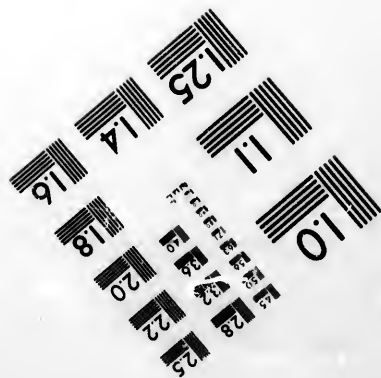
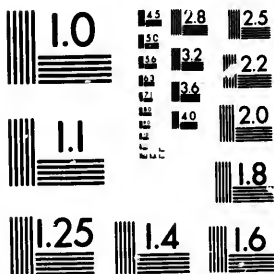


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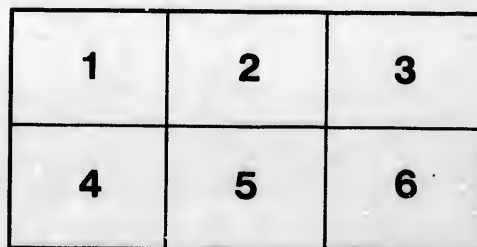
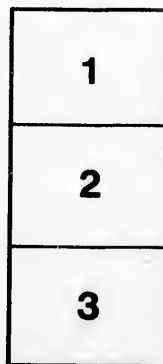
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859

Report on the State of the Principal Museums in Canada and Newfoundland. By HENRY M. AMI, M.A., D.Sc., F.G.S., of the Geological Survey of Canada, Ottawa.

[Ordered by the General Committee to be printed *in extenso*.]

THE following report on the state of the principal museums in Canada and Newfoundland is based upon information contained in a correspondence between the Director of the Geological Survey Department at Ottawa (Dr. Dawson) and the curators or officers in charge of the several museums, who very kindly supplied the information desired.

The four following points in connection with museums received particular attention :—

1. The approximate number of specimens classified and displayed in each museum.
2. The relative importance of collections in geological, mineralogical, botanical, zoological, ethnological, or other classes of material.
3. Any special collections acquired from individuals included in the museum.
4. Types of species (if any) preserved in the museum, with the name of the describers.

The order in which the several museums are presented is *geographical*. Beginning with the most easterly one, the Museum of the Geological Survey of Newfoundland, St. John's, Newfoundland, and closing with the Provincial Museum of British Columbia, Victoria, British Columbia.

The principal object in view in preparing this report was to gather definite information regarding the amount of material at present housed in the various museums of the country, and thus enable the Director of the National Museum at Ottawa and others, to whom applications for information are constantly coming in, to give satisfactory replies.

The report consists of a consecutive list of museums in Canada and Newfoundland, including only the principal ones known to the Department, with brief descriptions or abstracts of the contents of the different museums enumerated.

Brief descriptions and notes on fifty private collections in Canada are also added.

This report does not profess to be complete in every respect. The information presented, however, has been obtained from the most reliable sources available—from official letters sent by the curators or officers in charge of the several museums addressed, or from published papers and reports on the contents of museums in the different provinces.

The thanks of the writer are due to Dr. G. M. Dawson, Director of the Geological Survey Department at Ottawa, for many valuable suggestions and kind offices in preparing this report.

Geological Survey of Newfoundland.—Contains about 3,000 specimens, of which 2,000 at least are arranged and classified, to illustrate the economic and natural resources of this colony. The mineralogical cabinets comprise 600 specimens; the palæontological and geological

collections include 850 specimens; whilst the collections of birds, fishes, shells, &c., number together 426 specimens. There is an herbarium of the plants of the island, prepared by Professors B. L. Robinson and H. Schenck, of Harvard. Economic exhibits of the fisheries (seal and fish-oil, &c.) of Newfoundland. There is also a fair collection of ethnological specimens, besides a numismatic collection. Museum, in charge of J. P. Howley, Esq., F.G.S., Director of the Geological Survey of Newfoundland, and supported by the legislative grant, is located in St. John's, Newfoundland, in the Post Office Building.

Provincial Museum, Halifax, Nova Scotia.—Contains about 10,000 specimens. The geological cabinets include: Minerals, 1,000 specimens; rocks, 300 specimens; fossil organic remains, 2,000 specimens, for the most part collected and arranged by the late Dr. D. Honeyman. The zoological department includes 1,500 specimens, and the botanical collection is that prepared by Dr. Henry How. Museum supported by grant from the Legislature of Nova Scotia, and in charge of Dr. E. Gilpin, F.G.S., Commissioner of Mines for the province. Located in a large room, 80 feet by 20 feet, in the uppermost storey of the Halifax City Post Office, the property of the Dominion Government. Types. Contains a few types of fossils described by Dr. Honeyman and the type specimen of a giant squid described by Professor A. E. Verrill. Curator: Dr. E. Gilpin, M.A., F.G.S., Halifax, Nova Scotia.

The University Museum, Dalhousie University, Halifax, Nova Scotia.—Contains upwards of 1,600 specimens, classified and arranged for the use of students and professors. Of 700 specimens in the zoological collection the native birds of Nova Scotia form an important part. The geological cabinets comprise a good series of Nova Scotian minerals, Nova Scotian carboniferous fossils, and European cretaceous fossils, 450 specimens in all. The Patterson collection of archaeological remains from various parts of Nova Scotia and Prince Edward Island is of considerable importance: it includes 330 pieces. The Thomas McCulloch collections comprise birds, rocks, fossils, minerals, and plants. An herbarium illustrating the flora of Nova Scotia is in course of preparation. Supported by the University authorities and by the Thomas McCulloch fund of \$1,400 given to Dalhousie in 1884. The Rev. Dr. Forrest, principal, and Professor E. Mackay, pro-curator, in charge, Halifax, Nova Scotia.

Acadia University Museum, Wolfville, Nova Scotia.—Contains upwards of 5,000 specimens, neatly arranged and classified for the use of students and professors. The geological cabinets include 504 specimens of minerals, 365 rock specimens, and 800 fossil organic remains. The zoological collections comprise 690 specimens, divided as follows:—*Ornithological*: birds, birds' eggs, and their nests, 300 specimens. *Conchological*, 300 species, besides a large number of marine invertebrates. In the herbarium we find nearly all the plants occurring in New Brunswick, presented by G. U. Hay, of St. John, N.B., besides collections from various parts of the province and from foreign countries. There is also a small ethnological collection. The zeolites, amethysts, and trap rocks from Blomidon are of local and special interest. There is also a fair collection of coins. Curator: Professor A. E. Coldwell, M.A., Wolfville, Nova Scotia.

King's College Museum, Windsor, Nova Scotia.—For the use of students. Contains 5,500 specimens. The mineralogical cabinets hold the first place; the botanical collections come next. The next important individual collection is the Cosswell Herbarium of phæno-

gamous and cryptogamous plants from Great Britain. Supported by the Senate of King's College. Acting Curator : Professor F. W. Vroom, Windsor, Nova Scotia.

Pictou Academy Museum, Pictou, Nova Scotia.—Includes a very good and fairly complete collection of the birds and mammals of the county of Pictou, an herbarium, and a cabinet of geology illustrating the minerals of Nova Scotia, with special reference to the coals, iron ores, and fossil remains of Pictou County. Enriched by numerous collections made and arranged by Dr. A. H. Mackay, Superintendent of Education for Nova Scotia, and a past principal of the Academy.

Natural History Society of New Brunswick Museum, St. John, N.B.—Contains about 15,000 specimens, arranged and classified. The Gesner Museum of Geology, &c., is included in the same building. Geological collections comprise 1,400 specimens of minerals, upwards of 1,000 specimens of fossils, and the zoological department, embracing collections of birds, fishes, reptiles, mammals, insects, shells, birds' eggs, and birds' nests, contains 3,741 specimens in all. There is a good herbarium, comprising about 6,500 sheets, 1,500 New Brunswick phanerogams and cryptogams, and 5,000 phanerogams, foreign, European, West Indies, United States, Canada. About 600 specimens in the archaeological cabinets and 200 in the ethnological series. The palæontological collections are chiefly those of Dr. G. F. Matthew and of the late Professor C. F. Hartt.

Type specimens of fossil organic remains from rock formations in the vicinity of St. John, &c., described by Dr. Matthew, Professor S. H. Scudder, Mr. C. F. Hartt, and Sir J. W. Dawson are carefully preserved in the cabinets of this museum.

'The most valuable,' Dr. Matthew writes, 'are the types of the Devonian plants collected by Hartt and described by Sir William Dawson.'¹ There are here also the types of the fossil insects described by Dr. S. H. Scudder that were collected by Hartt.' Also some few other types and a good many typical fossils of various formations. The museum is housed in six rooms on the second floor of St. John City Market, Charles Street. The society receives a small annual grant from the New Brunswick Legislature. Curators of the Museum : Dr. G. F. Matthew, Samuel W. Kain, Esq., A. Gordon Leavitt, Esq.

The University Museum, University of New Brunswick, Fredericton, N.B.—Organised about 1836 by Dr. James Robb. The approximate number of specimens classified and displayed to-day in the museum is 2,800, of which about 1,300 belong to the geological collections of minerals, rocks, and fossils from various parts of New Brunswick and other provinces of Canada, Europe, and the United States. There are 1,495 specimens in the zoological cabinets, including birds, birds' eggs (representing 250 species), reptiles, crustaceans, fishes, insects, molluscs, and star-fishes, &c., most of which are the gift of foreign institutions and societies. There is also the nucleus of a small archaeological collection, including pipes, pottery, and stone implements from New Brunswick, with a few from the United States. The economic mollusca, the Cambrian fossils of St. John, New Brunswick, and the ornithological collection by Messrs. Ganong, Matthew, and Adney respectively comprise the most conspicuous and

¹ See *Reports on Fossil Plants of the Devonian and Upper Silurian of Canada*. Geological Survey of Canada, Montreal, 1871.

special collections. Curator: Professor L. W. Bailey, M.A., Ph.D., F.R.S.C., Professor of Geology, University of New Brunswick.

Muséum de l'Université Laval, Québec, Quebec.—The nucleus of this collection, which now amounts to 35,000 specimens, arranged and classified, was the old 'Cabinet de Minéralogie' of the Quebec Seminary. The mineralogical cabinet to-day comprises more than 4,000 specimens. Of special interest is a collection of minerals made by the Abbé Haüy for the Quebec Seminary. Besides 1,000 specimens of rocks, determined by Dr. Sterry Hunt, the geological collections include upwards of 1,000 fossil remains, some from Canada, determined by the late Mr. E. Billings and by Dr. H. M. Ami, others from the late Abbé Joachim Barrande, of Bohemia. The zoological collections include 17,000 specimens: 1,200 mammals, 14,000 insects, and 2,000 shells from various parts of the world. The botanical collections, including l'Abbé O. Brunet's herbarium, named by Gray, Hooker, Engelman, and Michaux, comprise upwards of 10,000 sheets. Herbaria, by Hall, Parry, Harbour, Geyer, N. Riedl, Leidenberg, Vincent, Moser, Smith, Durand, Nuttall, and Rafinesque are also included in the botanical collection at Laval.

The dried specimens of plants are supplemented by an excellent collection of woods from Canada and foreign countries.

An archaeological and ethnological collection of about 1,000 pieces, prepared by Dr. Joseph Charles Taché, for the most part illustrates the manners and customs of the Huron aborigines and Indians of North-East America. The numismatic collection contains some 3,000 coins and medals.

The 'Lea collection' of Unios, the Macoun collection of North-West Canadian plants, the St. Cyr Herbarium of Quebec, the Dr. Ahern collection of Quebec fossils, form some of the more conspicuous collections in the museum of the University. Curator and Rector: Very Rev. Mgr. J. C. K. Laflamme, P.A., F.R.S.C.

Muséum de l'Instruction Publique, Québec, Quebec.—Contains 32,450 specimens, neatly housed, but uncomfortably overcrowded in a portion of the uppermost storey of the Provincial Parliament Building, Quebec. The local Legislature has given a small annual grant to the curator for the support and maintenance of this museum for a number of years. The geological collections consist of 3,500 specimens of minerals and 780 fossils. The zoological collections amount to 4,430 specimens as follows: Mammals, 60; birds (mounted), 46; birds (skins), 514; birds' eggs, 271; fishes, 65; mollusca, 3,480. The entomological collection is large and contains 15,670 specimens, including as it does l'Abbé Provancher's type collections of Canadian insects, described and figured in his 'Faune Entomologique de Québec.' The St. Cyr Herbarium is very extensive, and includes an excellent series of the Quebec flora. It contains 7,870 sheets. Curator of the Museum: Mons. D. N. St. Cyr, Québec, Quebec

Muséum du Séminaire de Philosophie, Montreal, Quebec.—For the use of the students and professors. Contains about 6,300 specimens, of which 2,000 are geological (minerals and rocks); 1,500 palæontological; 2,810 zoological, besides a fair collection of botanical specimens for teaching purposes. Amongst the special collections we note one, 'Collection de Minéralogie faite pour le Collège de Montréal par les soins du célèbre Haüy, 1822.' Most of the fossils are European. Curator: L. Lepoupon.

Muséum du Collège Saint-Laurent, St. Laurent, near Montreal, Quebec.

Miscellaneous collections, comprising upwards of 18,000 specimens. Upwards of 1,000 specimens each of minerals, rocks, and fossils comprise the geological cabinets, and as many each of the zoological and botanical collections, according to the curator's report. The 'Crevier collection' of fossils from Montreal and vicinity and a numismatic collection form the most interesting special collections we note in this museum. Supported by private contributions and donations of friends to the Congregation of the Holy Cross. The collections are classed under twenty-five heads and in charge of the curator—Rev. Joseph C. Carrier, C.S.C., St. Laurent, Quebec.

Peter Redpath Museum of McGill College, Montreal, Quebec.—75,000 specimens, arranged and classified for the use of professors, students, and the general public in a large, well lighted, and commodious fire-proof building, built for the purpose, in 1882, by the munificent gift of the late Peter Redpath, Esq. The geological collections, including the Dawson collections of Devonian, Carboniferous, and Cretaceous fossil plants, of Pleistocene fossils, Microsauria, Eozoon, and many other types, and the Logan Memorial Collection include some 16,540 specimens, divided as follows:—Fossils, 8,000; minerals, 2,880; rock specimens, 5,660. The Holmes and Miller cabinets of minerals are included in the above figures. There are also excellent collections of petrographical slides. The zoological collections comprise 19,685 specimens as follows:—

	Specimens
Mammals	170
Birds	500
Birds' eggs	125
Reptiles	90
Fishes	200
Crustacea	300
Mollusca	7,500
Insects	10,000
Echinodermata	250
Annulata	100
Anthozoa	200
Protozoa and Hydrozoa	250

The University Herbarium consists of upwards of 30,000 sheets, and includes the Holmes Herbarium and the Macoun collections of Canadian plants, exhibited at the World's Centennial Exhibition, Philadelphia, in 1876. There are also representative collections from Australia, India, Japan, South Africa, South America, and Northern Europe. Specimens of the Canadian timber trees, as well as those of the United States and foreign countries, are included in the 'Economic Collection.' Botanical collections in charge of Professor D. P. Penhallow.

The archaeological and ethnological collections comprise some 1,200 specimens illustrating the implements, pottery, and weapons of the aborigines of Canada and foreign countries, besides Egyptian antiquities in the Dawson collection.

The 'Carpenter collection' of shells is a special feature, and contains many types. The Chitonidæ are of special interest. The McCulloch collection of birds is also worthy of note, besides the entomological collections of Messrs. Bowles, Cooper, and Pearson, acquired for the museum in recent years.

Types.—This museum contains numerous type specimens of species and

varieties of recent and fossil organisms described by Sir William Dawson, Professor James Hall, George Jennings Hinde, T. Rupert Jones, Joseph Leidy, O. C. Marsh, D. P. Penhallow, J. T. Donald, and P. P. Carpenter. Hon. Curators: Sir William Dawson, Dr. B. J. Harrington, Dr. D. P. Penhallow, Dr. F. D. Adams, Dr. W. E. Deeks, Peter Redpath Museum, Montreal.

Museum of the Natural History Society of Montreal, Montreal, Quebec.—Total number of specimens displayed and classified, 18,250. Of these the zoological collections comprise nearly two-thirds, viz., 11,220 specimens, as follows:—

Mammals (mounted)	150
Birds (mounted)	1,300 ¹
Reptiles (mounted)	50
Fish (mounted)	120
Shells, classified and labelled	4,000
Crustacea	200
Insects	5,000
Radiates	150
Corals and sponges	250
	<hr/>
	11,220

These 11,220 specimens, together with a botanical collection of Canadian and British plants, numbering 1,600 sheets, make up the total of 12,820 biological specimens. The geological collections comprise 1,500 rocks and fossils, besides 2,500 minerals, amongst which are some rare old finds. Of birds' eggs there is a collection of 160 specimens.

There is also the 'Ferrier collection' of Egyptian antiquities, presented in 1859; the 'C. U. Shepard collection' of minerals, numbering 600 specimens; and a rare collection of birds from the Malay Archipelago presented by H. J. Tiffin, Esq., in 1892.

The collections in this museum have been enriched from time to time by private donations, and much of the work in classification is due to Sir William Dawson, Mr. J. F. Whiteaves, the late Mr. E. Billings, and many others. This society received provincial aid for a number of years, but is now supported by the members of the Natural History Society of Montreal. Curator: J. B. Williams, Esq., 32 University Street, Montreal, Quebec.

Museum of the Geological Survey of Canada—the National Museum of Canada, Ottawa, Ontario.—Contains some 92,000 specimens, arranged and classified for reference. The finest and most complete collection of Canadian minerals, rocks, and fossils. The geological cabinets and cases include upwards of 14,000 specimens of minerals and rocks, illustrating the mines and mining industry of Canada, besides a typical collection of 16,000 fossil organic remains neatly labelled and classified, representing about 4,600 species, of which about 1,000 are the types of species described by the late E. Billings, and some 600 types described by Mr. Whiteaves. Other type specimens of fossil organic remains in the collection are the types of species established by Sir Wm. Dawson, Sir W. E. Logan, J. W. Salter, Dr. S. H. Scudder, Professor T. Rupert Jones, Professor E. O. Ulrich, Professor E. D. Cope, Professor H. Alleyne Nicholson, Dr. Henry Woodward, Professor James Hall, Dr. Arthur H.

¹ 600 of these are Canadian.

Foord, Mr. W. R. Billings, Dr. H. M. Ami, and Mr. L. M. Lambe. Among special suites may be mentioned fossils characterising the 'Quebec Group' of Logan and Billings from Quebec and Newfoundland.

About 150,000 specimens, illustrating the palaeontological characters of the various geological formations in Canada, from Atlantic to Pacific, and from the United States boundary line to the Arctic Circle, are kept for reference in the store-room and basement of the museum, together with a series of duplicate specimens for collections intended for educational purposes.

There is also a remarkably fine collection of Ordovician Crinoidea from the Trenton of Ottawa and Hull, and a fine series of Devonian fishes from Bay des Chaleurs, and the original specimens of *Eozoon canadense*.

The zoological collections comprise 15,000 specimens, including the 'Whiteaves collection' of shells, Atlantic and Pacific coast shells of British North America—corals, radiates, and sponges from various localities—besides birds, mammals, reptiles, and the 'Geddes collection of Lepidoptera,' chiefly Rocky Mountain and Canadian.

Types: North Pacific and N. Atlantic recent sponges described by Mr. L. M. Lambe; Mollusca, foraminifera and other invertebrates described by Mr. J. F. Whiteaves, A. E. Verrill, J. B. Smith, Alex. Agassiz and others.

Ethnological collection includes the 'Mercier collection' (chiefly N.W. Eskimo); the 'Herschfelder collection' of Indian remains from Ontario; the Powell collection of Pacific or West Coast Indians of British Columbia, besides various collections made by officers of the Geological Survey of Canada.

Madoc Meteorite, Thurlow Meteorite (pars) also in the collection.

The herbarium contains upwards of 80,000 sheets, of which 50,000 form the most complete collection of Canadian plants. Besides numerous types and co-types of Canadian species described by Hooker, Michaux, Torrey, Pursh, Gray, Watson, Kindberg, Robinson, Peck, and other botanists, the herbarium comprises large and representative collections from Great Britain, Scandinavia, Northern Russia, France, Germany, Switzerland, Austria, Italy, Greenland, the United States of America, including Alaska, Mexico, Australia, New Zealand, Natal, &c. There are also included the classic herbaria prepared by Menzies, Sir Joseph Back, Sir John Richardson, Douglas, Drummond, and other arctic explorers in the early years of this century, besides a complete collection of Canadian woods and a fair collection of the native fruits from the Atlantic to the Pacific. The herbarium is in charge of Professor John Macoun, Dominion Botanist.

Director of the Museum: Dr. G. M. Dawson, C.M.G., F.R.S.

The Fisheries Museum, Ottawa, Canada.—Under the immediate care of the Department of Marine and Fisheries at Ottawa. Contains the best collection of Canadian fishes in the Dominion. This collection, primarily brought together in 1883 as part of the exhibit from Canada at the Fisheries Exhibition, London, England, gives a very fair idea of the fisheries of the large bodies of fresh and salt water of the Dominion from an economic standpoint. Specimens determined for the most part by Mr. J. F. Whiteaves, of the Geological Survey of Canada in 1883. Now in charge of Professor Ed. E. Prince, B.A., F.L.S., Commissioner of Fisheries for Canada, Ottawa.

Central Experimental Farm Museum, Ottawa, Ontario.—Contains a

good herbarium of Canada. Collections of native and cultivated fruits, seeds, &c., preserved in a liquid medium for reference for agricultural as well as horticultural purposes. Samples of the cereals, grasses, and fruits which grow in Canada as the result of tests made at the central and other experimental stations in Canada. Samples of soils from different portions of Canada and the North-West. Director: Dr. Wm. Saunders, F.R.S.C., Ottawa, Ontario. Maintained by the Dominion Government Territories, forming part of the Department of Agriculture. Collections of insects injurious and beneficial to vegetation. Botanical and entomological collections in charge of Dr. James Fletcher, Central Experimental Farm, Ottawa, Ontario.

Queen's University Museum, Kingston, Ontario.—Contains 22,700 specimens, arranged and classified for the use of professors and students. Of these there are 3,600 minerals and rocks and 5,000 fossil organic remains, in all 8,600 geological specimens. The zoological collections, chiefly mollusca and other invertebrata, number 3,146 specimens. Entomological and ethnological collections defective.

The herbarium is an excellent one, and contains 9,435 sheets of Phanerogamia and Cryptogamia of Canada and other countries. Type specimen: Large slab showing tracks of *Sauropus unguifer*, Dawson, from the Carboniferous rocks of Cumberland County, Nova Scotia.

Special collection: The 'Rev. Andrew Bell collection' of minerals, rocks, and fossils, consisting of 1,500 specimens. Curator: Rev. J. Fowler, M.A., F.R.S.C., Kingston, Ontario.

Museum of the School of Mining, Kingston, Ontario.—The mineral collection consists of about 9,000 specimens, classified as follows:—(1) Specimens to which students have access, 5,650; (2) specimens illustrating physical mineralogy, 900; (3) mineral species, 2,120, specimens; (4) ores, &c.

The palaeontological collections consist of the Columbian Exposition collection sent to Chicago by the Geological Survey of Canada, and presented to the Ontario School of Mining, together with a number of specimens of Ontario palaeozoic fossils. Curator: Professor W. G. Miller, M.A., Ph.D.

Biological Museum, University of Toronto, Toronto, Ontario.—Contains between 15,000 and 20,000 specimens, of which the geological department includes about 12,000 specimens, as follows:—

Ferrier collection of minerals	6,000 specimens
Palaeontological collections	4,000 "
Rocks, &c.	2,000 "

The zoological collections alone number 8,000 specimens, and include specimens of living and fossil representatives of the various classes and orders of the animal kingdom, as well as a large series of models for educational purposes. There is also a good herbarium, with collections of woods, models, &c., all of which serve to illustrate the botanical department in the university. The ethnological department, established by the late Sir Daniel Wilson, contains a large collection of crania and implements.

There are no types in the museum. Curators: Professor R. Ramsay Wright, M.A., Ph.D., Professor A. B. Macallum, M.A., C. Jeffrey, Esq., M.A.

Museum of the School of Practical Science, Toronto, Ontario.—Contains 6,000 specimens, of which 3,292 belong to the geological department, and are divided as follows:—

Minerals	1,245 specimens
Rocks	1,617 "
Fossil organic remains	400 "

Besides the above there is also a students' collection of 1,600 species for reference, and 1,200 thin or microscopic sections of rocks. Economic minerals a speciality. Curator: Professor A. P. Coleman, M.A., Ph.D., University College, Toronto, Ontario.

Museum of Victoria University, Toronto, Ontario.—3,000 specimens are included in the geological collections (500 mineral specimens, 500 rocks, and 2,000 specimens of fossil organic remains). There is also the 'Taylor collection of archaeological remains' from both the eastern and western hemispheres. *Meteorite* from near Victoria, N.W.T. Curator: Rev. N. Burwash, D.D., Queen's Park, Toronto, Ontario.

Ontario Archaeological Museum, Toronto, Ontario.—Supported since 1887 by an annual grant of \$1,000 from the Ontario Legislature. Excellent collection of stone and clay pipes, copper and iron, and stone implements and weapons from various portions of the province of Ontario, besides collections from United States mounds, from British Columbia, &c. The collections in all amount to about 20,000 pieces (not counting individual wampum beads, &c.), thousands of flints, hundreds of celts (plain and grooved), gouges, hundreds of bone and horn instruments, numerous clay vessels, 200 crania, 700 miscellaneous Aztec specimens, 250 slate gorgets, 40 'bird' amulets, besides clay vessels from Aztec and Pueblo mounds.

The collection is neatly labelled and catalogued as to exact name of locality, name of donor, collector, and date. Curator: David Boyle, Esq., Ontario Archaeological Museum, in connection with the Department of Education, Ontario.

Canadian Institute Museum, Toronto, Ontario.—Supported by legislative grant and membership fees. It is located at 58 Richmond Street East, Toronto. Established 1849; incorporated by Royal Charter, 1851. The specimens belonging to the old Natural History Society of Toronto (now the Biological Section of the Institute) form part of the Canadian Institute Museum collections. The zoological collections comprise the following:—

Birds (Canadian)	. . . . .	729 specimens
Birds' eggs (Canadian)	. . . . .	329 "
Birds (foreign)	. . . . .	150 "
Mammals	. . . . .	62 "
Reptiles	. . . . .	200 "
Insects	. . . . .	2,000 "

There is also a small herbarium. Curator: James H. Fleming, Esq., Canadian Institute.

Hamilton Association Museum, Hamilton, Ontario.—Contains 8,000 specimens, arranged and classified, of which there are about 3,300 geological, divided as follows:—Fossil organic remains, 2,500; minerals, 800. Fine collection of the sponges and graptolites of the Niagara formation, Canada. The herbarium contains 1,400 sheets, belonging chiefly to the local flora. Zoological collection defective, although some few and rare species are exhibited. Small collection of ethnological specimens from Canada and the South Sea Islands. The Mrs. S. E. Carry collections of 3,000 specimens of shells, recent and fossil, and of Indian relics form part of the exhibits at present in the museum—a loan collection. Secretary (pro-Curator), S. A. Morgan, B.A., 26 Erie Avenue, Hamilton, Ontario.

Ontario Agricultural College Museum, Guelph, Ontario.—Contains

about 5,000 specimens : Minerals, 230 ; rocks, a small collection ; fossils, 65 ; zoological collection miscellaneous, and divided as follows :—

Birds	398 specimens
Reptiles	15 "
Fishes	38 "
Mollusca	102 "
Molluscoidea	3 "
Insects	767 "
Annuloida	18 "
Cœlenterata	11 "
Protozoa	1 "
In all	1,422

The botanical collections, comprising dried plants and seeds for agricultural purposes, European plants &c., contain 1,698 specimens and samples, besides a fair collection of Canadian woods.

Museum and college under the supervision of the Department of Education for Ontario, Dr. S. P. May, Toronto, organiser of the museum, and J. Hoyes Panton, officer in charge, Guelph Agricultural College, Guelph, Ontario.

Entomological Society of Ontario, London, Ontario.—Contains the leading collection of entomological specimens in Ontario. The Society has also a botanical and a geological section. Curators of the Museum : J. Moffatt, Esq., Professor Dearness, and S. Woolverton, London, Ontario.

Provincial Museum, Winnipeg, Manitoba.—Contains several thousand specimens. The natural history collection comprises the birds, mammals, and insect fauna of the province and the North-West Territories of Canada. Very fair collection of minerals, rocks, and fossils from various geological formations in Manitoba and the other provinces. Housed in special apartments in the City Hall of Winnipeg. Curator : Charles N. Bell, Esq., City Hall, Winnipeg, Manitoba, Canada.

Rocky Mountain Park Museum, Alberta, Canada.—Supported by the Dominion Government. The majority of the specimens exhibited were sent from the Geological Survey Department and Museum at Ottawa. Contains interesting collections of the birds, plants, woods, &c., of local interest to tourists and travellers. Illustrates the fauna and flora of the Rocky Mountain region of Canada. Superintendent : H. Douglas, Esq., Banff, Alberta, North-West Territories.

Provincial Museum, Victoria, British Columbia.—This is one of the best kept and most interesting collections in Canada. Upward of 11,000 specimens arranged and classified for reference. Good collections of rocks, minerals, and fossils of British Columbia and other parts of Canada. The Newton H. Chittenden collections in ethnology of special value and interest. Zoological collections fairly complete.

Types : Two type specimens of birds : (1) *Melospiza Lincolnii*, Brewster ; (2) *Zaprora salivus*, Jordan, from near Nanaimo, Gulf of Georgia, British Columbia. Curator : John Fannin, Esq., P.O. Box 471, Victoria, British Columbia.

NOTES ON PRIVATE COLLECTIONS IN CANADA.

Halifax, Nova Scotia.

1. Dr. A. H. Mackay . Good reference collections in botany and zoology. Special collection of Canadian Spongiellæ; also micro-organisms.
2. Andrew Downs, Esq. Ornithological collection.
3. Harry Austin, Esq. . (Dartmouth) Ornithological collection.
4. T. J. Egan, Esq. . (Dalhousie University) Ornithology.
5. The Lawson Herbarium. Containing the extensive series of mounted and dried plants of Nova Scotia and other parts of Canada, with special reference to the Ranunculaceæ and Filices of the whole Dominion.
6. Dr. John Somers . Herbarium.
7. Dr. Lindsay . Herbarium.

St. John, New Brunswick.

8. Dr. Lucien Allison . St. John and New Brunswick Diatomaceæ.
9. S. D. Scott, Esq. . Numismatic collection.
10. G. U. Hay, Esq., F.R.S.C. New Brunswick and general Canadian plants.
11. A. Gordon Leavitt, Esq. Collection of native birds for reference.
12. J. S. Maclaren, Esq. . Numismatic collection, collection of medals, clasps, &c.
13. Dr. G. F. Matthew, F.R.S.C. Best collection of St. John group fossils. Palæozoic fossils from maritime provinces and other parts of Canada. Numerous types of species of fossil plants, sponges, mollusca, insecta, trilobita, &c., from various horizons (Cambrian, Ordovician, Silurian, and Devonian) in the Palæozoic of New Brunswick; European fossils; also recent plants and marine invertebrates.

Montreal, Quebec.

14. Dr. T. J. W. Burgess, F.R.S.C. Herbarium contains about 15,000 sheets. Excellent and very complete collection of Canadian flowering plants, including North-West Territory and Rocky Mountain flora. Ontario collection very complete. Canadian vascular cryptogamic plants a specialty.
15. Sir Wm. Van Horne, K.C.M.G. Extensive collection of fossil organic remains from Canada, the United States, and Europe.
16. Rev. Robert Campbell, D.D. Herbarium containing plants representing flora of Montreal Island, Murray Bay, and other portions of the Province of Quebec.
17. Harold B. Cushing, B.A. Complete collection of the ferns of the island of Montreal. Fair collection of Phanerogamia of Montreal Island and vicinity.
18. Dr. B. J. Harrington Cabinets of minerals from Canada and the United States for reference collection. Type specimens, dawsonite, chemawinite, &c.

Ottawa, Ontario.

19. W. Hague Harrington, Esq., F.R.S.C. Very complete collection of Ottawa Coleoptera and Hymenoptera; also Spiders and Proctotrypidæ. Contains numerous types of species new to science. Also collection of Canadian flowering plants.
20. Dr. James Fletcher, F.L.S., F.R.S.C. Specimens illustrating his 'Ottawa Flora' or 'Flora Ottawaensis' as published in the 'Transactions of the Ottawa Field Naturalists' Club.' Botanical collections from nearly all parts of the Dominion and elsewhere. Also extensive collections of insects injurious and beneficial to vegetation, &c. Excellent collection of Lepidoptera.

21. Walter R. Billings, Esq. Very complete collection of Ordovician fossils from the Ottawa Valley, including those from Paquette's Rapids, Hull, and Ottawa City and vicinity.
22. W. L. Scott, Esq., B.A. Excellent collection of birds and birds' eggs of Ottawa and vicinity.
23. George R. White, Esq. Excellent collection of mounted birds and birds' skins for reference in Ottawa district.
24. Frank R. Latchford, Esq., B.A. Collection of Ottawa Unionidæ—*Unio borealis*, A. F. Gray—a type from the Ottawa River described from Mr. Latchford's collection. Also large series of Ohio and Western Ontario as well as other Canadian shells.
25. Dr. H. Beaumont Small. Good collection of the flowering plants about Ottawa and vicinity.
26. R. B. Whyte, Esq. Excellent reference collection of the flora of Ottawa and vicinity. Perth specimens. Species of rare occurrence in the collection.
27. Walter F. Ferrier, Esq., F.G.S. Excellent collection of Canadian minerals. Also foreign type and other minerals. Collection of rocks—lithological. Canadian fossil organic remains.
28. Dr. H. M. Ami. Fair collection of Ottawa and general Canadian flowering plants. Foreign and domestic shells. Collection of Canadian ethnological specimens. Utica fossils from Ottawa and vicinity.
29. W. J. Wilson, Esq., B.Sc. Choice collection of Devonian fossil plants from the 'fern-edges' of Lancaster Co., New Brunswick. Also two co-types of fossil insects described by Dr. G. F. Matthew.
30. Joseph Townsend, Esq. Palæontological collections: 3,000 Guelph fossils; 1,000 Ordovician fossils from Trenton, Utica, and Lorraine of Ontario; 500 Niagara corals and other fossils; 400 pre-glacial plants and shells.
31. T. W. E. Sowter, Esq. (Aylmer, Quebec.) Collection of Chazy fossils from Aylmer and vicinity. Fair collections of Trenton and Black River fossils from the Ottawa Palæozoic Basin. Mr. Sowter's collections of Ordovician fossils include more than 2,000 specimens.

Vernon, Ontario.

32. Rev. J. M. Goodwillie, M.A. Collection of archaeological remains from Ontario; also Hamilton group, Niagara, Clinton, and Black River fossils from various districts in Ontario.

Kingston, Ontario.

33. Rev. Professor James Fowler, M.A., F.R.S.C. Large herbarium, consisting of 14,731 sheets, representing flora of New Brunswick very completely, and that of other parts of British North America very well, besides foreign specimens.
34. W. G. Kidd, Esq., M.A. Very good collection of the minerals of Ontario. This collection was exhibited at the World's Fair, Chicago, in 1893 as part of the Province of Ontario exhibit.

Lansdowne, Ontario.

35. Rev. W. G. Young, M.A. Ornithological and Oological collection.

Toronto, Ontario.

36. B. E. Walker, Esq., F.G.S. Extensive and choice collection of Canadian, Niagara, Hamilton group and Ordovician fossils. Also fine collection of British and United States fossils. Undescribed Stromatoliproids.

37. James H. Fleming, Esq. 2,000 bird-skins, including 500 species, nearly all Canadian birds. Also mounted birds from Canada and some foreign birds.
38. Hon. G. W. Allan . Collection of native (Canadian) birds.

Hamilton, Ontario.

39. A. E. Walker, Esq. . Collections of local fossils, including rare and undescribed fossil sponges from Silurian of the district.
40. A. T. Neill, Esq. . Collections of fossils and minerals from Canada, ranging from the Laurentian to the Cretaceous.
41. Col. C. C. Grant . Collection of Medina, Clinton, and Niagara fossils, graptolites and sponges a speciality. Also few Indian relics.
42. Thomas Mellwraith, Esq. Complete collection of Canadian birds; also many foreign species.
43. A. Alexander, Esq. . Botanical collection, local flora. Also Georgian Bay plants.

Grimsbey, Ontario.

44. Jonathan Pettit, Esq. Excellent collection of Niagara (Silurian) fossils, containing good crinoidea, &c.

Thedford, Ontario.

45. Rev. Hector Currie, M.A. Very complete collection of Hamilton group fossils from Thedford (Widder), Bartlett's mills, &c., in Lambton County, Ontario.

London, Ontario.

46. Rev. W. Mintern Seaborn, M.A. Collection of Devonian fossils, chiefly corals from Western Ontario.

Olds, N.W.T.

47. — Willing, Esq. . Entomological collection, North-West noctuids. Type specimens and undescribed specimens in collection.

Victoria, British Columbia.

48. Dr. C. F. Newcombe Excellent collection of Cretaceous and Tertiary fossils from British Columbia, &c. Numerous undescribed forms, including decapod crustacea.
49. Rev. G. W. Taylor, M.A., F.R.S.C. Canadian and British mollusca. Large and important reference collection of Western (especially) as well as Eastern recent shells (Nanaimo, B.C.).
50. John Fannin, Esq. . General collection of fossil organic remains, from the Cretaceous and Tertiary of Vancouver and other islands, and recent natural history specimens from British Columbia (Victoria, B.C.).