TRANSACTIONS

OF

THE CANADIAN INSTITUTE.

VOLUME I., 1889-90.

TORONTO:
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1891.

PREFATORY NOTE.

The Canadian Institute was incorporated by Royal charter in 1851, and immediately began the publication of a record of its transactions under the name of "The Canadian Journal." The first series was in quarto form and terminated in 1855. It comprised three volumes. The second series was in octavo form, began in 1856 and terminated in 1878. It comprised fifteen volumes. In 1879 the name was changed to "Proceedings of the Canadian Institute," and of this third series seven volumes were issued, terminating in 1890, making in all twenty-five volumes.

The Government of Ontario having three years ago commenced the making of an annual grant to the Institute in aid of archæological research, the annual archæological reports have been published as appendices to the Report of the Minister of Education in the same form as other government reports, and therefore could not be bound up with the "Proceedings." As it was desirable that these Reports should be incorporated with the other publications of the Institute, with the view of attaining this object it has been decided to enlarge the page and issue a new series under the name of "Transactions of the Canadian Institute." The archæological Reports which have already been issued may be bound up with the first volume of the "Transactions," and subsequent ones with the succeeding volumes as they appear.

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ROYAL CHARTER OF INCORPORATION OF "THE CANADIAN INSTITUTE," GRANTED 4TH NOVEMBER, 1851.

PROVINCE OF CANADA.—ELGIN AND KINCARDINE.

VICTORIA by the Grace of God of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith, &c. &c.

To all to whom these presents shall come, greeting.

Whereas William E. Logan, John O. Browne, Frederick F. Passmore, Kivas Tully, William Thomas, Thomas Ridout, Sandford Fleming, and others of our loving subjects in our Province of Canada, have formed themselves into a Society for the encouragement and general advancement of the Physical Sciences, the Arts and Manufactures, in this part of our Dominions; and more particularly for promoting the acquisition of those branches of Knowledge which are connected with the Professions of Surveying, Engineering, and Architecture: being the Arts of opening up the Wilderness and preparing the country for the pursuits of the Agriculturist, of adjusting with accuracy the boundaries of Properties, of improving and adorning our Cities and the habitations of our subjects, and otherwise smoothing the path of Civilization; and also being the Arts of directing the great sources of Power in Nature for the use and convenience of man, as the means of production and of traffic both for external and internal trade, and materially advancing the development of the Resources and of the Industrial Productions and Commerce of the Country; and have commenced the formation of a Museum for collections of Models and Drawings of Machines and Constructions, New Inventions and Improvements, Geological and Mineralogical Specimens, and whatever may be calculated, either as Natural Productions or Specimens of Art, to promote the purposes of Science and the general interests of society, and have subscribed and collected certain sums of money for these purposes.

And whereas, in order to secure the property of the said Society and to extend its useful operations and at the same time to give it a more permanent establishment among the Literary and Scientific Institutions of this part of our Dominions, we have been besought to grant to the said William E. Logan, John O. Browne, Frederick F. Passmore, Kivas Tully, William Thomas, Thomas Ridout, Sandford Fleming, and to

those who now are or shall hereafter become members of the said Society, our Royal Charter of Incorporation, for the purpose aforesaid.

Now know ye that we, being desirous of encouraging a design so laudable and salutary, of our especial grace, certain knowledge, and mere motion, have willed, granted and declared, and do by these presents for us, our heirs and successors, will, grant and declare that the said William E. Logan, John O. Browne, Frederick Passmore, Kivas Tully, William Thomas, Thomas Ridout, Sandford Fleming, and such others of our loving subjects as now are members of the said Society, or shall at any time hereafter become members thereof according to such regulations or by-laws as shall be hereafter framed or enacted, shall by virtue of these presents be the members of, and form one body politic and corporate for the purposes aforesaid, by the name of "The Canadian Institute," by which name they shall have perpetual succession and a common seal, with full power and authority to alter, vary, break, and renew the same at their discretion, and by the same name to sue and be sued, implead, and be impleaded, answer and be answered unto, in every court of us, our heirs and successors, and be forever capable in the law to purchase, receive, possess, and enjoy to them and their successors, any goods and chattels whatsoever, and also to be able and capable in law (notwithstanding the Statutes of Mortmain) to take, purchase, possess, hold and enjoy, to them and their successors, a Hall or House, and any Messuages, Lands, Tenements, or Hereditaments whatsoever, the yearly value of which, including the site of the said Hall, shall not exceed in the whole the sum of Two thousand pounds, computing the same respectively at the rack rent which might have been had or gotten for the same respectively at the time of the purchase or acquisition thereof, and to act in all the concerns of the said body politic and corporate for the purposes aforesaid as fully and effectually, to all intents, effects, constructions and purposes whatsoever, as any other of our liege subjects or any other body politic or corporate in our said Province of Canada, not being under any disability, might do in their respective concerns.

And we do hereby grant our especial license and authority unto all and every person and persons, bodies politic and corporate, otherwise competent, to grant, sell, alien, and convey in Mortmain unto and to the use of the said Society and their successors any Messuages, Lands, Tenements, or Hereditaments, not exceeding such annual value as aforesaid. And our will and pleasure is, and we further grant and declare, that there shall be a General Meeting of the Members of the said body politic and corporate, to be held from time to time as hereinafter mentioned, and that there shall always be a Council to direct and manage the concerns of the said body politic and corporate, and that the general

meetings of the Council shall have the entire direction and management of the same in the manner and subject to the regulations hereinafter mentioned. But our will and pleasure is, that at all General Meetings and Meetings of the Council, the majority of the members present, and having a right to vote thereat respectively, shall decide upon the matters propounded at such meetings, the person presiding therein having, in case of an equality of numbers, a second or casting vote.

And we do hereby also will, grant, and declare that the Council shall consist of a President, not more than three nor less than one Vice-President, and not more than eleven nor less than three other Members, to be elected out of the members of the said body politic and corporate, and that the first Members of the Council, exclusive of the President, shall be elected within six calendar months after the date of this our Charter, and that the said William E. Logan shall be the first President of the said body politic and corporate.

And we do hereby further will, grant and declare that it shall be lawful for the Members of the said body politic and corporate hereby established to hold General Meetings once in the year or oftener, for the purposes hereinafter mentioned—viz., that the General Meeting shall choose the President, Vice-Presidents, and other Members of the Council; that the General Meeting shall make and establish such by-laws as they shall deem to be useful and necessary for the regulation of the said body politic and corporate, for the admission of members, the establishment of Branch Societies, the management of the estate, goods, and business of the said body politic and corporate, and for fixing and determining the manner of electing the President, Vice-Presidents, and other Members of the Council, and the period of their continuance in office, as also of electing and appointing a Treasurer, two Auditors, and two Secretaries, and such other officers, attendants, and servants, as shall be deemed necessary or useful for the said body politic and corporate, and such by-laws from time to time shall or may alter, vary, or revoke, and shall or may make such new and other by-laws as they shall think most useful and expedient, so that the same be not repugnant to the laws of England, to these presents, or to the laws and statutes of this our Province of Canada, and shall and may also enter into any resolution and make any regulation respecting any of the affairs and concerns of the said body politic and corporate as shall be thought necessary and proper.

And we further will, grant and declare that the Council shall have the sole management of the income and funds of the said body politic and corporate, and also the entire management and superintendence of all the other affairs and concerns thereof, and shall and may—but not

inconsistently with or contrary to the provisions of this our Charter or any existing by-law, the laws of England, or the laws and statutes of our said Province of Canada—do all such acts and deeds as shall appear to them necessary or essential to be done for the purpose of carrying into effect the objects of the said body politic and corporate.

And we further will, grant and declare that the whole property of the said body politic and corporate shall be vested, and we do hereby vest the same, solely and absolutely in the members thereof, and that they shall have full power and authority to sell, alienate, charge or otherwise dispose of the same as they shall think proper; but that no sale, mortgage, incumbrance, or other disposition of any Messuages, Lands, Tenements, or Hereditaments belonging to the said body politic or corporate shall be made, except with the approbation and concurrence of a General Meeting.

And we lastly declare it to be our royal will and pleasure that no resolution or by-law shall on any account or pretence whatsoever be made by the said body politic and corporate in opposition to the general scope, true intent and meaning of this our Charter, the laws of England, or the laws and statutes of this our said Province of Canada, and that if any such rule or by-law shall be made, the same shall be absolutely null and void to all intents, effects, constructions and purposes whatsoever.

In testimony whereof we have caused these our Letters to be made Patent, and the Great Seal of our said Province to be hereunto affixed.

Witness our Right Trusty and Right Well-beloved Cousin James, Earl of Elgin and Kincardine, Knight of the Most Ancient and Most Noble Order of the Thistle, Governor General of British North America, and Captain General and Governor-in-Chief in and over our Provinces of Canada, Nova Scotia, New Brunswick, and the Island of Prince Edward, and Vice Admiral of the same, &c. &c., at Quebec, this fourth day of November, in the year of Our Lord One Thousand Eight Hundred and Fifty one, and in the fifteenth year of our reign.

[L. S.] W. B. RICHARDS,
Attorney General.

By Command,
E. A. MEREDITH,
Assistant Secretary.

PRESIDENTS

OF THE

CANADIAN INSTITUTE.

1849	Hon. H. H. Killaly.
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1851–52	" " "
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1854–55	" " "
1855–56	Hon. G. W. Allan.
1856–57	Hon. W. H. Draper, C.B.
1857–58	" " "
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1859–60	Sir Daniel Wilson, LL.D., F.R.S.E., F.R.S.C.
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1872–73	" " "
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1874–75	" " "
1875–76	" " "
1876–77	James Loudon, M.A.
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1879–80	" " "
1880–81	" " "
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1884–85	W. H. Ellis, M.A., M.B.
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1887–88	" " "
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1889–90	" " "

OFFICERS

OF

THE CANADIAN INSTITUTE,

1889-1890.

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W. H. MERRITT, *Chairman of the Geological and Mining Section.*
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Assistant Secretary and Librarian:

R. W. YOUNG, M.A.

TRANSACTIONS

OF

THE CANADIAN INSTITUTE,

SESSION 1889-90.

SPECIAL MEETING.

At a special general meeting, duly called by circular, held on 22nd July, 1889, Mr. Vice-President T. B. Browning in the chair, the following resolution was moved by Mr. John Notman, seconded by Mr. G. E. Shaw, and carried :

"That whereas the Hon. G. W. Allan formerly conveyed to the Canadian Institute lots numbers 32 and 33 on the west side of Pembroke street, in the city of Toronto ; and whereas, by deed, bearing date the seventeenth day of July, A.D. 1871, the said Canadian Institute granted to the said Hon. G. W. Allan lot numbers 32 and the northerly fifty-two feet of lot number 33 on the west side of Pembroke street, according to Plan No. 150, registered in the Registry office for the said city; and whereas, the said last mentioned deed was executed by the hand of the then President and Secretary of the said Canadian Institute and under the corporate seal thereof, but it does not appear from the minutes of the said Institute that the said deed and transfer was ever approved of or concurred in by a general meeting of the members thereof, and it seems desirable that the same should be concurred in and approved of; it is resolved that this special general meeting of the members of the said Canadian Institute, duly called for that purpose, doth hereby approve of the said deed and transfer to the Hon. G. W. Allan, and doth hereby ratify and confirm the same and hereby concurs in the action of the said President and Secretary in executing the same and affixing thereto the corporate seal of the Canadian Institute."

FIRST MEETING.

First Meeting, 2nd November, 1889, the President in the chair.

The report of Mr. J. T. B. Ives, F.G.S., delegate of the Geological and Mining Section to the meeting of the American Institute of Mining Engineers at Ottawa, was read, and the thanks of the Institute tendered to him.

Donations since last meeting, 111; exchanges, 1,140; purchases, 387; total, 1,638; new exchanges, 47.

A letter from Mr. Boyle respecting the Archæological Collection was read and referred to a Special Committee, and the Council was instructed to take measures for issuing a larger edition of the next Report.

Joseph Dilworth, A. W. Dingman and George Pattinson were elected members, and Charles Pearson, John Edmunds and L. M. Cockerell associates.

Mr. Arthur Harvey read a paper on "Pelotechthen Balanoides," and presented some specimens to the Museum.

Dr. A. M. Rosebrugh read a paper on "Prison Reform in the United States."

Mr. Marling inquired whether Dr. Rosebrugh could give any information as to the comparative increase of crime in European countries and the United States, and how the native American compares with the immigrant in regard to the commission of criminal offences.

Dr. Rosebrugh was not prepared to give any statistics in the matter.

Mr. G. M. Rae stated that in the greater offences the native American outnumbers the immigrant.

Mr. Chamberlain referred to the influence of the low state of the morals of public men in regard to politics and the extent of all the forms of mercantile dishonesty.

Mr. Macdougall thought that the system of complete isolation had been done away with years ago. He was quite surprised to hear the statements regarding the advantages resulting from the cellular system.

Dr. Rosebrugh—In the solitary system employed in Philadelphia the criminals were kept in complete isolation for three or four years. They saw no one but the keepers and the chaplain. In the same system in Belgium and England nine months were considered sufficient. After

that the criminal passed to an intermediate prison, and was finally advanced to an institution to test the reality of his reformation.

Mr. Marling—It appeared to him that the causes of crime went much farther back. In their endeavour at reformation they should commence with the moral education of the children. The question of moral training in schools was looked upon by some as a matter impossible to handle. He did not think that this was a correct view of the case. The question was occupying much attention in the United States. It should receive more attention in Canada than had been given to it. It was too much ignored in this country. Another subject that should engage the attention of humanitarians was the prisoner's family. He thought that the labour of the man should go to their support. As to the cellular system it was quite clear to him that it should be adopted. In the case of persons awaiting trial they should be kept entirely separate to prevent contamination. The cellular system was the only one that could do this, and it was necessary that it should be continued for a length of time, for if the prisoner was allowed to go back to the corridors all good effects would be effaced. It was just as necessary to isolate boys in the Reformatory. The system should also be introduced into the common gaols.

Governor Green, of the Toronto Gaol, was in favour of isolation. The system in the common gaols should be re-organized with a view to isolation, which will be a very expensive matter.

Mr. Marling asked whether anything could be done in utilizing the labour of the prisoner for the support of his family.

Governor Green said that there were many difficulties in the matter.

SECOND MEETING.

Second Meeting, 9th November, 1889, the President in the chair.

The President and Mr. J. H. Pearce were named as delegates to attend a meeting of the Prisoners' Aid Association in Toronto on the 26th inst.

A letter from Dr. Schram, of Vienna, on "Cosmic Time," was read and referred to a Special Committee.

Donations and exchanges since last meeting, 56.

Mr. William Knox was elected a member.

Mr. A. F. Hunter, B.A, read a paper on "French Relics from Village Sites of the Hurons."

Mr. Marling would like to learn the locality of the ossuaries.

Mr. Hunter had been able to give only the number of them. He would give the localities in another paper.

Mr. Boyle thought that the Institute was much indebted to Mr. Hunter for his paper. Only those engaged in that sort of work can appreciate the amount of labour that Mr. Hunter had bestowed on its preparation. The localizing of the ossuaries was of considerable importance. A map should be constructed and the localities marked on the map. He had succeeded in locating twenty-two villages. Every village has not an ossuary attached to it. There appeared to be an ossuary attached to every second village. This difference between the number of villages and ossuaries may be accounted for. Some ossuaries may have been covered in the act of ploughing; this could not happen in the case of villages, which were generally laid bare by the plough. He had no doubt that many ossuaries yet remained undiscovered. If they were all known the number would nearly correspond to that of the village sites.

THIRD MEETING.

Third Meeting, 16th November, 1889, the President in the chair.

Donations and exchanges since last meeting, 59.

On motion by Mr. Boyle, seconded by Mr. Chamberlain, it was resolved, "That it would conduce materially to the interests of science and the influence of the Canadian Institute to hold one or more meetings during the year in other cities and towns of this Province, and that a Committee of three members be appointed by the President to make enquiries for the holding of such a meeting in whatever place may be deemed most suitable and report to the Council before the close of the present session."

The President named as a Committee Messrs. Boyle, Chamberlain and Macdougall.

On motion by Mr. Chamberlain, seconded by Mr. VanderSmissen, Sir Daniel Wilson was requested to convey to the American Philosophical Society of Philadelphia the congatulations of the Canadian Institute on the celebration of its centenary.

Mr. F. S. Spence was elected a member.

Mr. Levi J. Clark read a paper on "City Sanitation and the Sewage Problem.'

Mr. Arthur Harvey had paid a good deal of attention to the subject since the reading of Mr. Clark's paper of last session. The main question was then discussed, and the opinions of some of the engineers present were favourable to the plan proposed. He could not help protesting against the waste of fertilizing matter which it involved. If the sewage of Toronto were to be turned into the lake, Mr. Clark's ingenious contrivance for utilizing the water-power of the flushing tanks to drive the sewage out to sea and prevent the choking of the great outlet pipe seemed very cheap and appeared to promise good results. But while he thought considerations of economy might compel the adoption of such a system in Toronto, he was much opposed to the great waste involved in it. Some regions in the Old World, once fertile, had become deserts through taking successive harvests from the soil and returning nothing to it. From this and other causes several New England States and parts of New York no longer yielded as they once did. In Canada, the Richelieu district, once the granary of a Province, was now an importer of food. Surely we ought to exhaust every means of saving the fertilizers in sewage before accepting a method of total waste. He had caused a close enquiry to be made in England of modern methods of sewage disposal, and had interested in the subject Mr. T. Kennard Thomson, one of the brightest graduates of the Toronto School of Science, now a member of the American Institute of Civil Engineers. This gentleman had examined the sewage farms, the filtering beds, the methods of electrolysis, the Condor method of deodorisation, the Amiens system, and had come to the conclusion (with which Mr. Harvey agreed) that if any European system was to be introduced into America it should be the system of precipitation, and that the best and cheapest precipitant was the porous carbon, charged with chemicals, now being used at Ealing, Southampton, Coventry, and other places; of which certain trials had been made at the City Hall here and at the Agricultural College in Guelph. Mr. T. Kennard Thomson had visited Southampton (shortly after the visit of the Mayor of Toronto), also Ealing and one or two other towns. The system at Southampton was self-supporting; at he other places nearly so. The precipitation was very rapid, and the solids, though not being of as much value for manure as once expected, were nevertheless all in demand. The effluent of the precipitation was colorless and bright. It contained some nitrates, and all germs were not destroyed; but if it was desirable, these nitrates could be saved and the effluent sterilised at small cost. After referring to the systems in use in other towns in England, which had worked quite satisfactorily in

destroying the sewage, Mr. Harvey said he thought that we had perhaps gone too far on a defective system of sewer construction in Toronto to change it, but younger cities and towns would do well to provide one system for dealing with rain water and a distinct one for sewage. This should be conducted to precipitating tanks in small well-glazed pipes. The volume of sewage would be constant, much less in quantity than by the mixed system, sewer gas would not be generated in such abundance, it would not circulate in the pipes or escape from them, the cost of such a system would be moderate, it would fulfil all sanitary needs, and the sewage could be cheaply and easily made useful for fertilizing purposes.

FOURTH MEETING.

Fourth Meeting, 23rd November, 1889, the President in the chair.

This meeting was devoted to the consideration of certain proposed amendments to the Regulations and By-laws.

FIFTH MEETING.

Fifth Meeting, 30th November, 1889, the President in the chair.

Donations and exchanges since last meeting, 85.

Francis Oakley, M.D., was elected a member.

Dr. Sandford Fleming read a letter from the Astronomer Royal on Cosmic Time, and submitted a memorandum he had prepared at the request of the Astronomer Royal on "The movement for reckoning time on a scientific basis, by which the greatest possible degree of simplicity, accuracy and uniformity will be obtainable in all countries throughout the world." It showed that the hour zone system, known here as standard time, has been adopted in Asia, Europe and America, that is to say in Japan, Sweden, Austria, Hungary, Great Britain, Canada, and the United States. The 24-hour notation is also making steady progress, although Canada is taking the lead. It is the only system in use at this date north of the 49th parallel and west of the 89th meridian. There is not a Province in Canada where it is not already in use. It has been adopted on the railways in Nova Scotia,

New Brunswick, Prince Edward Island, Manitoba, Assiniboia, Alberta, British Columbia, and partly in Quebec and Ontario, and so satisfactory are the results of four years' experience that there can be no doubt of its application being speedily extended. The Institute has had communication with the Grand Trunk and Canadian Pacific authorities, who are, we believe, quite ready to introduce it so soon as they are satisfied the public will assist.

He also read a translation of a communication from the distinguished Belgian, M. Houzeau, on "The History of the Hour." He pointed out that the division of the day into two series of hours goes back more than twenty centuries before our era, but the point of division being placed at mid-day is comparatively recent. Originally the first hour began at the rising of the sun; mid-day was called six o'clock and sunset was called twelve o'clock. The progress of the day was denoted by the position of the sun, the hours of the night by the stars. The length of the hours continually changed with the seasons, and it is remarkable that when a commencement was made to use mechanical movements to measure time the population exacted the preservation of the unequal hours. As a consequence the machines were exceedingly complicated. To mark continually varying periods of duration by instruments of regular motion demanded the greatest ingenuity, but such are the exigencies of ancient habit of thought that people would not for a long period hear of compounding. The day and night, they exacted, should remain separated, and that the hours should be variable in length, according to the seasons. In Paris, so late as the beginning of this century, distinctions were awarded for mechanism that would denote the variable hours; the hours of the day in June were more than double those of the night, and in December *vice versa*. This troublesome arrangement came to an end and clocks were allowed to go at the same rate day and night, but the commencement of reckoning continued to be placed at sunset, a custom which exists at the present day in some parts of Italy. As the moment of sunset is changing from day to day, it became necessary constantly to interfere with the most uniform clocks, moving the hands backward or forward as the seasons changed. This, too, came to an end. In 1792 London ceased to push on the hour; the Continent was less enterprising, Berlin only renounced the daily alteration of its clocks in 1810, and Paris in 1816. There yet remains to us of primitive times the double series of hours in each divisional period, the meaning of which has long since disappeared, as there is only one species of hours. We have also the absence of system in the relationship between the hours in the different longitudes. M. Houzeau writes:—
"What then has been done is but a small matter with regard to the

value of what remains to be done. One reform demanded is the notation of the hours from 1 to 24 in place of twice twelve, a practice from which not only inconveniences result, but danger in connection with railways from the possible confusion between the hours of morning and the hours of evening. It would not be more difficult to reckon 13 o'clock for the hour which follows mid-day than to recommence a new notation. Everybody knows that 13 comes after 12. There is nothing new to learn. If only the administrators of railways have the courage to introduce the new notation in their time tables the public will follow it."

On motion of Mr. W. H. Merritt, seconded by Dr. Meredith, it was resolved, "That the memorandum now submitted be transmitted to His Excellency the Governor-General with the respectful request that means be taken to bring the subject to the notice of foreign nations and in the hope also that through His Excellency's intervention the advantages of the improvements in time-reckoning introduced with so much practical success in Canada may be extended to the British possessions round the globe.

On motion of Mr. Browning, seconded by Mr. Chamberlain, it was resolved, "That in order to meet every difficulty which may arise from the introduction of the improvements in time-reckoning, a permissive Act should be passed by the Dominion and Provincial Parliaments, and with this in view it is suggested that petitions to Parliament be signed by members of the Institute and other citizens."

SIXTH MEETING.

Sixth Meeting, 7th December, 1889, the Vice-President in the chair.

Mr. J. W. L. Forster was elected a member.

The Rev. Edward F. Wilson read a paper on the "Formation of a Society to be called The Canadian Indian Research and Aid Society." He argued that the society should be organized, because it is desirable that Indian relics, traditions, folklore, etc., be collected and preserved while yet it is possible to gather them; because the Indians are the "wards of the nation," and it is the duty of the Canadian people to take a kindly interest in their welfare; because all efforts made hitherto for the benefit of the Indians have been isolated in their character—each Church working on its own lines and the Indian Department on its line and the general public knows but little either of what the Churches or

the Government is doing; because in the States there are two or three well-organized societies having the above objects in view already successfully in operation, and in Canada there are none.

The aims and objects of the society will be to bring the cause of the Indians more prominently before the Canadian public, the Christian Churches working hand in hand together, hearing about (through the journal and meetings) and taking an interest in each other's work. Each Church can still follow its own lines in caring for its own church members among the Indians and educating their children, but it is believed that great benefit will accrue from this united effort, at which the proposed society aims, and that it will become a power for good (as have similar societies in the States) in restraining injustice and improving the condition of the Indians, and will lead to a deeper and more earnest interest in their welfare.

Any archæological specimens collected by the members of the society will be deposited with the Canadian Institute, Toronto.

The following persons have subscribed their names to become members of the Society so soon as it is set on foot, provided it is conducted on the lines and in the spirit set forth:—Sir Daniel Wilson, University of Toronto; Prof. Chas. Carpmael, Observatory, Toronto; Rev. Dr. Wm. McLaren, Knox College, Toronto; Prof. J. Galbraith, School of Practical Science; Prof. W. H. Ellis, School of Practical Science; Rev. J. D. Cayley, St. George's Rectory; Mr. David Boyle, Canadian Institute; Mr. T. B. Browning, Vice-President Canadian Institute; Rev. Dr. John Potts, Toronto; Rev. Principal George M. Grant, Queen's University, Kingston; Mr. James Bain, Jr., Chief Librarian, Public Library; Mr. Horatio Hale, Clinton, Ont.; Rev. Edward F. Wilson, Sault Ste. Marie, Ont.; Mr. C. H. Hirschfelder, American Vice-Consul, Toronto.

A monthly journal or periodical will be published under the auspices of the Society; the journal to give general information of missions and educational work among the Indians (irrespective of denomination), and also to have papers of an ethnological, philological and archæological character.

Ojijatekhah thought that branches of the proposed society should be established among the Indians. It would tend to bring out individuality. Among the Six Nations there were many able men, but there was no way of developing their abilities. He fully endorsed Mr. Wilson's views.

Mr. Browning enquired how the Municipal Act worked among the Indians.

Ojijatekhah.—In some places it worked very well. He thought there were some good points in it. It was working well among the Mississaguas. Some of the older people were opposed to it.

Mr. Chamberlain thought, on account of the national character of the society much could be done in regard to science that could not be done by the Canadian Institute nor by the Government. By means of this scheme they would come into direct contact with the Indians. Another point in its favour was the broad platform on which it was founded.

From these considerations he thought the Institute should give it its support.

Mr. Harvey, while he considered the scheme very good in its general aim, thought the details were very faulty. He thought that science and religion were too much mixed up in it. He thought it was necessary to consult the Indians themselves. He spoke favorably of the work done at the Shingwauk Home. He had come across some Indians from that institution. They were fine bright lads, who were quite able to take their places alongside the white children.

SEVENTH MEETING.

Seventh Meeting, 14th December, 1889, the President in the chair.

Donations and exchanges since last meeting, 95.

Rev. E. F. Wilson, G. K. Powell and R. Haslitt were elected members.

A letter was read from Dr. A. M. Rosebrugh announcing that the question of priority of invention of a system of duplexing metallic telephone trunk lines had been decided by the United States Patent Office in his favor; also a letter from Professor Schram of Vienna, with papers, giving an account of the steps taken to introduce the hour-zone system of time-reckoning on the German and Hungarian railways.

On motion of Mr. Marling, seconded by Mr. Merritt, it was resolved. "That petitions to the House of Commons, the Senate and the Governor-General relating to the introduction and adoption of Standard Time be sent to Hamilton, Ottawa and Kingston for signature; that those for Ottawa and Kingston be sent to Dr. Fleming, and those for Hamilton to the Hamilton Association with the request that they take charge of the petition and endeavor to obtain signatures.

Mr. Arthur Harvey read a paper on "The Cruel Plant (*Physianthus albens*)," illustrated by specimens.

In answer to a question from Mr. Hamilton, Mr. Armstrong said that the humming birds and insects would not feed on the insects caught. The humming bird feeds on honey. He, therefore, thought that the humming bird was the agent in cross-fertilization. The larger sphinx moths may also act as fertilizers. He had seen a moth with the pollen adhering to it, and so carried away to another plant. He was sure that the cruel plant did not make use of the insects caught. He had found as many as sixty-five moths in one species of the plant. He understood that the common milk-weed also acts as a fly-trap He wished some of the junior members would collect specimens and endeavour to ascertain the fact.

Mr. J. B. Williams read a paper on "Birds recently added to the Museum." He exhibited between thirty and forty mounted specimens which had been added during the past year to the Institute Museum. The following species, all taken in the neighbourhood of Toronto, were represented :—Winter wren, house wren, cat bird, chestnut-sided warbler, myrtle warbler, cedar waxwing, scarlet tanager, indigo bunting, fox sparrow, song sparrow, pine siskin, redpoll, red-winged blackbird, cow-bird, horned lark, yellow-bellied flycatcher, olive-sided flycatcher, crested flycatcher, red-headed woodpecker, belted kingfisher, black-billed cuckoo, yellow-billed cuckoo, rough-legged hawk, red-backed sandpiper, stilt sandpiper, Caspian tern, and Bonaparte's gull. The habits and distribution of these different birds were described, and two mounted groups to illustrate the natural habits and surroundings of our Canadian birds were also exhibited, one of the wood pewee, with its nest and eggs, which was procured by the members of the biological section on the occasion of their excursion last June to Scarboro' Heights ; the other of the least bittern, with nest and eggs surrounded by grasses and reeds, upon one of which is perched a specimen of the long-billed marsh-wren. These were taken last summer in Ashbridge Bay. Mr. Williams expressed a hope that sufficient funds would be provided to procure a number of such groups for the museum, so that it would become an interesting and instructive institution, not only to scientific men, but to the public generally. A specimen of the razor-billed auk, recently taken in Toronto Bay, and kindly lent for the evening by Mr. Cross, the taxidermist, on Yonge street, was also exhibited. This is the first record of the bird having been taken on Lake Ontario, and it was hoped this specimen would be secured for the museum, and not be lost in some private collection, as is the case with many of the rare birds taken in this neighborhood.

Mr. Stark enquired respecting the sparrows whether they drove away any insectivorous birds.

Mr. Williams did not think that they were so bad as the American Report tried to make them out. He did not think they had exterminated any birds.

Mr. Harvey called attention to the persistency with which some birds frequented the same locality. He had noticed a wren that came to the same place for five years in succession. The same bluebirds came three years, and the same cat-birds three or four years successively. He had a fly-catcher about his place for four or five years.

EIGHTH MEETING.

Eighth Meeting, 21st December, 1889, the President in the chair.

Donations and exchanges since last meeting, 37.

Mr. T. B. Browning read a paper on "The Codification of the Law."

The paper opened with an account of codification in India, and the progress of the movement generally. He regarded the term "code" and the qualities usually ascribed to it as relative rather than absolute. That code is best which is most complete, most precise, most systematic. The laws which pass under Justinian's name would not be called a code in any modern meaning of the word. There are states of law as growing custom, which scarcely admitted of codification, but the general mass of our procedure and substantive law was in a fit condition for and urgently demanded codification, while the most effective means of codifying was by taking the law in sections, as was done in India. Case, statute, and text-book law was reviewed, and the approximate result of codification upon each pointed out. Case law showed itself in three stages, historically speaking:—As voluntary reporting by judges and counsel in the olden time; speculative, where publishers engaged in it for profit; authoritative, under direction of legal authorities. Mr. Browning was of opinion that all cases in the Superior Courts should be officially reported, and not some only as now, and gave as his reason that each judgment not only determines the law for a particular group of facts, but with us constitutes a rule to be followed in subsequent similar groups; is as much a part of the law as a statutory provision, and the means of ascertaining that law should be given. The only remedy for the

excessive bulk of the reports was codification, which meant the summing up of past law, and gave a new start to case law. Speaking of statutes, he divided them into the ante-reform period, where they constituted isolated interferences by the legislature with the established course of justice. The post-reform period took a much wider range, and developed what is known as the consolidation system, which was applied mainly to company and land law, to crimes and procedure. Mr. Browning criticised the cumbrous form of statutes, their want of definition, redundancies in words, inaptness of division, want of thoroughness and temporary character, but saw in consolidation a step to codification, and in the late Judicature Act, the fullest consolidation we have, almost a realization of it. Especial value was placed on text books, which were ranked in three classes: First, those writers before Coke, who sum up, or are supposed to sum up the early customary law of England, but whose authority is now waning, as one of the results of recent investigation. Second, writers from Hale to to-day. These enumerate, analyse and extract general rules from cases and statutes; but of late years are becoming so unwieldy from mass of matter as almost to defeat their end—an exposition of the law. In the third class are found Mr. Justice Stephen, Sir Frederick Pollock, and others. They give special prominence to principles and cite cases, not by way of discussion, but as examples or foundations for principles, in a short, clear, mathematical form. From this stage of legal development to codification the distance is not far; the very form they use is taken from Macaulay's penal code for India. Mr. Browning then showed the principles on which the Anglo-Indian codifiers proceeded, and illustrated his remarks by extracts from their work. Except English-speaking peoples, all civilized nations have codified their laws and find the system useful. England has used a code of bills, notes, and cheques with acceptance since 1882, which our commercial men might find it to their profit to introduce into Canada. Summing up, Mr. Browning claimed for a competent codification the following advantages:—1. The summing up of case and statute law in distinct propositions with due limitations—reducing the law to definiteness. 2. A consequent gain in intelligibility, an enormous saving in labour and cost to the community.

NINTH MEETING.

Ninth meeting, 11th January, 1890, Dr. Kennedy in the chair.

Donations and exchanges since last meeting, 125.

The President, the Secretary, Hon. G. W. Allan, Professors Ellis and Pyke, Dr. Kennedy, and Messrs. Marling and Merritt were named a committee to co-operate with the other Societies in the movement to retain Upper Canada College and grounds for museums and other purposes.

Announcement was made of the death of Samuel Keefer, C.E., a member of the Institute since 1850.

Mr. Charles G. Y. King, late Superintendent of the Haitian Navy, read a paper on "Personal Experiences in Haiti under President Legitime." He dealt with the political and domestic life of this black Republic, the general appearance of the island as viewed from various points and harbours, and described as truly picturesque the lofty mountainous regions attaining an altitude of over 8,000 feet above the sea level, and the luxuriant, fertile plains of the Artibouill and other valleys. Many graphic and humourous sketches of the habits, costumes, and customs of the people were vigorously represented, and many thrilling incidents of naval and military life during the late rebellion added zest to the evening's amusement. Various examples of creole conversation and native proverbs, descriptions of floral, agricultural and forest scenes occurred at frequent intervals. Mention of voudou rites and ceremonies and native superstitions gave an insight into the inner life of this strange people.

TENTH MEETING.

Tenth meeting, 18th January, 1890, the Vice-President in the chair.

Donations and exchanges since last meeting, 81.

Mr. Boyle announced a loan to the Institute by Mr. Long of some hundreds of archæological relics found in the neighbourhood of Toronto.

John McConnell, M.D., was elected a member.

W. A. Douglass, B.A., read a paper on "The Distribution of Wealth as Related to Production." The Creator furnishes the raw material with the

physical force: man wants the finished article. To obtain this finished article toil must be expended. Nature is a coy maiden, and will be wooed only by the hand of industry. Idleness she abhors as she abhors a vacuum, and the idler she punishes with weeds, poverty and death. Man's tenure on this planet depends on his industry; nature knows no compromise: her decree is short, sharp and decisive toil or death. The first of nature's laws is: Produce to the producer only.

The productive power of man is limited: for any man or any number of men to produce sufficient to maintain the succeeding generation without toil is a physical impossibility. Human skill can be perpetuated only by continuous practice. Hence nature has so limited production that the exercise of toil is an indispensable necessity. Nature's second law is limited production.

All human productions are transitory. The food of this year is soon consumed, our machines quickly wear out, even our buildings, stable as they seem, do not last on the average more than one generation. Nature's third law is transition of product.

These laws summarized are: produce to the producer only, produce limited, produce transitory.

If, therefore, our statutory law of distributing wealth conformed to nature's laws, we would have for each individual produce only when he produced. In nature's laws we find no continuous income without toil and much less do we find an increasing income without toil.

How far we have departed from nature's laws of distribution by our legislative enactments may be readily seen in the fact that many obtain large production without producing, many continue to enjoy large product generation after generation without producing, and many enjoy increased production without producing. Our legislative methods of distribution are utterly at variance with nature's laws of distribution.

How this comes about may at once be seen by noting two fatal errors in our legislative enactments:—1st—Treating raw material, the land, the ore, the water-power, nature's gifts, as though they were the products of labour. 2nd—Treating the values that arise, principally to land simply from the increased demand of a larger population, as though these values were also products of labour.

The raw material or the natural opportunities are undoubtedly not the product of toil, and to say that the values that have come to the mines and lands of this continent with its growing population is to set at defiance the commonest observation. It is from the non-recognition of

these two great facts that arises the contrast between nature's laws of distribution and human laws.

As the raw material is not a product, so no set of men can rightly claim it as theirs. Equity demands that the rights of all mankind to the natural opportunities are equal. If a man utilizes this right, and puts forth industry, he secures an exclusive right to the product; but if he exerts no industry, by what right can he claim product? For one portion of society to claim exclusive right to the raw material is equivalent to that portion asserting the exclusive possession of the planet.

Every growth of population is accompanied with two conditions, increased land value and increased common expenditure. The increased land value must be surrendered by the toilers. Our legal enactments determine the destination of that surrender in one of two ways, 1st, either to speculators, who appropriate without producing and thus despoil the toiler; or, 2nd, into the public treasury for the common advantage of all. Only when we have conformed to this simple law of securing to the individual the value he produces and to the community the value it produces can our laws of distribution conform to nature's laws. Nature's laws are harmonious and beneficent, and so long as we set them utterly at defiance social harmony is impossible.

Mr. Pursey thought that Mr. Douglass had placed the subject in a very clear light; there may be flaws in the reasoning, but he did not see where they were. He thought that from the importance of the subject, the meeting should have been attended by some of the professors of the science, who would point out the errors and enlighten the audience.

Mr. Richardson referred to the large amount of wealth that was annually lost through ignorance and unscientific methods of production; as in agricultural pursuits when the land was impaired by constantly growing the same crop. This was not the natural condition. If there was a proper rotation of crops there would be a constantly increasing amount of production.

Mr. Jones thought the subject was of importance in its bearing on the single tax question. He read an extract shewing that the theory of Malthus was wrong and that population will not outrun the means of subsistence.

Mr. Chamberlain: A good deal had been said against the law propounded by Malthus; in the first place he did not see what the law of Malthus had to do with the subject; and then as to Malthus himself, it was not quite clear that he understood his own principles.

Mr. Richardson: Where Malthus was not quite right was that he did not take all the circumstances of modern civilization into consideration.

Mr. Elvins was of opinion that the theory of Malthus had nothing to do with the present paper.

Mr. Boyle referred to a writer in England, who gave illustrations of the effects of increased population. The correct explanation was that given by John Stuart Mill, who when asked what was the greatest incumbrance on the land, said it was the landlord. He shewed that while the proprietor was getting more, the laborer was getting less. With every increase of population the ground rents keep advancing.

Mr. Douglass referred to some important tables got out by Mr. Giffard which showed the result was in the course of a century that there was a smaller proportion of large fortunes, and a larger proportion of small fortunes. This related to England. Every man that looks into the matter will find that the lots become divided into smaller portions. He did not find that those who held the largest portions made more of them. As to the contrast referred to between nature and man, he thought that there was no opposition between them. He considered man the most important part of nature. He asked where did they get natural distribution? We had no such thing handed down to us. It was a state that had not existed. As to the theory of Malthus, he did not think that anybody held to it in its present state.

Mr. L. J. Clark said there seemed to be a want of definiteness in the subject to satisfy his mind. He thought that there were many obscure points about it. How would the single tax affect those portions of the country that were of less value? Would there be some correcting influence attending the tax? He did not see any objection to men like Vanderbilt accumulating wealth. He thought as distributors of wealth they were an acquisition to the country.

ELEVENTH MEETING.

Eleventh Meeting, 25th January, 1890, Mr. Merritt in the chair.

Donations and Exchanges since last meeting, 50.

Mr. A. E. Rundle was elected a member.

Mr. A. F. Chamberlain, M.A., read a paper on "The Indians of Canada."

He began by indicating the progress that has been made of late years in the study of the American aborigines, noting the problems that had already been solved, and those, and there were many, which yet waited for a solution. The tendency of American investigation at the present day is to study the aborigines as Americans, or, as Mr. Henshaw has well put it, "to find out what they are" before seeking to discover "who they are," to find out how long they have been on this American continent before trying to determine from what part of the world they migrated hither. There was also a distinct trend of opinion in favor of the great antiquity of savage man in America. The writer pointed out in what relation the study of the aborigines of Canada stood to these great questions, what had been done in investigation in the past and what yet remained to be done in the future. He also dealt with race classification, showing how impossible it was to catalogue races of men by the color of their skin, their hair, or the formation of their skulls. A study of these peculiarities amongst the Indians of Canada was sufficient to reject all of them for the present at least, as absolute race classifiers. He noticed the opinion of Major Powell, that a classification of mankind into groups had resulted everywhere in failure, and inclined strongly to the view advocated by the venerable philologist Horatio Hale, shared also by Freeman, the historian, and seemingly, too, by Prof. Max Muller, that in our day language is the only certain test of race. He proceeded to discuss the linguistic families of Canada, the Eskimo, the Algonkian, the Iroquoian, the Siouan, the Athapaskan, the Salish, etc., pointing out their importance in the study of American comparative philology, and noting the results of the recent investigations of Rink, Murdoch, Petitot, Cuoq, Legoff, Dorsey, Henshaw, Hewitt, Boas, Hale, and others. He pointed out that Canada was a remarkably fertile field for ethnographical research, for within its borders lay the primitive habitats of the Eskimo, Iroquoian, and Algonkian races, according to the opinions of eminent scholars. The question of the relation of the Canadian aborigines to those of the United States was pointed out as being of very great importance, as was also the connection that must have existed in the past between the Indians proper and the Eskimo. The subject of the religion of the Indians of Canada was then taken up, and the opinion of Col. Mallory cited and agreed with that apart from ideas imparted to them by the whites, the American Indians never had any knowledge of a sole beneficent being, had no idea of monotheism as we now understand it. Myths of origin were then considered and curious beliefs cited, such as those of the Iroquois, who believed their forefathers came out of a little eminence near Oswego Falls; of the Blackfeet, who thought that their ancestors came out of two lakes in their country—men out of one,

women out of the other; of the Eskimo, who thought that their forefathers were seals, tired of the sea, who began a new life on the land Myths of migration were also discussed, and the importance of recording at once all that can possibly be obtained of the myths, legends, and folklore of the Canadian Indians was dwelt upon. The sociology, customs, and habits of the Indians were becoming more and more a subject of research, and in Canada valuable results in this field had already been obtained, and much more was to be expected in the very near future. The writer concluded by emphasizing the importance of the study of the American Indians for the proper understanding of the evolution of modern civilization and modern social and political institutions, and by expressing the hope that both the Provincial and the Dominion Government would in the future aid in carrying out these needed researches much more than they have done in the past.

Mr. Boyle said the time had gone by when students of archæology would endeavour to trace any connection between the Indians of North America and the Israelites and any other Asiatic nations. It had also gone by when America was considered the younger continent. He considered philology was the key that would unlock the difficulty of the origin of the Indian people. He corroborated what Mr. Chamberlain had said respecting the origin of Indian myths. It was impossible to give anything as a pure myth. He urged the importance of collecting all these myths. Mr. Boyle then referred to the loan of specimens to the museum by Mr. Lowry; they were peculiarly valuable as having been found within a radius of a few miles of Toronto. Another young man who had heard of what Mr. Lowry had done, declared his intention of doing the same.

Mr. Harvey, in reference to the mounds, said there was no evidence whatever as to their origin. He understood that the connection of the mound builders with Asia was now under consideration by members of the order of Jesuits in all parts of the world. At present there was nothing known with certainty. He had recently found a short statement in *Les Relations des Jesuites* that speaks of Lake Superior as the rendezvous to make their trade. This was corroborated by specimens of shells now in the museum. With respect to the myths, he suggested to Mr. Chamberlain that it would be well for him to obtain an introduction to the Seminary at Quebec, and obtain access to the documents of the early Jesuit relations. The earliest of these were very difficult of access, and still remained in manuscript.

Mr. Chamberlain had intentionally omitted to use the word "mound-builders," because it is generally agreed that there was no such people as

the mound-builders. He referred to them as the people that built the mounds.

TWELFTH MEETING.

Twelfth Meeting, 1st February, 1890, the President in the chair.

Donations and Exchanges since last meeting, 74,

William Burton, W. D. McPherson, and R. H. Ahn were elected members.

Mr. J. C. Hamilton, L.L.B., read a paper on "The Maroons of Jamaica and Nova Scotia."

THIRTEENTH MEETING.

Thirteenth Meeting, 8th February, 1890, the President in the chair.

Donations and Exchanges since last meeting, 85.

The Council reported the election of John Jackson as an Associate.

Prof. J. M. Baldwin was elected a member.

On motion by Mr. Harvey, seconded by Mr. Boyle, it was resolved, That a meeting of the members of the Institute favorable to the formation of a Historical Section, be held in the Lecture Room of the Institute on this day se'nnight at 19.30 o'clock, for the purpose of adopting a constitution and electing the officers of the said section.

Mr. J. F. Cummings, Electrical Engineer, read a paper on "The Edison System of Electric Light."

FOURTEENTH MEETING.

Fourteenth Meeting, 15th February, 1890, the President in the chair.

Donations and Exchanges since last meeting, 52.

A communication from Mr. G. M. Rae, relating to the destruction of archæological relics was referred to the Council.

Moved by Mr. Hamilton, seconded by Mr. Browning, "That the members of the Institute express profound regret at the recent calamity which has befallen the Province, in the destruction by fire of a large part of the University building, with its valuable library, apparatus and specimens. They also express the hope that the building will be speedily rebuilt, which they urge in the best interests of education and of the the people generally.

Moved by Mr. Harvey, seconded by Mr. Boyle:

"That deeply sympathizing with the Faculty and the Students in the impairment of the facilities for study, the Canadian Institute beg to tender the use of their Lecture rooms and the mineralogical and archæological museums in the building of the Institute on Richmond street. The reading room, open daily between one and six, is also placed at their service."

Both motions were carried.

Messrs. Bain and Macdougall were elected representatives of the Institute on the Board of the Industrial Exhibition Association.

Mr. Andrew Elvins read a paper on "Sun Spots during 1889," illustrated by diagrams and a magic lantern.

He stated that he at first intended to give a few facts in relation to sun spots during 1889, but finding no other paper on the programme for the evening he would branch out a little and embody the spots of 1889 in some general remarks on sun spots. He then described a typical spot and showed a drawing of one taken during the past year, also a group of spots as seen at different dates during August last. The group underwent marked changes from day to day. He alluded to the fact that spots are usually found near the sun's equator, and very rarely more than 35° from it, so the zone of spots passes around the sun parallel to the equator.

The fact that spots are more numerous some years than others was then referred to, and it was shown that though there is a cycle of about 11¼ years the real period is very variable. During 1889 there were very few spots. They have kept decreasing in numbers and size, and it is questionable if the minimum is yet reached. During 1887 there were 156 new spots, in 1888, 82 new ones, and last year only 55.

He noticed that a spot cycle commences with the spots far from the equator, and that they approach the equator at the time of sun-spot minimum or the end of the cycle. This was illustrated by diagrams. During the past year an old question has been revived. Rev. Mr.

Howlett states that though he has been observing and drawing spots for more than twenty years, he has not seen the spots show evidence of being cavities. Mr. Raynard, F.R.A.S., corroborates this statement, and Mr. Elvins' own observation leads him to the conclusion that the spots may not be cavities after all. He spoke of the spectra of spots as observed by Mr. A. F. Miller. of Toronto, and one observed at Stonyhurst, England, which gave a spectrum of bright calcium lines. He stated that two theories existed as to the nature of these spots. One regarded spots as openings in the photosphere, the other as existing on its surface and in the sun's atmosphere above the photosphere. In relation to the first he read long extracts from the recent work of J. H. Kedzie. He eulogized the work, and stated that if the meteoric theory which he had always supported, should fail (which he did not anticipate), Kedzie's explanation is the best he knows of to fall back on. At the conclusion many views were shown with the lantern by Mr. Howells and explained.

Mr. Harvey enquired whether any magnetic disturbance had been observed in connection with the sun-spots of last year.

The President had not been able to trace any connection. There was an intimate connection between magnetic disturbance and the aurora. Whenever there was magnetic disturbance there was an aurora, and *vice versa*. He referred to a large spot to which his attention had been called by his brother in England. On observing it with the spectroscope he saw bright flames in the neighborhood of the spot. Mr. Lockyer published a similar observation on the same date.

Mr. Ridout corroborated the statement of the President regarding the connection between the aurora and magnetic disturbance from his observations in the North-West.

FIFTEENTH MEETING.

Fifteenth Meeting, 22nd February, 1890, the President in the chair.

Donations and Exchanges since last meeting, 39.

A communication from the Deputy Superintendent General of Indian affairs, declining to recommend a grant by the Dominion Government to the Institute in aid of archæological research, was referred to the Historical Section.

The Secretary and Librarian were instructed to offer to the University of Toronto the use of such works in General and Classical Literature,

Philosophy and History, as are now in the Institute Library, except copies of original documents of which the Institute has no duplicates.

Mr. John G. Ridout was elected a member.

Mr. W. A. Sherwood read a paper on "Color in Nature" (a sequel to a former paper.)

Mr. Sherwood, after referring to the different views advanced by eminent men of science, their disagreement as to the cause of color perception, and to what constituted the primary colors, advanced his theory of color-blindness. That there are certain rods or cones in the retina for the perception of certain colors was now fairly established. The most recent writer on the rod or cone theory, Professor Le Conte, of the University of California, in a work on sight, afforded a great deal of light on the subject. Le Conte was supported in his views on the cone theory by the eminent Professor Herring, of Vienna. According to Herring, there are four rods or cones corresponding to the four colours—red, green, blue, and yellow—acting in pairs, yet distinct the one from the other. Color-blindness was a retinal defect, and those affected were unable to perceive red and green. These colors to the color-blind, seemed as shades of grey. This defect Mr. Sherwood declared, was due to the condition of society For the last two centuries the color red was almost unused. With it went, by decree of certain creeds, other colors associated with it, substituting the uninteresting colors grey, black, and white. Was it not reasonable to believe that the cone, or rod, whose special function was the perception of red, would, by the absence of red, become first inactive, then dormant, and finally die? Writers on color-blindness had ascribed every cause save that which seemed most natural. He believed it was due to external and not internal causes. The sect known as the Quakers were not only found with much weakness of the eyes, but also with a large per centage of color-blindness. This Mr. Sherwood believed was due to the habit of wearing the sober colors. The primary red with them had long been in disuse, as it was now with us. With the Highlander the love of color in all varieties of hues never lessened in interest even in ripe years. With us, unfortunately, the opposite state of things existed, colour having but little interest beyond middle life. This want of interest was due to the absence of color in our daily surroundings An early return to the colors as we saw them in nature should be made The colors of autumn foliage might well replace those now used in drapery in our homes and in our literature. This would prevent an invasion in after generations of this dangerous affliction. Of the unpleasant effect of black and white, Mr. Sherwood said halls of learning often

seemed to him like white sepulchres with dark spirits hovering round. Here he would strongly reform the present custom. The professors should wear purple or terra-cotta coloured gowns, and the students baize green. The eyes of the professor would rest with pleasure upon the field of color before him, and the student would easily discern the robes of the professor, The walls should be painted with such colors as would lend a soft effect to the eye, and afford an illustration of the most prevailing tints of nature.

In reference to Mr. Sherwood's remarks as to the prevalence of color-blindness in Philadelphia, Mr. Williams thought it impossible that it was owing to the dress of the people or the color of the houses. There was no lack of red in the exterior of the houses of Philadelphia, as they were of red brick. There may be something in the interior of the houses to produce the effect.

Mr. Sherwood referred to the large quantity of marble used in the buildings of Philadelphia. He was struck with the prevalence of white. All the old buildings were white, many of the new buildings red. Color was almost unknown in the streets. Over one out of five of the inhabitants were compelled to wear glasses. It could not be accounted for on any other theory than that of the absence of red. The cure was to return to the draperies of the 16th century. Two centuries ago everyone wore red.

Mr. Harvey thought the theory was original. Some of the arguments, however, were not conclusive. As to race he thought that different races recognized different colors; the pure blue of one race was not the pure blue of another.

Mr. Chamberlain agreed with Dr. Ryerson, who read a paper last session, that the use of tobacco and intoxicating liquors was to a great extent the cause of color-blindness. He could not draw the conclusion that savage people could distinguish colors better than civilized, as in the vocables of some Indian tribes the words for blue and green were the same. He would like to know whether any experiment had been made as to color-blindness among the lower animals.

Mr. Sherwood referred to the work of the Indians, as shewing a nice discrimination of the colors. In the basket work and bead work there was a perfect arrangement of colors. All the different colors were most accurately blended. Various incidents showed that the lower animals had a keen perception of color. As to the effect of the use of tobacco and intoxicating liquors, some of the most eminent artists who used them excessively, produced the finest works. He instanced Moreland and Turner,

whose colored pictures were celebrated all the world over. That the whole system becomes weakened by the use of tobacco and liquor, no one could deny, but it could not be proved that it was the cause of color-blindness or affected the sense of color.

Mr. Jones thought that it was carrying the thing too far to apply it to dress. He asked why Mr. Sherwood had not the courage of his convictions and come in the colored costume he advocated. He agreed with Mr. Sherwood that there was too much white in the interior of houses.

Mr. Clark wished to call attention to the investigation Dr. Ryerson had made last year as to the prevalence of color-blindness in the Public Schools. The report stated that from five to six per cent. of the pupils were color-blind. He was struck with the fact that so few of the girls were color-blind.

Mr. Sherwood thought that it was owing to the fact that girls were more accustomed to pay attention to colors.

The President enquired whether in Toronto there were more girls or boys that wore glasses.

Mr. Clark said that so far as his observations went the numbers were about equal.

Mr. Bengough stated that it was not long since a commission had been appointed to investigate the prevalence of color-blindness among the seamen employed on the lakes. One of the members of the commission told him he was surprised at the number of captains and mates of vessels that were color-blind. The men were astounded to find that so many had to be set aside for that defect.

SIXTEENTH MEETING.

Sixteenth Meeting, 1st March, 1890, the President in the chair.

Donations and Exchanges since last meeting, 62.

Dr. P. H. Bryce read a paper on "Some Points in the Natural History of Drinking Waters."

Mr. J. J. Mackenzie, B.A., exhibited some cultures of bacteria from city water.

SEVENTEENTH MEETING.

Seventeenth Meeting, 8th March, 1890, the President in the chair.

Donations and Exchanges since last meeting, 59.

Messrs. R. Dewar and F. W. Barrett were elected members.

Mr. Ernest E. Thompson read a paper on "Canadian Faunal Lists."

Mr. Harvey referred to the unusual irruption this year of both kinds of Grosbeaks. He had never heard of the Yellow Grosbeak coming here before.

Mr. Thompson said this was the first year it had been known in New England. They were never found before in such numbers. They had been found in former years. The best known record is that of Mr. Collins, of Woodstock, in 1854. It was impossible to explain what brought them here in such numbers, unless, as Dr. Brodie had explained it, it was the effect of the frost in the branches of the trees containing the fruit which were broken off and covered with snow. This caused them to seek out other regions. Birds seem to go where they will get food; the climate is not of so much consideration. The question of food during the winter season is the principal if not the only reason of their migration.

Mr. Harvey referred to the Baltimore Oriole being found during the summer in the neighborhood of Pelee Island. The summer there was about the same as that of Memphis. The migration of birds to that peninsula from the south-west was very remarkable. It was wonderful to see the immense number in the County of Essex, making the woods brilliant with their plumage. The Baltimore Oriole was common near Toronto, but not so much so as formerly. Speaking of migration, it was still an obscure subject. It was clear that birds did not follow some blind instinct, but were guided by certain circumstances. Some explained it as arising from a traditionary instinct derived from their ancestors.

EIGHTEENTH MEETING.

Eighteenth Meeting, 15th March 1890, the President in the chair.

Donations and Exchanges since last meeting, 45.

Prof. Ellis was elected Delegate to the next meeting of The Royal Society of Canada.

Messrs Harvey and Middleton were named Auditors for the current year.

Mr. Alderman Maughan was elected a member.

A sale of last year's periodicals was then held.

NINETEENTH MEETING.

Nineteenth Meeting, 22nd March, 1890, the President in the chair.

Donations and Exchanges since last meeting, 53.

Mr. Macdougall was named to represent the Institute on the Committee of the Parks and Public Places Association.

R. W. Doan was elected a member.

Dr. G. Sterling Ryerson read a paper on "Defective Vision in the Public Schools."

He said that during the past year 5,253 children in the Public schools have been examined, with the assistance of Dr. Wishart, as regards defective vision. Of these 2,726 were boys, and 2,527 were girls; 193 boys and 260 girls were found to be undersighted, an average of 8·6 per cent.; 78 boys and 138 girls were short-sighted, an average of 4·0 per cent. Of the 5,253 children tested, 668 were found to have visual defect of some kind, an average of 12·7 per cent. The per centage of defect varied in different schools, the smallest per centage being found in Queen Victoria School, Parkdale—4 per cent. of undersight and 6 per cent. of short sight; whereas the highest was found in the Elizabeth Street School—25·4 per cent. of undersight and 31·0 per cent. of short-sight. The per centage of Upper Canada College was 4·1 per cent. undersighted and 7·3 per cent. short-sighted. In Wellesley, 7·7 per cent. undersighted and 10·3 per cent. short-sighted. Taking the classes from senior first to senior fifth, the short-sighted increased from 2·5 per cent. to 8·6 per cent. He held that the great difference in per centages of short sight in different schools, was caused by imperfect window space, wrong position of desks, the use of ground glass in windows, the size of the playground, height of surrounding buildings, and last but not least, the home surroundings of the children. He considered that Queen Victoria school was the best lighted and ventilated he had visited, as were also the surroundings the best—a wide view over the lake, plenty of play room, and the absence of surrounding high buildings. Dr. Ryerson especially con-

demned the desks used by the junior classes as hurtful to the eyes and spine. With these exceptions, he believed the hygienic surroundings of the children to be exceptionally good, and pointed to the very low per centage of short sight, only 4 per cent., in proof of his contention. He thought that the School Board was to be congratulated, and that small as was the proportion of defect it might still further be diminished by abolishing the ground glass windows, the desk-seats of the junior classes, and the exercise of more care in placing the desks with regard to light. The proportion of defect found in Philadelphia in a similar examination was 4·27 per cent. In Germany it va ied from 10·9 to 80 per cent. Two thousand seven hundred and twenty-six boys were examined for color-blindness; 84 were found more or less color-blind—about 3 per cent. Of 1,671 girls, 11 were color-blind—about 8·6 per cent. In two schools over 5 per cent. of color-blindness was found—in one as low as 1·6 per cent.

Mr. Macdougall called attention to the abominably printed school books. He thought they had as much to do with causing a strain on the children's eyes as anything. He referred to the large per centage of myopia in Lansdowne and Elizabeth street schools. He thought that the dwellings of the children would likely have an effect in producing it.

Mr. Clark had been always opposed to the use of ground glass. Clear glass could be put in much cheaper. As to the large per centage of myopia in Elizabeth Street School and Queen Victoria School, he wished some further information as to the cause. He did not think that the print of the school books was nearly so bad as that of the daily papers.

Mr. Browning wished to ask whether any relation was found between myopia and color-blindness.

The President was struck with the fact in the statistics that when the per centage of short-sightedness was large that of long-sightedness was also large.

Mr. Chamberlain referred to the remarkable contrast between the Indians of the settlements and those in the reservations in regard to long-sightedness.

Mr. Macdougall asked, in reference to the large per centage of short-sightedness in Norway and Sweden, 66 per cent., was it not owing to the glare of the snow?

Dr. Ryerson: As to the connection between short-sightedness and color-blindness, he had not found any cases where they coincided. The long-sightedness of the Indians and also of the inhabitants of Switzer-

land was very remarkable. As to the schools—The Elizabeth Street School was very badly lighted, the desks, too, were placed in a disadvantageous position. The large per centage of short-sightedness may also in a measure be due to the character of the dwellings of the children. As to Queen Victoria School, he had never examined any school where the hygienic arrangements were so good, the surroundings, also, were remarkably good, so were those of the Lansdowne School. Perhaps more credit was due to the surroundings than to the schools themselves.

TWENTIETH MEETING.

Twentieth Meeting, 29th March, 1890, Mr. VanderSmissen in the chair.

Donations and Exchanges since last meeting, 62.

A communication was read from the Chairman and Secretary of the Architectural Section, stating that at the last meeting of that Section its members had resolved for their future success and progress, it would be to their advantage to form the Section into an independent Sketching Club, which rendered it necessary to resign their connection with the Institute.

Mr. David Spence read a paper on "Ossianic Poetry."

The paper gave an account of the many collections made in the Highlands at different times of Gaelic poems, ballads, and tales; with brief sketches of the works of such eminent collectors of fragments of ancient Celtic literature, as McGregor, Dean of Lismore; Rev. Dr. John Smith, and others. It then proceeded to deal more in detail with the collections made by James Macpherson and by John F. Campbell, of Islay. The progress of the Ossianic controversy was traced, and a brief statement given of the chief arguments of the more prominent contestants. The evidence collected by the Highland Society was reviewed; and the conclusion was reached that probably the view of the extremists on neither side was correct; that Macpherson neither found the poems as they now stand, nor forged them in their entirety; but that, having collected thousands of lines of Gaelic poetry of undoubted authenticity, he fused them together, himself supplying needed connectives, and in many cases adding passages of his own composition. The groundwork of the poems was held to be certainly of great antiquity; and the correspondence of the social conditions depicted in them with the real state of society in the third century (the supposed era of the Feine) was stated to be so

close as to have led Ebrard, the eminent German critic and antiquarian, to a firm belief in their authenticity as poems of that period. The concluding portion of the paper dealt with the subject matter of the poems, and with the light thrown on the question by early Irish manuscripts. As to the identity of the race called in the poems the "Feine," the writer ventured an original explanation of the meaning of the name, combatting the view of Mr. W. F. Skene, the Historiographer Royal of Scotland, who basing his opinion partly on a passage in an early manuscript, which speaks of "the Feine of Erin, Albyn, Britain, and Lachlan (Scandinavia)," holds that the Feine were a distinct race, widely extended over Britain and a part of the Continent. Mr. Spence argued on the contrary, that Mr. Skene might have mistaken the word "fine," meaning merely a "nation" or "tribe," for the proper name of a particular race, and thus that a widespread nation of the Feine may have had none but a conjectural existence. In short, that the "Feine" were simply the "Gaels" or Highlanders, who spoke of themselves as the "Fine"—the nation *par excellence*. The paper closed with the quotation of an eloquent passage from a poem in the Highland Society's report on the Ossianic controversy.

Mr. Chamberlain referred to a paper in the *Century* last year, that took up the same line of argument in relation to the connection between the Finne and the Gael. He mentioned the case of a gentleman who published an account of an Indian language that presented a case similar to that of the Ossianic poetry. It was taxed by Dr. Brinton as a forgery. The owner of the MSS. offered to show them to the public, but when they were looked for he said he had lost them.

Mr. Alexander Fraser expressed the pleasure he had felt in listening to Mr. Spence's paper. He thought that it was one of the most satisfactory contributions to the subject that had been presented for a long time. He thought that he had done what had not been done before, in placing the different poems together and showing that Macpherson wrote but a small portion of them. It could not be doubted that a large body of Ossianic poetry existed over and above that of Macpherson's, equal and some of it superior to his. The only question was whether Macpherson had taken part of the poems from one part of the country and part from another and connected them with some verses of his own. In poems recited by old inhabitants there were hundreds of lines similar to those of Macpherson's Ossian.

Mr. Evan McColl said there was no reason to doubt that these poems were handed down from very remote centuries. Numbers of Highlanders

could repeat thousands of lines of Gaelic poetry, which he had no doubt were handed down from one generation to another.

Mr. J. J. Mackenzie, B.A., read a paper entitled "A Preliminary List of Algae collected in the neighborhood of Toronto."

TWENTY-FIRST MEETING.

Twenty-first Meeting, 5th April, 1890, the President in the chair.

Donations and Exchanges since last meeting, 35.

Mr. R. F. Stupart read a paper on "Meteorological conditions during the past winter."

He said that the intense heating up of land and sea near the equator causes an up draught of air, which, ascending to the upper regions of the atmosphere, then flows away towards higher latitudes. Just north of the tropics a large portion of this upper current descends again to the surface and forms a belt of high pressure outward, from which, on the southern side, the north-east trade wind blows towards the equator, while on the northern side there is a general drift of the atmosphere from the south-west over the middle latitudes. The position of this belt of high pressure alters as the sun changes in declination, and hence the mean limit of the drift varies with the season, and varies also according as it is over land or ocean. Having this general flow of atmosphere from the south-west over the middle latitudes there must be return currents, and a large proportion of these are found in anti-cyclones moving south-east. In winter the formation of anti-cyclones occurs over the continents where the air cooled by radiation becomes heavy and contracts, and in consequence, air in the upper regions over the comparatively warm oceans flows towards the continents. It is probably not wrong to surmise that the almost permanent high pressure over Asia draws its supplies from over the Atlantic, and that the Pacific supplies America. The mean limits of the south-west drift at the surface of the earth may practically be identified with the mean track of a vast and persistent system of areas of low pressure or cyclones, which can be traced nearly around the globe, and which varies more or less from season to season and in different years.

During December an unusually persistent and rapidly moving stream o areas of depression from the Pacific passing over the northern part of the lake region kept back the flow of cold continental air which in average seasons at intervals flows over Ontario and Quebec in the form of anti-

cyclones. Connected with the high pressure to the south these areas caused prevalence of warm south-west winds. The Gulf of St. Lawrence at intervals during the month was affected by the northern anti-cyclonic waves which moved east, north of the lake region. During January in Western Canada there was a marked tendency for warm south to west winds, clearly attributable to the position of the storm track and excessive rate of movement of the storms. In Eastern Canada there was continually a distinct gradient for cold north to north-west winds owing to anti-cyclones having passed eastward far north of the lakes, closing in behind the storms as they left the coast. In February the average storm track was further south in the lake region and further north over the Gulf, thereby causing a greater prevalence of cold anti-cyclonic conditions than in January over the former part of the country and a lesser amount in the latter. He was convinced that on the position of mean track of storms, and on their persistency and rate of movement depends very greatly the character of seasons. He thought it not improbable that the position of mean track and the rate of movement may depend largely on the energy of the general drift of the atmosphere from the south-west over the middle latitudes. What causes most probably lead to a difference in this drift in correspondent seasons of different years? It seemed not improbable that a changing amount of heat received from the sun owing to solar disturbance might be the secret agency they were in search of What was the connection between sun spots and terrestial phenomena? A connection had been proved to exist between sun spot periods and magnetic declination. Many scientists had shown almost conclusively a connection between sun spots and rainfall. If the mean track of storms was affected by sun spot periods, then so must be the rainfall. It was possible that the failure to study rainfall in connection with storm tracks might have caused the agreement between maximum rainfall and maximum sun spot periods to appear less evident. On the position of the mean path of storms and on their persistency depended greatly the character of our seasons. Was there nothing in the fact that the spots or solar storms at periods of maximum were found near the equator, and that just before minimum they began to appear in higher latitudes, and that just after minimum there was often an outbreak far from the equator?

TWENTY-SECOND MEETING.

Twenty-second Meeting, 12th April, 1890, the President in the chair.

Donations and Exchanges since last meeting, 68.

Rev. J. F. Latimer was elected a member.

On motion of Mr. VanderSmissen, seconded by Mr. Bain, it was resolved, "That this Institute has learned with profound sorrow of the sudden death of Alexander Marling, Esq., LL.B., for many years a zealous member and efficient and faithful office-bearer, and desires to express its sense of this great loss sustained by the Institute in particular and also by the whole Province of Ontario which he has served so faithfully and well, and the sympathy of all members of the Institute with his sorrowing children and relatives, and that the secretary be instructed to transmit a copy of this resolution to his family."

Mr. A. F. Chamberlain, M.A., read a paper on "The American Indian in Literature."

After referring briefly to the treatment of the American Indian in fiction, with which he proposed to deal on a future occasion, the reader proceeded to discuss the American Indian as he is presented to us in the works of the poets of America and of Europe. First in chronological order as well as in importance (excepting a few notices of earlier writers) comes Shakespeare, in whose plays references to America, the West Indies, Mexico, Guiana, and the Bermudas are to be found. A passage relating to the "canibales" and the "antropophagus," which occurs in "Othello," carries us to the New World. But it is in Caliban in the "Tempest" that Shakespeare is most intimately concerned with America, for the ultimate conception of that strange being is to be found in the second hand information regarding the aborigines of the new continent that was at the disposal of the Elizabethian courtier and poet. Caliban itself is by most considered a metathesis of canibal, a word that preserves to us, in disguise, the name of a fierce Indian people of the Spanish Main. After briefly examining the character of Caliban, the reader took up some few isolated references to America and its aborigines in the works of Spenser, Jonson, and other contemporaries and successors of the great dramatist.

"The Cruelty of the Spaniards in Peru," by Sir William Davenant (1658), in which several Indian characters occur, and not a few spirited passages are to be found, was briefly referred to. After touching upon

Dryden, whose "Indian Queen" (1664) and "Indian Emperor" (1665), in one of which Montezuma figures, Pope's celebrated lines: "Lo! the poor Indian," etc., were cited. Passing by the intervening writers the reader next took up Southey's "Prince Madoc," a work founded on a Welsh legend relating to America, the scene of which is partly in Aztlan or Mexico and partly in Wales, and which contains some of the best passages in Southey. The next poet considered was Thomas Moore, who is best known, in this regard, by his ballad of the "Lake of the Dismal Swamp." Moore visited the United States and Canada, and has left us some charming pictures of the scenery of the great lakes and St. Lawrence. Campbell's celebrated poem, "Gertrude of Wyoming," was then referred to and the character of Outalissi, the Oneida warrior, discussed. The reader pointed out some of the exaggerations and misstatements in the poem. He then took up "Hiawatha," and the other works of Longfellow, the poet-laureate of the American Indian, dwelling briefly on its importance in the group of literary compositions under consideration. The "Burial of the Minnisink" and "The Driving Cloud" were also referred to. Bryant's "Prairie," Whittier's "Mogg Megone," "Nauhaught the Deacon," Lowell's "Chippewa Legend," Joaquin Miller's "Californian," and "Last Taschastas," were also taken up briefly. Reference was also made to the mumerous short poems of Mrs. Hemans dealing with American Indian lore and legend.

Passing to Canada the reader noticed the poems of Chauveau, Frechette and Lemay in particular. Amongst the writings of English-Canadians, the dramas "Tecumseh," by Charles Mair, and "De Roberval," by Col. Duvar, were discussed and interesting passages pointed out. Reference was made at some length to the poetry relating to the Indian to be found in the works of Mair, A. W. Eaton, Charles Sangster, and Prof. Roberts, as well as in those of less celebrated Canadian writers. Notice was taken also of Miss Pauline Johnson, a descendant of the celebrated Capt. Joseph Brandt. The reader closed by urging the importance of the Indian life, lore, and legend of our country as a source of poetic inspiration.

Mr. Bain called attention to a dramatic poem of the 18th century on Pocahontas, who was a favourite subject for dramatic authors. It was written by a Capt. Rogers, who, after the conquest of Quebec, was sent to Montreal. He was the first English speaking traveler who mentioned Toronto. After his return to England he wrote a journal of his travels and the drama of "Pocahontas." He exhibited the greatest familiarity with the Indian character.

TWENTY-THIRD MEETING.

Twenty-third Meeting, 19th April, 1890, Dr. Kennedy in the chair.

Donations and Exchanges since last meeting, 44.

A letter was read from the President of La Société pour l' ètude des Langues Romanes, announcing that on the occasion of the sixth centenary of the foundation of the University of Montpellier, the Society will hold a congress, and inviting the Institute to take part; when on motion by Mr. VanderSmissen, seconded by Mr. Chamberlain, Mr. Arthur Harvey was appointed delegate to attend on behalf of the Institute.

Sir Alexander Campbell, K.C.M.G., H. D. Weaver and Jackson L. Little, were elected members.

On motion of Mr: VanderSmissen, seconded by Mr. Chamberlain it was resolved "That this Institute has learned with profound regret of the death of General Sir J. Henry Lefroy, K.C.M.G., F.R.S., one of its earliest Presidents, and a most zealous supporter during his residence in Toronto, and that the members desire to express their sense of the loss which the cause of Science has suffered through his decease; and that the Secretary be instructed to forward to his son, Mr. A. H. Fraser Lefroy, Barrister, Toronto, a copy of this resolution together with a request that he will furnish the Institute a memoir of his late distinguished father suitable for publication in the "Proceedings of the Institute."

Mr. J. W. L. Forster read a paper on "Gleanings from European Art Fields."

He said there is little that is artistic in the Londoner or his city, yet the whole make-up is picturesque. Through smoke and haze in fine weather, or through fog and sleet in foul weather, a murky scrambling over the gables and street scenes gives a softening touch—a touch of mystery that is very fascinating to an artistic eye. He alluded to five great historic centres in the city of Paris. A pleasing pen picture was sketched of the old windmill on Montmartre, and of the Arc de l'Etoile as the centre of Napoleonic Paris, and the centre of that city's beauty as well. The four great relievo groups on this arc are worthy an essay in themselves. Special interest, of course, centres around the Champ de Mars. A high tribute is paid to the organizing genius of the *Directeur*

Generale and able lieutenantsin arranging with such perfect system an accumulation of industries so vast. In fact, French instinct and taste alone is able to provide a display so unique, charming with its touch of magnificence like a dream of the Orient, and with its evidence of utility so appropriate to the Occident. But it is in the art gallery Mr. Forster is most at home. He told how to look at pictures; not to go at them with your eyes wide open and attempt to cram everything into your brain, but to approach them cautiously, feeling for the value of light, and for the sense of refinement, which is always present in a lasting work of art. The English pictures are pretty, tasteful, modest subjects. In producing luminous effects by a simple study of light, the Continental schools are far in advance of the English.

Mr. T. B. Browning, M.A., read a paper on "The Codification of the Law, (second paper), Real and Personal Property."

English property law, he said, is a growth marked by two main tendencies. The first results in multiplicity, as in the many real property actions (over 70) which were in use at the opening of the last reign, each of which gave a distinct relief. The second is towards unity, and consists in bringing to rule the jarring mass of remedies, principles, statutes and cases that had grown up in the law. In speaking of the codification of the property law, Mr. Browning held that the main obstacle to it was the maintenance of the division of property into real and personal, with its consequences, and argued for the abolition of the distinction and the reduction of property to a unified standard.

The following papers were presented:—

"The Déné Languages considered in themselves and in their relations to the principal linguistic groups," by Rev. A. G. Morice, O.M.I.

"The Philology of the Cree Languages," by Rev. E. B. Glass, B.A.

"The Crees sociologically considered," by Rev. R. P. Végréville, O.M.I.

TWENTY-FOURTH MEETING.

Twenty-fourth Meeting, 26th April 1890, the President in the chair.

Donations and Exchanges since last meeting, 92.

A communication was read from La R. Accademia delle Scienze del'

Istituto di Bologna, offering a gold medal of the value of 1,000 Italian lire for the best memoir on Galvanism written in Italian, Latin or French, to be received before the 11th of May, 1891.

On motion of Mr. VanderSmissen, seconded by Mr. Hamilton, it was resolved "that the Council be requested to take steps for obtaining materials for brief memoirs for publication in the "Proceedings" of such deceased members of the Institute as may have been distinguished for their services to Science."

Nominations for Officers and Members of Council for next session were then made.

Mr. Alan Macdougall, read a paper on "Present Efficiency in Sewage Disposal."

He described the several systems in use in this province and those lately under trial at London, on a large scale, and in one or two other places at private residences. Filtration was under trial, and so far the results were satisfactory. Sub-surface drainage, tried on a small scale, had stood the test for two winters. The tile drains were from 10 to 15 inches under the surface, and had not frozen. The porous carbon system came well recommended from England, and the poudrette exhibited was a practical illustration of what it could effect. The sulphate of iron, or Conder system was still *sub judice*, and he awaited the report on this system with much expectation and interest. It was said to have deodorized the Yonge street sewer completely. Samples of the treated sewage were exhibited during the reading of the paper.

Mr. Tully remarked that the system in use at the London Asylum, so far as it was tested was a perfect success; there was no effluent, it passes through the sand and disappears. In Guelph where the porous carbon system was used, it took 20 lbs. of porous carbon to 3,000 gallons of sewage, and the effluent was very pure.

Mr. L. J. Clark read a paper on "The Formation of Toronto Island."

He illustrated his remarks by a series of maps and drawings on the blackboard, showing the gradual development of the Island from its earliest stages. He believes the Humber and the Don to have furnished the substratum of clay while excavating their huge channels during a period when the waters of the lake stood at a higher level than at present. All indications go to prove that an ancient lake beach once existed at the foot of the range of cliffs just north of the present limits of the city.

Their subsidence was owing to the melting away of an immense glacier or icefield that extended all along the northern shore and cut off the exit of the water from the great chain of lakes by the St. Lawrence. Previously the outlet was through the State of New York, by Rome and Utica, and by the Hudson river. When it assumed its present level, Scarboro Heights formed a promontory which extended probably a mile into the lake. The heavy storms from the long reach of lake from the east produced their abrading effects on the promontory, and the abraded material was deposited to the west. This was the beginning of the Island, which has simply been added to from the same source, and by the same cause, acting through an unknown period of years. Mr. Clark acknowledged his indebtedness to the writings of Messrs. Hind, Sandford Fleming and Kivas Tully for a large portion of his paper.

FORTY-FIRST ANNUAL MEETING.

Forty-first Annual Meeting, 3rd May, 1890, the President in the chair.

Donations and Exchanges since last meeting, 49.

The Annual Report was read and adopted.

It was resolved, "That this Institute has learned with regret of the death of Mr. John Notman, who for a long number of years an active and valued member of the Institute, and for ten years its Treasurer, assisted materially in aiding and building up the Institute; that this meeting recognizes the loss the Institute has sustained, and conveys to Mrs. Notman and family the assurance of its sympathy in their great sorrow.

E. J. Cousins and William Cutts were elected members.

Messrs. Hamilton, Macdougall, Ridout, Boyle, and Chamberlain were appointed a Committee to make arrangements for the summer meeting of the Institute at Niagara.

On motion of Mr. Chamberlain, seconded by Mr. Keys, it was resolved, "That the thanks of the Institute be tendered to the city newspapers for the notices of the meetings which have appeared in their columns, and especially to the *Mail* for the fulness with which it has published the reports of the meetings."

. The following were chosen as Officers and Members of Council for the ensuing year :

President—C. Carpmael, M.A., F.R.S.C.

Vice-President—James H. Pearce, Esq.

Secretary—Alan Macdougall, M. Inst. C.E., F.R.S.E.

Treasurer—James Bain, Jr., Esq.

Librarian—A. F. Chamberlain, M.A.

Curator—David Boyle, Ph.B.

Editor—George Kennedy, M.A., LL.D.

Members of Council—W. H. VanderSmissen, M.A.
W. H. Ellis, M.A., M.B.
Arthur Harvey, Esq.
Maurice Hutton, M.A.
G. M. Rae, Esq.
W. E. Middleton, Esq., *Sec. Biol. Sec.*
W. H. Merritt, Esq., *Chn. Geo. and M. Sec.*
J. C. Hamilton, LL.B., *Chn. Hist. Sec.*

"In nature there is nothing mean or unworthy of attention."—*Huxley.*

PROCEEDINGS OF THE ORNITHOLOGICAL SUB-SECTION OF THE BIOLOGICAL SECTION OF THE CANADIAN INSTITUTE.

FOR JANUARY, FEBRUARY AND MARCH, 1890.

EDITED BY THE EDITING COMMITTEE.

(First Meeting, January 14, 1890).

[The nomenclature in use throughout these papers is that of the A.O.U., as published in 1886.]

1. Pinicola enucleator at Toronto.—On Jan. 12, on the Glen Road, in Rosedale, I observed a flock of Pine Grosbeaks about twenty in number. They came from the south-west and alighted in a clump of pine-trees; this was about half-past three in the afternoon; a few minutes previously, Mr. Thompson informs me, he saw the same flock on Howard Street, where they were feeding on the berries of the mountain ash, surrounded by a large flock of English sparrows, which were resenting the intrusion by noisily chirping, but not attempting any violence. Later in the afternoon I saw another flock, about the same size, flying over from the north. They were very shy, from which we might argue that they had been for some time in the neighborhood, for usually, on first arriving from the north, these birds are so tame as to be easily knocked down with sticks.—JOHN EDMONDS.

2. Ampelis cedrorum.—While walking in the ravine of St. James' Cemetery, on the morning of Jan. 1, I came on a pair of Cedar-Waxwings; they were perched on a tree about thirty feet from where I stood, in clear view, so that there is no doubt about the identification. I mention this, because although Mr. McIlwraith gives the cedar bird as a winter as well as a summer resident, there are very few, perhaps not more than four or five, authentic records of its occurrence about Toronto in the winter.—J. L. JACKSON.

(Second Meeting, January 28, 1890).

At this meeting the officers of 1889 were re-elected for 1890.

3. Sitta canadensis wintering.—On January 18, while shooting at West Toronto, I shot a pair of Red-Breasted Nuthatches. This is said to be the first report of these birds being taken this winter around Toronto.—C. E. Pearson.

4. Megascopsasio.—On January 19, while out collecting, I came on a Mottled Owl, but was unable to secure it having changed the charge in the gun so as not to injure it with too heavy a shot.

5. Larus marinus wintering here.—On the same date I saw a number of Saddle Back Gulls flying about Coatsworth's cut and the sand bar, in company with a number of other gulls.—J. R. Thurston.

6. Spinus tristis and Ampelis cedrorum wintering.—On same date I saw three Cherry Birds near Logan's crossing, on G. T. R. also saw a large flock of Goldfinches feeding on weeds in a field near Chester.—J. L. Jackson.

7. Hybrid Pinicola enucleator X Carpodacus purpureus.—On Jan. 22, 1890, a small-sized finch which was taken from a flock of Pine Grosbeaks (*Pinicola enucleator*) was brought into my store. As the bird was new to me I had it submitted to Dr. J. A. Allen, who says: "It is clearly a hybrid between the common Purple Finch and the Pine Grosbeak. * * * It is certainly a most interesting capture, combining about equally the characters of the Pine Grosbeak and the Purple Finch. It is just half way between them in size and very nearly so in all other features." The specimen is as follows: male, ad, l. 6·75, wg. 3·75, tl. 1·25 inches; general color like that of our adult male Pinicola in very high plumage. The red on the breast being particularly rich; the back, wings, sides of breast and belly are nearly of the warm color of *Carpodacus*, without the slaty tints of *Pinicola*, and streaked as in the smaller species; the under tail coverts are lined as in *Carpodacus cassinii;* the bill with its antrorse feathers is just intermediate in shape and color, but is larger than that of some adult Pinicolæ.—W. Cross.

8. Dr. Brodie reports that he saw another specimen of the above hybrid early in the season. It was in the female plumage and clearly observed but not collected.

While in Manitoba in 1883, I met with a Mr. Babb, who told me of a strange bird that he shot in Western Ontario some years before; neither

he nor the local taxidermist had ever seen one like it; although both were acquainted with the Pine Grosbeak and the Purple Finch. He described it as being between the two in size and color, and he said that they had always referred to it since as the "Strawberry Finch."—ERNEST E. THOMPSON.

10. **Pinicola enucleator in Rosedale.**—On January 7, I met with a flock of about fifteen Pine Grosbeaks in the woods north of Rosedale. They were feeding on basswood seeds. I procured five specimens. On the 18th, I shot a female of the same species, which was sitting alone, on the top of a tree, calling to passing flocks. On January 24, I saw several more small flocks, in different parts of the city feeding on the berries of the mountain ash, and have observed them eating snow at different times since.

11. **Acanthis linaria.**—On January 24, I found a large flock of about 70 or 80 Redpolls and shot three specimens. These are the first I have seen since October 1, 1889.—J. B. WILLIAMS.

12. **Sturnella magna wintering near Toronto.**—On January 24, while out near Mimico, I saw three Meadow-larks. They were flying over an open field. This is not the first instance of the kind, as in the winter of 1881-2 I observed several individuals about the Woodbine race-track, where they remained till spring; also in the "Auk" for April, 1888, p. 211 is a note by Dr. Brodie on a male *Sturnella* which was taken on Feb. 21, 1881, at Highland Creek, east of Toronto.—ERNEST E. THOMPSON.

13. **Pinicola enucleator on Spadina Avenue.**—On January 17, while walking around Spadina Crescent I heard a call note almost new to me, and looking up saw seven birds fly into a mountain ash tree on the west side of the street; following them I found they were Pine Grosbeaks. I took my catapult and shot a fine male. The rest flew to the next tree, and I found there were two more males in full plumage, young male and three females. On the 18th I saw another flock, or perhaps the same, in Sir Adam Wilson's grounds on the crescent, but could not procure any. On January 25th, on Bathurst Street, I shot a young male out of a flock of about fifty, which were feeding on the ground on the black ash and mountain ash seeds. The same afternoon I shot an adult male and a female, in Mount Pleasant cemetery; and on January 25 I shot another male in the grounds at 396 Bathurst street, and I have not seen any since that day.

14. **Merula migratoria wintering.**—On January 25, near the reservoir, I heard a familiar but out of place call, and turning saw my friend

collect a fine specimen of Robin. This is the first record of its being taken around Toronto this winter.—G. E. ATKINSON.

15. **Sphyrapicus varius.**—The specimen of the Yellow-Bellied Sapsucker exhibited is a female taken in Rosedale woods on April 14, 1887, and I also exhibit specimens of maplewood bored by her. I watched her for some time that morning, and found there was one tree on which she remained when undisturbed. On this tree, about six feet from the ground, she had bored about twenty holes from which sap was plentifully exuding. I sat down near the tree, and she came back, but kept on the side away from me. But the richest supply of sap was on my side of the tree, and she was evidently anxious to get at it, but feared to come into full view; once she came half round, then suddenly withdrew and ran to the top of the tree, but the temptation was very strong, and she came slowly down again; after a while, as I sat very still, she gained some confidence and would remain for a second or two on my side drinking the sap. I came back again in the afternoon with a gun. She was still there, but I missed with the first shot, and she flew away, but I found her near by in company with a male bird which I procured. I returned to the tree, and found her there with another male, and she slipped away leaving her companion to be shot. I went back in about half an hour and she was there, but very cautious, and three times did I try to creep towards her before I got her. There seemed to be an irresistible attraction in that tree, as she always returned to it as soon as I left the spot. Apparently she was on the look out for a husband, and was treating those who passed to a drink of the sap which she had spent the morning boring holes to procure. I find, from records, that these birds arrive here about the 14th of April, and almost disappear about the 18th.—J. B. WILLIAMS.

16. **Pinicola enucleator in Rosedale.**—On Jan. 12, I went along the C. P. R. track eastward from Toronto, and soon came on a large flock of Pine Grosbeaks and following them, procured ten specimens. On January 25 I took my glasses and went out to make observations; on the way I saw two small flocks of Pine Grosbeaks, and presently after arriving at my former stand I saw a flock of about twenty; they came from the north and alighting for an instant on the trees on the hill they flew to an adjoining orchard and then down to the ground, along which they worked toward me, shelling and eating the seeds of the white ash as fast as they could pick them up.

17. **Corvus americana wintering.**—On January 26, while walking along the track, I saw a flock of about 100 Crows perched on a

large pine tree on the side of the track. I have also observed large flocks at Eglington, Ont., this winter.

18. **Field Mouse impaled by Lanius borealis.**—If ou and Field Mouse (*Arvicola riparius?*) impaled on a thorn by the Butcher Bird in some small thorn bushes in Rosedale, on January 27th, but did not see the butcher.—JAMES H. AMES.

19. **Aquila chrysaëtos.**—The Golden Eagle is represented in my store by the immense wings and claws of a specimen that was killed in Muskoka, August, 1889.

20. **Haliaëtos leucocephalus.**—A male Bald Eagle was shot a little west of Kingston, Ont., in August, 1889, and sent to me.

21. **Syrnium nebulosum.**—Six years ago the Barred Owl came in numbers, since then it has been hard to obtain a specimen till this season, during which about a dozen have been brought to my store. The largest and finest was a female that was shot on the R. C. Archbishop's Palace on Sherbourne Street. It measured:—lg. 20½; wg. 13; tl. 9¾ inches.

22. **Ulula cinerea.**—The Great Grey Owl has this year been very common in Ontario. During the last thirteen years I have handled five or six specimens in my business as taxidermist, and have heard of but a few other Ontarian specimens. But this winter (1889-90) I have received twenty-three specimens, and have had them reported from various parts of the Province. One of my acquaintances stationed at Barrie received twenty-six this season. They began to come into this region in November, and increased in numbers up to February, after which they became very scarce again. Mr. Thompson suggests that the unprecedented fall of snow in the North-west may account for this unusual migration of owls, as it would effectually conceal the swarming *Arvicolæ* of the boreal regions, and thereby rob the owls of a staple article of diet and compel them to migrate.

23. **Nyctala tengmalmi richardsoni.**—The Richardson's Owl is equally rare in all seasons here. I never receive more than three or four in a year, sometimes none at all. They are usually taken in the fall, but occasionally in the early spring time.

24. **Nyctala acadica.**—The Saw-whet is our smallest species, much like *richardsoni* on a small scale. It is always scarce; this season even more so than usual. In the fall of 1889 they appeared in great numbers on Toronto Island. One man assured me that he collected over twenty-

six in one tree, eight of them being taken alive, and as he brought six of them at once, I am bound to believe him; especially as several more were brought in at the same time by different persons. All of these that I saw were in the adult plumage. I have had but two in the young plumage. One was taken in July and one in August, both near Toronto.

25. **Megascops asio.**—As is well known, the Screech Owl is found in two plumages, a red and a grey. These are said to have no relation whatever to age or sex. Of those taken here about 90 per cent. are in the grey plumage, and every one of the red ones that have come into my hands was a female. In July, 1889, I received a brood of this species. It contained three grey and one red young, partly in the down, but showing clearly their colors; the mother was red.

26. **Bubo virginianus.**—The farmers who occasionally bring in the Great Horned Owl relate wonderful tales of the prowess of this bird, and of the loss their poultry yards sustain at his claws. One man credibly informs me that such is the courage and strength of this bird that settlers in Muskoka have great difficulty in keeping a cat, for these owls never hesitate to attack the feline and soon succeed in destroying it.

On March 25, 1889, Mr. Jackson of Maple found a Horned Owl's nest in a hole in a decayed tree, at a place eight miles north of Toronto. The nest was made of finely shredded strips of cedar and basswood bark, and contained eggs on which the bird was sitting.

27. **Nyctea nyctea.**—The Snowy Owl was very abundant here in the winter of 1884-5; since then it has been a rare winter visitant, not more than three or four being seen each season till this winter. In November, 1888, they came in great numbers and continued to arrive during December. In January the last of them appeared. About forty, as nearly as I can ascertain, were shot near Toronto this year; two of these were shot in the centre of the city.

28. **Surnia ulula caparoch.**—The Hawk Owl has always been rare here. I can count on the fingers of one hand all that I have received in fourteen years. I know of but four having been taken near Toronto, one that I received from Thornhill, and three that are elsewhere recorded by Mr. Thompson.

For *Asio accipitrinus* in flock see Proc. Orn. Sub-s. 1889, p. 20, par. 134.

In all nine species of Owl have been procured in the heart of the city of Toronto. This includes all our Owls except the Barn Owl, (*Strix Praticola*) and the Hawk Owl.—WM. CROSS.

(Third Meeting, February 11th, 1890).

29. At this meeting so many fragmentary observations on the *Coccothraustes vespertina* were presented, that it was decided to hold them all over for a single concise report at the end of the season.

30. **Nesting of the Seiurus noveboracensis.**—The favorite haunts of the Water Thrush are low swampy woods, or the margins of muddy creeks and drains. Its nesting places are, of course, in similar localities. Although I have been a resident of Canadian backwoods from my early days, and have rambled many a day and many a mile through pathless wilds and was, moreover, perfectly familiar with the bird itself, I had never seen the nest or the eggs of this Wagtail until the summer of '82, when in the early part of June, being in a piece of swampy bush, I discovered a nest containing four eggs and a young Cow-bird just hatched. The nest was in a hole in a large turned-up root of a tree, under which was a large pool of water into which the bird jumped when flushed from the nest. Her exit from the pool and her disappearance among some brushwood were, however, but the work of a moment, and while I was examining the nest she returned and I became certain of her identity, otherwise I would have taken the nest for that of a Junco, so much did it and the eggs resemble those of that bird. On May 22nd of the following year, as I was crossing a piece of swamp or wild-wood, I noticed, near the root of a fallen tree, a Water Thrush, which by her notes and actions intimated that her nesting place was near. Taking off my boots I waded into the water beneath the overhanging root and found on a kind of shelf about a foot above the surface of the pool, a nest containing two eggs. This nest was composed externally of moss, rather loosely put together and lined with dry fungus of a small species, fine grass and hair. On the 24th I returned and found that five eggs in all had been deposited. I took them and they are now in my collection. These are of a white hue, having the large end umber brown, and the greater part of the surface irregularly dotted over with small spots of the same color. Last spring I saw in the same root another nest of the same species containing four of its own young and one of a Cow-bird. This seems to indicate that, if not much disturbed, it will nest repeatedly in the same place, though it does not a second time occupy the same nest.—WM. L. KELLS, Listowel, Ont., 1885.

31. **Disappearance of Forest Birds, etc.**—Hon. Charles Clarke writes me from Elora on the disappearance of *Ectopistes migratorius, Melanerpes erythrocephalus,* and on the advance of *Dolichonyx oryzivorus, Corvus americanus* and other species, as follows: "April 27th, 1885,—Our woods, alas! are rapidly disappearing and with them many of our summer visitors. There are young men here who have never seen a Wild Pigeon, and some to whom the Red-headed Woodpecker is a rare if not an unknown bird. The Bobolink, however, has increased largely with us since the disappearance of the forests; as also have the Crows and Blackbirds within the last few years. The English Sparrows, too, have greatly multiplied in our village, but have not yet extended to the farms in the neighborhood." -ERNEST E. THOMPSON, 1885.

32. **Nesting of the Certhia familiaris americana.**—The Brown Creeper has been observed in our wild-woods nearly every month in the year. Its general habitat is the low swampy woodland where there is an intermingling of evergreen with black ash timber. Here, also, it selects its nesting place. This is usually in some old black ash stub, where the small flakes of bark have become partly detached from the trunk and curled up and which frequently projects far enough to afford the required room for the nest. I have, on several occasions and in different places seen its nesting place, but only in one instance have I taken its nest with eggs. This was in the early part of May, 1878, at which time I was out in North Wallace on a farm where I had previously resided for a number of years, when I observed a pair of these birds busily engaged at nest-building. The place was on the margin of a beaver meadow, and the nesting site between a piece of bark and the trunk of a hemlock tree, nearly twenty feet from the ground. The female collected and placed in position all the material of the nest, but her partner seemed to think that he was giving her much assistance by following her to and from the nesting place and running up and around the trees and old logs from which she collected the materials, at the same time warbling his little ditty in a pleasing manner. Rough pieces of cedar bark formed the foundation of the nest, then dry fibrous woody matter composed the main part of the structure, which was completed by a warm lining of hair. Some ten days afterwards I again visited the place, but had some difficulty in reaching the nest, the lower part of the tree having been scorched by fire, and the bark peeled off the year before. On getting up to the desired spot the bird flushed out, and I found in the nest six eggs which I took, and in preparing them ascertained that incubation was considerably advanced. One egg was broken, the other five are in my collection. The ground color of the eggs is

dull white with a mottling of bay dots towards the larger end, and a slight sprinkling of the same hue on other parts of the surface; in size they are somewhat more oblong than those of the Black-capped Chickadee.

I might also remark that I noticed the individuals of this species very active during the thaw in the latter part of December last and the beginning of the present year, but I did not see or hear the bird again until the 6th of April.—WM. L. KELLS, Listowel, Ont., 1885.

33. **Dryobates villosus and its prey.**—Some time ago I saw a Hairy Woodpecker pegging away at a stick of dry cordwood in my yard. I took an axe and split the stick, and found in its centre a large white grub, the *larva* of a *Tremex columba* (*Drn.*)

34. **Trochilus colubris and Spiders.**—I have captured more than one Ruby-throated Humming Bird with its legs, bill and wings enveloped in spider's web, proving the correctness of the assertion of certain naturalists that humming birds prey upon some of the smaller species of the Family *Arachnidæ*.—REV. VINCENT CLEMENTI, Peterboro, Ont., 1885.

35. **Coccyzus erythropthalmus.**—In regard to erratic nesting of the Black-billed Cuckoo I have been collecting as much evidence as possible, not wishing to insist too much on my own observations. The three cases detailed were under the notice of several perfectly reliable observers, and, of course, I was a witness myself. I think you need not have the slightest hesitation in accepting the notes as scrupulously accurate, as anything of a problematical nature has been carefully eliminated. Of course, it is to be regretted that full details were not jotted down as the cases occurred, and it is possible that even now some ornithologists will not be convinced by anything short of the *identical* young Cuckoos—however, it is useless to make regrets, and I doubt not the young Cuckoos have long passed that age when they would be easily recognizable as the heroes of my story.

The observations were made at Elora, and the statements are corroborated by my father and sister.

The arrival of the Cuckoo in our garden was always an event taken particular notice of, and, as the bird was comparatively rare, its movements were carefully watched. It had a clean reputation during its first season, and if it did any "hatching by proxy" no one was clever enough to discover the fact, and several years passed before we were forced to acknowledge that *our* Cuckoo had become as degenerate as its British relative, and losing the respectable character generally accredited to the

American bird. Such was the fact though, and the discovery caused so much surprise that the bird was more closely watched than ever.

Case I.—A Cuckoo was noticed constantly haunting the vicinity of a cedar hedge, and as the bird behaved in what we considerd a very bold manner for a cuckoo of decent bringing up, it was thought advisable to seek a reason for the peculiar deportment of the bird. An investigation of the cedar hedge was made and a chipping sparrow's nest found, and, as might have been expected, eggs were in the nest. There would have been nothing remarkable in the discovery had all the eggs been sparrow's eggs, but they were not, and one looked very much as if it might belong to a Cuckoo. I must confess that a connection between the Cuckoo and the mysterious egg was, at least, suggested to our minds, and no one was astonished when a *genuine* Cuckoo did actually come out of the egg, although I can imagine the poor sparrow mother being puzzled over her child.

Next year the Cuckoos returned, and were evidently ashamed of their former conduct, for a nest was built of a few crossed twigs in the crotch of a Talman apple tree, and in due time two young birds made their appearance. These little fellows were undoubtedly of the same family as the stranger found in the sparrow's nest the year previous, and all had the hedgehog appearance, so characteristic in the young Cuckoo.

Our faith in the Cuckoo having been shaken no surprise was manifested when Case II. was observed.

Case II.—Just in front of the house was a clump of Tartarian Honeysuckles, and here some little yellow warblers built every year, notwithstanding the fact that they had, on several occsaions, been rudely disturbed by inquisitive intruders. A Cuckoo was noticed "spying out the land," and was, of course, watched and eventually discovered *coming from* the warbler's nest. The visit was evidently a satisfactory and reassuring one, as an egg was left for the warbler to take care of. If the warbler observed anything unusual in the appearance of the contents of the nest, she kept the discovery to herself, and went resolutely to work to hatch out a warbler superior to any of her race. When the brood was hatched one bird proved a source of surprise and admiration to his parents, who had to work without rest to supply their hungry child with food. Their efforts were prodigious and might have been almost laughable had it not been apparent that a tragedy was about to occur, as the young warblers were neglected on account of the intruder. By and by, as the Cuckoo grew, it was but natural the nest should seem small for such an important fellow, as he was, and he soon discovered a simple method of improving the household arrangements. He crowded out his companions who

were then carefully picked up and placed in a cottonwool nest hung up near by, in the hope that the old birds would look after their young. However, the Cuckoo required a great deal of attention and the natural, or rather unnatural result was that the young warblers were neglected and died in a short time. During the whole period the old cuckoo was an interested observer of all that was going on, and was always to be found flitting about the nest in a restless manner, as if she had her doubts in regard to the ability of the warblers to take care of her child. The young Cuckoo learned to navigate for himself in course of time and disappeared eventually, but not before his identity was completely established.

Case III.—The third case is one that leaves no room for doubt in the mind of the most sceptical. In an orchard we discovered a Cuckoo *sitting* in a Chipping Sparrow's nest, and the bird did not attempt to move till we almost touched it. It now seemed very evident that the case against the bird was a strong one, and when a Cuckoo's egg was found in the nest, the chain of evidence was complete. The egg was hatched and produced a tyrannical young Cuckoo who turned his companions out of the nest, and made himself as comfortable as possible as long as was necessary. Two of saw the old Cuckoo actually sitting in the nest, and there was no doubt about the matter. We are informed that the erratic nesting of the Cuckoo has been repeated in the same orchard since the date referred to, but of this we have no accurate information.

This is the evidence upon which I base my case against the American Cuckoo, and I think the jury will find no difficulty in finding a verdict of "guilty." Of course, the ornithological lawyer for the defence will say these people do not know the difference between a "Cow blackbird and a Cuckoo!" All that can be said in reply to this is that *our* Cuckoos were not *Cow blackbirds*, and if the Cuckoo is more degenerate in the locality of Elora than in other places, so much the worse for the locality. C. K. CLARKE, M.D., Kingston, Ont., 1885.

37. Habia ludoviciana.—The Rose-breasted Grosbeak arrives here according to season, from May 4 to 12, the males about five days before the females, and leaves about September. It builds its nest about June 1; lays three or four eggs, and hatches but once. If, however, the nest is destroyed, which is very often the case, because it is very slightly built of dry twigs, it builds again. The female sits on the nest in the forenoon, then the male relieves her till dark, when she takes the nest again.

Although this Grosbeak has a very powerful bill like those of its tribe

which live on nuts and hard seeds, it lives mostly on insects; even in a cage it will not thrive unless it gets a change from seeds to soft food, such as eggs, meat, bread and milk, etc. But his beautiful song will fully repay any one who will take the trouble to find proper food for him.

This bird effectually extirpates the Colorado potato beetle, if the potatoes are planted near the woods. The young are all alike in the brown streaky plumage, except that the males have the under wing coverts red and the females have them yellow. This mark distinguishes them at all ages. The late young do not shed their feathers before leaving, and the young males arrive the next spring in dress like that of the female, except that there is a little red on the breast. The full black male plumage is not obtained till he is three years old, and one might get twenty-four birds in different intermediate stages without seeing two just alike. This species moults twice each year, in spring and in fall.—W. A. SCHOENAU, Mildmay, Bruce Ont., 1885.

38. Junco hymelis, Pinicola enucleator, Acanthis linaria.—On January 29, I shot one Junco and one Redpoll and two male pine Grosbeaks; the stomachs of the latter were full of seeds of the black ash. On February 13, I saw a female pine Grosbeak feeding on the cones of a tamarack tree.

39. Pinicola enucleator.—On January 26, I saw a female Pine Grosbeak, and wounded it but did not secure it. On February 7, I was passing the same place and I shot a female Pine Grosbeak, and on examining it I found it was the specimen I had wounded on January 26, and the bird was just on the mend when I shot it, and seemed in good condition, the stomach containing a few black ash seeds.—JAS. A. VARLEY.

40. Lanius borealis.—On February 10, I found a dead specimen of the Northern Shrike. It was lying beside a fence in Rosedale, where it had evidently been dropped by the shooter as he was climbing the fence, as there was no shot in the fence over where it lay.—JAS. R. THURSTON.

41. Loxia leucoptera at Toronto.—On February 8, I received one male White-winged Crossbill, shot at Toronto.

42. Pinicola enucleator capture.—On February 11, I captured a female Pine Grosbeak with a snare on a pole, for which exploit one of her companions gave me a noisy scolding. I have seen flocks of these birds on Huron, Baldwin and McCaul streets, where they have stripped the mountain ash of their berries.—WM. CROSS.

43. Pinicola enucleator.—On February 9, in a mountain ash, on College avenue, Toronto, I saw a number of Pine Grosbeaks which were very tame; I could easily have knocked them off with a stick. On another tree I saw a flock of about fifty, equally composed of Pine and Evening Grosbeaks (*C. vespertina*), one of the former in red plumage. They were so tame they would not fly, although I killed a couple of them. On February 10, I saw dozens of Pine Grosbeaks in various mountain ash trees in the city, but only one with red plumage.

44. Plectrophenax nivalis.—On February 8, I saw the first snowbirds, that I have seen this year. On February 9, in a field north of Bloor street, I saw a flock of 1,500 or 2,000, they literally covered a large field which was overgrown with tall weeds, on the seeds of which they seemed to be feeding.—H. H. BROWN.

45. Observations on Pinicola Enucleator.—While strolling in the woods north of Rosedale, on February 9, I observed a flock of about twenty Pine Grosbeaks. Among them were several adult males. I watched them feeding and found they were eating a black berry, apparently viburnum. Owing to the large quantity of snow on the ground they were unable to procure their favorite food, the seeds of the white ash.—J. H. AMES.

46. Pinicola enucleator.—On February 8, I saw two flocks of Pine Grosbeaks in Rosedale, about six in each flock, and collected four specimens, one adult plumaged male and three females. On February 9, I saw several more small flocks of the same species and one female Evening Grosbeak (*Coccothraustes vespertina*), in Rosedale.—JOHN EDMONDS.

47. Otocoris alpestris praticola arrived.—On February 6 I observed Shorelarks at East Toronto.

48. Plectrophenax nivalis on Telegraph wires.—On February 11, I saw three Snowbirds alight on a telegraph wire in East Toronto. This is the first occurrence of the kind noted.

49. Pinicola enucleator.—Pine Grosbeaks have been very common in East Toronto, for the past few days.—C. W. NASH.

50. Pinicola enucleator.—On February 2, I saw a pair of the above species in Rosedale, and procured one adult plumaged male.

51. Syrnium nebulosum.—On February 6, I saw a Barred Owl sitting on the city morgue, on Esplanade street.

52. Merula migratoria wintering.—I saw a Robin near the C.P.R. track in Rosedale, on February 9th.—J. L. JACKSON.

53. Pinicola enucleator in the Park.—On February 10, while on my way to school I saw one of these birds sitting on the top of a pine uttering a loud call. In the Park Crescent I saw another. On February 11, I saw several and secured one alive.—C. E. PEARSON.

54. Large flocks of Pinicola enucleator around the city.—On February 8, I saw a large flock of Pine Grosbeaks. I shot two and stunned another which I now have alive. On 9th I collected three red males, two young males and three females. On 10th I got three more, two of them alive.—GEO. E. ATKINSON.

(Fourth Meeting, February 25, 1890.)

55. Pinicola enucleator and Acanthis linaria.—On February 12, I shot two female Pine Grosbeaks, and two females and one male Redpoll in the Park. On February 13, shot one female Pine Grosbeak and another male Redpoll at the same place. On February 21, I saw a flock of seven Pine Grosbeaks feeding on the tamarac cones in the 'Varsity grounds, but did not secure any.—C. E. PEARSON.

56. Pinicola enucleator.—On February 13, I went out with a snare on a fishing pole and caught a young male Pine Grosbeak, and saw several more but they are beginning to be very sh[illegible] February 14, I caught another young male that was in company with a bright red male. On February 20, I came across two more, one I knocked down with a stick, it proved a male in adult plumage, with yellow markings among the red on the crown, throat, about the eyes and down the back.

57. Sitta canadensis wintering.—On February 16, on W[illegible]ll's Hill, I saw a pair of Redbreasted Nuthatches and collected the female.—GEO. E. ATKINSON.

58. Two Cinereus Owls.—(*Ulula cinerea*), were received from Mount Albert, Ontario, on February 12.

59. Ampelis garrulus in Ontario.—Three Bohemian Waxwings were shot at Port Dover, Ontario, on February 20, and one of them sent to me.

60. Zenaidura macroura.—A Mourning Dove was shot about six miles east of Toronto on March 24. It was in good adult plumage.—WM. CROSS.

61. Otocoris alpestris praticola and Pinicola enucleator.—On February 15, I shot two specimens of the former. Mr. Ernest E. Thompson informs me that *praticola* is the breeding form and the only one found here in the spring migration. The only Toronto specimens of *alpestris* that he has seen were taken in the fall migration. On same day I saw two Pine Grosbeaks (*Pinicola enucleator*), in St. James's Cemetery.—J. B. WILLIAMS.

62. Pinicola enucleator, Otocoris alpestris praticola, &c.—On February 13, I saw a flock of Pine Grosbeaks on Sherbourne street. On February 22, saw a flock of Redpolls (*Acanthis linaria*), on a sand bar, and a flock of Shorelarks feeding on manure at Ashbridge's Bay.—JOHN EDMONDS.

63. Crymophilus fulicarius and phalaropus lobatus at Toronto.—A specimen of the Red Phalarope was shot on Toronto sandbar on May 23, 1889, and a specimen of the Northern Phalarope was shot the same spring and in the same place. I received both specimens from the shooter.—J. R. THURSTON.

64. Stercorarius parasiticus at Toronto.—Mr. Loane has recently shown me a Parasitic Skua that he shot on Ashbridge's Bay in September, 1885. The bird was mounted and in a sealed case and therefore not available for measurements, but a careful comparison with an authentic specimen in my hands satisfies me of its identity. It is in the dark phase of color, everywhere sooty, darker on the quill feathers, lighter on the crissum, mottled with whitish on the hind neck, back and crissum, central tail feathers pointed and projecting about three inches.

During September and October, 1889, Mr. Loane observed another specimen apparently of this species. It was not shot, but he several times saw it close at hand and described it as like the above but redder on the belly. On one occasion it carried off a Plover he had just shot. The other gulls (*Larinae*) seemed afraid of it and would rise and fly off squawking when this one came near them. The specimen is not known to have been shot, but it disappeared late in October.

65. Linota cannabrua at Toronto.—On January, Mr. Loane informs me that he saw two strange birds accompanying a flock of English Sparrows that were feeding on a pile of stable refuse near the Bay. One of these he captured in his net and now has it in a cage where it is doing well and occasionally singing. On comparing this bird with a male specimen of the English Linnet (No. 25143 Am. Mus.) kindly loaned me for the purpose by Dr. J. A. Allen of the American Museum, I have no hesita-

tion in pronouncing it one of the same species. I held the two birds together and made a careful comparison; in size and structure they agreed exactly; in color they were alike but the Toronto bird had little or no red on the crown, which was streaked dusky, and the plumage was everywhere darker and duskier; the differences fairly paralleling those which exist between eastern and central basin forms of American species. The question how the birds came here is not easily answered for this could not have been a cage bird escaped as its breast still bore the rosy tinge that is so soon lost in captivity. I have not heard that the species has been introduced artificially anywhere into Canada.—E. E. THOMPSON.

66. Pinicola enucleator.—During the winters of 1882-3 and 1883-4, a large number of these handsome birds appeared in our gardens, even in the centre of the town. They were first seen on the mountain ash trees and were busily engaged in devouring the dried berries.—REV. VINCENT CLEMENTI, Peterboro', Ont., 1885.

67. Rare birds in Toronto University Museum.—Through the courtesy of Professor Ramsay Wright I have been enabled to examine the following rare specimens in the above named museum:

68. Gannet (*Sula bassana*).—One specimen, in immature plumage shot at Oshawa, Ontario, by Mr. A. Dulmage, in 1862. The full particulars were published at the time in the *Canadian Journal*, (July, 1862, p. 329), by Professor Hincks.

69. Richardson's Jaegar (*Stercorarius parasiticus*).—A fine adult specimen marked "Toronto." The plumage is exactly as described in Coues' *Key*, first edition. The dimensions as follows:—Length about 19; wing, 13¼: tail, 5, or to the end of the two pointed central feathers, 8; beak, 1¼; tarsus, 1⅝; middle toe and claw, 1$\frac{11}{16}$.

70. Evening Grosbeak (*Coccothraustes vespertina*).—A male and a female of this species are exhibited, the male is marked "Presented by T. S. Cottle, Esq., of Woodstock, 1857." Possibly taken from the flock recorded in the *Canadian Journal* (July, 1855, p. 287). However, there are no records to prove either that it was so or that there was a second migration in 1857; the latter is quite likely.

71. Cardinal Redbird (*Cardinalis cardinalis*).—A fine male specimen marked "Weston, Ontario," (a north-western suburb of Toronto).

72. Yellow-throated Vireo (*Vireo flavifrons*).—A pair marked "Toronto."

73. Bohemian Chatterer (*Ampelis garrulus*).—One specimen marked "near Toronto."

74. Cape May Warbler at Hudson's Bay.—A single specimen of *Dendroica tigrina*, marked "Hudson's Bay."

75. Cœrulean Warbler (*Dendroica cœrulea*).—A pair, male and female adults, marked "Toronto, 1856."

76. Woodthrush (*Turdus mustelinus*).—A single specimen marked "Toronto."—ERNEST E. THOMPSON.

(Fifth Meeting, March 11, 1890.)

77. Among the letters read was one from Professor Robert Ridgway, of the Smithsonian Institute, acknowledging receipt of the copy of Proceedings of the Subsection that had been sent him and remarking, "I am exceedingly pleased with the appearance and contents of the "Proceedings," and trust that the important records which the ornithologists of Toronto have begun may be continued for many years to come. The arrangement of the memoranda, while different from anything that I remember having seen before, is an admirable one, and for convenience of reference seems to be most excellent. Should these Proceedings be kept up, they will result in a series of records which cannot help being of the utmost value to science, and a credit to those who originated the plan of their publication, as well as those who foster and encourage the good work."

78. Arrivals in 1889 at 3rd Concession, York.—On February 17, I saw the first Bald Eagle (*Haliœtus leucocephalus*). On March 16, I saw first Meadow Lark (*Sturnella magna*), and on May 15, the first Ruby-throated Humming Bird (*Trochilus colubris*).—W. SQUIRES.

79. First Sialia sialis at Lorne Park.—On March 1, Mr. R. A. Luker observed two or three Bluebirds as above.—ERNEST E. THOMPSON.

80. Accipiter cooperi.—On October 12, Mr. Geo. Powell shot a fine female specimen of Cooper's Hawk in Ashbridge woods, east of Toronto; its crop and stomach were distended with the flesh and small bones of a domestic Pigeon.

81. Asio wilsonianus.—On November 7, Mr. Powell obtained for me a male Long-eared Owl on the Don Flats, Toronto; its stomach contained the remains of some field mice.

82. Pinicola enucleator.—Taken as follows:—At Rosedale, two males; crop and stomach of each were full of buds and ament scales of birch (*Betula popyracea*). January 25, by Mr. Powell, one male and three females; crops and stomachs contained the kernels of white ash (*Flaximes americana*), and the kernels of the berries of mountain ash (*Pyrus americana*), also a quantity of sharp sand. Mr. Mitchell winged and brought home an adult male which is now (March 10), doing well in a cage. February 1, collected three females at Rosedale. March 1, a young male and a female secured for me on Don Flats.

83. Acanthis linaria.—Specimens of Redpoll taken November 9 and 16, 1889. They have been unusually numerous this fall about Toronto.

84. Spinus pinus.—Pine Siskins in large flocks feeding on birch trees in Rosedale, during November 1889, also observed October 12.

85. Junco Hyemalis.—On January 4, 1890, I procured two males in Rosedale; they were feeding on the seeds of *Amaranthus*. On February 1, I saw a flock of about fifty in the same place; believe that they wintered here this year in large numbers.

86. Passerella iliaca.—Fox Sparrow. On October 12, 1890, at Rosedale, shot two fine specimens of this rare sparrow, both males. On November 7, 1889, I took another at Dunbar's wood, Rosedale, Toronto. These are the only specimens I have seen of this beautiful sparrow and consider it very rare in this vicinity.—Daniel G. Cox.

87. Pinicola enucleator &c., in University Grounds.—This afternoon, Feb. 21, I saw a flock of Pine Grosbeaks in the University grounds feeding on seeds of the European Larch. They put themselves in all positions, sometimes hanging with their heads downward in order to get at them. I have shot five of these birds and four of them were feeding on these seeds. On February 12, I saw a flock of Redpolls (*Acanthis linaria*), feeding on seeds of *Chenopodium album* near the University. I procured three specimens. On February 13, I saw the flock at the same place again but not feeding. On February 26 I saw two female Pine Grosbeaks on College street, near the park; they were in a beach tree but were not feeding. They were very restless and only remained a few seconds and then flew off towards the north-west.

88. Loxia leucoptera north of Toronto.—On February 25, I received a pair of White Winged Crossbills from Mr. T. H. Irwin, of Sharon, who says he sees a flock of about twenty every day, eating seeds of spruce and tamarack. On March 10, I received another male of

the same species from the same place where they are still common.—C. E. PEARSON.

89. Pinicola enucleator.—Only a few of this species appeared here, most likely because there were no mountain ash berries left, the Robins (*Merula migratoria*) having cleared them all off before they left. The few Grosbeaks I saw were feeding on the buds of the larch.

90. Sturnella magna wintering.—I saw five Meadow Larks on January 30, and three on February 21.

91. Ceryle alcyon wintering.—I saw a Kingfisher here last January.

92. Molothrus ater.—Cowbirds observed in flocks at different times in January and February.

93. Regulus satrapa.—The Gold-crested Kinglet is not generally distributed in winter but found in sheltered hollows very often among hemlocks.

94. Eider Ducks.—Regarding the King Eider (*Somateria spectabilis*), I think we have all been astray about it. An Eider in immature plumage is a pretty regular visitor at Hamilton Bay. I described it in the "Birds of Ontario," as the Common one, but an examination of one I mounted long ago, as well as others obtained since, leads me to believe that they are all King Eiders in immature dress. Has the Common Eider (*S. dresseri*), ever been found with you?

95. Ulula cinerea.—Not a Grey Owl has been seen here this winter.

96. Otocoris alpestris praticola.—I first saw Shorelarks on February 10; though I believe a few winter with us. The true *Alpestris* I have not seen at all for several years.—THOMAS MCILWRAITH, Hamilton, Ontario.

97. Merula migratoria wintering at Gravenhurst.—Robins have also been with us, and a fine specimen was secured by Mr. Melville on January 4.—A. P. CORNELL, M.D., Gravenhurst, Ontario.

98. Loxia leucoptera at Toronto.—On March 9, while on Bathurst street, I saw some strange birds in McDonald's grounds feeding on the ground on seeds of the spruce cones which had fallen. On examination I found a flock of about twenty White-winged Crossbills. I fired at them but got none, and they flew off. On 10th, I went again and saw them, but they were so shy I could not get near them. To-day I went

over again and was fortunate enough to secure two specimens, one male and one female, the latter being alive. This is the first time I have seen the species in city since January, 1887, when I got three specimens out of a large flock which were in Rosedale ravine.—G. E. Atkinson.

99. After the reading of Reports, Mr. Thurston showed a young Coot (*Fulica americana*), taken in Toronto marsh, August 14, 1889, and called attention to the remarkable spur-like appendage of the alula.

(Sixth Meeting, March 25, 1890.)

100. **Lanius borealis at Scarboro'.**—On January 15, Mr. Horsey, of Scarboro', saw two Butcher-birds in his orchard. They had been there all winter, and were identified by him on that date.—W. Brodie.

101. **Lanius borealis killing Sparrows.**—On January 25, I saw two Butcher-birds attack and kill a Sparrow in my grounds at Claremont, Pickering township.—Dr. G. Brodie.

102. **Arrivals at Rouge Hill.**—*Merula migratoria*, *Sialia sialis*, and *Melospiza fasciata* arrived here on March 13.—M. Annis.

103. **Corvus americanus paired.**—I noticed that on March 12, Crows were paired and preparing for nesting about Toronto.—W. Brodie.

104. **Loxia leucoptera at Toronto.**—On March 16, I saw a flock of seven or eight White-winged Crossbills in the city.

105. **Merula migratoria around.**—Robin seen March 16, in the city; reported from Green River two weeks ago; in full song March 22. —Hubert H. Brown.

106. **Loxia leucoptera.**—On March 12, I received a pair of White-winged Crossbills that had been shot at Sharon on the 11th.

107. **Merula migratoria in Song.**—Heard Robin in song in the University grounds, March 19th.

108. **Melospiza fasciata.**—March 22, saw a male Song Sparrow in full song.

109. **Food, etc., of Otocoris alpestris praticola.**—Shot two male Shorelarks on the afternoon of March 22. Stomach of first contained seeds of *Amaranthus hybridus*, *Chenopodium album*, *Clover*, Pigeon weed and one oat; the other contained *Amaranthus*, *Chenopodium* and oat as before, a few grains of sand.

One Shorelark that I struck with my catapult fell, and after fluttering about, managed to rise and fly southward in a very erratic fashion; another, probably its mate, went after it and seemed trying to bring it again to the ground, by fluttering just in front and above it. They kept together like a pair of fighting Kingbirds, till lost to sight.—C. E. PEARSON, Toronto.

109. **Spring Notes.**—On March 20, near Lorne Park I saw a Red-headed Woodpecker (*Melanerpes erythrocephalus*). As it flew I noticed that the secondaries were marked also with a black spot or bar as in the immature birds. On March 15, I noticed a number of Shore-larks (*Otocoris alpestris praticola*), along the road in an open part of the country near Streetsville, where a pair of these species breeds every year. On March 19, as I passed I noticed a male in full plumage and song. No doubt he is mated and has eggs already. Is this the old bird of last year's pair, and if so where are the young nesting? Why not back to their native field?—ERNEST E. THOMPSON.

109. **Corvus americanus mobbing an Accipiter atracapillus.**—On Saturday, March 22, while collecting up the Don, I heard a great commotion among the Crows on a wooded hillside opposite my stand. On examining them through a glass I discovered that they were mobbing a hawk that seemed to be an immature Goshawk. I failed to get nearer or observe them more closely.—JAS. R. THURSTON.

110. **Lanius borealis.**—On February 22, I observed one Northern Shrike on the top of a maple tree in Leslie's nurseries, east of Toronto.—JOHN EDMONDS.

CANADIAN ORNITHOLOGICAL BIBLIOGRAPHY.

116. Ornithological Papers published in the *Canadian Journal* up to 1889 inclusive.

1st Series, Vol. I., 1852-3.

1853.—**Allan, (Hon. G. W.)** The land birds wintering in the neighbourhood of Toronto. March, 1853. pp. 167-72.

An interesting paper containing notes on twenty-five species, including Quail, Spruce Partridge, Canadian Jay, etc.

1853.—**Whitwell (Rich.)** A "Rara Avis," June 15, 1853. p. 260.

On a *Merula migratoria* that wintered at Philipsburg (Ont.? or Quebec?)

1st Series, Vol. II., 1853-4.

1853.—Couper (Wm.) Red-breasted Thrush, Aug. 1853. p. 19.

Note on Mr. Whitwell's "Rara Avis." Somewhat aspersive of that writer's ornithological attainments, because he calls *Merula migratoria* "a Robin."

1853.—Bechstein (T. M.) M. D. Review of "Cage and Chamber Birds, by T. M. B.," December, 1853. p. 124. Reviewed by Prof. H. Y. Hind.

Interesting extracts on Red Crossbill in captivity.

1st Series, Vol. III., 1854-5.

1855.—Hind (Prof. H. Y.), M.A., etc. Egg of the Epyorius. April, 1855. p. 244.

Description of Egg from Madagascar.

1855.—Cottle (J.) Coccothraustes vespertina. Evening Grosbeak. July, 1855. p. 287.

Notes of the species at Woodstock, Ont., and description of habits and female plumage. May 7, (1855)?

1855.—Lowe (E. J.) Singular mortality among the Swallow tribe. Notice by Prof. H. Y. Hind. Nov., 1855. p. 388.

Mortality at end of May among *Hirundo rustica*, *H. urbica* and *H. riparia* in England, due to starvation.

New Series, Vol. I., 1856, Toronto, Ontario.

1856.—Bovell (Jas.) M.D. Freaks of nature on a game fowl, which on successive years was black, brown, white and speckled. June, 1856. pp. 75-6.

1856.—Wilson (D.) LL.D. Value of Natural History to the Archæologist, mentioning many birds and mammals that have been found in mounds, etc. *Gallus domesticus*, Gens Cinerea. Feby., 1856. pp. 191-2.

New Series, Vol. II., 1857

1857.—Hincks (Wm.) F.L.S. Canadian Strigidae. Names and comments on eleven species in the Toronto University Museum. May, 1857. pp. 219-20.

1857.—Bovell (Jas.) M.D. The Canadian Humming Bird. Sept., 1857. pp. 382-3. Reference to Mr. John Gould's visit to Canada. His observations on *Trochilus colubris* also a mention of *Cariornis caboti*.

New Series, Vol. III., 1858.

1858.—Hincks (Rev. Wm.) F.L.S., etc. Review of Sclatin Geog. Distrib. of Aves. Sept., 1858. pp. 459-60.

1858.—Wilson (Daniel) LL.D., etc. Review of a Hand-book of Toronto, by a member of the press. Nov. 1858. pp. 502-9.

Contains interesting paragraphs on several of our common birds.

New Series, Vol. IV., 1859.

1859.—Hincks (Wm.) F.L.S. Review of the "Monograph of the Trochilidae," by John Gould, Jany., 1859. pp. 47-50.

1859.—Cottle (T. J.) F.R.C.S.E. Grus Americanus and Grus Canadensis; are they the same bird in different stages of growth? July, 1859. pp. 266-8.

Upholding their specific distinctness.

1859.—Cottle, (T. J.) F.R.C.S.E. Capture of two birds of unusual occurrence in Upper Canada. Sept. 1859. pp. 388-9. *Picus meridionalis* and *Ortygonietra jamaicencis.*

The first name is a mere synonym of *Picus* (now Dryobates) *pubescens.* The second item must stand as a good record of the occurrence of the *porzana jamaicensis* near Ingersoll, in 1857, "now in the collection of Wm. Pool, Esq."

1859.—Hincks (Rev. Wm.) F.L.S. The Family Falconidae. Nov., pp. 443-9.

A rambling essay. He claims "not less than fifteen species" for Canada, but adds little to our knowledge of them.

New Series, Vol. V., 1860.

1860.—McIlwraith (Thos.) List of Birds observed in the vicinity of Hamilton, C.W. Arranged after the system of Audubon. July, 1860. pp. 387-96.

An annotated list of 202 species, a work of sterling worth, of great value to science, and interesting as being the first good avifaunal list from Canada.

New Series, Vol. VI., 1861.

1861.—McIlwraith (Thos.) Notices of Birds observed near Hamilton, C.W. Jany., 1861, pp. 6-18, and March, 1861, pp. 129-38.

A pleasantly written rambling article, that would have been of vastly more use had it been methodically treated.

New Series, Vol. VII., 1862.

1862.—Hincks (Rev. Wm.) F.L.S. May, 1862. pp. 226-7.

Note on Anas Glacialis in Tor. Univ. Mus. and another in Mus. of G. W. Allan. Refers to papers on Hybrid (Mareca penelope and Anas boschas) published in P. Z. S., 1861, by Alfred Newton, M.A.

1862.—Hincks (Rev. Wm.) F.L.S. Obs. * * on Sula bassana. * * at Oshawa, Ont., * * belonging to Mus. Univ., Toronto. July, 1862. pp. 329-336.

Contains little more than the title.

1862.—Wilson (Daniel) LL.D. Science in Rupert's Land. July, 1862. pp. 336-47.

Gossipy articles on scientific explorers of the North, with biographical notes on Kinnicott, Blakiston, etc.

1862.—Morris (Beverley R.) M.D. On the power that certain water birds possess of remaining partially submerged in deep water. Nov., 1862. pp. 509-15.

1862.—Hincks (Rev. Wm.) F.L.S. Snowy Owl. Abundant at Toronto in winters of 1833, '37, '39 and '53. Nov., 1862. p. 522.

Letters appended from "Strix," and from S. Passmore.

1862.—Taylor (F.) Poisonous Partridges. Nov., 1862. pp. 523-4. On two persons poisoned by eating of Bonasæ, that had fed on certain berries.

With comments by Prof. Hincks.

New Series, Vol. VIII., 1863.

1863.—Hincks (Rev. Wm.) F.L.S. Nov., 1863. pp. 462-6. The Struthionidae. The extent and divisions of the Family with its systematic position and relations.

A dissertation on their taxonomic position.

New Series, Vol. IX., 1864.

1864.—Hincks (Rev. Wm.) F.L.S. July, 1864. pp. 230-240. "On the families properly belonging to the Fissirostral sub-order of Incessorial Birds, and the real position of some which have been referred to it."

ORNITHOLOGICAL TITLES.

Vol. I., 1863.

1883.—"Seton" (Ernest E. Thompson.) Pediocetes Phasamillus or Prairie Chicken. Feby., 1883. pp. 405-12.

A maiden effort. Full of original observations, very indifferently expressed. Had the writer of the article first taken the trouble to acquaint himself with the literature of his subject, he would have been saved much labour.

Third Series, Vol. III., 1886.

1886.—Allan (Hon. G. W.) Some of our Migratory Birds. Jany. 17, 1885. pp. 87-100.

A pleasanly written article of general treatment. He claims the Pine Finch (*Chrysomitris pinus*) as a summer resident in the neighborhood of Lake Simcoe, and also that the two Crossbills (*L. americana* and *L. leucopera*) "undoubtedly breed in the pine and hemlock woods (about Lake Simcoe,) and may be seen there all throughout the year.

Third Series, Vol. IV., 1887.

1887.—Williams (J. B.) Destruction of Wild Animals. March, 1886. pp. 142-6.

Third Series Vol. V., 1887.

1887.—Payne (F. F.) Mammals and Birds of Prince of Wales' Sound, Hudson Straits. 15th Jany., 1887. pp. 111-123.

A valuable paper with original observations on fourteen Mammals and twenty-six birds.

SUMMER SESSION, 1890, AT NIAGARA.

FIRST MEETING.

First Meeting in the Pavilion of the Queen's Royal Hotel, 2nd July, 1890, at 14 o'clock, the President in the chair.

The following papers were read:—

1. Curculionidæ of the Niagara District, by A. C. Billups, Esq., illustrated by a large collection of specimens.
2. Ignored Distinctions in Economics, by W. A. Douglass, B.A.
3. The Original Survey of Niagara Township, by William Canniff, M.D.
4. The proper use of the word "American," by J. P. Merritt, Esq.
5. Two Frontier Churches, by Miss Carnochan.

SECOND MEETING.

Second Meeting at the same place and date, at 20 o'clock, the President in the chair.

The following papers were read:

1. Weather Probabilities, by C. Carpmael, M.A.
2. The Making of Niagara, by William Kirby, Esq.
3. The Centenary of 1891, by O. A. Howland, Esq.

The following resolution was unanimously passed:

"That in the opinion of this meeting it is exceedingly desirable that the spots where the pioneers of Niagara lie buried should be carefully ascertained and definitely indicated by permanent marks; that in the case of Col. Butler, the remains should be removed to the burial ground of St. Mark's Church, Niagara, where a tablet to his memory has for several years been placed; and that this important and patriotic work should be undertaken and carried out by some local organization."

THIRD MEETING.

Third Meeting in the Pavilion of The Chautauqua Assembly, 3rd July, 1890, at 10 o'clock, Mr. Hamilton in the chair.

The following papers were read:

1. Niagara Falls in Literature, by A. F. Chamberlain, M.A.

2. The Hurons, by D. B. Read, Q.C.

3. Legislative Work of the First Parliament of Upper Canada (1792-95), by W. Houston, M.A.

4. Slavery in Canada, by J. C. Hamilton, LL.B.

5. Upper Canada in Peace and War, 1805 to 1815, by J. G. Ridout, Esq.

6. Archæological Remains; a factor in the study of History, by David Boyle, Ph. B.

7. Newark in 1792, by D. B. Read Q.C.

8. Diary of Governor Simcoe's Journey from York to Penetanguishene, 1794, by the late Hon. Alex. Macdonell communicated by Alex. Macdonell, Esq., of Osgoode Hall.

The following resolutions were passed unanimously.

1. That this meeting desires to place on record an expression of regret that Fort Mississauga and Fort George have been allowed to fall into a state of decay, which, if steps are not soon taken to preserve them, will result in their total destruction, and to urge upon the Dominion Government the desirability of taking prompt and effective action to preserve what remains of these interesting historical monuments; and that the Secretary of the Institute be instructed to send a copy of this resolution to the Minister of Militia of Canada.

2. That this meeting desires to express approbation of the patriotic sentiments in the paper of Mr. W. T. Kirby on "The Making of Niagara"; regrets, as does the writer, the great neglect of the study of Canadian history by our people; strongly urges that Canadian history be given a more important place in the school programmes and University curriculums in the different Provinces; and hopes that school histories may be prepared giving a comprehensive view of the Dominion, and at the same time having a more pronounced spirit of patriotism evident in them.

3. That the Members of the Canadian Institute hereby wish to express to The Chautauqua Assembly and the Town of Niagara, their gratitude for their kindness and hospitality in entertaining the Members during their summer outing, and that a copy of this resolution be transmitted to the Assembly and the Town.

ARCHÆOLOGICAL REMAINS, A FACTOR IN THE STUDY OF HISTORY.

By David Boyle.

Read at Niagara 3rd July, 1890.

When we compare the neoliths, the bronzes, the cromlechs, and the architectural ruins that afford material for archæological study in many other countries, both in the Old and New Worlds, with the "finds" that reward the student in Canada, it must be quite apparent that so far, at all events as variety and quality are concerned, the Canadian is at a considerable disadvantage. They too, as well as we, have palæoliths, while we can barely lay claim to having aught else.

I say "barely," because, although it is true that many of the aboriginal relics of this country are as ingeniously constructed, and as finely finished as are many of those belonging to the neolithic periods of Europe, they are found so intimately associated with the equivalents of old world palæoliths, that it has been found impossible to make here the distinctions that characterize European specimens.

Within the last few years discoveries of rudely worked flints have been made deep in gravel beds, by Dr. Abbott in New Jersey, and by others as far west as Ohio and Minnesota. The position of these weapons or implements favors the belief that man on this portion of the continent was contemporary with the glaciers by whose agency the gravel beds were deposited, and if this view is confirmed, it will be in order to distinguish the glacial from the more recent specimens by means of some such designations as are now applied to the relics of ancient man in the mother countries.

Up to the present time, however, there has been no well authenticated discovery of co-glacial relics in Ontario, or, so far as I am aware, in any part of the Dominion, and yet the probabilities are as strongly in favor of their being found here as in the places mentioned. But to revert to the comparison made with other countries, our disadvantage in the matter of quality and variety is fully compensated on other grounds. Here we are not only studying the life-history of those who ante-dated the arrival of the superior invading race, but of a people whose representatives came directly into contact with our own, scarcely less than four

hundred years ago, and what is more, of a people whose descendants, numbering many thousands, are still reckoned among our population.

As affording material for a chapter in the story of man's development these conditions have proved immensely valuable, notwithstanding that much yet demands careful and prolonged study before anything approaching correct solutions can be arrived at. In all that relates to existing tribes or families of Indians, much time and patient study have been devoted by individuals and by learned societies, more especially during the last half-century, and more particulary still, during the past twenty years by the American Bureau of Ethnology under the able directorship of Major J. W. Powell whose services cannot well be over-estimated in connection with the enormous mass of matter collected by himself and his staff of enthusiastic assitants, for the benefit of all who are interested (and who should not be?) in the cognate studies of archæology, mythology, and anthropology.

To many it seems little less than puerile that busy, practical, nineteenth century people should pay any attention to the fables and legends of the aborigines. In this connection Dr. Parkman says, "The fireside stories of every primitive people are faithful reflections of the form and coloring of the national mind; it is no proof of sound philosophy to turn with contempt from the study of a fairy tale. The legendary lore of the Iroquois, black as the midnight forests, awful in its gloomy strength, is but another manifestation of that spirit of mastery which uprooted whole tribes from the earth and deluged the wilderness with blood. The traditionary tales of the Algonquins wear a different aspect. The credulous circle around an Ojibwa lodge-fire listened to wild recitals of necromancy and witchcraft—men transformed to beasts, and beasts transformed to men, animated trees, and birds who spoke with human tongue. They heard of malignant sorcerers dwelling among the lovely islands of spell-bound lakes; of grisly *weenäigoes*, and bloodless *geebi*; of evil *manitoes* lurking in the dens and fastnesses of the woods; of pigmy champions, diminutive in stature but mighty in soul, who by the potency of charm and talisman subdued the direst monsters of the waste; and of heroes, who not by downright force and open onset, but by subtle strategy, tricks or magic art, achieved marvellous triumphs over the brute force of their assailants. Sometimes the tale will breath a different spirit, and tell of orphan children abandoned in the heart of a hideous wilderness, beset with fiends and cannibals. Some enamoured maiden scornful of earthly suitors, plights her troth to the graceful manito of the grove; or bright aerial beings, dwellers of the sky, descend to tantalize the gaze of mortals with evanescent forms of loveliness."

In Ontario, the Indian is either so far advanced beyond the savage condition, or the modifying influence of white contact has been such as to render his recitals of traditions and folk-lore almost totally valueless, on account of the incredibly short time during which he absorbs unconsciously so much of what is purely Caucasian, and incorporates it with primitive legend. The Rev. John McLean who for ten years was a missionary among the Blood Indians in our North-West Territory informed me that when he resigned his mission at the end of the period named, he was able to observe a marked difference between the versions of the same story as told him at the beginning and end of his residence with these people. In the latter case many of the allusions were evidently tinctured with Christian doctrine and dogma, notwithstanding the stolid pagan character of those who recited the narratives.

It follows, therefore, that study and investigation along ethnological lines in this Province must be conducted mainly from the archæological point of view, unless, indeed, an exception be made in favor of philology —a field which has been pretty thoroughly worked in the older portions of the country and among the better known tribes, although, no doubt, much remains to be gleaned among those who reside north of the watershed that divides us from the Hudson Bay slope.

Fortunately for the archæological student (not the mere collector) material is not yet wanting in Ontario, although it is perfectly safe to say that hundreds of thousands of specimens have been carried off to find places in British and foreign museums.

Given the conditions necessary for aboriginal livelihood in any part of the province, and there it is almost a certainty that traces of ancient occupation will be found. The requirements were means of defence, proximity of water, light and easily turned soil, nut and fruit-bearing trees, and an abundanee of game.

Right here, and with narrow intervals all over this grand old Niagara peninsula which has been so appropriately named "The Garden of Canada," the Indian found as nearly a real earthly paradise as it was in the nature of aboriginal life to conceive. Every hill-top must have glowed with innumerable camp-fires, or have been set apart as a depository for the remains of departed braves. Every valley must have, times untold, re-echoed with the shout of the successful hunter, or the whoop of the vengeful warrior. Not a spring but has refreshed man, woman, and child of the dusky forest denizens, and not a foot of soil that has not yielded its root, or its fruit, or its bark, or its timber, for the nourishment and protection of those who little dreamed that ever the time would come when they would be dispossessed of their ancient heritage by a strange

and pale-faced people from the east, armed (if I may use the expression) with a bible in one hand, and a musket or a bottle of fire-water in the other.

The royal sturgeon of the big river, the maskalonge and lesser fish of the lakes, and the speckled trout of the small streams abundantly ministered to their wants. The soil in point of quality left nothing to be desired, and doubtless many a small clearing produced maize, and pumpkins for food, sun-flowers for oil, and tobacco for solace or ceremony.

Situated on a natural and comparatively narrow frontier, the Indians who inhabited this district were not slow to perceive the advantages as well as the disadvantages of their position. Their territory formed an immense middle ground between contending parties, east, north and south. With statesman-like diplomacy they refrained as much as possible from mixing themselves in these tribal wars, and, no doubt, profited by largesses from the opposing forces that had to traverse their country. It is uncertain how long they had maintained this attitude prior to the appearance of the French and English, but their position in this respect during the first half of the 17th century had gained for them the name of Neutrals.

It is inevitable that a people so circumstanced should have made considerable advance in rude mechanical art, and it is just as certain as anything can be that their relics have been turned up in large quantities during the clearing and cultivation of the farms for which Niagara district is famous, and yet, strange to say, there is scarcely any portion of old Ontario which is so poorly represented in the Provincial Archæological Museum.

True as are the remarks quoted relative to the value of primitive legends by way of enabling us to understand the modes of thought, manners of life, and conditions of early society, it may safely be asserted that even more may be learned from a close and patient study of such utensils, implements and weapons as we find to-day on the sites of ancient villages and kitchen-middens, or scattered about as they have been lost in the chase or on the battle-ground.

A comparison of American with European relics while exhibiting many points of resemblance, brings out also a very large number of divergencies. The hornstone celt and the flint arrow, or their equivalents in other material were coincident with primitive man in every part of the world, but, besides these, there are forms peculiar to certain large areas, and not seldom, to districts of comparatively limited extent.

To learn the uses of these is to arrive at a knowledge, not only of how

the ancient people lived, but of how they thought which is of even greater importance, for if we can ascertain this we are on the highway to an understanding of much that it would be extremely interesting to know relative to aboriginal mental development, and consequently valuable as a contribution to the history of our race in its progress from the rudest to the highest and most refined manifestations of humanity.

The larger and more varied a collection of such objects is, the better are the opportunities for study and comparison. In aboriginal workmanship no two objects intended to serve the same purpose are identical, and it may be that a slight peculiarity in the form of one in a score or in a hundred will prove suggestive of the application of the whole group.

The Canadian Institute has succeeded in bringing together what I think it is safe to say is the largest collection in the world, of such objects as are illustrative of pre-historic life in what is now the province of Ontario.

Natural, however, as it may be to suppose that in any circumstances this should be the case, I wish to take this opportunity to state, that but for the assistance rendered to the project by a small annual grant from the Provincial Government during the last four years, the Archæological, Museum of Ontario would scarcely have been worthy of the name, and the six or seven thousand valuable specimens now in its cases would have remained scattered throughout the country either buried in the soil or if in the hands of private collectors, to be of little use scientifically and in not a few cases ultimately lost. Its reputation as an established institution is now so good that during the last half-year, three private collections have been placed in our rooms on permanent exhibition. These collections number respectively, 600, 150, and 450 specimens or a total of 1,200, to which if there are added at least 300 as the result of search on benalf of the Institute, we have increased the number this year by 1,500

As I have already intimated, the Niagara peninsula is but scantily represented—the northern side of it hardly at all, and I am sure it is perfectly needless for me to say how much pleasure it will afford the Institute to receive from residents in this locality any archæological information or material connected with the Attiwandarons who were here when Hennepin and La Salle landed, on their way to the upper lakes in 1678, and who had probably occupied the same ground for centuries previous to that time.

NEWARK IN 1792.

BY D. B. READ, Q.C.

(*Read 3rd July, 1890.*)

Newark, the first capital of the Province of Upper Canada, had but a brief existence under its English name, and then relapsed into the Indian name of Niagara. Its successor, York, had a similar experience. After sporting for a time the Royal name of York, it too, after a time, fell back to its old Indian name of Toronto. The first place in which we find Newark named in the old Records is in the Crown Lands office at the capital of the Province. There will be found there an old map made by Acting Surveyor-General D. W. Smith in 1794, in which is set apart the Town Plot of Newark. Newark had its name from Newark, a borough and market-town in Nottinghamshire, England, in which market-town are the ruins of a fine castle built in Stephen's reign, and dismantled in the Cromwellian period.

In 1789, Newark was called Niagara, the name it bears to-day. In the early history of the Province, indeed before Upper Canada and Lower Canada were formed into separate Provinces, there was a Land Board formed principally for the purpose of allotting to the original settlers the land to which they were entitled by virtue of the instructions issued by the King to Lord Dorchester in 1783—the parties entitled to lands being officers, non-commissioned officers, privates and others who adhered to the King's cause during the Revolutionary war. This Land Board, it is recorded at the Crown Land office, met at Niagara (not Newark) on the 26th October, 1789. There were present, Lt.-Col. Harris, Lt.-Col. Butler and R. Hamilton. The Board took into consideration the King's commands, and determined what number of acres each of the above named class of persons should receive for their services during the Revolution, and awarded to loyalists who were non-combatants a quota of the land set apart by the King; each head of a family securing fifty acres for himself and fifty acres for each of his children. Mr. Surveyor-General Smith's Report of 1789 is very interesting reading at the present day, as in that report we come across so many names familiar to Canadian ears. It was perhaps a fortunate thing that Lt.-Col. Butler of Butler's Rangers, should have complained to the Governor that certain of the original settlers were trespassing on his lands. This complaint caused

enquiry, and the Report to which I have referred. In that Report we find the name of Secord, Servos, Ball, Lt.-Col. John Butler, Mr. Bradt and others, all of whom had lands just west of the Town Plot of Newark, between the two-mile and the four-mile creek, or as called on the map, between the two-mile and four-mile pond. It is not generally known that Newark was at one time called Lennox. D. W. Smith, in 1794, about the time that the public offices in Newark were being removed to York, thought it proper that he should make a table of distances of places, and other matters, for use in the Crown Land office. It is stated in this table that "Newark, formerly called Lennox, is situated on the west side of the entrance of Niagara River, opposite to the fortress at Niagara on Lake Ontario. This town was laid out in the year 1791, and the buildings were commenced upon the arrival of His Excellency Lt.-Governor Major-General Simcoe in 1792. It contains now (1794) about 150 houses—the gaol and Court House for the Home District were erected in this place by an Act of the Provincial Legislature in their first session—the Courts of the General Quarter Sessions of the Peace are holden here. The Court of King's Bench sits here. The first Provincial Parliament met at this place, and the public offices of Government have been held *pro tempore* here. Navy Hall, which is situated on the west bank of the river, a little above the town, is the residence of the Lt.-Governor during his stay at this place. The Council House is about half-way between the town and Navy Hall." It will be noticed that Mr. Smith states that in 1794 there were 150 houses in Newark. Then how *many* were there in 1792? Dr. Withrow, in his history, gives the number at that date to have been about one hundred.

Mr. Isaac Weld, in his travels in America, A.D. 1795-1797, gives a very complete description of Newark as it appeared to him at that time, and there is no reason to believe that it was different in 1792, except as to the number of the people in the town, and the number and class of buildings erected since 1792. Mr. Weld, after describing his trip across Lake Ontario, says:—"The Town of Newark is built parallel to the river. From the deck of our vessel anchored two miles out it could scarcely be seen. Except a few shabby houses at the nearest end, it makes a very fine appearance. We landed at Mississaga Point, from whence there is an agreeable walk of one mile, partly through woods, to the Town of Niagara. The Town of Niagara, contains about seventy houses, a Court House, gaol aud building intended for the accommodation of the Legislative bodies. The houses, with few exceptions, are of wood—those next the lake are poor, but at the upper end of the town there are several very excellent buildings, inhabited by the several principal officers of the Government. Most of the gentlemen in official stations in Upper Canada are Englishmen of education, which renders the society agreeable. Few

places in North America can boast of a more rapid rise than the little Town of Niagara, nearly every one of its houses having been built during the last five years . . . . land has risen 50 per cent. in three years. . . . On the margin of the Niagara River, about three-quarters of a mile from the town, stands a building called Navy Hall, erected for the accommodation of the naval officers on the lake during the winter, and also to facilitate the landing of merchandize when the navigation is open. Navy Hall is now occupied by the troops, the fort on the opposite side having been delivered up to the Americans."

The visit of Mr. Weld to Newark or Niagara (I say Newark or Niagara as he uses the name interchangeably to signify the same place), was in 1797. It will be observed he makes the statement that at that time there were about seventy houses in the place, while Dr. Withrow states that there were about one hundred houses in 1792. Dr. Withrow is more nearly correct as evidenced by the statement of D. W. Smith, made in 1794, in which he says there were then one hundred and fifty houses in the town —the population was therefore, according to ordinary estimates, 500 in A.D. 1792 and 750 in A.D. 1794. Who made up this population? We have historical facts to establish that immediately after the Treaty of Peace between England and her revolted colonies, now the United States, United Empire Loyalists came into this Province in large numbers, and Major General Simcoe, the Governor, immediately on receiving his appointment as Governor, issued a proclamation inviting settlers, and threw open the Crown lands for their benefit. Led by Mr. Berczy, a band of German colonists, from New York, came over, and were the precursors of thousands who followed them to different parts of the Province. "Across the Niagara River (says Professor Bryce) came convoys of emigrant waggons, herds of cattle, household goods, to receive a welcome to the Niagara or London Peninsula, or the district around Toronto. In the early settlement a large per centage of the immigrants were military. The Niagara frontier was peopled by Butler's men. . . ." Again he says, "Two ships guarded by the brig "Hope," and laden with Loyalists left New York harbour in 1783, and landed at Sorel in Lower Canada. To Sorel also came a number down the old Military road, along the Richelieu—soldiers and disbanded Royalist regiments—and settled the country in the next year (1784) from Glengarry to the Bay of Quinte. The Niagara frontier at the same time was lined with the desperate Butler's Rangers. Loyalist Districts extended even to Detroit, along Lake Erie. Ten thousand Loyalists, men and women, of determination and principle, thus peopled and gave tone to what is now the Province of Ontario. In 1792 there were 12,000 settlers in the Province."

In the Life of the late William Hamilton Merritt, the projector of the Welland Canal and United Empire Loyalist, we find it stated that his father came into Upper Canada from New York State in 1796, and that at that time the lands of the Niagara District had all been taken up by the men of Butler's Rangers, that the frontier being settled he was forced to take up land on the twelve-mile creek.

From all this it is pretty plain to be seen how Newark or Niagara had a population of at least five hundred souls in 1792.

Major General Simcoe, the commander of the Simcoe Rangers throughout the Revolutionary war, when he took up the reins of government in the Province, found himself among his own people, who looked upon him as an elder brother.

This paper would not be complete without a fuller statement of what took place at Newark on the occasion of the opening of the first session of the First Parliament of Upper Canada, of which General Simcoe was executive head, in 1792. It has been stated, on the authority of Mr. Surveyor-General Smith, that the Council House was on the hill between Navy Hall and the Town of Newark. It would thus be found to be in the Military Reservation. There is every reason to believe that the Council House mentioned by Mr. Smith was the place of meeting of the Legislative Council of the Province. There is a kind of unauthenticated tradition that the first Legislature met under a tree. It is more probable that the members sent to the first Assembly met the Governor at his headquarters, Navy Hall, and having organized, were summoned to attend His Excellency in the Council Chamber to hear the speech from the throne. It is an historical fact that at the opening of the House soldiers were drawn from Fort Niagara on the opposite side of the river (still retained by the British, as a hostage for the due performance of the terms of the Treaty of 1783 by the Americans) to act as a guard of honor to His Excellency, and to accompany him to the Council House to listen to his speech to be addressed to Parliament. It is not impossible that the members may in the first instance have met together under a tree, and then it being announced to them that the Governor was ready to receive the people's representatives proceeded from thence to the Council Chamber. It has been the custom for nearly a century of our existence as a separate Province for the Governor to address the Legislative Council and the Commons in the Legislative Council Chamber. The Constitutional Act of 1791 entitled the Province to send fifteen members to the Legislative Assembly—of the fifteen returned to the first Assembly only seven were present at the opening of the House, and about as many Legis-

lative Councillors. It may be safely affirmed that at the first opening the Governor had not a very full house. This conscientious Governor, like a conscientious actor, was not to be daunted by the slim attendance.

Governor Simcoe was ever careful to respect the formalities which threw a halo around the British throne. In military uniform, attended by his staff, he proceeded to the Council Chamber, and there met the Council and people's representatives in Parliament assembled. It is not necessary to give the speech here, as it has been elsewhere published. It may, however, be stated that it was a speech abounding in patriotic sentiments and devotion to the Crown and Constitution of England.

I will not tire my hearers by prolonging this paper to greater length, but will conclude by saying that I join with them in felicitations at the happy circumstance of this meeting at Chautauqua, in the vicinity of the old Town of Newark, Navy Hall and Fort George, all historic spots in a Province, blessed by Providence beyond measure, and which had for its first Governor Major General John Graves Simcoe, whose memory will be perpetuated for all time in the annals of the country.

THE LEGISLATIVE WORK OF THE FIRST PARLIAMENT OF UPPER CANADA (1792-95).

By William Houston, M.A.

(Read 3rd July, 1890.)

The work of the first Upper Canadian Parliament cannot be clearly understood without a preliminary survey of the events which led to the establishment of the Province of Upper Canada in 1791. A vast but indefinite extent of territory was surrendered by the French Governor to General Amherst at the capitulation of Montreal in 1760, and this surrender was confirmed by the Treaty of Paris in 1763. The boundaries of the surrendered territory were not defined either in the Articles of Capitulation or in the Treaty of Paris, but the conquered country was regarded in a vague way as extending westward to the Mississippi and northward to the southern limit of the territory covered by the Hudson Bay Company's Charter. The most easterly part of this vast region was erected into the "Province of Quebec" by the Royal proclamation of 1763, with an area not greatly different from the area of the same Province to-day, the south-westerly limit being a line drawn from Lake Nipissing to Lake Champlain. The Proclamation did not provide any machinery for the government of the new Province, which, with the rest of the surrendered territory, had been administered for three years under military law. Civil government was established by the issue of a commission to General Murray as Governor of Quebec in 1764, the appointment of a small advisory council, and the appointment of a Chief Justice and other civil officials.

For eleven years the Government of Quebec retained this rudimentary form, but in 1774 the British Parliament, prompted partly by the demands of the people of Quebec for a more regular form of government, partly by the requests of the residents in the distant French settlements for protection, and partly by the desire of preventing the Canadians generally from joining in the then rising revolutionary movement of the English colonists, passed the Quebec Act. This statute enlarged the Province by extending it westward to the Mississippi, and southward to the Ohio, secured the French Catholic clergy in the enjoyment of their "accustomed dues and rights," established "Canadian law" as the rule of decision in all controversies respecting property and civil rights, and created a legislative body,

the members of which were to be appointed by the Governor from amongst the British and French citizens of the colony. The passage of this Act had probably the effect of hastening the American revolution, and it had certainly the effect of preventing the French people from casting their lot in with the revolutionists. In 1776 the Declaration of Independence was signed, and in 1783 Great Britain, by the Treaty of Paris, acknowledged the independence of the revolted colonies as the "United States of America."

The "United Empire Loyalists"—those who had stood by the King of Great Britain during the revolutionary war—in some cases from choice, in other cases to escape persecution, emigrated from the adjacent States to various parts of what is now the Dominion of Canada—Nova Scotia, New Brunswick, Quebec, and Ontario. In the last named Province they "squatted" along the St. Lawrence between Kingston and Montreal, along the north shore of the eastern part of Lake Ontario, about the Bay of Quinte, and in the Niagara Peninsula. Niagara had for them special attractions, inasmuch as it was comparatively near and well known, naturally adapted for agricultural life, and protected against Indian depredations by Fort Niagara, which remained in the hands of the British authorities till the negotiation of the Jay Treaty in 1796. During the seven years, from 1783 to 1790, the population of the western part of the Province of Quebec, as defined by the Act of 1794, increased with rapidity, owing to the immigration of these English-speaking exiles, and it soon became evident that the primitive constitution provided by the Quebec Act would have to be changed in conformity with the altered conditions. The Constitutional Act, which was passed by the British Parliament in 1791, divided Quebec into Upper and Lower Canada, the line of division being in part the Ottawa River, and in part a line from the Ottawa to the St. Lawrence along the western limit of the most westerly of the French seigniories. Each of these Provinces was furnished with a Parliament of its own, and each Parliament consisted of a Governor, a Legislative Council, whose members were appointed by the Crown, and a Legislative Assembly, whose members were elected under a very restricted franchise.

It should be borne in mind that though the "United Empire Loyalists" had opposed their fellow colonists in the attempt to assert their independence of Great Britain, they had long been accustomed to a system of Government under which they made their own laws in all important matters, and administered for the most part their own affairs of state. The thirteen colonies had all been provided with legislatures for a longer or a shorter period—some of them for over a century—and had enjoyed a degree of political freedom which left nothing to be desired until the unfortunate attempts of the British Parliament to collect an Imperial tax between 1764

and 1774. In spite of their adhesion to the Royal cause, the "Loyalists" were of a robust political temperament, and the appointed "Legislative Council," which they found sitting in distant Quebec, was a poor substitute both theoretically and practically for the legislative machinery to which they had been accustomed. Their feelings in this matter were shared by the immigrants from Britain, who were familiar with representative parliamentary government there. Both classes of the new community were further accustomed to the common law of England, to free and common soccage tenure of land, and to the exercise of local self government through the medium of municipal machinery, however imperfect. The settlers in Western Canada were at once distant from Quebec and close to the United States, far from their own seat of government and near a people whom they regarded as their bitterest enemies. From every point of view the system of government under which they found themselves was unsuited to their needs and peculiarities, and from knowing what these were one might almost predict without actual acquaintance with the work of the first Upper Canadian Parliament what that work would be like.

Nor should it be forgotten that under the new system introduced in 1791 the offices of Governor and Chief Justice were of the very greatest importance. The occupant of the former acted then on his own personal responsibility as an Imperial officer, having no ministry, as colonial governors now have, responsible to Parliament for the advice they gave. He wrote his own speeches to be read from the throne, and in this and other ways intimated his own wishes and propounded his own policy to the Houses of Parliament. The first Governor of Upper Canada, John Graves Simcoe, had been a British officer during the Revolutionary war, and he came to the discharge of his duties with a high sense of the dignity of his position and of the political value of the British Parliamentary system. In the first Chief Justice, Sir William Osgoode, he had an able coadjutor and a cordial sympathiser. Behind or beneath a somewhat amusing assumption of vice-regal and judicial formality there can be little doubt that there existed among the various parties to the work of legislation a certain frank familiarity which made it possible for all, untrammelled by partisanship, to bring to bear on that work the most earnest consideration, the most assiduous effort, and the most disinterested desire to promote the common good.

The first Parliament of Upper Canada met at Newark, now Niagara, on the 17th of September, 1792. It continued its meetings at the same place for four sessions, the last being held in 1795. The first session of the second Parliament was held at Newark in 1796, and the second session at York, now Toronto, in 1797. It is impossible now to say, with certainty, in what building the first Parliament met, but the weight of local tradition

seems to make it probable that for some time the sessions were held in the old Indian Council House, the site of which is still pointed out on the Garrison Common to the south-west of the town of Niagara.

Perhaps the most convenient way of getting a view of the legislation of the first Parliament during its five sessions will be to classify the statutes passed according to the subjects with which they deal, and for this purpose the following heads will suffice: (1) Administration of Justice, (2) Municipal Affairs, (3) Militia and Defence, (4) the Status of Special Classes of Persons, and (5) the Work of Legislation and Administration.

I. ADMINISTRATION OF JUSTICE.

It has already been intimated that the discontent of the English-speaking immigrants, whether from the United States or Great Britain, with French Canadian law, was one of the reasons for the passage of the Constitutional Act of 1791, and the division of Quebec into Upper and Lower Canada. It is not surprising, therefore, that the first Act passed by the first Upper Canadian Parliament, at its first session was "An Act to Repeal certain parts" of the Quebec Act of 1774, "and to introduce the English law as the rule of decision in all matters of controversy relative to property and civil rights." The preamble to this statute gives as a reason for enacting it that "the part of the late Province of Quebec now comprehended within the Province of Upper Canada has become inhabited principally by British subjects, born and educated where the English laws were established, and who are unaccustomed to the laws of Canada;" and one section of the Act provides that "all matters relative to testimony and legal proof in the investigation of fact, and the forms thereof, in the several courts of law and equity within this Province be regulated by the rules of evidence established in England." The second Act passed during this first session was one to establish trial by jury, in strict accord with the law and custom of England. The effort to work the system of trial by jury in the French colony to the east had proved unsatisfactory, and in 1774 it had been abandoned in civil cases. During the same session an Act was passed "to abolish the summary jurisdiction of the Court of Common Pleas in actions under ten pounds sterling," and another "for the more easy and speedy recovery of small debts," by means of local tribunals, each made up of two or more justices of the peace and designated a "Court of Requests." And, still during the same session, an Act was passed to provide for the erection of a jail and courthouse in each of the four districts into which the Province was then divided—Eastern, Midland, Home, and Western.

In the second session the times and places of the meetings of the quarter sessions of the justices were fixed by statute, and a probate and a surrogate court were established in each district.

In the third session amendments were made in the statutes respecting juries, and jails and courthouses; district courts were established for the "cognizance of small causes," the lower and upper limits being forty shillings and fifteen pounds; and the Court of King's Bench, with powers similar to the Court of the same name in England, was created as a "Superior Court of Civil and Criminal Jurisdiction," an appeal in suits involving sums of more than one hundred pounds being allowed to the Governor and two or more members of his Executive Council, sitting as a Court of Appeal.

All the other statutes dealing with the working of the legal system of the Province that were passed during the remainder of the Parliamentary term were Acts amending previous statutes, except one to provide for the registering of deeds, conveyances, wills, "and other incumbrances" affecting real property.

II. MUNICIPAL AFFAIRS.

Nothing could show more clearly than the statutes passed by the first Parliament of Upper Canada to regulate those affairs now ordinarily termed "municipal," the fact that it drew its inspiration largely from the U. E. Loyalist immigrants, who were accustomed to free municipal institutions in their former homes. During the first session very little was done in this direction except to authorize the justices of each district to make what regulations they pleased for the prevention of accidents by fire, and to appoint officers to enforce them; but in the second session an Act was passed "to provide for the appointment of parish and town officers" within the Province, and by "town" here is meant what we now call a "township." This statute is of great historical importance in relation to the municipal system of Ontario, and, therefore, a brief summary of its provisions may be useful here. It provided that in each township which had "thirty or more inhabitant householders," any two justices of the district might order the constable to call a public meeting of the householders of the township on the first Monday in March for the purpose of electing a town clerk, two assessors, one collector of taxes, not more than six overseers of highways who should also serve as fence-viewers, a pound-keeper, and two church wardens. The statute defines the duties of these various officers, and also provides that in the event of a refusal on the part of any of those so elected to serve, any two justices might elect others to fill the vacant offices till the next town meeting. The "inhabitant house-

holders" in public assembly were not authorized to impose taxes—that would be done in those days only by Act of Parliament—but they had the right by resolution to "determine upon the height or sufficiency of any fence or fences" within the township. There can be no mistake as to the source from which the idea of this primitive municipal system came; the Upper Canadian "town meeting" was simply an adaptation of the "town meeting" of New England, modified by the omission of some of the more democratic prerogatives of the latter and by the addition of special features that were probably imported direct from Great Britain.

During the same session two other municipal statutes of importance were passed, one regulating "the laying out, amending and keeping in repair the public highways and roads," and the other authorizing "the levying and collecting of assessments and rates in every district." Some of the provisions of the latter statute are sufficiently interesting to merit notice. The assessors of each township were required to arrange all the "inhabitant householders" in eight classes, according to the amount of their real and personal property, from fifty pounds upwards, and to make out a tax roll, one copy of which was to be signed by two justices and affixed to the church door or some other place of public resort, while another was to be delivered to the town clerk. The rate of taxation was two shillings and six pence a year for each fifty pounds of assessment, and this was to be paid by the collectors of townships to the treasurer appointed by the justices in session for the district to which they belonged, and to be paid out by him on the order of the same justices under statutory authority. The various services to which these funds might be devoted were, according to the preamble to the statute, building and repairing a courthouse and jail, paying the jailer's salary, maintaining the prisoners, building and repairing houses of correction, constructing and repairing bridges, paying the fees of coroners and other officers, destroying bears and wolves, and paying members of Parliament "wages," not to exceed ten shillings a day for the period of their actual attendance.

Statutes were subsequently passed by the first Parliament amending those already referred to, and during its third session it undertook to deal with the still vexed question, the regulation of the retail traffic in spirituous liquors. The ordinance passed by the Legislative Council under the authority of the Quebec Act of 1774 was repealed as "inconvenient," and the granting of licenses to sell intoxicating drink was vested in the justices of the district, who were authorized to determine the number of licenses to be granted, and also to decide as to whether the applicant for a license was "a sober, honest and diligent man, and a good subject of our Lord the King." The evidence on which the latter point was to be decided was

"a testimonial under the hands of the parson and church or town wardens, or of four reputable and substantial householders, setting forth that such person is of good fame, sober life and conversation, and that he has taken the oath of allegiance to our Sovereign Lord the King."

III. MILITIA AND DEFENCE.

The Treaty of Paris, 1783, did not immediately reduce to a state of peace the Niagara frontier on either side of the river. Fort Niagara remained, as did also Forts Detroit and Michillimackinac, in the hands of the British for a period of thirteen years. The Indians on both sides of the frontier were in a chronically perturbed condition, and there was constant danger of a serious if not a prolonged border war, with both whites and Indians taking part in it. In this state of affairs Governor Simcoe naturally desired that the people of Upper Canada should put themselves in readiness for an organized defence of their territory against invasion, and at his instance one Act was passed in the second, and another in the third session of the first Parliament. How far the measures thus taken might have served the intended purpose had any invasion taken place must be left to conjecture, for all danger of immediate trouble was removed by the Jay Treaty of 1796, which secured the final withdrawal of the British troops from the forts on the United States side.

IV. STATUS OF SPECIAL CLASSES OF PERSONS.

In 1790 the British Parliament, actuated, no doubt, by a desire to facilitate the migration of United Empire Loyalists from the United States to Canada, passed an Act permitting them to bring with them their negro slaves under authority of a license granted for that purpose by the Governors of Provinces. A considerable number of slaves were imported into Canada between 1790 and 1793, but in the latter year a statute was passed by the Legislature of Upper Canada, during its second session, "to prevent the further introduction of slaves and to limit the term of contracts for servitude within the Province." The preamble to this Act recites that "it is unjust that a people who enjoy freedom by law should encourage the introduction of slaves," and declares that it is "highly expedient to abolish slavery." The statute itself enacted that no more licenses should be granted for the importation of persons destined to slavery, that all persons previously held in slavery elsewhere should, after the passage of the Act, be free on arrival in Upper Canada, and that no contract for voluntary servitude should be made for a longer time than nine years. It further provided that while slaves already in the Province should be left in slavery, every

child born of slave parents after the passing of the Act, should be free at twenty-five, and that the children of those who were thus temporarily slaves should be free from birth. The effect of this law was first to prevent the spread of slavery and secondly to bring about its gradual extinction.

During the same session an Act was passed "to confirm and make valid certain marriages" which had been contracted irregularly on account of the absence of a Protestant clergy, "and to provide for the future solemnization of marriage in the Province." Besides confirming marriages "publicly contracted before any magistrate or commanding officer of a post, or adjutant, or surgeon of a regiment acting as chaplain, or any other person in any public office or employment" before the passing of the Act, the statute provided a method of attestation and registration of marriages and births well calculated to remove all uncertainty as to the legitimacy of the children born of such irregular marriages. For the future all marriage ceremonies were to be performed by "Parsons of the Church of England," except when the parties were as much as eighteen miles from the nearest one, in which case they might call in the services of a justice of the peace. The illiberality of this provision was quite in keeping with the provision made in the Constitutional Act, 1791, for the establishment and endowment of a Protestant Church. It required nearly half a century of agitation to secure for the clergy of other denominations the right to perform the marriage ceremony.

During the third session an Act was passed "to authorize the Governor to license practitioners in the law." It suspended for two years the operation of an ordinance of the Legislative Council of Quebec and substituted for its provisions a simple method of licensing by the Governor, the number of practitioners so licensed to be limited to sixteen. Disbarring was provided as the penalty for "malversation or corrupt practice." The license fee was fixed at forty shillings and the registration fee at thirteen shillings and four pence.

During the fourth session an Act was passed "to regulate the practice of physic and surgery." This does not call for any special remark, except that it was the first of a long series of legislative attempts to confine the art of healing to regular practitioners.

V. LEGISLATION AND ADMINISTRATION.

During the second session of the Legislature an Act was passed which provided that "members of the House of Assembly be allowed wages for their attendance thereat, not exceeding ten shillings a day." Another was passed to provide means "for the payment of the salaries of the officers of the Legislative Council and the House of Assembly, and for defraying the

contingent expenses thereof." The fund to be used for this purpose was created by the imposition of "a duty of twenty shillings, to be levied on all licenses for the retail of wines or spirituous liquors," in addition to the one pound sixteen shillings already mentioned as the license fee.

During the third session an Act was passed to provide that all moneys paid into the Provincial Treasury on account of fines, forfeitures and penalties should be "accounted for" to the King as he might direct. By an Act passed in the same session a duty was levied on "stills," thus laying the foundation of that very important source of income, the inland revenue tax.

During the fourth session, in view of the then approaching election, an Act was passed "to ascertain the eligibility of persons to be returned to the House of Assembly." This also was the first of a long series of enactments which were subsequently passed with a similar purpose in view.

THE HURONS.

BY D. B. READ, Q.C.

(*Read 3rd July. 1890.*)

The very able Report of the Canadian Institute, made in the Session of 1888-1889, in which Mr. David Boyle, Curator of the Institute, has given an interesting and instructive account of the archæology of that part of the Province of Ontario in the neighbourhood of Lake Huron, suggested to my mind the opportuneness of the present occasion for drawing attention to the *history* of that great Indian Nation after whom Lake Huron is named. What fitter place to discuss this question than on the margin of Huron's sister Lake, Ontario, in Indian, "Skandario,"—in English, "the beautiful lake?"

Like Ontario, Huron in the 17th century, had another Indian name. On Sanson's map, 1656, Lake Huron is called "Lake Karegnondi." In the same map, Lake Michigan is called "Lac-de-Puans."

The Huron nation which occupied all the territory forming the Peninsula between Lake Ontario and Lakes Huron and Erie was a nation within a nation. The great Algonquin family of Abenaquis claimed all the territory extending from the St. Lawrence to the Rocky Mountains. Mr. Schoolcraft, the distinguished American ethnologist, has classified the North American Indians as follows:—1st, Northern, extending from the Atlantic to the Pacific Ocean. 2nd, East of the Mississippi and the Rocky Mountains. 3rd, West of the Mississippi and Rocky Mountains. 4th, West of the Rocky Mountains. These embrace altogether thirty-seven families under which there are numerous sub-divisions. He gives the name of the Iroquois as one of the sub-divisions, but does not name the Hurons, which goes to establish that he considered the Hurons as a branch of the Iroquois.

Parkman, after stating that the Algonquin population extended from Hudson's Bay on the north to the Carolinas on the south, and that the Iroquois family was confined to the region south of the Lakes Erie and Ontario, forming as it were an island in the vast expanse of Algonquin population, goes on to say, "Of all the members of the Algonquin family, those called by the English the Delawares, by the French les Loups, and by themselves, 'Lenni Lenapé,' or *original man*, hold the first claim to

attention; for their traditions declare them to be the parent stem, whence other Algonquin tribes have sprung. The latter recognized the claim and at all solemn councils, accorded to the ancestral tribe the title of Grandfather." Mr. Parkman subjoins this note, "The Lenapé, on their part, called all the other Algonquin tribes children, nephews or young brothers, but they confess the superiority of the Wyandotts (Hurons), and the five nations, by yielding them the title of Uncles. They in return call the Lenapé, nephews, or more frequently cousins. This confession proves the antiquity of the Iroquois and Huron families of Indians: that indeed they date back to the earliest ages and were the ancestors of the Algonquins, who greeted Jacques Cartier on his arriving at the Indian village, now the site of the city of Montreal, on the 2nd October, 1535.

The Jesuits styled the country of the Hurons around Lake Huron, "the granary of the Algonquins."

The Indians who met Cartier on his arrival at Hochelaga or Montreal, in 1535, were doubtless Indians of the Huron Iroquois family. Faillon (Histoire de la Colonie Française) says he believes that the Indians found on the St. Lawrence were Iroquois, who were succeeded in Champlain's time by Algonquins. Cartier found Hochelaga to be a village of some magnitude and well fortified with palisades and other means of defence. When he arrived there, one hundred Indians came down from their bark houses to the shore to meet him, which they did in the most friendly manner. This may be ascribed to the fact that the Indians of Hochelaga seemed to recognize Taignoagny and Donnagaya, the two natives that Cartier had captured at Gaspé in 1534, on the occasion of his first voyage to America, and had now with him as interpreters—or it may have been from the desire of the Abenaquis to get up a trade with the white men. The question, however, is, were these Abenaquis, Huron or Iroquois-Huron Indians? Before reading Mr. Joseph Pope's admirable essay on "Jacques Cartier, his life and voyages," written in competition for a prize offered by His Honour the Lieutenant Governor of the Province of Quebec, offered through the Literary and Historical Committee of the "Cercle Catholique" of Quebec, and for which essay Mr. Pope received first prize, I had come to the conclusion in my own mind that these Hochelaga Indians were Hurons or Iroquois-Hurons. Mr. Pope's essay of 1889, now published in the form of a book, justifies me in this opinion. Mr. Pope writes, "The description which Cartier gives us of the fortifications of Hochelaga and of the structure of the houses, closely resembles that recorded by the Jesuit missionaries among the Iroquois a hundred years later, and leaves little room to doubt that the people he found there belonged to the Huron-Iroquois family. The method of fortification he describes was

that practised by all the tribes of the Iroquois race. The Algonquins, on the other hand, did not employ this means of defence." Mr. Pope says further, "There are likewise strong grounds for thinking that the people of Stadaconé (Quebec) were also of Huron-Iroquois lineage. In the first place there is every likelihood that they spoke the same language as did the people of Hochelaga. We have seen how at Gaspé, Cartier was quick to notice and record the difference in habits and in language between the Indians he met there and those he had before encountered. But at Hochelaga, he says nothing which would lead us to suppose that the Indians he there found differed in any essential particular from those at Stadaconé. The evidence we have is all the other way. For example, the vocabulary of Indian words appended to the relation of Cartier's second voyage is styled 'le lâgage des pays et Royaulmes de Hochelaga et Canada, aultrement appellée par nous la nouvelle France.' Now, anyone reading Cartier's narrative must acknowledge that by Canada he means Stadaconé and its neighbourhood; this being so, the inference from the foregoing is that the same tongue was spoken at Stadaconé and Hochelaga."

Mr. Pope gives other reasons for his contention, which it is not necessary to state here. From other sources we learn that the chief of the Indian band who met Cartier at Hochelaga, in their interview with him gave him to understand that their home was by the side of a great lake which they reached by the river Utawa (Ottawa). They escorted him to the top of the Mountain of Montreal, and while making their way to this vantage point of observation, described to him the country whence they came, and where they obtained "Caignetage," a red copper of which they had specimens with them. It has often created surprise in the minds of many how it was that at this time the Huron Indians were in possession of shells and other commodities of the sea shore. The explanation is that frequent trips were made by them to the far west for copper implements and agate arrow heads which they traded off to other Indians of the Maritime Coast for products of the sea on which they placed a high value.

How long the Hurons had been in the possession of their hunting grounds in the vicinity of Lake Huron is not known with any degree of certainty, but that they had been there for many decades, and it may be for many centuries is evident from the fact that when Champlain, in the year 1611, established the frontier trading post of Montreal, he at once set about arranging for trade with the distant Hurons, a large and populous tribe. It has been computed that at that time not less than 16,000 of this aboriginal people occupied the forest home of the Hurons. It is related that in the year 1642, or about that time, two savages of a nation which had once inhabited Montreal accompanied

Mr. Maisonneuve, the then Governor of New France, to the summit of the Montreal mountain "Mount Royal," and calling his attention to the magnificent country that lay before him, said, "All those lands and waters were once ours; we were a number of people in those days, but the Hurons drove out our ancestors. Of those they expelled, one portion took refuge with the Abenaquis, another got shelter from the Iroquois, and the rest remained in subjection to the conquerors."

Colden says that according to a tradition among the Iroquois, their ancestors once inhabited the environs of Montreal.

Garneau, remarking on the meeting between Maisonneuve and the two aged Indians, and what they discussed, says, "An idea strikes the mind while reflecting on the above incident, that those aged men may have been survivors of the aborigines found in quiet possession of Hochelaga more than a century before."

There is much to support the idea that the numerous people referred to by the old Indians were Iroquois-Hurons.

The Iroquois tongue was the mother tongue of the Hurons; their language, their customs, their observances were the same. No matter how much a nation may be divided up, or by what name the component parts may be called, or how distant they may be from each other, if they possess a common language, they are of the common stock. A nation may be composed of many tribes, and the tribes each have an idiom different from the other, yet if they have a common mother tongue, they are tribes of that nation. These tribes will be able to communicate with each other, though they could not communicate with an alien nation. The very fact that the Indians expelled from Montreal, took refuge with the Abenaquis and the Iroquois tends to prove that they were Iroquois-Hurons, and when driven out made way to tribes speaking their language and of kin to themselves. The territory of the Abenaquis Indians was in the vicinity of the Iroquois; their hunting grounds were in the now Province of New Brunswick, between the Iroquois and the Micmacs. The names Iroquois and Huron were the French names of these famous tribes of Abenaquis nations. Before the French came into the Province the Iroquois passed under the name "Agonnousionsi," signifying a "constructor of wigwams." The name Iroquois, given by the French, arose from the fact that in their discourses or talk they usually ended with the word "hiro," which means either "I say," or, "I have said," or as we would say, "that is the end of it." This word "hiro" was combined, as an affix with the word "koué," hence we have "hiro-koué," Iroquois. The Indian names of the tribes composing the confederacy were "*Agniers*" *or* "*Mohawks*," "*Onon-*

daguës," "*Goyogouins*," "*Onneycuths*" and "*Tsonnonthouans*." The Indian name of the Hurons was "Wyandotts." The French changed this name into that of "Huron," which is derived from a French word "hure," because of the rugged locks of unkempt hair of the people of that race. It may be said of the Hurons that of all the Indian races in Canada they were not the most warlike, and yet they suffered the most from Indian wars. Their great enemies, the Iroquois, were at war with this nation from the earliest period of Indian history on the continent. Why were the Iroquois enemies of the Hurons? It was not because of any Pocahontas escapade, or because of the avenging spirit of the braves in revenge for an abducted maiden of either tribe. The real reason of their differences, their lamentable disagreements culminating in exterminating war, must be ascribed to other causes.

The French made a permanent settlement in Canada in the year 1603, six years before the Dutch possessed themselves of New Netherlands, now called New York. When the French arrived they found the Five Nations there at war with the Adirondacks. The Adirondacks and the Hurons were allies, and it was that alliance which at that time brought them into conflict with the Iroquois, or Five Nations. The Honourable Cadwallader Colden, one of Her Majesty's Counsel and Surveyor-General of New York, when it was a British province, with great accuracy of statement wrote a history of the Five Nations of Canada, which (as he described) "are the barrier between the English and French in that part of the world, with particular accounts of their religion, manners, customs, laws and government, their several battles or treaties with the European natives, their wars with the other Indians."

I shall adopt this author in giving an account of the origin of the war between the Iroquois and Hurons, which was in progress on the coming in of the French.

Mr. Colden says, "The French settled at Canada in the year 1603. They found the Five Nations at war with the Adirondacks, which they tell us was occasioned in the following manner: The Adirondacks formerly lived three hundred miles above Trois Rivieres, where now the Utawas are situated; at that time they employed themselves in hunting, and the Five Nations made the planting of corn their business. By this means they became useful to each other by exchanging corn for venison. The Adirondacks, however, valued themselves, as delighting in a more manly employment, and despised the Five Nations in following business, which they thought only fit for women. But it once happened that the game failed in the Adirondacks, which made them desire some of the young men of the Five Nations to assist them in hunting. These young men soon became

much more expert in hunting and able to endure fatigues than the Adirondacks expected or desired; in short they became jealous of them, and one night murdered all the young men they had with them. The Five Nations complained to the chiefs of the Adirondacks of the inhumanity of this action; but they contented themselves with blaming the murderers, and ordered them to make some small presents to the relatives of the murdered persons without being apprehensive of the resentment of the Five Nations; for they looked upon them as men not capable of taking any great revenge. This, however, provoked the Five Nations to that degree that they soon resolved by some means to be revenged, and the Adirondacks being informed of their designs thought to prevent them by reducing them to their obedience. The Five Nations then lived near where Montreal now stands; they defended themselves at first but faintly against the vigorous attacks of the Adirondacks, and were forced to leave their own country and fly to the banks of the lakes where they live now. As they were hitherto losers by the war, it obliged them to apply themselves to the exercise of arms, in which they became daily more and more expert. Their sachems, in order to raise their people's spirits, turned them against the Satanas, called by the French "the Ouonons," a less warlike nation, who then lived on the banks of the lakes; for they found it was difficult to remove the dread their people had of the valour of the Adirondacks. *The Five Nations soon subdued the Satanas, and drove* them out of the country; and their people's courage being thus elevated, they from this time not only defended themselves bravely against the whole force of the Adirondacks, but often carried the war into the heart of the Adirondacks' country, and at last forced them to leave it and to fly into that part of the country where Quebec is now built.

"Soon after this change of the people of these nations, the French arrived in Canada, and settled in Quebec; and they thinking it advisable to gain the esteem and friendship of these Adirondacks in whose country they settled, Monsieur Champlain, the first Governor of Canada, joined the Adirondacks in an expedition against the Five Nations. They met a party of tw hundred men of the Five Nations in Corlars Lake, which the French on this occasion called by Monsieur "Champlain's" name, and both sides went ashore to prepare for battle, which proved to the disadvantage of the Five Nations. * * * The trade with the French, soon after this, drew most of the neighbouring natives to Quebec, and they all joined in the war *against the Five Nations. The Adirondacks having their numbers thus* increased, proposed nothing less to themselves than the entire destruction of the Five Nations."

Mr. Colden, after relating various stratagems resorted to by the Adiron-

dacks and the Five Nations to overcome each other, then proceeds, "The Five Nations are so much delighted with stratagems in war that no superiority of their forces ever makes them neglect them. They amused the Adirondacks, and their allies, the Quatoghies (called by the French, Hurons) by sending to the French and desiring peace. The French desired them to receive some priests among them, in hopes that those prudent fathers would, by some act, reconcile them to their interest and engage their affections. The Five Nations readily accepted the offer, and some Jesuits went along with them. But after they had the Jesuits in their power they used them only as hostages, and thereby obliged the French to stand neuter, while they prepared to attack the Adirondacks and Quatoghies (Hurons), and they defeated the Quatoghies in a dreadful battle fought within two leagues of Quebec. This defeat, in sight of the French settlements, struck terror into all their allies, who were at that time numerous, because of the trade with the French, which furnished them with many of their most useful convenencies."

Mr. Surveyor-General Colden's relation proves two things. 1st. That the war as between the Iroquois and Hurons at the beginning of the Seventeenth Century, originated with the Iroquois in revenge for the treacherous conduct of the Adirondacks in murdering young men of the Five Nations. 2nd. That the war once commenced extended to the Hurons, the fast allies of the Adirondacks in peace or war.

The Rev. E. F. Slater, in his article contributed to the Narrative and Critical History of America, says, when Champlain arrived in Canada he was met at Tadousac by 1,000 Indians, among others, Algonquins, coming from the vast region watered by the Ottawa. They had just returned, he says, from a conflict with the Iroquois, near the mouth of the Richelieu.

This was no doubt the same conflict to which Mr. Colden refers in his narrative.

Champlain had not been long in Canada when he thought it to his interest to form an alliance with the Hurons. This he did, and in 1609, with his Huron and Algonquin allies, came across the path of 200 Mohawks, which were met in the neutral territory near Ticonderoga, Lake Champlain. In this engagement, Champlain inflicted a severe blow upon he Mohawks, and returned to Montreal amidst great rejoicings. In 1615, Champlain made another expedition against the Iroquois of the Mohawk Valley. To effect his purpose he pursued what would now be called a very large and circuitous route. The course he followed was up the Ottawa to Lake Nipissing; crossing this lake he entered the channel of the French River, entered Lake Huron and coasted along Georgian Bay till

he reached the present Lake Simcoe. Crossing Lake Simcoe, he by rivers and lakes and frequent portages reached Cataraqui, at the head of the St. Lawrence River. He and his allies concealed their canoes on the east side of the river, and on the 10th July, reached the Iroquois fortress and stronghold. He and his Huron Indians made an attack on the Iroquois fort. The attack did not prove successful—the Iroquois were found too redoubtable warriors. They conducted the defence of the fortress with great skill. Champlain was wounded in this engagement, and was obliged to give up the contest. He and his war party retreated to the woods to the north of Kingston, where they remained some time in ambush fearing an attack from the victorious Mohawks, and finally returned to the home of the Hurons in Simcoe.

The Hurons, though not able to cope with the Iroquois in successful war, were the most susceptible to christianizing influences and to habits of civilization of all the Indian tribes. To the French is due the credit of introducing christianity among the Hurons. Jesuit missionaries were sent into their country at a very early period. It was not, however, till after the treaty of St. Germain-en-laye, that any organized system of missionary effort was adopted.

Previous to 1629, when David Kertk, a French Huguenot, captured Quebec for the British, there had been some attempts made to bring the savages under Christian influence, but such attempts were not fruitful in results. It may be remarked here as an uncommon event on the page of history that the French stronghold of Quebec should have been attacked and conquered by a French admiral—but so it was. At this time the French Catholics and the French Protestants or Huguenots were at war. It became convenient for the English to declare war against France. French officers were put in command of British ships to attack Quebec in the outlying Province of Canada, hence the singular spectacle was presented of a French officer (Kertk) becoming the master of the chief town of New France, which he held for three years, when it was restored to France by the treaty of St. Germain-en-laye in 1632. Shortly after this treaty the Jesuits went about their work of establishing missions in Indian territory in earnest. They built chapels and mission houses throughout the Huron lands. As the stations increased new chapels were built in the Huron missions. In 1639, the mission house of St. Mary's was erected in the heart of Huron Country. The missionaries extended their labours to the neutral nations on the shores of Lake Erie, and to the Sault Ste. Marie, at the head of Lake Huron. The conversion of the Indian to Christianity was not an easy matter to accomplish. The missionaries in 1640 were only enabled to claim one Christian out of the 16,000 Huron Abenaquis. The

bible and the sword usually travel together in the subjugation of pagan nations. In the case of the Hurons, their trouble did not arise from any difficulty with any Christian power, but they were continually subjected to invasions by the unfriendly Iroquois. The Dutch settlers in the Province of New York supplied the Iroquois with fire arms which they were not slow to use against their enemies, the Hurons. The Iroquois and Huron war, up to this time (1640), was a desultory war, the Iroquois, by stealth, getting into the Huron territory and making sudden onslaught on the not so well armed Hurons, chopping them to pieces like bundles of sticks. In 1642, Father Jogues, who had been sent to Quebec for supplies of provisions for the hard pressed Hurons, while journeying back fell in with the Mohawks, the chief tribe of the Iroquois. The Mohawks massacred most of the party and led the rest, with Father Jogues, to the missionary towns. There were at this time five churches in as many towns of the Hurons.

M. DeMaisonneuve arrived out from France as Governor of Canada in 1642. He was, on his arrival in the country, advised not to go up the river St. Lawrence beyond Quebec. He was courageous and determined, and pushed his way up to Hochelaga or Montreal, which he fortified with palisades and re-christened the place "Ville Ste. Marie." The French inhabitants at this time were completely at the mercy of the savages. The whole European population in Canada did not then exceed two hundred. DeMaisonneuve, in his zeal for Christianity, and to afford the natives the best opportunity for practising it, gathered around him at Ville Ste. Marie, the Indians who had embraced the new religion and invited them who had a desire to become Christians to join their company. The Jesuits did the same at Quebec. Could the missionaries have stayed the hands of the Iroquois it is possible that the Huron nation might altogether have been converted to Christianity. But this was not to be. The Iroquois were constantly on the war path, and in 1648, commenced a war of extermination. On the 17th March of that year the Iroquois fell upon the Huron missionary village of St. Louis, the station then taking the name of St. Ignatius, which was then in the care of Pere Jean-de-Brebeuf and Pere Gabriel Lalemant, both of whom, with most of the inhabitants, were put to death. Fathers Brebeuf and Lalemant were, as one historian describes, "subjected to torments such as devils alone would be thought capable of inflicting; all of which their colleagues reported they bore with an unfaltering reliance on their Saviour, equal to that of the primitive martyrs."

Again on the 4th July, 1648, a numerous body of the Iroquois fell suddenly upon the flourishing village of St. Joseph (in the Huron country), then superintended by Pere Anthony Daniel who had been resident among the Hurons fourteen years. The Iroquois in this onslaught massacred the

whole village, including Daniel, set fire to the mission house and church and threw Daniel's body into the burning church—thus was the martyr buried in the flames of the sanctified house erected to the glory of God and the advancement of Christianity. The Jesuit priests of that day were truly a valiant, self-sacrificing body of men. They went out into the wilderness to civilize and Christianize the native tribes; they gave up their lives for the propagation of the gospel. Some may differ from them in their methods, but it can not be denied that the love which begets courage marked their actions in their dealing with Indian tribes. There have been Catholic martyrs and there have been Protestant martyrs; it is doubtful if any earned a more deserving crown than the Jesuit fathers who undertook the difficult task of Christianizing the North American Indian. The massacre of the Hurons, committed by the Iroquois at St. Ignatius and St. Joseph, so completely shattered the Hurons that they determined to abandon their settlement in the territory around Lake Huron, and endeavor to make a home for themselves in some other place. Theirs was a cruel fate. In conjunction with the missionaries they had built up many churches and many bark and wigwam towns. When they determined to take leave of the Huron territory they abandoned no less than fifteen of these towns. In leaving, some went to one place, some to another. Some took up their abode on the Island of St. Joseph, where the relentless Iroquois pursued them. Some took refuge in Sault Ste. Marie, Detroit and Sandusky, while others made their way to Quebec. The Jesuits took charge of this band, led them to the Island of Orleans, and subsequently gathered a remnant of them at Lorette, where their descendants still remain.

It would extend the limits of this paper to too great a length were I to give a more detailed account of this ancient tribe. Sufficient has been written to show that they were a nation singularly susceptible of Christian influences, that they were victims to the revenge of the dreaded Iroquois, of a nation not so numerous but more powerful than themselves. Incidentally, the actions of the Iroquois in their warfare do not appear in an enviable light. It is to be remembered, however, that they were a savage nation whose spirit of revenge had in some way been roused to such a pitch as never allowed itself to be appeased till they had annihilated the Canadian Indians on the shores of Lake Huron.

It is but justice to the Iroquois to say that although endowed with all that spirit of revenge which is so natural to the Indian, they were a valiant and commanding band, not surpassed by any of the native tribes in America. They were always firm allies of the British, and under the discipline of Brant in later times, gained for themselves imperishable renown.

THE SETTLEMENT AND ORIGINAL SURVEY OF NIAGARA TOWNSHIP.

BY WILLIAM CANNIFF, M.D., M.R.C.S. ENG.

(Read 2nd July, 1890.)

It was the successful rebellion of the thirteen American colonies, 1776, which led to the settlement of Upper Canada, now the Province of Ontario. The struggle terminated in 1783, and it was in that year and the year following that the U. E. Loyalists mainly entered the wilderness of Upper Canada. But prior to that, there is good reason to believe, a certain number had crossed the Niagara River from the fort, where, during the war had been a garrison, and to which refugees fled from the time of General Burgoyne's defeat. Fort Niagara, during this time, had been the headquarters of a celebrated colonial regiment, the Butler's Rangers. It was here that the regiment was organized, and recruits were enrolled from among the refugee loyalists, and from this fort the Rangers went forth again and again on raiding expeditions. The refugees collected around the fort in tents and rude cabins, and received the necessaries of life from the Government stores. They consisted of the old, middle-aged, and the young, and of both sexes. Those who were unable to serve as soldiers naturally looked about for something else to do and for a place of more permanent habitation. Consequently there is reason to believe that some time before the end of the war not a few individuals and families had crossed the river and squatted along the river and lake on the western side; so that at the close of the war there had already been formed a settlement in what is now the Township of Niagara, and perhaps more distant places. Not all of these pioneers were connected with Butler's Rangers, but were U. E. Loyalists who had been compelled to leave their homes and estates in the revolting colonies to be appropriated by the rebels.

The survey of the land into townships was begun soon after the end of the war. It is not probable that much more than a beginning was made in 1783, but in 1784 it was actively proceeded with along the Niagara River, as well as in the east, on the Bay of Quinte and the River St. Lawrence. We learn from the original plans in the Crown Lands Department that, commencing July 29, 1784, a line was run from a point about a mile up the river, from the site of Navy Hall, or at the present ruins of

Fort George, westward, to the Four Mile Creek, and afterwards to the boundary of the Township of Grantham—the "original garrison line to the Four Mile Creek," which is now known as the "east and west line." That portion on the lake side was "constituted a military reservation," or "lands reserved by the Crown, extending to the Four Mile Creek." This was "by the order of General Haldimand." To the south of the line the land was laid out in lots, fronting on the Niagara River. Looking at the map of the township the lots seem to be of uniform size, but a memorandum on the original plan indicates that some exceptions originally existed. It relates to the survey by Surveyor Philip R. Frey, 1787, and is as follows:—"The lots are laid out 20 chains in front and extending 50 back, with one of allowance every second lot. The regular survey differs a good deal in front from number four down to thirteen; these lots were settled prior to any survey. A memorial of all the owners concerned to the land board, stating that their improvements would be much hurt should the original line be changed, the board consented to grant their lots conformable to their possessions." There are eight concessions in the township south of the line, with 23 lots in each tier. They are numbered from the front, beginning at the south, and in the second tier from north to south, and so back and forth through the concessions. Philip R. Frey had charge of the work of surveying. In a letter written by Augustus Jones to Thomas Ridout, Surveyor-General, January, 1823, he "gives the principal of the surveys performed by the acting deputy surveyors under the superintendence of Philip R. Frey, deputy surveyor for Detroit and Niagara." On the pages of an account book in the Crown Lands Department, 1787, is found "a statement of people's accounts who were employed at surveying by P. R. Frey, deputy surveyor for the district of Nassau, township No. 1." It will be remembered that Lord Dorchester divided that portion of the Province of Quebec, now comprising the Province of Ontario, into four districts, Lunenburgh, Mecklinburgh, Nassau and Hesse. The district of Nassau extended from the River Trent to Long Point, Lake Erie. Among those employed by Surveyor Frey were Ebenezer and Augustus Jones, John Claus, Robert Conklin, Peter Hare, jr., Andrew English and Daniel Hague. These acted as surveyors, and received 4s. per day. The name of Andrew Miller also appears as a surveyor; probably it was before the time of Frey. It appears from a letter written by Augustus Jones in 1825 that it was he who did the surveying at Niagara in 1787, but it was under the superintendence of Surveyor Frey. Augustus Jones became one of the most prominent surveyors in Upper Canada. He had at that time a father and brother living with him. Whether the Ebenezer mentioned was father or brother cannot be said. We learn from a letter written by Augustus Jones to Surveyor

John Collins, November 10, 1791, that both his father and brother had died in the previous month. A letter, dated at Quebec February, 1791, from John Collins, "congratulates Augustus Jones, Esq., on his appointment to our department," and "gives him instructions for the business to be done in the district." Surveyor Collins wrote that he had long since asked Mr. Frey for a plan of the district with the proprietors' names written on each plot, and he requests Mr. Jones now to furnish them. The receipt of these plans is acknowledged by Mr. Collins, January 23, 1792.

It seems that, although the reservation was nominally held for military purposes, it was understood that Col. Butler and some other favoured person of the Rangers should eventually possess the land, and doubtless there was a minute of the executive council to that effect. Had such not been the case Col. Butler and others would not have located themselves in different parts of the reserve. This view is supported by a minute on the original map (1787). Except the reserve of Navy Hall and Butler's barracks, the other part of the military reservation had "been located to Col. Butler and his rangers." The present military reserve seems to have been surveyed by Frey, according to a footnote on the map, "by order of Major Campbell, June, 1787."

Looking at the map of Niagara township it will be seen that the land north of the east and west line (the old "military reservation") is laid out into lots which almost defy description. Indeed it is impossible to conceive on what principle the division was made. The extraordinary shape of the lots is shown in the enlarged map before you, taken from the original in the Crown Land Department. It may, however, be supposed that Col. Butler and others of his band located themselves as inclination led them, and, from year to year, made improvements according to circumstances and convenience; and, when the time came to have a survey, each one and all had the land so divided as to give to each one the benefit of his labor and improvements, and continue the advantages he had enjoyed. The survey of the military reservation was made in 1794, but the Town of Newark was surveyed in 1793.

The following are "Field notes of the boundary line of the Town of Newark, surveyed the 22nd of November, 1793, by Lewis Grant, D.P.S."

"Begin at a white oak tree with a broad arrow on two sides, at three chains distance from the River Niagara, and running west 77 chains to a beech tree marked on two sides with a broad arrow, and then run north (nearly) two miles 75 links to the banks of Lake Ontario; three chains 50 links to the east of the inlet of the One Mile Pond, with a white oak post on the top of the bank."

The memorandum in the Crown Lands Department of the survey of the reservation says :—" Field notes of a survey by Abraham Iredale, D.S., for Col. Butler, Messrs Ball, Secord, and others, bounded by the garrison and town line, Lake Ontario and the Four Mile Creek, surveyed between 11th and 29th of August, 1794." On August 10 the survey began " at a white ash tree marked with a broad arrow on two sides, standing three chains west of the Niagara River." (But a note speaks of "a line run for Col. Butler near the town, 17th October, 1793. " Began at a point on the banks of Lake Ontario to the east of One Mile Pond.") Thus began the survey of the remarkably irregular lots of the " military reservation."

In addition to the names of Butler, Ball and Secord are found those of Col. Arent Bredt and Daniel Servos. John Butler had 551½ acres; Jacob Ball & Sons, 862; John Secord had 486¾ acres; Daniel Servos, 356 acres; Arent Bredt, 91. On some of the early maps are found as a subdivision of Col. Butler's lot the names of Johnson Butler, 120 acres; Thomas Butler, 300 acres; Andrew Butler, 115 acres. " Comformable to a verbal order by his honor the chief justice, December 14, 1802," other names are found on lots, as that of David William Smith, who was designated captain and was acting-surveyor-general in 1794; Peter Russell, who was President of the Executive Council after the recall of Gen. Simcoe, and who was 'kind to himself' in making grants of land, had 160 acres; Robert Addison, the first clergyman in Upper Canada, had 45 acres; Anthony Slingerland received 120 acres. West of Four Mile Creek the lots were surveyed more uniformly."

Upper Canada was erected into a province by an Imperial Act, 1791, and the following year General Simcoe arrived as the Lieutenant-Governor of the new province. When he arrived at Niagara he found on the west side of the river, upon a point of land known as Mississaga Point, a small village. Here, it is recorded, was the largest collection of houses in Upper Canada at that time after Kingston, and where he decided to make his residence and the capital of the Province. To the place he gave the name of Newark, which was also sometimes applied to the township. Governor Simcoe made his home " in a small frame house half a mile from the village." It is stated that this village which had sprung up since 1784, was at first called " Loyal Town," then " Butler's Town " or " Butlersburgh." It was also sometimes designated West Niagara. At this time there was, up the river at the end of navigation, and at the commencement of the portage around the falls to Lake Erie, a small village, which had arisen from the course of travel upwards to the western lakes. The boats which left Kingston on their way westward were here unloaded. And this place had taken the name of Queenston, a name which it retains

in the present day. Rochefoucauld says of that village, 1795:—"The different buildings, constructed three years ago, consist of a tolerable inn, two or three good storehouses, some small houses, a block-house of stone, covered with iron, and barracks. Mr. Hamilton, an opulent merchant, who is concerned in the whole inland trade in this part of America, possesses in Queenston a very fine house built in the English style. He has also a farm, a distillery, and a tanyard. The portage was formerly on the other side of the river; but as this, by virtue of the treaty of 1794, falls under American dominion, government has removed it hither."

From the mouth of the Niagara River westward to the head of the lake are a number of creeks which discharge themselves into the lake, or rather into ponds, which are separated from the lake by bars of sand. These creeks are known by numbers, according to their distance from Niagara. Thus we have 1 mile creek and 2, 4, 6, 8, 10, 12, 15, and so on. At the mouth of each creek is a pond, separated from the lake by a sandbar. The outlet to the lake is not always open. At some of the ponds, when the water is low, the bar completely separates the pond from the lake. In the spring, or when there is a freshet, the water washes away the sand and makes a channel to the lake. These ponds vary in size: at One Mile Creek it is four or five acres in extent; at Two Mile Creek it is some sixteen acres.

Original routes. The aborigines were wont to journey across the Niagara peninsula in passing from one region to another. Their habit was to follow as much as possible the shores of a lake or a stream to or from its source. The traces of old Indian trails are frequently met with in all parts of Canada. These trails were also followed by the first explorers of the primeval wood; and the first settlers likewise used them in their travels. Not unfrequently these trails became permanent roads. A stream would sometimes be followed by the birch canoe, but usually along the course of the stream would be a trail, not exactly following the shore; but when its course was devious, the trail would take a direct line; but always ending at or near the source of the stream. Then there would be a portage to the head waters of another stream running in another direction. There were also portages to get around unnavigable rapids or falls.

The Niagara River was a great thoroughfare for the French and English to pass from one lake to the other, the portage extending from below the heights to a point above the falls. But there is no evidence that the Indians very often passed this way. Their route most frequently was eastward and westward; and the several creeks on the south shore of Lake Ontario, west of Niagara River, and now known by numbers,

.ere usually followed. From the source of the stream was a trail to the Niagara River above the Falls. In passing between Lake Ontario and Lake Erie, it appears that a more direct route was found by the Indians by way of the Grand River, with a trail to Burlington Bay, which seems to have been a central point towards which converged portages from different directions. Besides the Grand River route, there was a trail westward to the River Thames. The lake road westward from Niagara to Grimsby does not follow the lake shore, and, it is said, marks an original Indian trail passing to and from the mouth of the Niagara River, and, from its devious course, it may reasonably be supposed that such is the case. But it seems evident that the Indians passing back and forth from the west to the territory south-east of the Falls, instead of following the lake shore and Niagara River, took a shorter route to the Falls by following the Four Mile Creek, the source of which is in that direction. Sometimes they travelled by canoes, sometimes . . foot. Along the east side of the creek is a road more or less devious, extending from the lake road to the Village of St. Davids; this is the "Indian line road," or "Four Mile Creek road." From the source of the creek to Niagara River it was called "the Portage road." This road is mostly on the east side of the creek, and part of the way close to it, but at St. Davids it crosses the creek by the west bank. For a few miles from the lake the road is delightfully irregular in its course.

In the Toronto Public Library is an interesting record of the survey and grants of land to David William Smith and his family, in connection with which there is a map on which are traced several old roads. One is on the east side of Niagara River, and is designated "Road to Slocher" (Schlosser), another running south-westwards from the river, near the beginning of the east and west line, is marked, "Old road to Detroit," while a short road running south from the town plot to join it is the "new road." The lake shore road is called the "road to York."

SLAVERY IN CANADA.

BY J. C. HAMILTON, LL.B.

(*Read 3rd July, 1890.*)

Mr. Hamilton presented the results of a study of existing records, and stated the facts relating to this subject so appearing.

He began with the origin of the institution of slavery in Canada, 202 years ago, in the reign of King Louis XIV., who was then busy aiding and advising his good friend and brother, James II. of England, and in watching the movements of William Prince of Orange, and preparing for war with Germany. The Secretary of State, however, as soon as he found a leisure moment, brought before his Majesty certain letters from high officials in the Province of Quebec. There were two, dated 10th August and 31st October, 1688, from Mons. de Denonville, and one from Mons. de Champagny, dated 6th November, 1688, to the secretary, their purport being, to represent that working people ("gens d'industrie") were so extraordinarily scarce, and labor so dear in Canada, that all enterprise was paralysed, and that it was thought the best remedy would be, to allow the importation of negroes as slaves.

The Attorney-General of Canada, then in Paris, assured his Majesty that such was also his conviction, and that if permitted, some of the principal inhabitants would purchase slaves as they arrived from Guinea. His Majesty finally got to a consideration of the subject. Perhaps he talked it over with King James, who visited Paris in December, 1688, having "left his country for his country's good," and the result was a royal mandate written early in 1689 stating that his Majesty had approved of the proposal, that his royal subjects of Quebec should obtain negroes to do their work. He added that he wished care to be taken, lest the negroes, coming from so different a climate, might not endure the rigor of Canada, and so the important project fail.

The *code noir* contains an ordinance of 13th November, 1705, making negroes movable property, and providing for their humane treatment. In 1709 an ordinance was issued by Raudot, intendant at Quebec, reciting the king's permission, and that negroes and Panis (Pawnee Indians)

had been procured as slaves, and to remove doubts as to ownership, it was ordained that all such Panis and negroes who had been so bought or held should belong to the person so owning them in full proprietorship. Attached to this is the certificate of one Cognet, that he had duly published the ordinance by reading it after mass, in certain churches in City of Quebec. The 47th article of the capitulation of Canada to the English provides, that all such negroes and Panis should remain in their condition of slavery. This was on September 8th, 1760. The negroes so introduced were mostly from African cargoes landed at Jamaica, and other West India Islands. Some were from the United States.

Slaves were often cited and described in legal and other notices and documents in Lower Canada as chattels, such as "negroes, effects, and merchandise." By Act of the English Parliament in 1732, 5 Geo. II., cap. 7, houses. lands, negroes, and real estate within the colony, were liable to be sold as assets to satisfy their owner's debts. Both negroes and Panis appear on the parish records. Thus on the 13th March, 1755, at Longue Pointe, it is reported that Louise, a negress of M. de Chambault, had been buried, and on the same register is the certificate of baptism, dated 4th November, 1756, of Marie Judith, Pani, about twelve years of age, belonging to the Sieur Preville.

In the newspapers of the time are several advertisements for sale. In the Montreal *Gazette* of 18th March, 1784, Madame Perrault offers a negress for sale, and a week later is advertised "a negress about 25 years, who has had the smallpox and goes under the name of Peg."

In March, 1788, the Montreal Court of Common Pleas had before it the case of Jacobs v. Fisher, claiming the delivery to the plaintiff of "two negro wenches," and judgment was given that the slaves should be given up or £50 damages be paid. Several similar cases are on record in Montreal and Quebec.

BRITISH LEGISLATION TOUCHING COLONIAL SLAVERY.

In July, 1797, an Imperial statute was passed which recited the Act of George II. referred to, and that it was deemed expedient that change ould be made n the law in so far as the compulsory sale of slaves under execution was provided. That provision of the Act was therefore repealed as far as it referred to negroes in his Majesty's plantations. The agitation against the slave system had then fully begun in England. Lord Mansfield had decided the celebrated Somersett case, freeing the negro slave brought from Jamaica to England. This, and the misconstruction of the last recited Act, soon had a marked effect on the future

of the negro in Lower Canada. In February, 1798, "Charlotte," a colored slave, was claimed by her mistress and released on *habeas corpus* by Chief Justice Sir James Monk at Montreal. "Jude," another negress was soon afterwards arrested, as a runaway slave, by order of a magistrate. The negroes in Montreal, knowing of the "Charlotte" case, became excited and threatened to revolt, but when the woman was brought before the Chief Justice, he released her also, and declared to the effect, that in his opinion slavery was ended. On the 18th February, 1800, the case of "Robin" came before the full Court of King's Bench, Mr. James Fraser claiming him, when, after argument, it is recorded that it was ordered "that the said Robin *alias* Robert be discharged from his confinement." It seems clear that the court was wrong in its judgment, and that slavery in law existed in Lower Canada until the Imperial Act of 1833 removed it from all the colonies. An effort was made in the Provincial Legislature to obtain an act to define the true position, but without success. The masters, who were mostly residents of Montreal and Quebec, and the country members not having such property, had no interest in sustaining the system for the benefit of the wealthier citizens, who had to acquiesce in the inevitable, and slavery ceased *de facto* in that Province from and after the decision in the "Robin" case, 18th February, 1800.

SLAVERY IN UPPER CANADA.

The system was here introduced before the separation of the Upper and Lower Provinces in 1791, but our population was then small and scattered. We had a few hundred negro and a few Pawnee slaves, mostly around the Niagara, Home and Western districts.

In 1793 the first Parliament of the Province, meeting in its second session in Navy Hall, of which part remains in the low, brown, wooden buildings still visible from the wharf at Niagara, then called Newark, passed an Act which, while it prohibited the importation of slaves, confirmed the ownership in slaves then owned, and provided that their children should be free on attaining 25 years of age. The members of this first Parliament, thirteen in number, with Mr. Macdonell, of Glengarry, as Speaker, were mostly strong U. E. Loyalists. The Act regarding slavery was, it is thought, drawn by Chief Justice Osgoode (who became C. J. of Upper Canada, 29th July, 1792) at the suggestion of that good Englishman, Governor Simcoe, who in his speech on closing the session of 1793, and consenting to this Act, expresses

the great relief he felt at being no longer liable to be called upon to sign permits for the importing of slaves.

This remained the position till 1833, when the Imperial Act removed all remains of the system. Before the passage of the Act of July, 1793, some of the States of the Union had passed similar Acts, *e.g.* Rhode Island and Pennsylvania. New York followed in 1799 with a provision for gradual emancipation, which was followed by complete abolition in that State, 4th July, 1827. Mr. Hamilton cited several cases of slave advertisements, notably that of the Administrator, Hon. Peter Russell, who at York, on 19th February, 1800, offered Peggy, aged 40, and Jupiter, aged 15, for sale, the woman for $150 and the boy for $200, "payable in three years secured by bond, but one-fourth less would be taken for ready money." Mr. Russell's sister, Miss Elizabeth, had a pure negress named Amy Pompadour, who attended her mistress dressed in a red turban. Miss Russell made her a present to Mrs. Captain Denison, of York, who was the great-grandmother of several of Toronto's well-known citizens. Amy had a son, born during a visit of the Duke of Manchester to the town, who was named in memory of the duke and Mrs. Denison, Duke Denison, and lived to the middle of the century.

In the Niagara *Herald* several advertisements are found relating to slaves; so in the *Gazette and Oracle* early in the century—one refers to an Indian slave or *Pani*. Mr. Charles Field, in the *Herald* of 25th August, 1802, forbids all persons harbouring his "Indian slave Sal." Messrs. W. & J. Crooks, of West Niagara, in October 1797, advertised in the *Gazette and Oracle* "that they wanted to purchase a negro girl of good disposition from 7 to 12 years of age." It is interesting to note that these beautiful grounds of the Chautauqua Assembly were the old Crooks farm. On it still, within sight of the amphitheatre where we are now assembled, is the frame buff-painted family farm-house or homestead. Among the records in the register of St. Mark's parish church, Niagara, is the following certificate:—

"Married, 1797, Feb'y 5, Moses and Phœbe, negro slaves of Mr Secretary Jarvis."

Another noted Niagara citizen, Colonel Thomas Butler, advertised in the U. C. *Gazette* of July 4, 1793, offering $5 reward for his "negro man servant named John."

An account was given of Solicitor-General Gray and his slaves, Dorinda Baker and her children, Simon and John. Mr. Gray lost his life on the schooner *Speedy*, a Government vessel wrecked on Lake Ontario,

7th October, 1804, and with him died his body servant, Simon Baker. Simon's brother John lived till 1871, and died in Cornwall, Ont. But he, and all Mr. Gray's other slaves were freed by his will, which is proved in the Surrogate Court at Toronto. Lieut.-Governor Sir A. Campbell favored the reader with a note as to slaves in Kingston, stating his interest in the subject, and concluding:—"I had personally known two slaves in Canada; one belonged to the Cartwright and the other to the Forsyth family. When I remember them in their old age, each had a cottage, surrounded by many comforts, on the family property of his master, and was the envy of all the old people in the neighborhood."

Sir Adam Wilson also informed the reader of two young slaves, "Hank" and "Sukey," whom he met at the residence of Mrs. O'Reilly, mother of the venerable Miles O'Reilly, Q.C., in Halton County about 1830. They took freedom under the Act of 1833, and were perhaps the last slaves in the Province.

NEGRO SLAVES ON OGDEN ISLAND.

A description was given of Ogden Island in New York State, in the St. Lawrence River, opposite Morrisburg, Ontario, a beautiful place of 1,000 acres, where about 1810 Judge David A. Ogden built a mansion, and resided in patriarchal state, having 25 negro slaves, part of the dowry of his wife, a North Carolina Lady. They were happy and contented, and though free to go and come to the Canada shore, none ever deserted. At the rear of this house and in the yard may be seen the "negro quarters." Some of these servants were voluntarily set free by Judge Ogden. One of them, an intelligent, amiable man, was known as "Old Uncle Kit" on both banks of the St. Lawrence. He became a clergyman of the African Episcopal Methodist Church, and pastor of the old Leonard street and now Bleeker street colored church, New York City, and passed among his colored brethren, till his death about 1880, as Rev. Christopher Rush.

It is pleasant now to look back three score and ten years and see these contented servants moving about the grounds, or in company with white masters, and guests of this old and honorable family, pulling out to fish, among the green islands, or with bows and firearms seeking game, then abundant in the neighborhood.

Nova Scotian Slavery was referred to. The system was never there abolished by Parliament, but was unsuited to the climate, and fell into desuetude. The like was the case in the other Maritime Provinces.

Two references to slavery there were given, one in a deed registered in Truro in 1779, in which one Harris conveyed to Matthew Archibald his interest in a twelve-year-old negro boy called Abram for 50 pounds cy. The other is an advertisement dated 23rd June, 1800, of sale of "a stout negro girl, aged 18 years, good-natured, fond of children, and accustomed to both town and cou..try work. For particulars, apply at the Old Parsonage, Dutch Town."

The reader concluded with references to Africans held as slaves to Indians. He showed that while such slavery was common among the southern Indians, Creeks, Choctaws, and Cherokees, it did not obtain among Canadian tribes. This was owing to their nomadic habits and to the climate. The famous Mohawk, Captain Brant or Thayendenaga, is by some thought to have been a slaveholder. It was shown by reference to history and to enquiry now made of living descendants of Brant that such was not the case. He had large estates at Burlington Bay and on the Grand River. Here many runaway negroes from the States had come, were treated hospitably, and remained working and living with the Indians, often adopting their customs and mode of living. Several descendants of such fugitives are now living on the Six Nation reserve near Brantford.

Notwithstanding severe preventive laws passed by the Choctaw and other Southern Indian nations, mixture of blood obtained to a marked degree, the negroes, free and slave, intermarrying the Indians, becoming part of the nation. There is also a considerable intermixture of such blood in Ontario on certain of the reserves. Though the word Panis in the records referred to seems to have special reference to Indian slaves, it is sometimes used by old Canadian writers to signify all persons in servitude without regard to color. It is of Algonquin origin. Slavery in Canada was of a mild patriarchal type. Slaves could not be sold under compulsory process of law, nor members of families separated without the owner's consent. Marriage and ties of kindred seem to have been observed and regarded kindly.

It does not appear that Canadian owners participated in receiving any part of the £20,000,000 appropriated under the Imperial Acts for the indemnity of masters. The passing of our Act of 1793 was wise and opportune, and left the Province free to work in harmony with the Northern States of the Union and the other colonies which had already adopted, or which were soon to adopt, similar measures. When the harsh system of the Southern States drove many refugees to the Northern States, and, owing to the feeling and laws of exclusion there, the blacks went across the border they found in Canada a home. Here for half a

century they came as to a Goshen or land of refuge, until at the outbreak of the late war between the North and South fully 30,000 had been sheltered, and to a great extent educated and prepared, under our municipal and benevolent institutions, for the proper exercise and enjoyment of the rights and duties of free men.

To the end of time Africa will bless Canada for the refuge and home given to her children in that period of their trouble and trial.

The figures shown are taken from the Lower Canada *Gazette* of June, 1802. The first, of the Pawnee, is used in connection with a French advertisement for a runaway apprentice; the other from a like notice in English. These cuts had been used formerly in advertisements for slaves.

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TWO FRONTIER CHURCHES.

By Janet Carnochan.

(Read 2nd July, 1890.)

It ought to be an interesting and instructive task to trace the history of these two churches of Niagara, St. Mark's and St. Andrew's, dating almost a century back, the one 1792, the other 1794, and see how many links in the history of our town and even of our country can be filled in from those records, which give an ever shifting kaleidoscope of different nationalities, of pioneer life, of military occupation, of the red man, Britain's faithful ally, of the poor slave here for the first time by any nation freed by legal enactment, of strenuous efforts for religious liberty by appeals to Governor and Queen, of sweet church bells, of booming cannons and blazing rooftrees.

The often-repeated sneer that Canada has no history has been so easily refuted in the case of our eastern Provinces with their store of French chivalry and Saxon force, of missionary zeal and Indian barbarities, of fortresses taken and retaken, but still the phrase lingers with regard to Ontario. Surely, we in this Niagara peninsula lack nothing to disprove a statement which, to their shame, many among us allow to pass as if it were a truth. When we think that within the last two centuries four races have here fought for empire, that within sight of us are traces of the adventurous La Salle who traversed thousands of miles by sea and land to perish so miserably on the banks of the river of his search; when we think of this spot as an Indian camping ground, of the lilies of France yielding to our own flag even before Wolfe's great victory, of the landing here of loyal men driven from their homes of plenty to hew out in the forests of this new land a shelter under the flag they loved, of invasion, and three years of bitter strife, surely we have a right to say we have a history.

In my attempt to sketch the story of these two churches I have an ample store of very different materials, a picturesque grey stone church with projecting buttresses and square tower peeping through the branches of magnificent old trees, many tablets inside and out, tombstones hacked and defaced by the rude hand of war, an old register dating back to 1792, kept with scrupulous neatness, all these in the one case; in the

other, in the old volume which lies before me, the interesting business records of almost a century from 1794, if not of so romantic a nature, still shewing the sterling metal of this people, telling of bright days and dark days, of prosperity and adversity, of lightning stroke and tornado, as well as of "conflagration pale," of patient and strenuous efforts by appeals to Governor and Queen from this almost the first Presbyterian Church in Upper Canada. It may be questioned if any other churhes in our land can shew such interesting records.

Now, that the modern tourist has invaded our quiet town and learned of the beauties with which we are so familiar, I am always pleased to remember that as a child I loved and admired St. Mark's, that it was my ideal of an old English parish church, and churchyard, and in those days the tourist had not come to tell us what to admire. When the late lamented Dean Stanley visited St. Mark's he said, "this is a piece of old England, do not allow it to be altered." The register of St. Mark's is unique in this particular, that in almost a century that has elapsed there have only been three incumbents, one with a record of 37 years, another 27, the third, the Rev. Archdeacon McMurray, by whose courtesy I have had access to this record, of thirty-four years. Its value is shewn by the fact that permission was obtained some years since to copy all the earlier pages, and this has been placed in the archives of the Historical Society of the City of Buffalo. The Rev. Mr. Addison must have had a vein of quiet humor, as shewn by the quaint remarks interpolated here and there alike at baptism, wedding or burial. He was evidently a scholar and a lover of books, for his library of several hundred volumes, now in the possession of the church would bring from far and near the lover of rare and curious old books. Here is a Breeches Bible and Prayer Book in which prayer is offered for Henrietta Maria, the wife of Charles I., and in dull dusky leather many rare and valuable books to rejoice the heart of the bibliomaniac.

The first entry is "Aug. 23, 1792, Henry Warren, bachelor, to Catherine Aglor, spinster. Aug. 24th, Capt. James Hamilton, to Louisa, his wife." The remark appended to this tells a tale of a new country. "They had been married by some commanding officer or magistrate and thought it more decent to have the office repeated." "April 12, 1794, William Dixon, bachelor, to Charlotte Adlem, spinster. May 15, Col. John Butler of the Rangers buried, (my patron)." Here is a pathetic entry, "July, 1794, buried a child of a poor stranger called Chambers. Sept. 9, buried a soldier surfeited by drinking cold water. Baptisms, Sept. 3, Cloe, a mulatto. Married, John Jacks and Rose Moore, negroes." These must have come to their new homes slaves, but to the honor of Canada, be it

said, by Act of the Parliament which sat within sight of this spot, declared free long before Britain by many a hard fought struggle in the House of Commons made her chattels free, or our neighbors by the unstinted pouring out of millions, and of a more costly treasure of tears and blood, did the same. The next entry tells of the time when this was the capital. "Buried, an infant child of the Atty.-Gen.'s servant; and Oct. 10th, R. B. Tickell buried," and the comment on some to us never to be explained tragedy, "Alas he was starved." "Sept. 24th, White, the butcher from England, and an Indian child." It is noticeable that the rector must have been indefatigable in his exertions, for we find him baptizing at 12 Mile Creek, 20 Mile Creek, 40 Mile Creek, Ancaster, Fort Erie, St. Catharines, Head of the Lake, Chippewa, Grantham, Falls, York, Long Point. On these occasions, and when people came from long distances to Niagara, there are often a great many baptisms recorded on the one day, the comment "of riper years" shewing many besides children were baptized. June 24th, 1799, occurs a well-known name. "Baptism, Allan Napier McNabb, from York," as also occur the names of Ridout, Givens, Macaulay from the same place. "Buried, ——, worn out by excess at the age of 49. Baptised, Amos Smith, of riper years. Buried, old Mr. Doudle. Baptised, 1801, David, son of Isaac, a Mohawk Indian. Buried, 1802, Cut Nose Johnson, a Mohawk chief. Poor old Trumper, Capt. Pilkington's gardener." These slight descriptive terms show a human interest, a kind heart, a humorous vein. It is remarkable that in all the early notices of baptisms, there is nothing but the name and those of the father and mother; after some time come notices of godmothers, and in 1806 this fuller notice: "May 3rd, Eliza Ann Maria Vigoreux, daughter of Capt. Henry, Royal Engineers, and Eliza, godfather Rev. Louis Vigoreux, godmothers Dowager Lady Spencer and Anna Maria Vigoreux." Here is the name of one who justly or unjustly received much blame in the war. "Baptism, Nov. 20th, 1808, Augustus Margaret Firth, daughter of Col. Henry Proctor, commandant of the 41st Regiment, and Elizabeth. Married, Dec. 11th, 1807, Lieut. Wm. Proctor, brother of Col. Henry Proctor, commanding at Fort George, to Joan Crooks. Nov., 1807, John Conrad Gatman, an old German. Buried, 1810, Master Taylor of 100th Regiment, killed by lightning. Old Amen Misner, May 5th, 1812. Married, Thomas McCormack, bachelor, to Augusta Jarvis, spinster."

Here is the brief record of the hero of Upper Canada, who did so much by wise counsels, prompt action, and undaunted courage, to save our country and repel the invader, who, galloping away in the early morning, was brought back by his companions in arms in sorrow and gloom, a corpse. "Oct. 16th, 1812, burials, Gen. Sir Isaac Brock, Col. John Mc-

Donald, they fell together at Queenston, and they were buried together in the north-east bastion of Fort George." In the Buffalo paper, in which some of these were copied, occurs the rather astonishing and not easily to be understood statement, "we now approach the period of the second war of independence." How an armed invasion of a peaceful neighboring country can be called a war of independence by the invader is an unsolved mystery. Also referring to the burning of our town by the Americans, before evacuating our territory, these words occur. "In one of the engagements between the opposing forces St. Mark's took fire, and all but the solid stone walls was consumed." How differently can be described the same event by different people.

During the time of the occupation of the town by the Americans from May to December, the notices go on in St. Mark's Register, but it may be noted that there are no marriages except those of two Indian chiefs, thus recorded, "Mohawk chief Capt. Norton, to his wife Catherine, I think on 27th July, 1813, when she was baptised, and Jacob Johnson, another Mohawk chief was married to his wife Mary on 21st Aug. this year. Buried, July 17th, Col. C. Bishop, died of his wounds." As this brave young soldier was buried at Lundy's Lane, Mr. Addison must have been called on to ride all these miles to perform this service. The next item gives us another glimpse of warfare. "On the day on which the engagement between Sir James Yeo and Commander Chauncey took place on the lake, our dear friend Mrs. McNabb was buried in Mr. Servos's burying ground, supposed to be 29th September, 1813." This, history gives as the 28th Sept., but it is evident that during this exciting period some of the entries have been made from memory. Here is an entry which shows that though Parliament had been removed, Niagara was preferred as a burial place to York. "10th June, 1816—Buried, George Lane, Esq., Usher of the Black Rod." "Married, 1817, Rev. Wm. Samson, minister of Grimsby, to Maria Nelles. Buried, 1819, James Rogers, innkeeper," and the remark, "a bad profession for any but very sober men." "Sept. 23rd, 1822, Poor old Hope. Feb. 23rd—Baptised, Agnes Strachan, daughter of Hon. Dr. J. Strachan, Rector of York, and Ann his wife." Here may be seen the names of most of the Regiments that have been quartered here, 41st, 8th King's, 100th, 99th, 70th, Sappers and Miners. Of these we still find traces in buttons picked up at Fort George with these numbers.

Rev. Mr. Addison was military chaplain for many years. In 1820 we find another name as performing baptisms in that capacity. The last entry in this hand is 1827, in tremulous characters signed instead of full name, "R. A." And here, in another hand, is recorded the burial of this venerable man, whose zeal, piety and kindness of heart we have seen told

all unwittingly in these pages, "Oct. 9th 1829—The Rev. Robt. Addison departed this life on the 6th, in the 75th year of his age." On the outside wall of the church is a large tablet to his memory, and inside another with this inscription:

"In memory of Rev. Robt. Addison, first missionary in this district of the venerable the Society for the Propagation of the Gospel in Foreign Parts. He commenced his labors in 1792, which, by the blessing of Divine Providence, he was enabled to continue for 37 years. Besides his stated services as minister of St. Mark's in the town, he visited and officiated in different parts of this and adjoining districts until other missionaries arrived. 'Remember them which have the rule over you.'"

The Church was consecrated in 1828, on Sunday, Aug. 3rd, by the Hon. and Rt. Rev. Charles James, brother of the Earl of Galloway, and Lord Bishop of Quebec, in the presence of His Excellency Sir Peregrine Maitland, K.C.B., his staff, and other dignitaries. Morning prayer was said by Rev. Robt. Addison, the lesson and litany by Rev. Thos. Creen, the assistant minister, the Bishop preaching.

So far, I have not met with any documentary evidence to show exactly when the church was built, or how long in process of construction. The new part can be plainly seen forming the cross, while the nave containing the tower is the old part, as shewn by the color of the stone. The pulpits, curiously carved, have the date 1843.

Before the church was built, the congregation seems to have met in the Court House, near the site of the present one, and in the interval during and after the war in the Old Indian Council Chamber, afterwards used as an hospital, lately burned down. This last, with the buildings known as Butler's Barracks, was not burned with the rest of the town, as the British troops were reported to be entering, and they were thus saved. Here are two letters brought to my notice by our distinguished litterateur, Mr. Wm. Kirby, which have been lying forgotten, and now after seventy years throw a flood of light, giving us information unexpected as it is invaluable, and which, through the kindness of the Rev. Archdeacon McMurray, I have been allowed to copy. They were written by Col. Wm. Claus to Hon. and Rev. Dr. Stuart asking assistance from the Society for the Propagation of the Gospel.

"NIAGARA, U. C., Jan. 18th, 1818.

"Anxious that something should be done towards rebuilding our church, which in the winter of 1813 was unfortunately destroyed by the enemy at the time our town was burnt. I would not take this freedom if there appeared the most distant prospect or steps taken to make it even

in a state that we could attend Divine Service, but during this season it is hardly possible to attend. It remains in the state the Commissariat put it in for the purpose of storing provisions in after we repossessed ourselves of the frontier, with the trifling addition of a temporary reading desk and gallery for the troops. Your Lordship saw the state it was in last summer. Nothing whatever has been done or likely to be done. It is not even weather proof. The church was made use of in 1812 as an hospital for the wounded. We were deprived of our all and have barely the means of getting covering for ourselves and families, to which must be attributed the melancholy state the church remains in, &c., &c."

The next letter is dated Niagara, 20th Sept., 1820, and first speaks of the visit formerly paid and goes on thus: "It may not be amiss to recapitulate. Previous to war of 1812 the small congregation of Niagara erected at their own expense a church which cost £1200 cy. After its destruction by fire, application was made in 1816 to His Majesty's Government for some aid towards putting it into a state to perform Divine service in, when His Majesty was graciously pleased to order £500 stg. which has been received and applied, but falls short of accomplishing our wish. Our congregation are too poor to expect much from them. From their living within gunshot of the enemy's lines, they suffered the loss of all they possessed, burnt out and plundered of everything, and they had really not yet recovered their misfortunes from the late unhappy events, &c., &c."

The answer to this letter is dated 25th Dec., 1820, mentions that the Society had lately placed money in hands of Bishop of Quebec for aid in building churches and refers writer to him.

The churchyard is very interesting and also unique, for here may be traced the rifle pits constructed during the war. The church was used by both armies, for after the battle of Queenston Heights it was used as a hospital for our wounded, then by the Americans as a barracks, and again by our own commissariat. What an eventful history! Could these stones speak, (and do they not speak eloquently of the past?) what disputed points in our history might not be cleared up? The lover of the curious may find many strangely pathetic and sometimes strangely grotesque lines here, the desire to be remembered being so strongly implanted in the human breast, but I only copy here those having some bearing on the history of the place.

Length of service seems to be the rule, for in the graveyard is an inscription: "In memory of Jno. Ray, 50 years parish clerk of St. Mark's, who died at an advanced age, Oct. 6th, 1846." The oldest record is placed

inside the eastern door, having been found partly covered up in the graveyard and placed here for safety. It is rudely carved and imperfectly spelled by some hand unskilled in, or all unused to such work:

LENERD BLANCK
DESeaCED
5 AUG
1782

Not many feet from the church is the large flat stone, so often visited, hacked and marred, for to such an ignoble use as a butcher's block were these sacred memorials put in 1813. The hatchet marks have almost obliterated some of the words.

"To the memory of Charles Morrison, a native of Scotland, who resided many years at Machilimacinac as a merchant, and since the cession of that . . . . United States as a British subject by election . . . . . for loyalty to his sovereign. . . . . Died here on his . . . . . to Montreal on the sixth day of September, 1802, aged 65.'

In the porch, at the north door of the older part of the church is a tablet which brings back to us the rattle of musketry and rush of foemen the day when Niagara was taken.

"In memory of Capt. M. McLelland, aged 42 years, Charles Wright and Wm. Cameron in the 25th year of their age, of the 1st Regiment of Lincoln Militia, who gloriously fell on the 27th day of May, 1813, also Adjutant Lloyd of the 8th King's Regiment of Infantry.

As lurid lightnings dart their vivid light,
So poured they forth their fires in bloody fight.
They bravely fell and saved their country's cause,
They loved their Constitution, King and Laws."

The last three words, it is needless to remark, are in capital letters. In excuse for the absence of poetry in these lines, it may be said that the people of these days were too busy writing history with their swords to trouble about elaborating musical couplets or quatrains.

Here we unroll a page of history, a name handed down to obloquy by the skill of the poet and the imaginative powers of the sensational writer, but no doubt Time, which rights many wrongs, will do justice to the memory of one so bitterly spoken of by English poet and American historian: when even Henry VIII. finds a justifier, we may hope to

see some histories we wot of revised. The poet Campbell acknowledged his information on the subject had been incorrect, but how difficult to rectify the wrong!

"Fear God and honour the King. In memory of Col. John Butler, His Majesty's Commissioner for Indian Affairs, born in New London, Connecticut, 1728. His life was spent honorably in the service of the Crown. In the war with France for the conquest of Canada he was distinguished at the battle of Lake George, Sept. 1755, at the siege of Fort Niagara, and its capitulation 25th July, 1759. In the war of 1776 he took up arms in defence of the unity of the Empire, and raised and commanded the Royal American Regiment of Butler's Rangers. A sincere Christian as well as a brave soldier, he was one of the founders and the first patron of this parish. He died at Niagara May, 1796, and is interred in the family burying ground near this town. Erected 1880."

Outside the eastern wall is the story of one who has been fondly remembered, for his tragic fate is recorded also inside the church on a marble tablet.

"Sacred to the memory of Capt. Copeland Radcliffe, of His Britanic Majesty's Navy, who fell whilst gallantly heading on his men to board one of the enemy's schooners at anchor off Fort Erie on the night of the 17th August, 1814." One is erected at request of brothers and sisters by his nephew, the other by Capt. Dawes, R. N., at request of his mother. We cannot but drop a tear to the memory of a brave young sailor. Another near this, "Donald Campbell, Islay, Argyleshire, Fort Major of Fort George, died 1st Dec. 1812. Interred on west side of Garrison Gate at Fort George." Also the name of Lieut.-Col. Elliott, K.C.B., who fought in Peninsular war, Col. Kingsmill, and a daughter of Chief Justice Sewell. In the church altogether are fifteen tablets, two in the vestibules and three on the outer walls. It may be noted that seven are to military and naval heroes, four to clergymen; four women's names are here handed down.

Much might be said of the beauty of the spot, of the quaint pulpits and vaulted roof, of the chime of bells and the air of quiet repose, but where so many facts have to be recorded, the æsthetic and the emotional must be left for another pen or another time.

In turning now to the history of St. Andrew's we find many places where the records seem to touch, and each help out the other, where the story of one corresponds with the other, and again is widely different. While much attention has been attracted to the beautiful old church of St. Mark's, to which so much romance clings, from the fact that it is almost the only building now left which was not totally de-

stroyed by the fire of 1813, very little is known of the early history of St. Andrew's. The graveyard too is comparatively modern, as all denominations used that of St. Mark's for many years. There are no old grey stones mutilated by the hand of war, no tablets in the wall, no stained glass to give that dim religious light some so much admire. The present church is a square solid uncompromising looking structure of brick and stone with a belt of solemn pines on the north and west. While St. Mark's was built of solid stone, these church pioneers built of less enduring material, and thus nothing is left of the building of 1795, built on the same spot as the present church, erected sixty years ago. The history of the church is preserved in an old leather-covered book, with thick yellow paper, dated 1794, and curious glimpses are given of our country's progress. The oldest Presbyterian Church in Ontario is believed to be Williamstown, 1786, which with several others in the vicinity was presided over by Rev. John Bethune. This ranks next. It may easily be seen that St. Mark's had an immense advantage, with a settled clergyman, with a salary from the Society for the Propagation of the Gospel of £200, while St. Andrew's struggling under a load of debt for many years, with many breaks from the confusion and distress caused by the war, could only have been kept alive by the strenuous exertions of its members. We find many of the same names on the records of both churches. Some baptised in St. Mark's in the breaks in the history of St Andrew's. Many of the residents had pews in both churches. It is interesting to note that while St. Mark's register uses the name Niagara, and Newark never occurs, St. Andrew's record uses the word Newark from 1794, and in 1802 the name Niagara occurs. As a matter of history the name Niagara was formally resumed 1798.

The record dates from 30th September, 1794, and reads thus: A number of people met this day at Hind's Hotel, and resolved that "as religion is the foundation of all societies, and which cannot be so strictly adhered to without having a place dedicated solely to divine purposes, that a Presbyterian church should be erected in the town of Newark and that subscriptions for that purpose be immediately set on foot as well as for the support of a clergyman of the same persuasion." The committee consisted of John Young, Four Mile Creek, Chairman; Ralfe Clench, Andrew Heron, Robt. Kerr, Alexander Gardiner, William McLelland, Alexander Hemphill, any three to form a quorum in trivial matters, but in matters of importance the whole to be assembled. Here follows a bill of lumber, the size of the timbers required would move the wonder of our modern framers, 8x12 and 6x9. We see the size of the building to have been 46x32. No grass was allowed to grow under the feet of these pioneers, for the next day, 1st October, follows an agreement binding them to

support Rev. Jno. Dun, promising to pay £300 for three years, £100 per year with house room, a previous copy having been made out 23rd Sept. The agreement is from 30th June of same year, shewing that they had enjoyed his services from that date. Then follows an agreement as to windows, there being sixteen with 40, 24 and 12 lights respectively. A petition to Land Board for four lots in one square 157, 158, 183, 184. By referring to a plan of the town, we see that the first church stood where the present one now stands. A copy of subscriptions for building church, different sums subscribed from 8 shillings to £10, while the amounts promised for the support of clergyman are about the same per year. Andrew Heron is appointed Treasurer, and "this is to be made public, as the frame is shortly expected down and money will be wanted for the purpose of paying for the same." The whole amount subscribed at this time was £215, of which £160 is marked paid. Among the names is that of Samuel Street, £8.

Then follow receipts from Rev. John Dun of yearly salary; plans seating and pewing church are brought forward Sept., 1795. On March, 1796, a sexton employed for £6 N. Y. cy. On the same date pews to be let for £3 and £5 each. Here appear the names of Col. Butler, Peter Ball, Daniel Servos, Andrew Heron for sums as high as £10. The 21 seats let this day amount to £150. The last receipt given by Mr. Dun is 8th May, 1797. His name is found afterwards among the pewholders as he gave up the ministry and engaged in trade. The next business meeting is Sept. 2nd, 1802, when the Rev. John Young of Montreal is engaged, to have the privilege of teaching a school. The same day the thanks of the meeting are given to Mr. Jno. McFarland for the bell which he has been pleased to present to the church. Again the seats are let and the names of William and James Crooks, John and Colin McNabb, Jas. Muirhead, the heirs of the late Col. Butler, who we find from St. Mark's register, died 1796. Then follow lists of payments for glass, putty, stoves, stovepipes, rum for glaziers, rum for raising (2 gallons), interesting as shewing the prices then, rope for bell, "rope wetted," whatever that may mean I leave for wiser heads; covering and foundation for steeple, so that we see the first church had a spire as well as the present; charge for ringing the bell. Accounts from 1804 to 1812, all in a peculiar large hand, the writing almost filling the line, and though so large exceedingly difficult to read. All this time, although there was considerable debt, Mr. Heron seems to have advanced money when needed. We find in 1795 a "large balance unpaid and a great deal to be done to make the church convenient and comfortable." An obligation drawn out requesting "loan of money from those who were able to loan any to this laudable purpose, that the building be not impeded."

The baptisms in this book are only from Aug., 1795, to 1802, except two daughters of A. Heron, recorded in his own peculiar hand 1809 and 1814, Nov. 27th, the latter nearly a year after the burning of the church. The baptisms are performed by the regular ministers and others called visiting ministers. One in 1792 by Rev. John McDonald from Albany, U. S. The children of Ebenezer Colver, township of Louth are entered as baptised in 1781, 1783 and 1791, earlier than any in St. Mark's, but the performing clergyman is not mentioned, but shewing that in those early days this duty was not neglected. Rev. Mr. Mars, a visiting clergyman from 1st Feb. to 14th March, 1801, baptised several. Here we find the good old word "yeoman" used.

Here is a notice which seems to shew friction of some sort. "Resolved that this church is under the direction and control of the majority of the trustees and not subject to the direction of the clergyman." "Resolved that the pulpit, being part of the church, is subject to the majority of the trustees." Provision, however, seems to have been made even at that early date for their share in government, of the *minority*, of which our politicians may take a note. "Resolved that in case of a division of the Society the church shall be held alternately by each party, that is one week to one party and one week to the other. The key of the church to be left at all times with the trustee residing nearest to the church in order that the majority of the trustees may know where to find it when they may see fit to admit a preacher."

In 1804 Mr. Heron presented an account for £176 8s. 3d. lawful money U. C., inspected and approved, as also account of Mr. John Young £27, also approved. Of these we shall see more as the years roll on. Resolved in 1805 that Andrew Heron be clerk. April, 1805, persons named are authorized to obtain services of a clergyman at rate of £75 and £50 to teach 13 pupils, if he be inclined, in Latin, Greek and Mathematics. In this obligation to pay, the word dollars occurs for the first time. In 1809 the Rev. John Burns gives half his time to church, the pews to be let for one-half of that in 1796. His name is also mentioned in 1805 and appears during the years 1810—11, 16, 17, 18. He, it appears taught the grammar school and gave part of his time to the congregation, as sometimes he is mentioned as preaching every third Sunday and sometimes every fourth. Different efforts seem to have been made to obtain a Presbyterian of Established Church of Scotland, in 1806 communicating with Rev. Jas. McLean of Glasgow, agreeing to pay his expenses out. He actually preached during June, July, August. the church to be open to Rev. John Burns when it did not interfere with any other engagement of Trustees. In 1809 subscriptions set on foot to finish the church.

From 1812 to 1816 there are no records. No doubt, the war scattered the people and broke up the congregation. Here again St. Mark's had a great advantage, a resident clergyman and a stone church not entirely destroyed; for, heavy as were the timbers of St. Andrew's, they only fed the flames more fiercely.

In 1818 agreement with Rev. Chas. Jas. Cook. Then in 1820 a petition to Earl of Dalhousie for a sum of money to build a church in town and give title to land on which former church did stand. A collection at Divine service to repair windows and building as far as necessary for comfort of congregation (supposed to be school house). In the *Gleaner* lying before me for 1818, published in Niagara, is an advertisement of "annual meeting of Presbyterian Church, to be held in school house. The accounts of moneys received and expended in building school house will be produced."

In 1820 a letter asking for services of Rev. Thos. Creen, who had preached for them a few weeks and with whom they were pleased. At a meeting in school house, held 1821, "Resolved to put themselves under the Presbytery." Here follow signatures and sums promised, sadly diminished from those before the war. In 1821, Rev. Mr. Smart of Brockville, who was present, was appointed their Commissioner, and on 21st Dec. elders were nominated, Rev. John Burns presiding. Scarcely any records for 1822-23, but in 1824 is presented the formal account of £176 8s. 6d., with interest for twenty years, making the whole sum almost the amount, £400 allowed by Government for loss of church. £100 had been received and paid on this account. Some interesting items occur. Paid for deed of church, £6 14s. 6d.; passage to York and back, £1; detention there two days, 10s. There seems to have been no settlement of this account till 1833 when follows in small clear writing almost like copper-plate of W. D. Miller, "amount due the two persons named, £203; interest for 9y. 4 2-3m. from 1804 till the church was burnt, the commissioners not allowing interest after the church was burnt." This is signed by James Muirhead, Robert Dickson, Wm. Clarke, perhaps as arbitrators, or who state this to be the decision of the majority of the trustees.

The wheels of state must have moved slowly, as this sum £400 demanded in 1820 from the Government, awarded in 1824, was not paid for several years and then only in instalments of 10%, 25%, etc. In 1828, Rev. Mr. Fraser was engaged for two years and in 1829 a call was sent to the Presbytery of Glasgow offering £150, and the Rev. Robt. McGill was sent out. Now come various interesting items bearing on the vexed questions of Clergy Reserves, status of Presbyterian ministers, &c

Fancy a proud, dignified man like Dr. McGill coming from Scotland where he was a minister of the Established Church and finding that he was not allowed to perform the ceremony of marriage. Here are extracts from the dignified and rather curt letter he writes.

"SIR,—I understand it to be required by the law of the Province that a minister in connection with the Established Church of Scotland . . . . must yet submit to request of the General Quarter Sessions authority to celebrate marriage, even among members of his own congregation . . . although I regard this law as an infringement of those rights secured to the Established Church of Scotland by Acts of the Imperial Parliament of Great Britain . . . it seems expedient that I should conform to it, until that church to which I belong shall procure its abrogation as an illegal violation of its rights. I request, therefore, that you will give notice to all concerned that I intend . . ."

Also in this connection comes a copy of certificate to Governor's office, York, for share of money allotted by Her Majesty's Government for support of ministers of Church of Scotland. In 1830, subscriptions for a new church, this is seventeen years after the town was burnt, they having worshipped in the school-room where the Sexton's house now stands. Also a subscription for sacramental silver vessels which cost £20. On looking over the names we find many familiar to us, but so far as I know of the eighty names signed sixty years ago of various sums from £10 to £50 there are just two living now, Wm. B. Winterbottom, Niagara, and Gilbert McMicking, Winnipeg. Such well known names are here as Robert Dickson, Walter H. Dickson, Lewis Clement, Andrew Heron, Thomas Creen, Edward C. Campbell, Robert Hamilton, Daniel McDougall, Robert Melville, Jas. Crooks, Jno. Claus, John Rogers, John Wagstaff. The whole sum subscribed was £760, the church to seat 600. The name St. Andrew's was now used for the first time, salary of clergyman £175 with Government allowance and promise of manse, as soon as possible. Next comes Incorporation of church. The plan of the church and names of those who purchased seats, of whom there are now in the church representatives of six. In 1834, old meeting house was rented for £12.10s. In 1836, directions to advertise for a precentor in the newspapers of the town. Belonging to this period are the Communion tokens, bearing the inscription, "St. Andrew's Church, 1831, R. McGill, Niagara, U.C," which are now in demand by collectors of coins and may yet be quite rare if this rage of numismatists continue. Now comes the vexed question of the Clergy Reserves in the form of a petition to Sir Francis Bond Head for a due support from lands appointed, &c. Now that the bitterness and rancor

caused by this subject is forgotten we may quote without risk of wounding any one the words of the petition to Sir Jno. Colborne, showing the national characteristics of this people, a stern determination to have their constitutional rights and to gain them not by violence but by strictly constitutional means. The petition goes on to state that "they feel aggrieved by an act of the Lieutenant Governor, establishing a rectory by which their rights are infringed and which is incompatible with privileges granted by Treaty of Union between England and Scotland, privileges belonging in alienably in a British colony to subjects of Scotland as well as subjects of England." The institution of the rectory it is said "recognizes the incumbent as sole spiritual instructor of all residing within its bounds and places them in same relation to the Establishment as Dissenters of England are to church established there." To this are signed 128 names, of those the only ones now known to be living are A. C. Currie, Wm. Barr, Jas. McFarland.

Annual meeting 6th February, 1838, we have a glimpse of the Rebellion, "as meeting was unavoidably deferred on account of disturbed state of country from late insurrectionary movement, and piratical invasion from frontiers of U.S., the members being engaged in military duty." In 1838 comes appointment of Jno. Rogers as Treasurer, which position he held till his death in 1883, almost 46 years. It may be noticed that while there have been only three incumbents in St. Mark's, and in St. Andrew's, so many changes, the latter church had the advantage of three faithful officers whose term of office reaches almost to a century.

In 1839, in acknowledgment of sacrifice made by Rev. R. McGill remaining in Niagara instead of accepting a call to Glasgow, a subscription to raise the sum of £300 as a New Year's gift from his congregation. In 1840, reference to school kept by Jas. Webster in school room under control of church, in 1842 called St. Andrew's Church School, and to avail themselves of Act passed in Parliament in regard to common schools. A paper bearing on the subject of Clergy Reserves came into my hands some years ago which I copied. Singularly enough it is not found in this book, as a parchment copy was kept. It is a petition to the Queen in 1842, that, "in consequence of mistakes made in census of 1839, members of Presbyterian Church were underrated in settlement of Clergy Reserves in 1840, and that relief be granted for this wrong." It is signed only by heads of families, 142 names, giving number in each family, making 628 altogether. This was in the palmy days of Niagara, when the church was crowded above and below: in 1844 only one seat and two half seats were not taken, during ship-building at

dock. Of the names signed to this petition only one person is now living, Alexander R. Christie, Toronto.

A legacy of £750 was left by Jno. Young to the church and a statement is made that part of it is invested in Montreal Harbor Loan. Rev. Mr. McGill reports that he has received £52 10s. in interest for the balance which by condition of the will he could use for himself, but minutes go on to say, this he generously allows to church. The only tablet in St. Andrew's is in southern vestibule, reading thus:—"Sacred to the memory of Jno. Young, Esq., long a merchant in Niagara, returning home in pain and infirmity he was drowned in Lake Ontario, where his body rests awaiting the hour when the sea shall give up her dead. In his last illness concerned for the spiritual welfare of coming generations he ordained a bequest for the perpetual maintenance of divine ordinances in this church. He met death July 29, 1840, aged 73. Pray for the peace of Jerusalem, because of the house of the Lord I will seek thy good." In 1845 a presentation to Rev. Dr. McGill, on occasion of leaving for Montreal, of breakfast and tea set of massive silver. To this are signed 64 names, of which now living are Thos. Elliot, Andrew Carnochan, Jas. McFarland. It is singular that while Montreal gave a minister to Niagara in its early days the chief city of Canada was now indebted to Niagara for an able preacher. The present manse was built by Dr. McGill, and purchased from him with legacy of Mr. Young, as the handsome pulpit was the gift of Mr. Young.

Among the names signed in 1850 to the call to Rev. J. B. Mowatt, now professor of Hebrew, Queen's University, now living are only Jno. M. Lawder, Jas. G. Currie, Jas. M. Dunn, Jno. Currie, Andrew Torrance. The memory of Rev. Dr. Mowatt is yet cherished in Niagara. In 1851 is noticed the very handsome sum paid in to support of church by non-commissioned officers and privates of Royal Canadian Rifles here, who attend St. Andrew's. In 1852 is purchased a bell; having enjoyed the use of one for nine years, 1804 to 1813, they were without one for almost forty years. In 1854 a Glebe is purchased with £150 offered by Clergy Reserve Commissioners, they afterwards raised £50 to complete the purchase. In this period the church twice sustained serious injury from storms, the roof being taken off and other damage sustained.

Of the names signed to call to Rev. Chas. Campbell in 1858 we have a startling commentary on the slow but sure approach of death, of 68 names only four persons are now living, Jas. M. Dunn, Jno. Blake, Thos. Elliot, Robt. Murray. Having now come to comparatively recent times we may fitly close with an extract from the records of St. Andrew's, on the death of Wm. Duff Miller, which goes on in stately periods thus,

"who for the long period of half a century had been a most valuable member, taking on all occasions a deep interest and acting a faithful part in the temporal and spiritual affairs of the church, being one of that little company of excellent Christian men (himself the last survivor) that during a lengthened probation of trial and suffering arising chiefly from the want of regular ministerial services, managed and kept together the Presbyterian congregation of Niagara when in the year of our Lord one thousand eight hundred and twenty-nine, their laudable efforts were at last rewarded, by the church of Scotland's ordaining and inducting a minister to the pastorate; the deceased, the following year on the completion of the ecclesiastical organization of the congregation to church ordinances, was ordained to the Eldership, which office he worthily and actively filled to the day he rested from his labors."

Yes, these pioneers of St. Andrew's and St. Mark's did noble work, after life's fitful fever they sleep well. May those of the present day not prove degenerate sons of such noble sires, but in the duties of every day life write history so that those of a day as far advanced on the light and civilization of ours as this is of the days of which we have been giving the record may say of us, "they did what they could."

FORT GEORGE'S LONELY SYCAMORE

A REMINISCENCE OF NIAGARA.

The story of a tree that rears
Its form o'er an historic plain,
The sights it sees, the sounds it hears,
That story's gay or sad refrain.

O lone-tree on the rampart's height!
What hast thou seen, what canst thou tell,
Of peaceful watch or desperate fight,
O lonely, lonely sentinel?
But tell me first, what sweet, fair sight,
Extending far and wide before,
Thou seest from thy vantage height,
O lonely, lonely sycamore.

Afar, the lake spreads like a sea,
And near, the river, broad, blue, deep,
Its waters flowing silently,
As resting from their frantic leap.
Nor distant far, the mountain crowned
With column pointing to the sky,
While all forgot the humbler mound,
Where other heroes mouldering lie.

A skirt of oak in nearer view,
And hawthorn, white with fragrant bloom,
And tall sweet-briar, wet with dew,
Wild flowers with many a nodding plume.
Beneath the hill the children bring
Their little cups, and eager press
To drink the water at the spring,
Where grows the tender water-cress.

In front, a plain of changing hue,
In winter white, now bare and brown,
Or grassy green, with herds in view,
And to the west, the quiet town.
Beyond, the fort and beacon light,
Old Mississagua's square grey tower,
On either side church spires rise bright,
O'er stately home or humble bower.

Beneath, the crumbling ruins hid,
Where first our hero Brock was laid,
With funeral pomp in death-sleep cold,
And tears were shed and mourning made
For him, who, with the morning sun,
Went from these walls, erect and brave;
The evening saw *his* victory won,
A hero's fame—a soldier's grave.

Here, where the bank falls sheer and steep,
The Half-Moon Battery may be traced,
Alike commanding shore and deep,
A scar of war not yet effaced.
A path o'er-arched with trees we gain,
Nor did it all their dreams suffice
To call that path the "Lover's Lane,"
The grove around was "Paradise."

Nay, call it not their partial pride,
Where can ye find a spot so fair?
Italian suns have scarce supplied
Such sky, such stream, such beauty rare.

Tell us the sounds that come to thee,
Borne by the breezes as they fly,
The shout of schoolboy wild set free,
The sportsman's gun, or plover's cry.

Or lover's fondly-whispered vows,
The roar of guns in mimic strife,
The rustling of the forest boughs,
Or varying sounds of human life,
The bugle's call, so clear and sweet,
From neighbouring fort by breezes blown,
Gay laughter when pic-nickers meet,
Or on the beech the wave's wild moan.

The quiet dip of idler's oar,
The sweetly solemn Sabbath bell,
The distant cataract's softened roar,
All these, oh, lonely sentinel.
Or wilt thou tell of nations four,
Alternate owning this fair spot?
Thou knowest much historic lore,
Then tell thy tale; refuse us not.

Or is it far beyond thy ken
When Indian wigwams here were seen,
And red men roamed o'er fell and fen,
And trail or war-path followed keen?
Didst see the brave La Salle pass on
To seek the Mississippi's wave,
And how, ere Abram's heights were won,
Yon fort was won—won many a grave?

Ere gallant Frenchmen yielded here
To Britain's power their heritage,
Johnson, the red man's friend held dear,
Thou saw'st successful warfare wage.
The loyal refugees here press,
Leaving their lands, their homes, their all,
Deep in the solemn wilderness,
To hew new homes at duty's call.

And here our country's fathers met
In humble legislative hall;
But soon arose day darker yet,
When foeman held these ramparts all.
Then came a day of fear and dread
When winter snow robed dale and down;
And mothers with their children fled
In terror from the burning town.

But soon returning peace brought round
More prosperous, happy, golden days,
And from the shipyard came the sound
Of hammers beating songs of praise.
Those days are gone ; gone, too, we fear,
The busy mart the live-long day,
Nor sound of vulgar trade is here,
And " Lotos Town " they sneering say.

But no-- thy life's a shorter span ;
Thou canst not all the secrets tell
Of brave, or rash, or erring man,
O lonely, lonely sentinel.
Where once the pagan rite was seen,
Or French or Indian warlike bands,
Where fratricidal strife had been,
Two Christian nations now clasp hands.

Long mayst thou stand, O stately tree,
Outlined as boldly 'gainst the sky ;
As thou hast often gladdened me,
Cheer other hearts as years pass by.
As from my window now I gaze,
Thinking of many a ramble wild,
With friends of other, earlier days,
Far past thy fort with walls earth-piled,

I send a wish and prayer that thou
Mayst live to see and live to tell
Of brighter days than even now,
O solitary sentinel.
May other school girls love thee well,
They surely cannot love thee more,
And be thou long their sentinel,
O lonely, lonely sycamore.

JANET CARNOCHAN.

Niagara.

DIARY OF GOV. SIMCOE'S JOURNEY FROM HUMBER BAY TO MATCHETACHE BAY, 1793.

[The writer of the following interesting account of the above journey was the late Hon. Alexander Macdonell, one of the best known of the early citizens of Toronto. He was born in 1762, at Fort Augustus, Invernesshire, Scotland, and was the son of Capt. Allan Macdonell, who with his family and other relatives emigrated in 1773 to the Mohawk Valley, in the then British Province of New York. When the Revolutionary war broke out in 1776, the Loyalist Scottish settlement, to which the Macdonells belonged was disarmed, and Capt. Allan Macdonell was, with others, imprisoned as a hostage for the neutrality of his kinsmen and neighbors. Sir John Johnston and a number of the other settlers on the Mohawk, in May 1776, started to traverse the wilderness lying between them and Montreal, and in nineteen days reached their destination after undergoing the greatest hardships. Of these Loyalist pioneers young Alexander Macdonell was one. He soon afterwards, at the age of sixteen, enlisted as a cadet in the "Royal Highland Emigrants," subsequently numbered the 84th Regiment. After several years of active service he was transferred to "Butler's Rangers," and as a member of this famous corps he took part in many stirring military episodes. After the conclusion of the war, Capt. Allan Macdonell and his family received grants of land in Canada, then the Province of Quebec, and they resided near Quebec city until the father's death, which took place shortly after their arrival. Mrs. Macdonell and her family moved to Kingston, and afterwards to Newark, now Niagara, when it became the capital of the new Province of Upper Canada. Governor Simcoe, who had himself been a British officer in the Revolutionary war, and had in that capacity become acquainted with Alexander Macdonell, appointed the latter Sheriff of the Home District, which included both Newark and York. As a trustworthy member of the Governor's suite he accompanied him on the trip described in the diary subjoined. Sheriff Macdonell represented the Glengarry district for some time in the Legislative Assembly of Upper Canada, and was at one time Speaker of the House. When the war of 1812-14 broke out he was appointed Deputy Paymaster-General, with the military rank of Colonel, while his cousin and *protégé*, John Macdonell of Glengarry, joined the staff of General Brock, with whose remains his, and his alone, lie interred under the monument on Queenston Heights. Col. Alexander Macdonell was taken prisoner at the capture of Niagara in May, 1813, and was detained till the close of the war at Lancaster, Pennsylvania, where his father had been kept a prisoner in 1776, as narrated above. After his return to Canada he held various public positions, and was in 1831 created a member of the Legislative Council of Upper Canada. An active and earnest member of the Roman Catholic church, he rendered great assistance to his cousin, Bishop Macdonell, in building up that religious community in this Province. In 1818 he erected the still prominent residence on the Northwest corner of John and Adelaide streets, and at his hospitable table most of the eminent men in the Province were at one time or another entertained. He was tall and commanding in figure, but quiet and somewhat reserved in manner, and could talk fluently in the Gaelic, French, and Indian tongues. Colonel Macdonell died in his own residence in 1842, leaving behind him five sons, one of whom, Mr. Alexander Macdonell, now Clerk of Process at Osgoode Hall, has long been the careful custodian of the diary here printed for the first time. The Historical Section of the Canadian Institute has passed a resolution thanking Mr. Macdonell for permission to print the diary, and respectfully requesting him to have it placed for permanent preservation in one or other of the public libraries in Toronto.]

1793. September 24th.—Lieutenant Pilkington of the R. E., Lieutenant Darling of the 5th Regiment, Lieutenant Givens of the 2nd Rangers, and

W. Aitken, D.P.S., with two Lake LaClaie and two Matchetache Bay Indians, embarked in a batteau, and went that night to Mr. St. John's, on the River Humber.

25th.—Got up at daybreak to prepare matters for our journey. His Excellency, Lieutenant-Governor Simcoe, joined us from York. We shortly afterwards were ready and entered the woods, keeping our course about N.N.W., crossed a long pine ridge. About one o'clock, dined upon a small river which empties itself into the Humber, and, to make the loads lighter, took the bones out of the pork. After dinner, re-loaded our horses and pursued our journey. About four o'clock, it beginning to rain, we encamped on the side of the Humber, at the west extremity of the 3rd concession. We here got some wild grapes and a quantity of crawfish.

26th.—At eight o'clock continued our journey. In the early part of the day, went over a pine ridge; but from ten till six in the evening, when we encamped, went through excellent land for grain or grass, the trees uncommonly large and tall, especially the pine. Crossed two small creeks which emptied themselves into the Humber, on one of which (Drunken Creek) we dined, and encamped on the second. The land through which we passed is chiefly wooded with maple, bass, beech, pine and cedar. During this day's march we passed the encampment of an Indian trader, who was on his way to his wintering ground on Lake LaClaie.

27th.—Proceeded on early in the morning. Shortly after leaving our fires went through a ridge of very fine pine, which appeared to be bounded by a deep ravine to the north. After crossing in an oblique direction the pine ridge, went over excellent land, black rich mould; timber, maple, beech, black birch, and bass. Crossed a ravine and ascended a small eminence of indifferent land. This height terminated in a point, and a gradual descent to the River Humber, which we crossed. We dined here, and remained two hours to refresh ourselves and horses. While at dinner, two men with two horses, who left the end of the carrying place in the morning, met us. They were going to bring forward the trader which we passed the preceding day, and his goods. After dinner proceeded on. Went over very uneven ground, the soil in some places indifferent, but in general not bad land. Saw some very fine yellow pine and black birch. About six o'clock came to the end of the carrying place and encamped. Here found Mr. Cuthbertson, Indian trader, and owner of hut we passed the day before, encamped.

28th.—After breakfast, Messrs. Givens and Aitken, with two Indians and two white men, went up the river for three canoes which had been previously provided for the Governor, and I went with three rangers to

erect a stage near the river to put the pork, &c., on when brought down from the encampment. Having accomplished this, upon our return we cut a few trees to make a bridge upon a bad pass in the swamp. Returned to camp about two o'clock, and shortly afterwards to the stage with seven of the rangers, all with packs which we put upon the stage. We here met Messrs. Givens and Aitken, having returned with the canoes. The whole then returned to camp only me, who remained to take care of the baggage. In about two hours the whole came down, and we immediately embarked into five canoes, viz., the Governor, Mr. Aitken, an Indian, and two rangers in one; Messrs. Pilkington and Darling, with their two servants, in the second; Mr. Givens and two Indians in a third; an Indian and two rangers with me in the fourth; and Mr. Aitken's surveying party in the fifth. We dragged our canoes till we came to the river, over a part of the swamp where it would be impossible to walk without their support, it being a quagmire, the skin or surface of which was very thin. Proceeded about a mile and a half or two miles along the river, which in this short distance has several turns. Went about a quarter of a mile up a smaller river which empties itself into the former, and encamped. Soon after making our fires, the Great Tail and his family (Messessagues), who were encamped further up the river, came to visit their Great Father, the Governor, to whom they presented a pair of ducks, some beaver's meat, and a beaver's tail. His Excellency gave them some rum and tobacco.

29th.—Embarked into our canoes in the same manner as the preceding day, paddled down the river, which is a dead water, bordered on each side with quagmires similar to the one we hauled our canoes over. About two hours after leaving camp, Mr. Givens came into my canoe and the Indian went into his; but our canoe made much water and we could not keep up with the others; we shortly after got the Indian back again. At twenty minutes after one we entered Lake LaClaie, now Lake Simcoe, so called in memory of Captain Simcoe of the R. N. At the entrance of the lake we saw two canoes, who upon seeing us paddled off to their village, which was upon a point about four miles off, to apprise them of the Governor's arrival. We paddled on towards the point and passed the village close in shore. The Indians who were by this time assembled, fired a *feu de joie* to compliment His Excellency, which we answered with three cheers, and then doubled the point, and put on shore in a small sandy bay to dine. Soon after our landing the Indians came in a body to wait on the Governor, to whom they presented a beaver blanket, which he declined taking then, but promised to take it upon his return from Matchetache Bay. They were all more or less drunk and made rather an unintelligible speech. They got liquor from four Canadians who had been sent from Matchetache Bay by

Cowan, an Indian trader, to buy corn. His Excellency was sorry that he could not see Keenees, the chief of the village, with whom he was acquainted, as he was dangerously ill. We left our smallest canoe here, and got one Indian in lieu of the two Indians belonging to the village, who preferred remaining to proceeding on the journey. After dinner we re-embarked, and the wind being fair, hoisted sail, and about dark put on shore and encamped in a cedar grove about six miles from the village.

30th.—Left our encampment about ten o'clock. Mr. Givens was taken into the Governor's canoe, and in his place one of the rangers put into mine. Sailed on with a strong breeze about six miles, and it blowing too fresh to cross Kempenfelt Bay, put in at Point Endeavour, where we remained till two o'clock, and dined. After dinner, the wind moderating a little, we again hoisted sail and crossed the bay, which is between seven and eight miles deep and four and five wide. We had scarcely got over when the wind blew hard ahead, and it beginning to rain we encamped in a pleasa t spot on the side of the lake.

October 1st.—Embarked about eight o'clock, and having a contrary wind had to paddle against a head swell, which impeded our going much, and frequently dashed water into our canoes. Put in for a few minutes to take the bearings at a bluff point about six miles from our last encampment. This being accomplished we coasted close in shore for some time and, the wind abating, made for an island near the head of the lake, and landed there about two o'clock, and dined. This island, now Francis's Island is pleasantly situated, having a fine prospect of the lake. The Indians used to raise corn upon it, but have not for some time. It is quite covered with long grass. About two o'clock we embarked, and shortly after leaving the island entered a small straight, near the far extremity of which we saw two Indians in a canoe paddling across. So soon as the Indian in the Governor's canoe perceived them he gave the death hallow; the strange Indians made for land, and we, seeing the wigwam, followed. So soon as our Indian got near enough to be heard he made a melancholy detail of the number of deaths that had lately happened among the Lake Simcoe Indians, and closed his speech with saying "that the end of the world was at hand, Indians would be no more." An old Indian, owner of the wigwam, gave a similar unpleasant account of the great sickness in his neighbourhood also, and added that he expected his eldest son would soon change his climate, and that nothing but his being unwell prevented his going to his wintering ground. His Excellency made this family a small present, and we parted. Soon after leaving them, the wind turning fair, we hoisted sail. At this place the lake widens, and is interspersed with small islands, on some of which the Indians had planted corn, turnips and

squashes. About sunset got to the head of the lake, entered the river Matchetache, and encamped.

2nd.—Proceeded down the river, and in the space of two hours had to carry our canoes, &c., over two portages. A short distance below the first carrying place the Black River empties itself into the Matchetache, and changes the colour of that river from clear to a dusky brown, which it does not vary until it enters the bay of the same name, upon Lake Huron. Below the second carrying place the river widens, and at about a distance of six or seven miles from it we crossed a small lake about six miles in circumference. Put on shore and dined upon a point where we got various kinds of berries. Mr. Pilkington's canoe and mine being leaky were hauled out of the water and gummed well. After dinner pushed off, and about sunset came to a third carrying place, where, after hauling up our canoes, we encamped. This place is said to be much infested with rattlesnakes; it certainly has much the appearance of it, being almost a solid rock, with a few scrubby pines and oaks growing on it. John Vincall, of the rangers, cut one of his toes almost off here. To the left of the carrying place is a handsome fall, and below that an impetuous rapid.

3rd.—Had the canoes, &c., carried across early in the morning, and after breakfast proceeded down the river. Went through several rapids and crossed two more carrying places. At 2 o'clock arrived at, and had everything carried over a fifth portage. The scene of this place is pleasing and romantick; the portage is a solid, level rock with a few small pines and oak growing out of the rents. The falls rush, as may be easily conceived to be the case, from an immense body of water, having a great descent, and being condensed between two rocks, at not more than fifteen feet asunder. After dinner continued our journey, and soon after crossed a sixth portage. Shortly after re-embarking it began to rain, and we encamped upon a small island about two miles below the last mentioned carrying place.

4th—Loaded our canoes early in the morning and embarked. The wind being fair, hoisted sail, and in about three or four hours arrived at a seventh and the last carrying place. Having crossed our canoes, &c., and again re-embarking, at 11 o'clock we entered Matchetache Bay. The Indians being apprised, by an express across the country from Oakland Point, of the Governor's being near at hand, were assembled upon a point a short distance from the last carrying place. Upon seeing them we made towards them. When we got within a few yards of the shore they complimented His Excellency with a *feu de joie*, which we answered with three cheers, and immediately landed. After all the Indians had shook hands with the Governor, the chief presented him with two dozen ducks. His Excellency thanked him, and told him he would be happy to see him and his band

in the evening at Mr. Cowan's, on the opposite side of the bay. Re-embarked, and sailed across in little more than an hour; it blew so fresh before we arrived that we were obliged to lower our sails. Upon landing, unloaded and hauled up our canoes, encamped in the woods a small distance from the lake, and about half a mile from Mr. Cowan's house, or rather fort, for it is a square stockade; his house is in one, his store opposite to it in another, an out-house for potatoes, corn, &c., in a third, and the gate in the fourth. He does not allow the Indians to get drunk within the garrison. Soon after we had encamped the Indians arrived, and the Governor made e' h of them a present of tobacco. About eight o'clock, Mr. Cowan, who had been out hunting all day, returned. He sent His Excellency some ducks, and shortly afterwards came to pay his respects. Mr. Cowan is a decent, respectable looking man, and much liked by the Indians. He was taken prisoner by the French at Fort Pitt, during the war of '58 and '59, when a boy. He has adopted all the customs and manners of the Canadians, and speaks much better French than English. He has been settled at Matchetache upwards of fifteen years without once going to Lower Canada. He makes an annual trip to Michillimackinac to meet his supplies there and forward his furs to Montreal. He has in general six Canadians engaged with him, and is well known to that class of people by the name of Constant.

5th.—Mr. Cowan having been desired by the Governor the preceding evening to attend next morning to interpret, arrived after we had breakfasted, and the Indians being met, addressed His Excellency in the usual manner: "They were happy to see him in good health and thanked him for taking the trouble of visiting them in their own country, &c." The Governor replied that he would always be glad to hear of the prosperity of the Indians, and entreated them to attend to their hunts, and told them that he wished for nothing more than seeing them and his children, the whites, live in harmony together, and mutually assist each other. He promised them a keg of rum which should be delivered to them the day of his departure from the bay, and told the chief he would send him from York a silver medal and a flag, the usual badges of distinction which this chief had not as yet received. They then shook hands and went off well satisfied. I must here observe that the Lake Simcoe Indians were much mortified at the Governor not taking the beaver blanket when offered to him. This they communicated to the Matchetache Indians by the express which went overland; and they simply replied that their father did right not to take it, that they should have made his bed upon his arrival at York (as they did), and not waited for his arrival in their village. The Matchetache Indians had made his bed at York by presenting a beaver blanket.

Soon after the departure of the Indians, His Excellency, Mr. Cowan, and the gentlemen of his party embarked in one of Cowan's large canoes, worked by five Canadians, (leaving the rangers, &c., at the encampment) intending to visit Penetanguashin, a place supposed to be a good harbour for vessels. The wind blew so fresh that we could not effect our purpose, especially as we had a wide traverse to make. We, however, landed upon an island called by Mr. Cowan, "Place la Traverse." We got to a point opposite to it, and had an ample view of it, and from its appearance and the account Mr. Cowan gave of the depth of water, I believe His Excellency was satisfied with its sufficiency for the reception of vessels of eighty or ninety tons. To judge from the wood, the land about it seemed to be very good. It lays about six miles within Matchetache Bay, and nearly nine miles from Mr. Cowans'. We walked a mile and a half or two miles further, and had a fine view of Lake Huron, then returned to the canoe and dined. After dinner reembarked, the wind beieg fair, hoisted sail and arrived at our encampment about an hour after sunset.

6th.—Between nine and ten o'clock left our encampment, launched our canoes, and set off on our return home. Put in at the point where we had met the Indians on the morning of the 4th instant, and His Excellency gave them the keg of rum agreeable to his promise. After some little ceremony on their part in wishing us favorable weather and a clear day, &c., we pushed off from shore, upon which they saluted as they did the day we arrived in the bay, and we answered as before with three cheers. Paddled on and soon arrived at the carrying place; brought everything across and without halting pursued our journey, went about five or six miles further on, and landed upon an island. One of our Indians getting sick, Mr. Givens, with a white man and the other two Indians, returned to the point to bring back the sick man and get another in his place; but before they got down, the Indians on the point had paid their devoirs so very attentively to the rum keg that they had not the use of their limbs or reason. Finding that none would come with him, and expostulation being vain, he put the sick man on shore, pushed off, and joined us in the evening. Finding it too late to proceed after Mr. Givens' return we encamped where we were.

7th.—Got everything on board before sunrise. In consequence of our losing an Indian the preceding day, the one that was in my canoe was removed to the Governor's, and one of the rangers sent in to mine in lieu. Paddled up the river and got over two carrying places, upon the second of which we breakfasted, the same on which we dined on the 3rd. After breakfast His Excellency and the gentlemen of the party crossed to the opposite side of the river to view a fall which could not be seen from that we were upon. Having satisfied our curiosity we recrossed, embarked

into our different canoes, and pushed off. Crossed two more carrying places, upon the second of which we encamped about sunset, the one upon which we slept the night of the 2nd.

8th.—Some of the canoes being leaky were here gummed, after which we got on board, paddled pretty hard, crossed the two remaining carrying places, and half an hour before sunset got to the head of the lake, and encamped on the spot we had occupied on the 1st.

9th.—Embarked after breakfast, and having paddled against a head wind and swell arrived at Francis' Island at twelve o'clock. His Excellency did intend going from this island round the opposite side of the lake to what we had come, but finding only four days' provisions remaining, and not knowing what time it would take us by so doing, he judged it more expedient to return by the way we had come; therefore, after dinner got on board, crossed to the main land and before sunset encamped where we had slept on the 30th of September.

10th.—Got into our canoes before sunrise, being fearful that we would have the wind ahead and wishing to cross Kempenfelt Bay before it blew too hard. Our apprehensions were confirmed. The wind began to rise, but we luckily got over the bay before the lake was too rough. Put on shore and breakfasted at Endeavour Point. Re-embarked and coasted along shore. At one o'clock put in, and dined about two miles' distance from the village. Having dined and got on board we paddled on and soon came abreast of the village. The Indians fired a *feu de joie*, and we gave three cheers. Got round the point, put on shore in a small bay, hauled our canoes on shore and encamped in the rear of the village. While we were making up the fires and preparing everything for the night, His Excellency humanely went to pay a visit to Keenees, the chief, who, as I have already mentioned, was dangerously ill when we passed on our way to Matchetache Bay, but on his getting to his wigwam he was informed that he had been dead for some days. A man possessed of less sensibility and feelings than the Governor would have been shocked on this occasion, but his were plainly painted on his countenance upon his return to camp. About six o'clock a number of squaws came to visit the Governor. Two of them carried the images of their deceased husbands, dolls about two feet long decorated with silver broaches, feathers, paint, &c., if a chief, as was the case with one of these (Keenees), his medal is hung to his neck, the face painted black. His Excellency gave them some knives and looking-glasses, and shortly after they retired. At 8 o'clock the Indians came in a body, and being seated around the fire each got a dram and a piece of tobacco, after which the chief got up, thanked their Great Father, and presented him with the beaver blanket, which he spread under him. He

then said: "You white men pray; we poor Indians do not know want it is, but we hope you will entreat the Great Spirit to remove the sickness from amongst us." To which the Governor replied that they should certainly be remembered in the prayers of the whites. He then ordered them a keg of rum, and they went away perfectly happy, and highly pleased that the blanket was accepted, and that they had made their Father's bed.

11th.—About 9 o'clock left our encampment, embarked, and soon got out of the lake, paddled up the river about three miles, and then got into another river, and about two o'clock got to the landing place at the red pine fort. His Excellency finding that John Vincall, the man who cut his toe on the 2nd, could not walk, desired Mr. Givens, his servant, and me to remain with him, and that upon his arrival at York he would send a horse to meet us at the old carrying place, for the man to ride; therefore after dividing our little stock of provision and dining together we parted; the Governor and the rest of the party going to York by a new route, Givens, McEwen, Vincall, and myself remaining. It beginning to rain we encamped there that night.

12th—Got into our canoe before sunrise, paddled down the river till between 8 and 9 o'clock, then put on shore to eat breakfast, which having done, re-embarked and made the best of our way to the place where we had encamped on the night of the 28th of September, which we reached about sunset. Saw many ducks, but so wild that we could not get within shot of them; killed only one mud hen.

13th—Mr. Givens and his servant went out very early in the morning to hunt ducks. Vincall and I remained behind to pound and boil Indian corn for our breakfast. They returned about two o'clock with two ducks only. About half an hour before sunset Mr. Givens and I went up the river to get some birch bark to make torches with to spear fish. On our way up fired repeatedly at ducks without any success; killed one but could not find it. Having put on shore about two miles up the river and got a sufficiency of bark returned to our encampment at 8 o'clock.

14th—Got up at day break, and while preparing to go to hunt found that we had but two quarts of corn, and a small piece of pork remaining. Mr. Givens and I therefore resolved to go back to the Indian village, to get some supplies. After eating about a pint of corn and a small piece of pork embarked into our canoe, and shortly after leaving camp, the wind being fair, hoisted sail. We were very soon after forced to lower it, as it blew too fresh; cut off about two feet of the mast, reefed the sail, and hoisted it again. We shortly after met the Great Tail and his family in two canoes

going to their wintering ground. We gave him some powder and shot; he gave us two ducks, and promised to take care of our men until we returned. Sailed on, and near the entrance of the lake we met two canoes with two Indians in each. Got eight ducks from them for powder, shot, and a looking glass. Hauled the canoe on shore, made a fire, and gum'd her. Having made her as tight as we could, we again pushed off, hoisted sail and, passing the village, landed in the bay where we dined on the 29th September. Hauled the canoe on shore, turned her upside down, and made a fire. It being late when we arrived we had not time to get much wood, had scarcely sufficient to broil two ducks for supper. It beginning to rain, and the wind shifting suddenly about, we were forced to carry our canoe, &c., to the opposite side of the fire, and turned our backs to the lake. Crept under the canoe, and passed a very uncomfortable night.

15th.—Early in the morning three squaws came down to gum our canoe, and the Indians bartered as much corn with us as we wanted. It blew so hard that we could not possibly set out on our return, and it being too cold to remain on the beach went further into the woods to encamp. We lamented much not being able to return to our men, the more so as they had but a scanty allowance of provisions when we left them, although we took none from them. About two o'clock we broiled a couple of ducks, and breakfasted. Shortly after two squaws came down to our fire with more corn to sell. We told them we had enough to bring us home and wanted no more, that we were chiefs, not traders. We gave them a few broaches and some ribbon, and desired them to carry their corn home. In the evening two more came on a similar errand, and we made the same reply as to the former two. They brought us a sufficiency of fire-wood, for which we gave each a ribbon. They then left us, and we had no more offers of corn to barter. Being sleepy we went early to bed, but were both too unwell to get any rest.

16th.—Got up at daylight, tho' still very sick, but, seeing the necessity of returning to our men, launched our canoe, put everything on board, and pushed off to go to Mr. Cuthbertson's (an Indian trader), on the opposite side of the lake. Putting the canoe in the water was a disagreeable task, as it had frozen hard the night before and was then so cold that the water froze upon our paddles, About half way over to the trader's Mr. Givens got so very sick that he could not paddle, and as I was also unwell and not able to work now, we were a considerable time in getting across. Upon our arrival Mr. Cuthbertson received us very hospitably. He gave us chocolate for breakfast which revived us. Finding that in our then situation we could not bring the canoe up by ourselves we hired an Indian, and Mr. Cuthbertson let us have one of his men to help us. Having got a

gallon of spirits from him we started. Soon after embarking we found the canoe still leaked, therefore put on shore at the Indian village, hauled her up and gummed her. We saw there only one old squaw and a boy, all the rest having gone off that morning to their wintering ground, and they were soon to follow. At 12 o'clock left the village. When we came to the forks of the river we saw an eagle sitting on a muskrat house. The Indian in the bow fired, but in vain, being only loaded with duck shot. At eight o'clock we reached our encampment, and tho' we were apprehensive that our men had suffered during our absence we found upon enquiry that they had fared much better than we had, the Great Tail having supplied them with duck and Indian corn.

17th.—A little after sunrise Mr. Cuthbertson's man and the Indian parted with us. We gave them our canoe to bring them back. Soon after the Great Tail (who had encamped on the opposite side of the river) paid us a visit, and brought us four duck. We thanked him for the care he had taken of the men in our absence, and told him that it would please their and our father at York, as he wished for nothing more than such mutual good offices between the Whites and Indians. This being the sixth day since we parted with the Governor, and the day by him appointed for our crossing to the beginning of the portage, we provided corn for two days, borrowed a canoe from the Great Tail, and embarked. We soon reached the stage which we had erected on the 28th, and in two trips carried everything up to our old encampment. When we returned to the stage the second time we there met two of the Great Tail's sons, who came to bring three more duck and bring back the canoe we had borrowed. We gave the boys a few yards of ribbon each, and had given their father at parting in the morning all the powder and shot that we could spare. They were satisfied and we were pleased. Soon after encamping and putting on the fire a kettle full of Indian corn and a few ducks for our supper, Sergeant Mailey and another man of the Rangers, guided by one of the three Indians who went with His Excellency (the other two remained behind them a short distance) arrived from York with a horse for the lame man. The Governor was pleased to send us by them brandy, wine, tea, sugar, pork, and bread. We made a hearty supper, and concluding the evening with a can of grog to his health, went to bed.

18th.—The horse being missed two of the men were sent in search of him, but returned unsuccessful. The Indian was then sent and in a very short time found him. Packed everything up; made our packs, and when ready to start the two remaining Indians arrived. Parted with them at eleven o'clock and marched on. At four o'clock arrived at

the Humber, crossed it and encamped, the horse being too much fatigued to proceed, having had a forced march the preceding day.

19th—Tho' it rained all the night before, set out at daylight. At 12 o'clock halted at the creek where we met the trader's tent on the 26th, and breakfasted. At one o'clock continued our journey and at three came to the spot where we had encamped on the 25th, stopped for about a quarter of an hour, then pushed on and arrived at St. John's a little past four in the evening, and slept there that night.

20th.—Left St. John's after breakfast, and arrived at the camp at York at ten o'clock, having been absent 27 days, without any accident happening, excepting Vincall cutting his toe.