

INDEX.

VOL. X.

(Roman numerals refer to the Proceedings ; Arabic numerals to the Transactions.)

	PAGE
Agricultural credit. By Prof. J. Davidson, Phil. D	458
Air, school-room. By L Russell, B. Sc.	xxi
Ambrose, Rev. John, D. C. L., obituary notice of. By A. McKay	iv
Ami, Henry M., D. Sc.—Description of tracks (<i>Ichthyoidichnites acadensis</i> , n. sp.) from the fine-grained siliceous mudstones of the Knoydart formation (Eo-Devonian) of Antigonish County, N. S.	330
Subdivisions of Carboniferous system in eastern Canada, with special reference to position of Union and Riversdale formations of Nova Scotia, referred to Devonian system by some Canadian geologists.	162
Upper Cambrian age of Dictyonema slates of Angus Brook, New Canaan and Kentville, N. S.	447
Angus Brook, N. S., Notes on Dr. Ami's paper on Dictyonema slates of. By H. S. Poole.	451
Angus Brook, N. S., Upper Cambrian age of Dictyonema slates of. By H. M. Ami, D. Sc.	447
Antigonish County, N. S., Tracks from Knoydart formation of. By H. M. Ami, D. Sc.	330
Ants, Periodical appearance of, in a chimney. By H. S. Poole.	xlix
Aqueous solutions. See Lindsay, C F.	205
Archibald, E. H., M. Sc.—On a test, by the freezing-point method, of the ionization coefficients determined by the conductivity method, for solutions containing potassium and sodium sulphates	33
Atlantic, Material taken from the bottom of. By A H. MacKay, LL. D. .	1
Barnes, James, B. A.—On the calculation of the conductivity of aqueous solutions containing hydrochloric and sulphuric acids	129
On the conductivity, specific gravity and surface tension of aqueous solutions containing potassium chloride and sulphate.	49
On the depression of freezing-point by mixtures of electrolytes	139
On the Relation of the viscosity of mixtures of solutions of certain salts to their state of ionization	113
Bee's nest, Unusual site for. By H. S. Poole, F. G. S.	xlix

	PAGE
Bishop, Watson L.—Exhibition of a collection of Nova Scotian birds' eggs, and remarks thereon. (Title only).....	lxviii
Star-nosed Mole (<i>C. cristata</i>), its breeding habits, etc.....	348
Boehner, R. S., <i>B. Sc.</i> —Standardization of Hydrochloric Acid with Borax. (Title only)	ci
<i>Botrychium ternatum</i> , Condensed form of. By A. H. MacKay, LL. D....	xcix
Branch Societies, formation of authorised.....	lxviii
Branch of Institute at Wolfville, Report on. By Prof. E. Haycock... .	xcviii
Purposes and Aims of By Prof. E. Haycock	cix
Calyx drill. See Weatherbe, D'A., on Nictaux iron field.....	352
Cambrian slates of Halifax, Worm trails in. By H. S. Poole	453
Cape Breton coals, Notes on effect of washing. By H. S. Poole, F.R.S.C.	245
Carboniferous system of eastern Canada, On the sub-divisions of. By A. H. MacKay, LL. D.	xlvii
Carboniferous system, Sub-divisions of, in eastern Canada, with special reference to position of Union and Riversdale formations of Nova Scotia, referred to Devonian system by some Canadian geologists. By H. M. Ami, D. Sc.....	162
<i>Chylomycterus schæpfi</i> . See Piers, H.....	110
Coals, Notes on effect of washing certain Cape Breton. By H. S. Poole, F. R. S. C.....	245
Condensed form of <i>Botrychium ternatum</i> . By A. H. MacKay, LL. D....	xcix
Conductivity, specific gravity and surface tension of aqueous solutions containing potassium chloride and sulphate. By J. Barnes.....	49
Conductivity. See Barnes, J.	129
<i>Condylura cristata</i> , Star-nosed mole, its breeding habits, etc. By W. L. Bishop	348
Conglomerate, New Glasgow. By H. Fletcher	323
Consumption and expenditure in Canada, Statistics of. By Prof. J. Davidson	1
Copper sulphate, Solutions of. See Lindsay, C. F.....	205
Credit, Agricultural. By Prof. J. Davidson, Phil. D.	458
Davidson, Prof. John, <i>Phil. D.</i> —Agricultural credit	458
Natural history of Money	179
Statistics of expenditure and consumption in Canada	1
Dawson, Sir J. William, obituary notice of. By A. McKay.....	xxxvi
Resolution on death of	xlvi
Depression of freezing-point by mixtures of electrolytes. By J. Barnes ..	139
Depression of freezing-point for electrolytes. By Prof. J. G. MacGregor..	211
Determination of freezing-point depression constant for electrolytes. By T. C. Hebb	409
Determination of freezing-point depressions of dilute solutions of electro- lytes. By T. C. Hebb	422
Devonian, The: geological nomenclature in Nova Scotia. By H. Fletcher, B. A.	235

	PAGE
Devonian system in Nova Scotia. <i>See under</i> Ami, H. M., Sub-divisions of Carboniferous system.....	162
DeWolfe, Dr. James R., Death of.....	lxi, lxxxiv
Diagram of freezing-point depressions for electrolytes. By Prof. J. G. MacGregor	211
Diatomaceæ of Nova Scotia. By A. H. Mackay, LL. D	xix
Dictyonema slates of Angus Brook, New Canaan, and Kentville, N. S., Notes on Dr. Ami's paper on. By H. S. Poole	451
Dictyonema slates of Angus Brook, New Canaan, and Kentville, N. S., Upper Cambrian age of. By H. M. Ami, D. Sc	447
Doane, F. W. W.—Rainfall notes, Nova Scotia	399
Downs, Andrew, founder of the first zoological garden in America, Sketch of. By H. Piers	cii
Drift ice as an eroding and transporting agent. By W. H. Prest.	333
Drift ice as an eroding and transporting agent, Supplementary notes on. By W. H. Prest	455
Early intervale flora of eastern Nova Scotia. By C. B. Robinson.....	502
Earths, The rare. By W. H. Magee, Ph. D	lxii
Edwards, Dr. A. M.—Infusorial earths of the world and the iceberg period. (Title only.)	xix
Elastic properties of india-rubber. <i>See</i> India-rubber.	
Election of officers for 1898-9, xvii. 1899-1900, xlvi. 1900-01, lviii. 1901-02, xcvi.	
Electrolytes, Depression of freezing-point by mixtures of. By J. Barnes..	139
Electrolytes, Determination of freezing-point depression constant for. By T. C. Hebb	409
Electrolytes, Determination of freezing-point depression of dilute solutions of. By T. C. Hebb.....	422
Electrolytes, Diagram of freezing-point depressions for. By Prof. J. G. MacGregor	211
Ells, R. W., LL. D.—Progress of geological investigation in Nova Scotia.	433
Erosion and transportation. <i>See</i> Drift ice.	
Expenditure and consumption in Canada, Statistics of. By Prof J. Davidson	1
Fish (<i>Chylomycterus schæpfi</i>) new to the fauna of Nova Scotia. By H. Piers	110
Fletcher, Hugh, B. A.—Geological nomenclature in Nova Scotia: the Devonian	235
Geological nomenclature in Nova Scotia: New Glasgow conglomerate	323
Flora, Early intervale, of eastern Nova Scotia By C. B. Robinson	502
Flowering of plants <i>See</i> Phenological observations.	
Fossils, possibly Triassic, in glaciated fragments in the boulder-clay of King's County, N. S. By Prof. E. Haycock.....	376
Fox, J. J., obituary notice of. By A. McKay.....	xxxvi
Freezing-point depression constant for electrolytes, Determination of. By T. C. Hebb	409

	PAGE
Freezing-point depressions of dilute solutions of electrolytes, Determination of. By T. C. Hebb	422
Freezing-point, Depression of, by mixtures of electrolytes. By J. Barnes.	139
Freezing-point depressions for electrolytes. By Prof. J. G. MacGregor ..	211
Fresh water sponge [<i>Heteromeyenia macouni</i> , n. sp.] from Sable Island. By A. H. MacKay, LL. D.	319
Gaspereau Valley, Geological history of. By Prof. E. Haycock	361
Geological investigation in Nova Scotia, Progress of. By R. W. Ells, LL. D.	433
Geological nomenclature in Nova Scotia: the Devonian. By H. Fletcher, B. A.	235
Geological nomenclature in Nova Scotia: New Glasgow conglomerate. By H. Fletcher	323
Gilpin, Edwin, jr., LL. D.—Further explorations in the Torbrook iron district. (Title only.)	lxxix
Minerals for the Paris exhibition	248
New mineral discoveries in Nova Scotia	79
Halifax, Worm trails in slates of. By H. S. Poole	453
Harvey, Rev. Moses, LL. D., death of	lxxxv
Haycock, Prof. Ernest.—Fossils, possibly Triassic, in glaciated fragments in the boulder-clay of King's County, N. S.	376
Geological History of Gaspereau Valley, Nova Scotia	361
Kings Co Branch of the N. S. Institute of Science: outline of pur- poses and aims	cix
Records of Post-Triassic changes in King's County, N. S.	287
Hebb, Thomas C., B. A.—Determination of freezing-point depression con- stant for electrolytes	409
Determination of freezing-point depressions of dilute solutions of electrolytes	422
Variation of rigidity of vulcanized indiarubber with tension	273
<i>Heteromeyenia macouni</i> , n. sp. See Fresh water sponge from Sable Island. By A. H. MacKay, LL. D.	319
Hübnerite. See Notes on a Cape Breton mineral containing Tungsten. By H. S. Poole, F. R. S. C.	245
Humble-bee's nest, Unusual site for. By H. S. Poole, F. G. S.	xlix
Hydrochloric acid, solutions of. See Barnes, J.	129
Ice, drift, as an eroding and transporting agent. By W. H. Prest	333
Ice, drift, as an eroding and transporting agent, supplementary note on. By W. H. Prest	455
<i>Ichthyoidichnites acadensis</i> , n. sp. By H. M. Ami, D. Sc.	330
Indiarubber, Variation of rigidity of vulcanized, with tension. By T. C. Hebb	273
Indiarubber, vulcanized, Notes on the variation with tension, of the elas- tic properties of. By Prof. J. G. MacGregor and W. A. Mac- donald	xxviii
Infusorial earths of the world, and the iceberg period. By Dr. A. M. Edwards. (Title only.)	xix

	PAGE
Intervale flora, Early, of eastern Nova Scotia. By C. B. Robinson	502
Ionization coefficients. <i>See</i> Archibald, E. H.	33
Ionization, On finding the, of complex solutions of given concentration, and the converse problem. By Prof. J. G. MacGregor, D. Sc.	67
Ionization. <i>See also</i> Barnes, J.	
Iron field, Nictaux, Recent developments with calyx drill in. By D. Weatherbe	350
Jaggard, Miss A. Louise.—Notes on the Flora of Digby County, N. S. (Title only.)	c
Jones, John Matthew, Sketch of life By H. Piers.	lxxx
Kentville, N. S., Notes on Dr. Ami's paper on Dictyonema slates of. By H. M. Poole	451
Kentville, N. S., Upper Cambrian age of Dictyonema slates of. By H. M. Ami, D. Sc.	447
Kings County, N. S., Records of Post Triassic changes in. By Prof. E. Haycock	287
Kings County, N. S. <i>See also</i> Gaspereau valley	361
Kings County Branch of the N. S. Institute of Science: outline of pur- poses and aims of. By Prof. E. Haycock.	cix
<i>See also</i> p. xcvi.	
Knoydart formation (Eo-Devonian) of Antigonish Co., N. S., description of tracks from. By H. M. Ami, D. Sc.	330
Labrador plants, collected by W. H. Prest north of Hamilton Inlet, from June to August, 1901. By A. H. MacKay, LL. D.	507
Librarian's Report (1897-8), xv. (1898-9), xlii. (1899-1900), lviii. (1900-1), xcviii.	
Lindsay, Charles F.—Presence of acid sulphate of copper in mixtures of aqueous solutions of sulphuric acid and copper sulphate	205
Macdonald, W. A., and MacGregor, Prof. J. G.—Notes on the variation with tension, of the elastic properties of vulcanized india-rubber. xxviii	
MacGregor, Prof. James Gordon, D. Sc., F. R. S.—Diagram of freezing- point depressions for electrolytes	211
Finding the Ionization of complex solutions of given concentration, and the converse problem	67
Laws of dilution for aqueous solutions of electrolytes. (Title only) .	xlvi
Use of the Wheatstone bridge with alternating currents. (Title only.)	lxii
and Macdonald, W. A.—Note on the variation with tension, of the elastic properties of vulcanized india-rubber	xxviii
McKay, Alexander.—Presidential address [(a) Obituary notices of John Somers, M. D., Jules Marcou, and Rev. John Ambrose, D. C. L.; (b) Notes on the early history of the Institute; (c) The position of science in our educational system.]	i
Presidential Address —[(a) Review of year's work; (b) Obituary notice of J. J. Fox and Sir J. W. Dawson; (c) The utility of a scientific library and a properly equipped museum.]	xxxv

	PAGE
MacKay, A. H., LL. D., F. R. S. C. —Condensed form of <i>Botrychium ternatum</i>	xcix
Description of section of Stigmaria	346
Diatomaceæ of Nova Scotia	xix
Freshwater sponge [<i>Heteromeyenia macouni</i> , n. sp.] from Sable Island Labrador plants, collected by W. H. Prest on the Labrador coast north of Hamilton Inlet, from June to August, 1901.....	319
Material taken from the bottom of the Atlantic by the Cable S. S. "Minia"	507
Note on gravel taken by the mushroom-anchor of the "Mackay-Bennett," cable steamer, from the bottom of the Atlantic, 40 miles west of Sable Island. (Title only.).....	1
Phenological observations, Canada, 1898	lxi
Phenological observations, Canada, 1899	91
(1) Phenological observations of Botanical Club of Canada, 1900; (2) Abstract of phenological observations on flowering of ten plants in Nova Scotia, 1900; with (3) Remarks on their phenochrons...	303
Phenological observations in Nova Scotia and Canada, [1901].....	379
Presidential address [(a) On the scope of work of the Institute; (b) Provincial Museum and Science Library; (c) Death of Capt. Trott and Rev. A. C. Waghorne].....	486
Presidential address, 1901. [(a) Obituaries of Dr. J. R. DeWolfe, Capt. W. H. Smith, and Rev. Moses Harvey; (b) Work of the Institute; (c) Provincial Museum and Science Library; (d) Provincial Progress; (e) Malaria, yellow fever and Sheep-fluke Object Lessons; (f) Marine Biological Station.].....	liii
Sub-divisions of the Carboniferous System of Eastern Canada.....	lxxxiv
McLachlan, R. W. —Talk on Roman Coins. (Title only.)	lxxxvii
Magee, W. H., Ph. D. —The rare earths; their scientific importance as regards the periodic law	lxxxviii
Marcou, Jules , obituary notice of. By A. McKay	lxii
Material taken from bottom of the Atlantic by Cable S. S. <i>Minia</i>. By A. H. MacKay, LL. D.....	iv
Members, Lists of; 1898-99, Appendix I; 1899-1900, Appendix II; 1900-01, Appendix III; 1901-02, Appendix IV.	1
Mineral discoveries, new, in Nova Scotia. E. Gilpin, jr, LL. D.....	79
Minerals for Paris exhibition. By E. Gilpin, jr, LL. D.....	248
Mole, star-nosed, (<i>C. cristata</i>), its breeding habits, etc By W. L. Bishop	348
Money, Natural history of. By Prof. J. Davidson	179
New Canaan, N. S., Notes on Dr. Ami's paper on Dictyonema slates of. By H. M. Poole	451
New Canaan, N. S., Upper Cambrian age of Dictyonema slates of. By H. M. Ami, D. Sc.....	447
New Glasgow conglomerate. By H. Fletcher.....	323
New mineral discoveries in Nova Scotia E. Gilpin, jr., LL. D.....	79
Nictaux iron field, Recent developments with calyx drill in. By D'A. Weatherbe	350

	PAGE
Notes on Dr. Ami's paper on <i>Dictyonema</i> slates of Angus Brook, New Canaan and Kentville, N. S. By H. S. Poole.....	451
Notes, Supplementary, on drift ice as an eroding and transporting agent. By W. H. Prest	455
Nova Scotia, Progress of geological investigation in. By R. W. Ells, LL. D.....	433
Obituary notices. See Ambrose, Rev. J. ; Dawson, Sir J. W. ; DeWolfe, Dr. J. R. ; Fox, J. J. ; Harvey, Rev. M. ; Marcou, J. ; Somers, Dr. J. ; Smith, Capt. W. H. ; Trott, Capt. ; Waghorne, Rev. A. C.	
Observations on a fish (<i>Chylomycterus schæpfi</i>) new to the fauna of Nova Scotia. By H. Piers	110
Officers for 1898-9, xvii. 1899-1900, xlvi. 1900-01, lviii. 1901-02, xxviii	
Paris exhibition, Minerals for. By E. Gilpin, jr., LL. D.....	248
Pasea, C. M.—On a relation between the ionization coefficients of electrolytes, and its application as an interpolation formula. (Title only)	xlix
Periodic law. See Rare earths	lxii
Peter, Rev Brother Junian.—Exhibition of a collection of dried plants from the vicinity of Buffalo, U. S. A.....	lii
Phenological observations, Canada, 1898. By A. H. MacKay, LL. D....	91
Phenological observations, Canada, 1899. By A. H. MacKay, LL. D....	303
(1) Phenological observations of Botanical Club of Canada, 1900 ; (2) Abstract of phenological observations of flowering of ten plants in Nova Scotia, 1900 ; with (3) Remarks on their phenochrons. By A. H. MacKay, LL. D.....	379
Phenological observations in Nova Scotia and Canada, [1901].—By A. H. MacKay, LL. D.	486
Piers, Harry.—Notes on Nova Scotian zoology ; no. 5. (Title only.)	xxxiv
Observations on a fish (<i>Chylomycterus schæpfi</i>) new to the fauna of Nova Scotia	110
Sketch of life of Andrew Downs, founder of first zoological garden in America.....	cii
Sketch of life of J. M. Jones.....	lxxx
Plants, Flowering of. See Phenological observations.	
Plants, Labrador, collected by W. H. Prest north of Hamilton Inlet, June to Aug., 1901. By A. H. MacKay, LL. D.	507
Poole, Henry S., <i>F. G. S.</i> , <i>F. R. S. C.</i> —Description of the Davis Calyx Drill. (Title only.)	lix
Notes on a Cape Breton mineral [Hübnerite] containing Tungsten, and on effect of washing certain Cape Breton coals.....	245
Notes on Dr. Ami's paper on <i>Dictyonema</i> slates of Angus Brook, New Canaan and Kentville, N. S.....	451
Notes on the periodical appearance of ants in a chimney, and on an unusual site for a humble-bee's nest ..	xlix
Stigmaria structure.....	345
Worm trails in slates of Halifax	453

	PAGE
Portraits: Somers, Dr. J., op. p. i. Gilpin, Dr. J. B., op. p. xxxv. Jones, J. M., op. p. liii. Downs, Andrew, op. p. lxxxiii.	
Post-Triassic changes, Records of, in Kings County, N. S. By Prof. E. Haycock	287
Potassium chloride and sulphate. See Barnes, J.	49
Potassium sulphate. See Archibald, E. H.,	33
Presence of acid sulphate of copper in mixtures of aqueous solutions of sulphuric acid and copper sulphate. C. F. Lindsay	205
President's address: (1898, A. McKay), i. (1899, A. Mackay), xxxv. (1900, Dr. A. H. MacKay), liii. (1901, Dr. A. H. MacKay), lxxxiv.	
Prest, Walter H.—Drift ice as an eroding and transporting agent	333
Labrador plants collected by. By A. H. MacKay, LL. D.	507
Supplementary notes on drift ice as an eroding and transporting agent	455
Prichard (A. H. Cooper)—Exhibition of Roman coins of Provincial Museum	lxxxiii
Progress of geological investigation in Nova Scotia. By R. W. Ells, LL. D.	433
Rainfall notes, Nova Scotia. By F. W. W. Doane ..	399
Rare earths: their scientific importance as regards the periodic law. By W. H. Magee, Ph. D.	lxii
Recent developments with calyx drill in Nictaux iron field. By D'A. Weatherbe	350
Records of Post-Triassic changes in Kings County, N. S. By Prof. E. Haycock	287
Reid, A. P., <i>M. D.</i> —Exhibition and explanation of a model of a sanatorium for consumptives	xxvii
Report of librarian (1897-8), xv. (1898-9), xlii. (1899-1900), lviii. (1900-1), xviii.	
Report of treasurer, (1897-8), xv. (1898-9), xli. (1899-1900), lviii. (1900-1), xvii.	
Report on Wolfville Branch of the Institute. By Prof. E. Haycock	xcviii
Rigidity of vulcanized indiarubber, Variation of, with tension By T. C. Hebb	273
Riversdale formation. See Sub-divisions of Carboniferous system in eastern Canada. By H. M. Ami, D. Sc.	162
Robinson, C. B.—Early intervale flora of eastern Nova Scotia	502
Rubber. See India-rubber.	
Russell, Lee, <i>B. Sc.</i> School-room air	xxi
Sable Island, Freshwater sponge [<i>Heteromeyenia macouni</i> , n. sp.] from. By A. H. MacKay, LL. D.	319
School-room air. By L. Russell, B. Sc.	xxi
Science, Position of, in our educational system. By A. McKay	viii
Smith, <i>Prof.</i> H. W., <i>B. Sc.</i> —Rotation of crops. (Title only.)	lx
The Preservation and use of the tops of turnips and other root crops. (Title only.)	lx
Smith, <i>Capt.</i> W. H., death of	lxxxiv
Sodium sulphate. See Archibald, E. H.	33

INDEX.

xxv

	PAGE
Solutions. <i>See</i> Archibald, E. H. ; Barnes, J. ; Lindsay, C. F. ; MacGregor, J. G.	
Somers, John, <i>M. D.</i> —Obituary notice of. By A. McKay.....	iii
Sponge, Fresh water, [<i>Heteromeyenia macouni</i> , n. sp.] from Sable Island. By A. H. MacKay, LL. D.....	319
Star-nosed Mole (<i>Condylura cristata</i>), its breeding habits, etc. By W. L. Bishop	348
Statistics of expenditure and consumption in Canada. By Prof. J. Davidson	1
Stigmaria structure. By H. S. Poole	345
Sub-divisions of Carboniferous system in eastern Canada, with special reference to position of Union and Riversdale formations of Nova Scotia, referred to Devonian system by some Canadian geologists. By H. M. Ami, D. Sc.....	162
Sub-divisions of the Carboniferous system of eastern Canada. By A. H. MacKay, LL. D.....	xlvii
Sulphate of copper, acid, in mixtures of aqueous solutions of sulphuric acid and copper sulphate. C. F. Lindsay.....	205
Sulphuric acid, solutions of. <i>See</i> Barnes, J.....	129
Supplementary notes on drift ice as an eroding and transporting agent. By W. H. Prest	455
Tracks [<i>Ichthyoidichnites acadensis</i> , n. sp.] from fine-grained silicious mudstones of Knoydart formation (Eo-Devonian) of Antigonish Co., N. S. By H. M. Ami, D. Sc.....	330
Treasurer's report (1897-8), xv. (1898-9), xli. (1899-1900), lviii. (1900-01), xcvi.	
Trott, Capt., death of	lvii
Tungsten, Notes on a Cape Breton mineral [Hübnerite] containing. By H. S. Poole	245
Union and Riversdale formations of Nova Scotia. <i>See</i> Sub-divisions of Carboniferous system in Eastern Canada. By H. M. Ami, D. Sc	162
Upper Cambrian age of Dictyonema slates of Angus Brook, New Canaan and Kentville, N. S. H. M. Ami, D. Sc.....	447
Variation of rigidity of vulcanized indiarubber, with tension. By T. C. Hebb	273
Ventilation. <i>See</i> School-room air.	
Viscosity of aqueous solutions. <i>See</i> Barnes, J.	113
Vulcanized indiarubber, Variation of rigidity of, with tension. By T. C. Hebb	273
<i>See also</i> India-rubber.	
Waghorne Rev. A. C., death of	lvii
Washing Cape Breton coals, Notes on effect of. By H. S. Poole, F.R.S.C.	245
Weatherbe, D'Arcy, C. E.—Recent developments with calyx drill in Nictaux iron field	350
Wolfville branch of the Institute, Report on. By Prof. E. Haycock	xcviii
<i>See also p. cix.</i>	
Worm trails in slates of Halifax. By H. S. Poole	453