

PRESIDENTIAL ADDRESS

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(Read October 14, 1940)

A year ago we had with us at our Annual Meeting a member who for more than fifty years had given to the Institute his time and devotion. Mr. Piers took an active part in the discussions of that meeting. Little did we realize that his place would soon be vacant. The sense of loss which the Institute feels was expressed in a motion passed at the February meeting. This motion is published in the Proceedings. It is fitting to add here that in the years I have served on the Council with Mr. Piers, I have valued greatly his critical faculty which has acted as a brake on the impetuosity of us newer members, often to the advantage of the Institute. The flavour of our meetings will in the future lack the salt of his personality.

It is customary for the President in his annual address to sum up the year's activities and development with comments of a constructive nature for guidance in the future.

During the year under review there were elected five ordinary members, one associate member and eight student members. Evidently one of the duties of the incoming Council should be a drive for increased membership. Certain people interested in science would undoubtedly join if the present advantages of membership were brought to their attention. Others would become members if the meetings were made sufficiently attractive.

At the six ordinary meetings held during the year, there were presented 13 papers and 3 demonstrations. The papers were distributed among the sciences as follows: three in biochemistry, two each in physiology and ichthyology and one each in bacteriology, botany, industrial chemistry, physical chemistry, embryology and physics. The attendance at these meetings ranged from 13 to 30 with an average of 23.

To increase the value and attractiveness of ordinary meetings, the Council is experimenting with the serving of

refreshments after the programme of the evening. It is to be hoped that worth-while informal discussions will be developed over the tea cups. This innovation was started successfully last year and will be tried again this year. Whether refreshments take a permanent place at our meetings depends on the results.

During the last two decades the activities of the Institute have been becoming more and more concerned with specialized science, its membership composed very largely of professional scientists. It is to be remembered that our society began as a Mechanics' Institute. It has been suggested by several scientific laymen that we include on the programme of each ordinary meeting one paper of a general nature, or a demonstration, that they could understand. They made it plain that it was not desired that the presentation of original research be curtailed. They wanted to know what was being done scientifically even if it were over their heads. However they did want to come from a meeting with a sense of intellectual gain.

It was also brought to my attention that a similar organization in another city performed a service for, and stimulated the interest of, mechanics and others who encounter applied science in their work but who do not have a college education. They conducted a question period after the programme of the meeting where one could ask the professional scientists questions arising out of one's work or reading—such questions as definitions of octane number, conductance or hybrid vigour, what happens in the tempering of steel or is it really necessary to watch one's vitamins. These, by the way, are only a few of the questions which have actually been put to me during the year. Such a project would necessitate the presence at each meeting of experts representative of the various sciences.

Among the military, naval and air men stationed in the Halifax area, there are undoubtedly some who would find our meetings interesting. The Council has appointed a committee to investigate the best method of inviting such members of the services to attend our ordinary meetings.

It is recognized that the meetings of the Institute are valuable chiefly to those in Halifax. The Proceedings, on

the other hand, are of value throughout the Province. We like to think of them as our contribution to the scientific world. They are abstracted in the great abstract journals. Through our extensive mailing list they have been made available in every center of scientific activity in the world. The war has curtailed their distribution for the present, but we are storing sufficient copies to complete broken files when the war is won. The widespread distribution of the Proceedings is of decided value to the Institute and Province because in return we have obtained exchanges which now constitute a great proportion of the accessions of the Provincial Science Library, making it in some respects unequalled in Canada.

In 1929, following the death of Dr. A. H. MacKay, I was appointed his successor as Editor of the Proceedings. Since then I have seen twelve yearly numbers through the press. Part 2 of volume XX is now printed. I am told by the printers that it will be ready for distribution tomorrow. It is with an almost paternal reluctance, yet relief, that I herewith announce my retirement. The Editorship has involved much time and thought. I desire here to thank the Institute for the free hand it has given me in this work and for the kind appreciation with which, as an organization and individually, you have rewarded my efforts. I wish also to thank the members of the Editorial Board for their constant support and valuable assistance.

Your Council has had a very strenuous year with ten meetings. Beyond the efficient handling of the customary business, they have spent much time in drawing up the By-Laws of the Institute. A committee, composed of Dr. Weld, Dr. Hayes and your President, reviewed the regulations on the pages of the minute books and then proceeded to draw up a new code. Finally each item was carefully considered by the Council. This revision was completed in April. The combined Constitution and By-Laws were printed together in pamphlet form and mailed to each member during the summer.

The Institute, by reason of its long and intimate connection with the Provincial Museum, has always been deeply concerned

with the state of the latter. Last November a committee, composed of Dr. Henderson, Dr. Hayes and your President, was appointed to study the problem. This committee brought to the December meeting a motion requesting the Government of Nova Scotia to make adequate provision for the museum and to provide for a Museum Commission to administer its affairs. This motion was passed unanimously and is printed in full in the Proceedings. In support of this action the same committee prepared a memorandum. This was forwarded to the Government. It discusses in detail the views of the Institute as to the aims and policy of the Provincial Museum. Since this memorandum expresses our views and aspirations in respect to the museum, it is desirable that it be put in permanent form. Consequently, I embody it in this address. It reads as follows:

The Nova Scotian Institute of Science has for some years been much concerned over the overcrowded condition of the Provincial Museum in an unsuitable and non-fireproof building. It seems probable that before long a general reorganization of the Museum, not only in respect to staff, but to general aims and purposes, may be necessary. In any case, the Institute feels that a general policy in respect to the management and future development of the Museum should be formulated in the near future and with this in view considers that the best interests of the Museum would be furthered by the establishment of a commission under the authority of the Minister of Mines with the duty of formulating the policy and of administering the affairs of the Museum. It is suggested that this commission be composed of members selected from the following:

- Deputy Minister of Mines, Ex-Officio Chairman
- Deputy Minister of Public Works
- The Superintendent of Education
- The President of the Technical College
- The President of the Agricultural College
- Two nominees of the Nova Scotian Institute of Science
- One nominee of the Maritime Universities' Conference
- One nominee of the Nova Scotia Historical Society
- The Provincial Archivist
- One or two private citizens such as Dr. F. W. Gray, etc.

In order to make clear the views of the Institute, it is thought that a rather detailed statement will be pertinent and helpful. These

views may be classified under the following headings: (1) the purposes of the Museum, (2) the qualifications desirable in a curator, (3) the housing of the Museum and (4) the relation between the Museum and the Institute.

1. *The Purposes of the Provincial Museum.*

A museum serving the Province as a whole must have a multiplicity of services to perform. S. F. Markham, in his report on the Museums of the British Isles, has stated that the main functions of a museum are conservation, research and visual education. The first great function of the museum is to collect and conserve in an unimpaired state objects of scientific importance as a heritage for future generations in this Province. If conservation be the first function of museums, then research is of almost equal importance, for in this one word is combined the study of the collected objects, whether by the Museum staff or by visiting scientists; the classification of material; and the publication of the results achieved. The treasures of the Museum should be identified, labelled and arranged in such a way as to make them reference collections of original material, forming a comprehensive survey of all the natural resources of the Province. The third function is visual education, and in this capacity the museum can teach more about certain things in a few minutes than the best illustrated books or the most skillful of teachers can do in a much longer period. The Institute wishes to stress the fact that educational work should be a very important function of the Museum. It is unquestionably true that owing to overcrowding and lack of trained assistance this function has been inadequately fulfilled.

The Museum as it is now constituted contains many valuable specimens but owing to overcrowding cannot give the visitor a proper insight into the resources of the Province and the research worker material for study. The tourist interested in birds, minerals or other fields of natural history should be able to see without difficulty what the Province offers in the line of his special interest. The scientific worker, seeking, for example, the types of diatoms best suited for some special industrial application, should be able to get the necessary information without delay.

Other museums have found that visitors, both local and foreign, are attracted by seasonal displays of the common wildflowers of the region. This idea might be extended to include aquaria showing the game fish, hatching salmon eggs, etc., a collection of native snakes, exhibits of the mining and industrial life of the Province. The visitor should have an opportunity not only for asking questions concerning the exhibits but for advice as to points of scientific interest throughout the Province which he might wish to see for himself.

The Museum should take an active part in the intellectual life of the Province not only in holding lectures, moving pictures, etc., of scientific character but in arranging well selected and suitable collections to be loaned to schools or other interested bodies. A distinct effort should be made to distribute exhibits to town and rural schools. A group of named specimens of typical rocks of the Province with an accompanying map showing where they are to be found would teach school children much concerning their Province. Many children would appreciate a view of a case of the common birds accompanied by a map showing their migrations. These are but random examples of what can be done in an educational way by the Museum.

Moreover, the Museum should take an active part in the scientific utilization of the resources of the Province, particularly by bringing essential data to the attention of those who can best make use of them. For example, the Museum should be so organized as to be able to notify the N. S. Economic Council of the presence of valuable resources which could be developed to the benefit of the Province.

In conclusion, the Museum must be alive, modern, scientific and interesting, a pride to the citizens and an attraction to visitors.

2. Qualifications Desirable in a Curator.

Looking to the time when it will be necessary to appoint a new curator, the Institute feels that it will be of help to point out now, for the information of those responsible for the appointment, those qualities which would make for the best interests of the Museum and of the Province. The ideal qualifications have been set down by Sir Henry Miers and are so multitudinous that it is doubtful if all can be combined in one man. Primarily he should be a university graduate trained in science and with experience in research and instruction. He should have good administrative ability. The collecting type of mind is necessary if the museum is to grow, and judgment is needed to build up the museum as a whole. It is not necessary that he be an expert in all lines of science but, the more fields in which he has had some experience, the wider the acquaintance he has among scientists of all brands, the more valuable he will be. He need not know all the facts, but he should know where to look or inquire for them. The ability to convey his knowledge in an interesting and understandable manner is desirable. He should be familiar with the technical methods for the recording and preservation of scientific specimens. Perhaps we can best express our opinion as to the type of man required by suggesting that he should, in his sphere, hold a position corresponding to that of the Provincial Archivist, with like salary, rank, staff and responsibility.

3. *The Housing of the Museum.*

The overcrowding of the Museum is too well known to require more than the plea that, as soon as it is possible, provision be made for more space. May we quote from the 1932 report of Sir Henry Miers on "The Museums of Canada": "The only bright spots in the Maritime Provinces are the new museum at St. John, the Archives at Halifax, and the Provincial Museum at Halifax, which last, though congested and disordered, contains much material and might be made into a good museum." By some rearrangement of material, the collections might be made more attractive but the ideal, and, we believe, the final solution must be in the erection of a fireproof museum building comparable to that of the Provincial Archives on the Dalhousie campus or the Saint John City Museum at Saint John, N. B. In most cities the museum has to fill the dual purposes of containing both scientific and historical exhibits. In this Province the situation is unique in that there already exists the splendid Archives building whose entire contents would otherwise have had to be accommodated in the Provincial Museum. This relieves a considerable amount of pressure on the Museum, and it could be, therefore, logically expected that the Provincial Museum should devote most of its space and attention to scientific exhibits without altogether neglecting such historical exhibits as cannot be housed in the Provincial Archives. A building suitable for the needs of the Province should contain rooms for special exhibits, accommodations for the safe care and preservation under glass of the systematic collections, small laboratories for the study and identification of specimens, a lecture hall and suitable offices for the staff and visiting scientists. It should contain large storage space because only a fraction of the contents can be effectively displayed at one time. There should be ample accommodations for reading room and stacks for the Provincial Science Library. The Science Library should be an essential part of any museum, and we are very fortunate in possessing in the present library a collection which in some respects is unequalled in Canada. These facilities would establish the Museum as the scientific center of the Province.

4. *The Relation between the Provincial Museum and the Institute of Science.*

The Institute of Science takes special pride and interest in the Museum, which is its offspring. Both organizations have a common scientific interest and are closely connected through long years of intimate association. Needless to say the Institute is prepared to cooperate with the Museum to the fullest extent. If the Museum had a suitable lecture hall, it would be the natural place for the

meetings of the Institute. Public lectures and exhibitions by the Institute might well be a part of the Museum's functions. A great proportion of the accessions to the Provincial Science Library come through the Institute. The Proceedings of the Institute is the natural place for publishing the scientific observations and discoveries made by the staff of the Museum or by scientists attracted by the collections and facilities of the Museum. Through a proper organization of the Museum's activities, its relationship with the Institute should be strengthened and the value of both to the Province enhanced.

In 1918 Mr. Matheson assumed the duties of Treasurer of the Institute. How well these duties have been performed, is evidenced by the present excellent state of our treasury. Now Mr. Matheson has asked me to announce that he is not offering for reelection. I am sure that the Institute loses deeply by this decision. The Council, especially, will miss his sound financial sense and canny advice.

Now that I have reached the end of my term of office as your President, I still have a duty, a pleasant one, to perform. I wish to thank you each one, members of the Institute, for the help and inspiration you have given me through these two years. The members of the Council especially have given whole heartedly of their time and thought to the common good. Though the President may not offer a motion, the Council deserves your hearty vote of thanks.