unit might be devised.

— Cecil S. Burgess.

BRITISH COLUMBIA

International good-will prompted the Washington State Chapter of the American Institute of Architects to invite as guest speaker to its 44th Annual Dinner on January 28th our President, William Frederick Gardiner. In his address, Mr. Gardiner expressed the appreciation of the Architectural Institute of British Columbia for the invitation and used as the keynote of his remarks the mutual advantages that could accrue from a closer co-operation between the architects of British Columbia and Washington and from the interchange of ideas and architectural methods.

The Institute will be represented at the Annual Meeting of the Royal Architectural Institute in Ottawa this year by President Gardiner, who will carry British Columbia's greetings and good wishes to the parent Institute, together with its hopes for a closer co-operation and mutual understanding.

The National Housing Act has been the subject of much discussion and controversy in Vancouver architectural and building circles recently. The visit of Mr. F. W. Nicolls, Director of Housing, Department of Finance, Ottawa, to the city has resulted in the disclosure of several instances of faulty construction on the part of unreliable contractors, which have resulted in the home-buyer being defrauded of his rightful due.

The Architectural Institute had the pleasure of Mr. Nicolls' company at luncheon, when the housing problem was freely discussed, particularly from the architect's standpoint. Mr. Nicolls agreed that lack of competent supervision was responsible for most of the evils of poor construction and expressed the opinion that if part of the secret commission which sometimes passed from real estate agent to contractor was paid to a legitimate architect, the owner would derive considerable benefit.

He said, however, that if the architectural profession would bestir itself to co-operate in this work by evolving some scheme whereby the quality of homes built under the Housing Act could be brought up to high standard by arriving at some satisfactory plan for providing architectural service to the home-owner on a basis that would be advantageous to him, the architect would also stand to benefit by having his services profitably employed.

The Vancouver Chapter of the Institute, which met recently to discuss a renaissance, is planning to get under way in a spirit of co-operation and informal getting-together. Mr. Nicolls' challenge to architectural responsibility has been laid on its doorstep for consideration and action.

— David Colville.

MANITOBA

The Annual Meeting of the Manitoba Association of Architects was held at the Fort Garry Hotel, on January 16th At this business meeting two new members were introduced to the Association; Harold Semmens and George A. Martin. The new officers for the year 1939 were elected as follows: President, Edgar Prain; Vice-President, C. W. U. Chivers; Secretary, E. Fitz-Munn. New members on the council: C. W. U. Chivers, Col. J. N. Semmens, and Norman Russell. The president's annual report stressed the need for a better understanding and closer co-operation between members of the profession, and suggestions were made that members of the Association meet more often at luncheons, smokers or other get-togethers to talk over mutual problems. A report of the activities of the Department of Architecture and Fine Arts of the University of Manitoba was presented by Professor M. S. Osborne.

The Annual Dinner followed the meeting, the guests of honour including Professor J. A. Russell, and representatives of the Association of Professional Engineers, the Manitoba Land Surveyors, and the Builders Exchange.

The outstanding feature of the evening was the exhibition of photographs of work done by members of the Association. The architects represented were: D. W. Bellhouse, Green, Blankstein, Russell and Ham, C. S. Bridgmen, A. E. Cubbidge, Lloyd Finch, Wm. Fingland, Moody and Moore, Over and Munn, Gilbert Parfitt, Pratt and Rose, and Frank Rattan.

The members of the committee for the decoration of the approach to the Parliament Building on the event of the visit of Their Majesties to Winnipeg, are the Hon. A. MacNamara, chairman, the architects Gilbert Parfitt, Edgar Prain, John Russell and M. S. Osborne with the general secretary, Dean D. S. Woods. The present scheme calls for an avenue of huge banners leading from Portage Ave. down the Mall to the Parliament Building.

The sixth annual Beaux-Arts Ball of the Department of Architecture and Fine Arts was held in the studios of the department, on February 24th. The walls of the drafting roome were covered with red, blue and yellow paper and decorated with modernistic symbols. The costumes were designed to represent the title of a book, a play or a popular song. Prizes were given for the most unusual and original costumes. Guests included the members of the council of the Manitoba Association of Architects and the staff of the Faculty of Engineering and Architecture.

Construction on a new hotel building designed by the firm of Green, Blankstein, Russell and Ham, is proceeding on the corner of Portage Ave. and the Mall in Winnipeg. This is a corner of great importance and should offer excellent opportunities for a design of a building that will be an impressive approach to Portage Ave. from the south.

— *Milton S. Osborne.*

ONTARIO

Signs are appearing to encourage the belief that the sap is again rising in the architectural tree. Tenders are being taken on a number of fair-sized projects, and work has been started on the wrecking of the old *Mail* Building in Toronto, preparatory to the erection of new premises for the Bank of Montreal. The greater part of the profession, however, has had sufficient leisure to attend the conferences, annual meetings and get-togethers of one sort and another which have featured the past few weeks.

The annual meeting of the Ontario Association was held at Hart House, Toronto, and produced so little excitement that the only flurry we can remember was caused by an item in the accounts, bearing the mysterious label "Miscellaneous". But the discussions of architectural trends and the virtues (or otherwise) of modern design and symbolism, for which we were indebted to our visitors from across the border, came as a stimulating reward for duty done. At luncheon, in the Great Hall, Francis Keally, A.I.A., of New York, was interviewed by John M. Lyle. The annual dinner at the Arts and Letters Club was very well attended; and the guest speaker, Henry H. Saylor, A.I.A., F.R.G.S., associate editor of the *Architectural Forum,* entertained us with a most provocative—not to say disturbing—address on the future course of architecture.

These two gentlemen, with R. H. Macdonald, President of the P.Q.A.A., were the judges of the Toronto Chapter Exhibition, which was formally opened by the Governor of the Bank of Canada, Graham F. Towers. The show itself could not, of course, be expected to live up to such a headline as that which appeared in a Toronto daily—"Fair Models at Exhibition of Architects"—but future exhibitions may, perhaps, benefit by the idea.

Of the annual meeting of the Institute, which took place at Ottawa, we can only speak at second-hand. But we are told that the Ottawa Chapter positively outdid itself in the general arrangements and entertainment, setting up a standard which will put other centres "on their toes". Among the more serious items of business we note the election of two Ontario men as Fellows—Eric Haldenby and Forsey Page. Congratulations to both.

The National Conference on Housing, held at Toronto, did not produce very much of a positive nature. One of the most interesting discussions concerned the experiment at Tomkinsville, N.S., where a number of really good houses have been built to sell on monthly payments of $9.65, which includes interest, taxes and amortization. In general, however, it would appear that much remains to be done before public apathy will be sufficiently undermined to make real progress possible. All of which lays a heavy social responsibility upon the profession, as the President of the R.A.I.C. pointed out in his address to the annual meeting.

— *Gladstone Evans.*

QUEBEC

The re-opening of the Erskine and American United Church, after extensive remodelling and additions had been carried out under Nobbs and Hyde, Architects, formed the occasion for a special "Builders' Service" on January 15th in honour of all who participated in the work.

Those taking part in the ceremony included the architects and engineers, whilst about 200 workmen with members of their familes were present at the service and the reception that was held afterwards. This mark of appreciation shown by the Church and Building Committee of the good work done by the craftsmen was an appropriate gesture and one to be encouraged.

It is also to be noted that a small bronze plate has been placed in the new Y.M.C.A. Memorial Chapel by the donor to commemorate the work of the leading craftsmen employed in executing the work at the building. Their names appear under the inscription: "In the handycraft of their work is their prayer".

Notices have been sent out of the Spring Exhibition to be held at the Art Association March 9th-April 2nd, and Mr. P. Roy Wilson, A.R.C.A., has been appointed to the jury to judge the architectural exhibits.

The Annual Meeting at Quebec, at which Mr. R. H. Macdonald was elected president, passed off well and was well attended. Past President Joseph P. Ouellet was presented with the Association's medal for long and distinguished service to the profession. An interesting "side show" in connection with the Convention was the exhibition of photographs of "Vieux Quebec" at the Ecole des Beaux Arts. This Exhibition was held under the patronage of the Lieutenant-Governor of the Province, who was the principal guest at the official luncheon, and the Honorable Maurice Duplessis, Prime Minister.

At the last executive meeting of the R.A.I.C. a complete record of the history of the Institute was presented by Mr. Alcide Chausse. The esteemed Honorary Secretary has held this position since the inauguration of the Institute in 1907, and no one is better qualified to compile the facts that have been set down in this record. Copies of this useful history of the R.A.I.C. history will be kept at both the Toronto and Montreal offices.

Messrs. J. Cecil Macdougall, Hugh Jones and Harold Lawson acted as judges in connection with the R.A.I.C. Students' Competition at the School of Architecture, McGill University.

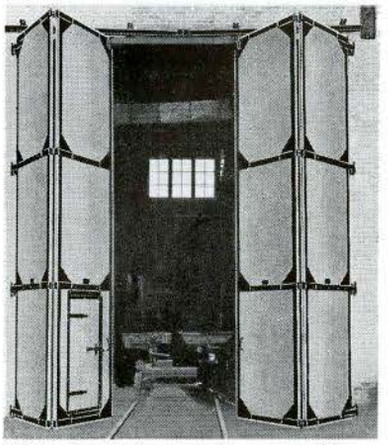
More than 100 views of park systems, parkways and pleasure driveways in various European and American cities have been on exhibition recently in the Art Gallery, Sherbrooke Street West. The show marked the first Montreal Metropolitan Commission-sponsored exhibition, and was officially opened in the presence of 200 invited guests. Explanatory comments on the views were made in French by Eugene Beaudouin, internationally-known town-planning authority and architect of Paris, and translated into English by Louis Francoeur, director of the commission's planning and research department.

Shown for the first time and one of the leading features of the exhibition was an aerial mosaic of the island of Montreal. This was assembled from photographs taken by the Royal Air Force. Also shown was a military map of the island and district. This exhibition could have been made more attractive and less dull to the general public had it been supplemented with more aerial and other photographs.

It is gratifying to note that Mr. Douglas C. Winter has been appointed one of the Assessors for the City of Montreal.

— *Philip J. Turner*

INDUSTRIAL DOORS



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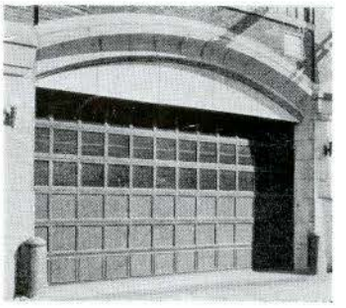

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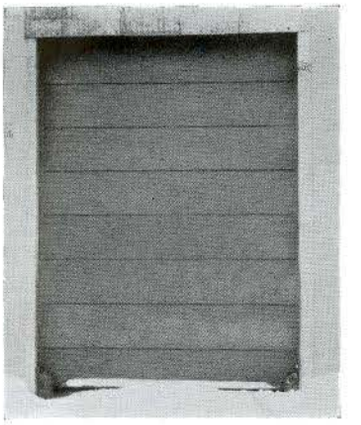

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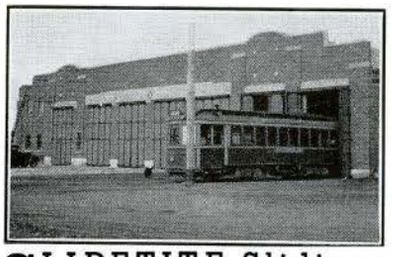

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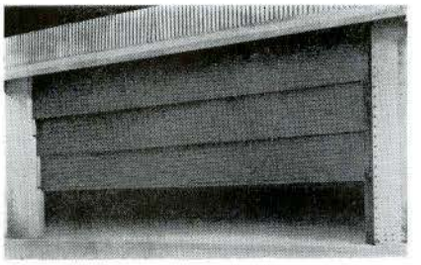

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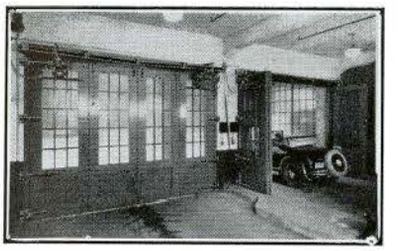

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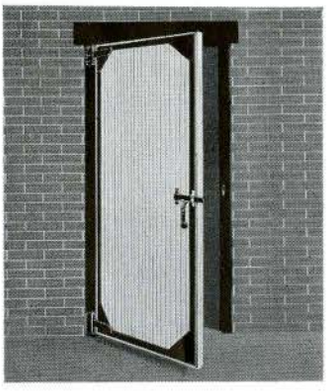

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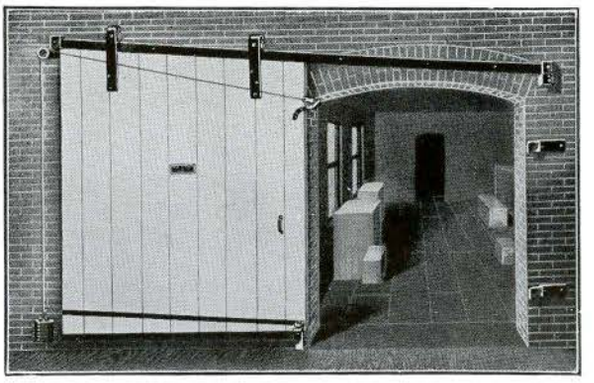

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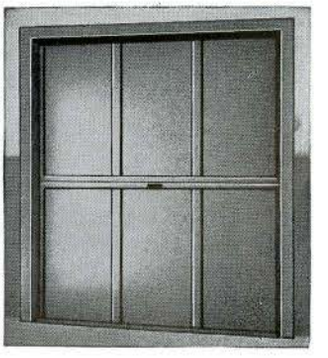

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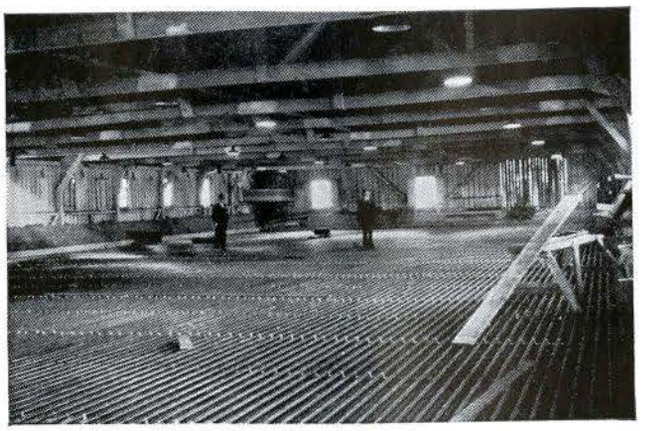

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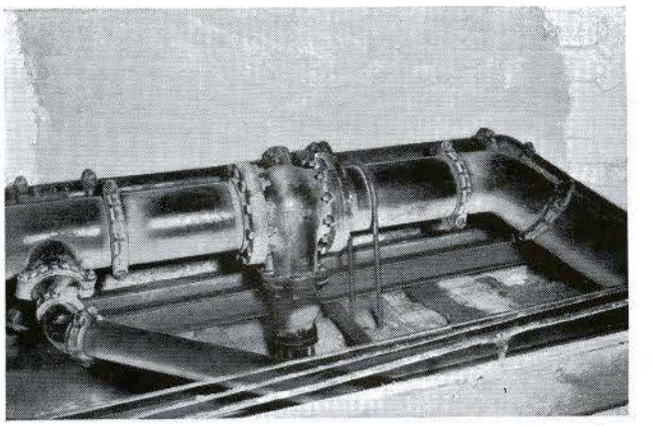

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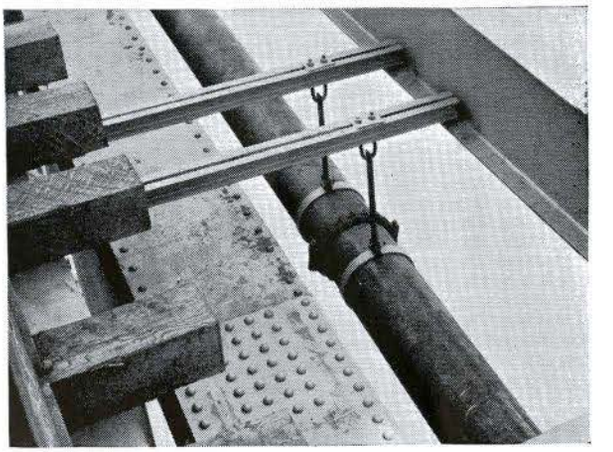

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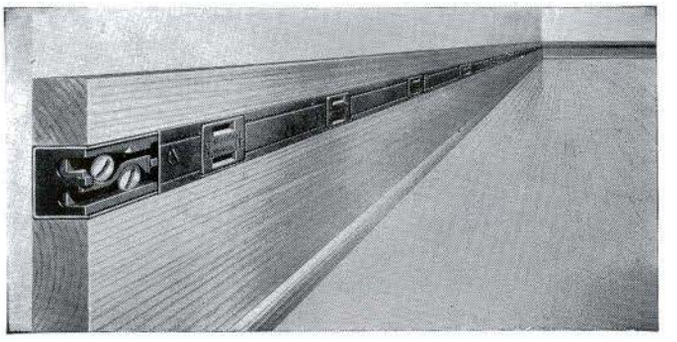

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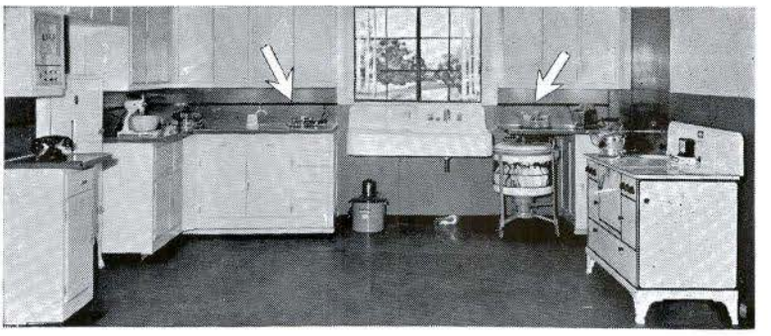

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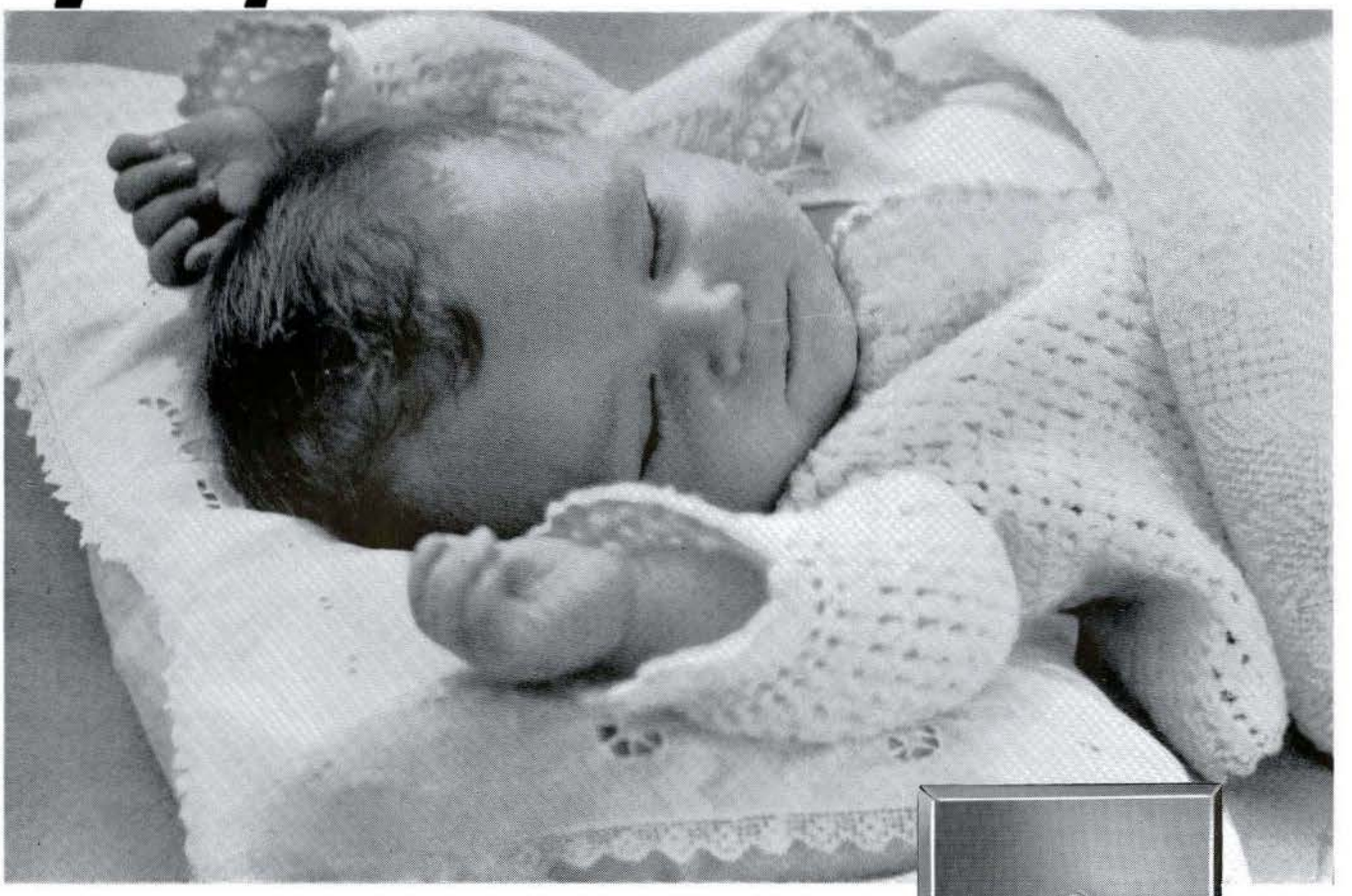

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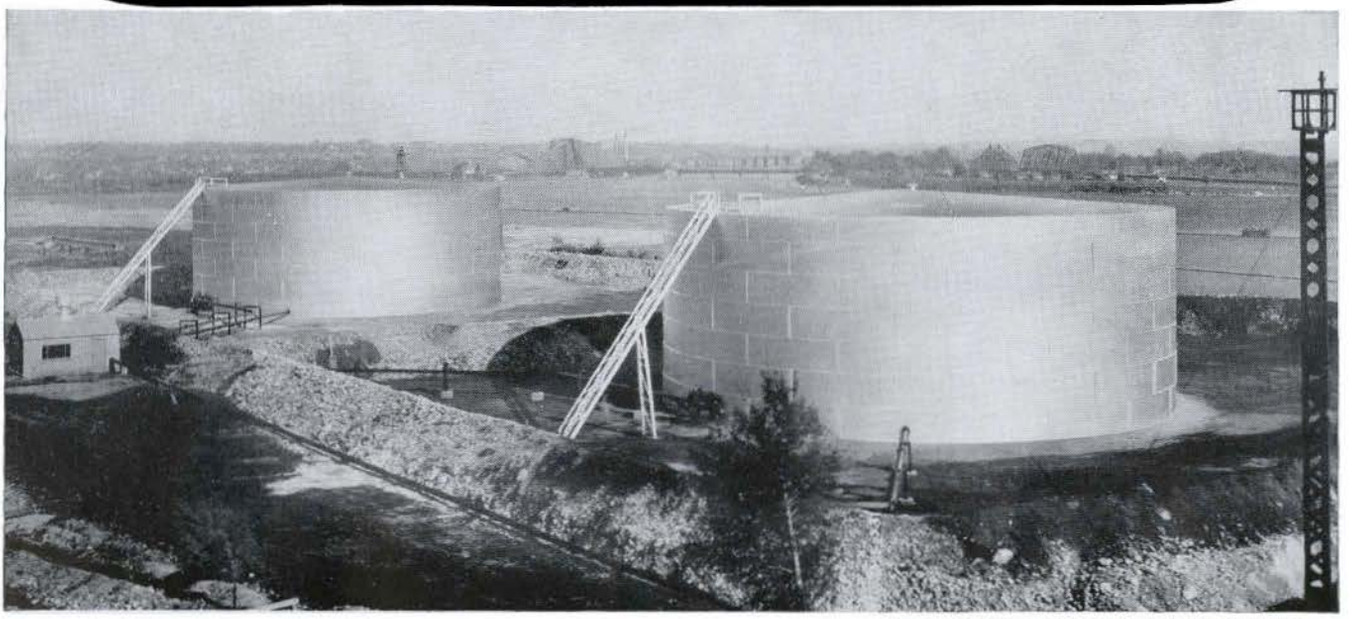

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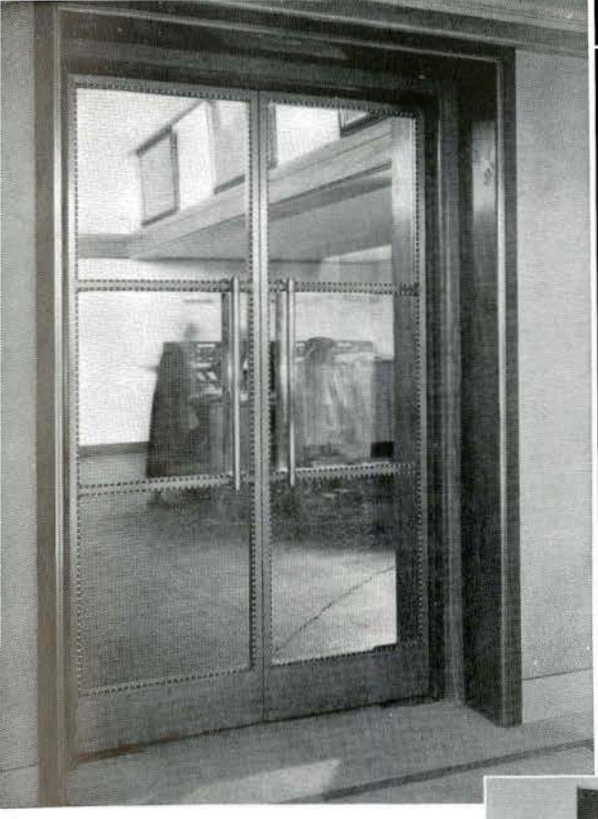

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(RIGHT) *The doors of the Henry Jarvis memorial room are of Nickel Silver and glass.*

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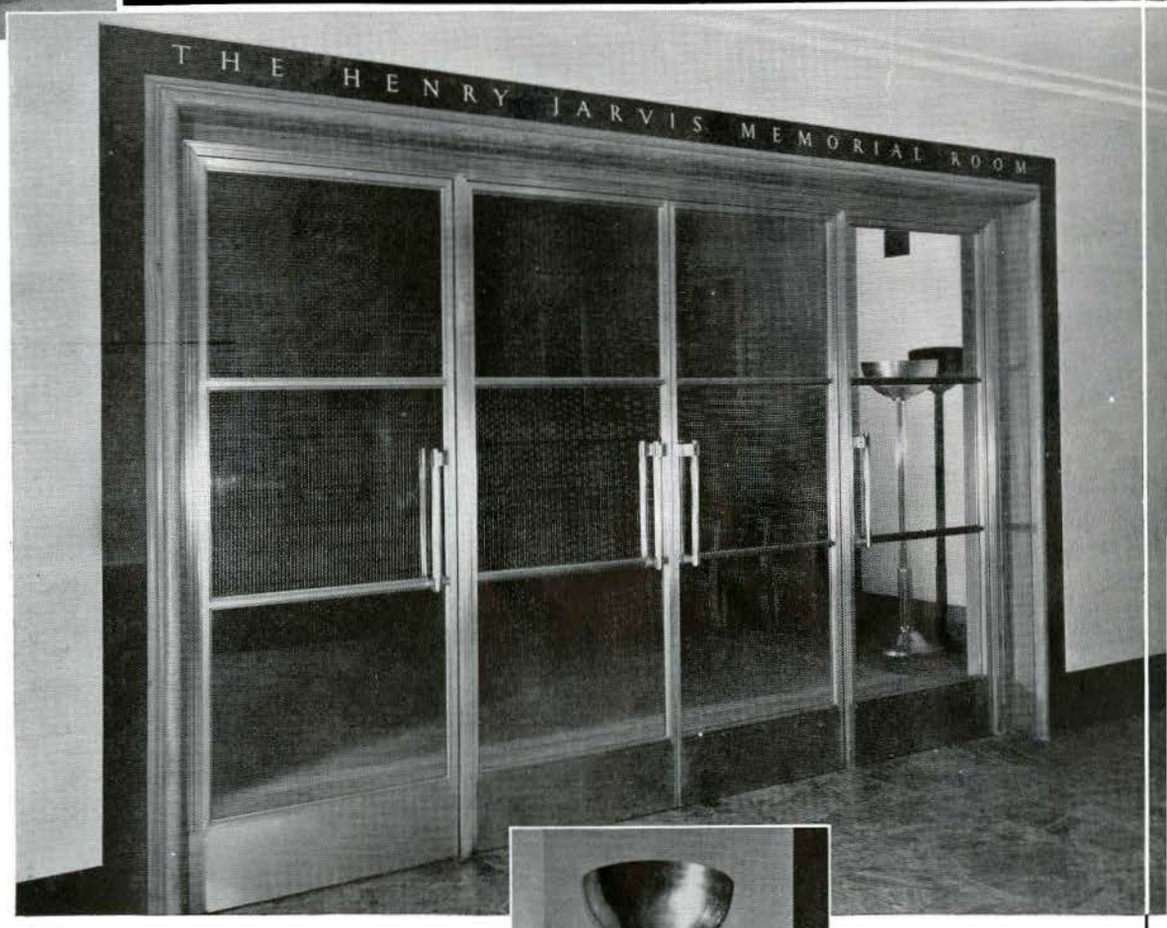

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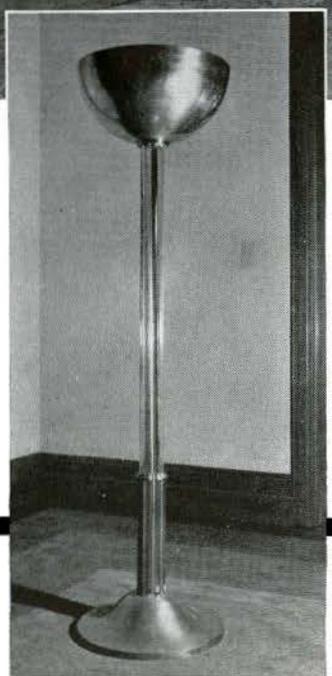

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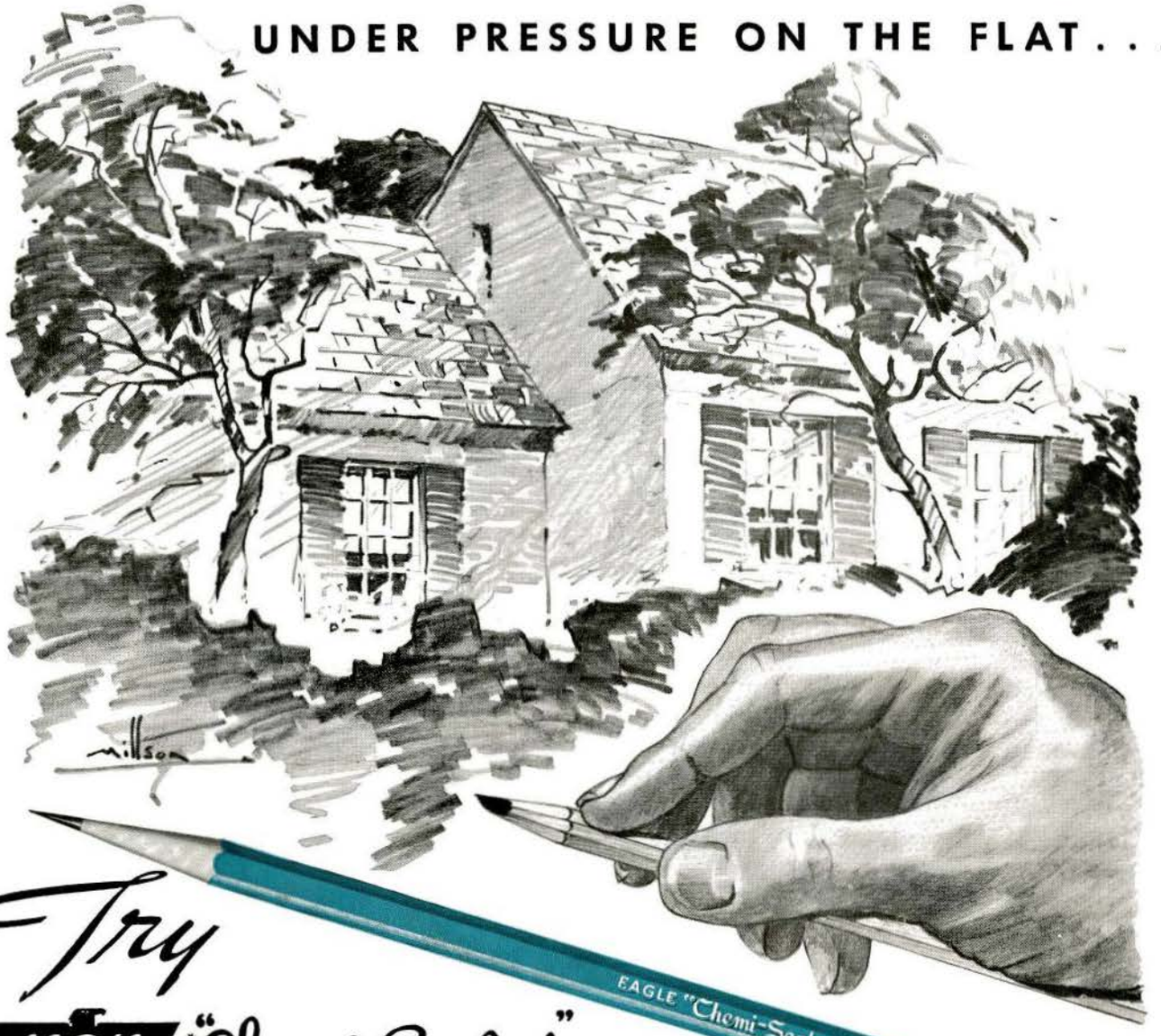

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