

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- Additional comments:
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
- Pages damaged/
Pages endommagées
- Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached/
Pages détachées
- Showthrough/
Transparence
- Quality of print varies/
Qualité inégale de l'impression
- Continuous pagination/
Pagination continue
- Includes index(es)/
Comprend un (des) index
- Title on header taken from: /
Le titre de l'en-tête provient:
- Title page of issue/
Page de titre de la livraison
- Caption of issue/
Titre de départ de la livraison
- Masthead/
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

October, 1887.

THE
* OTTAWA NATURALIST *

VOLUME I. No. VII.

The
TRANSACTIONS.

Of the
* Ottawa Field-Naturalists' Club *

(Organized March, 1879. Incorporated March, 1884.)

CONTENTS.

	Page.
Report of the Geological Branch	93
Report of the Ornithological Branch.....	98
Announcements	104

OTTAWA, CANADA:

Citizen Printing and Publishing Company, Metcalfe St.

1887.

Patron :

HIS EXCELLENCY THE MARQUIS OF LANSDOWNE,
GOVERNOR GENERAL OF CANADA.

Président : R. B. WHYTE.

Vice-Présidents : 1ST, PROF. J. MACOUN | 2ND, PROF. S. WOODS.

Secretary : W. H. HARRINGTON. (Post Office Dept.)

Treasurer : JAMES FLETCHER. (Library of Parliament.)

Librarian : T. J. MACLAUGHLIN. (Dept. Public Works.)

Committee : DR. H. B. SMALL, | H. M. AMI, | DR. GEO. BAPTIE.

Standing Committees of Council :

Publishing—PROF. S. WOODS, W. H. HARRINGTON, JAMES FLETCHER.

Excursions—T. J. MACLAUGHLIN, H. M. AMI, DR. BAPTIE.

Soirées—PROF. J. MACOUN, PROF. S. WOODS, DR. SMALL.

Editors :

Geology—H. M. AMI, REV. PROF. MARSAN, JOHN STEWART.

Botany—J. FLETCHER, DR. SMALL, DR. BAPTIE.

Conchology—F. R. LATCHFORD, H. B. SMALL.

Entomology—W. H. HARRINGTON, J. FLETCHER, T. J. MACLAUGHLIN.

Ornithology—G. R. WHITE, PROF. MACOUN.

Editor : W. H. HARRINGTON.

The Librarian will furnish the Publications of the Club at the following rates :—

Transactions, Part 1, Not sold singly	}	\$1.00 for Vol. I.
“ 2, 25 Cents.		
“ 3, 25 “		
“ 4, 25 “	}	\$1.00 for Vol. II.
“ 5, 30 “		
“ 9, 40 “		
“ 7, 30 “		

(Less 10% to members.)

The Ottawa Naturalist, \$1.00 per annum.

Extra copy to members, .75 “

Monthly parts, 10 cents each, \$1.00 per doz.

To members, 8 “ .75 “

REPORT OF THE GEOLOGICAL BRANCH.

To the Council of the Ottawa Field Naturalists Club.

The leaders have much pleasure in reporting that continued progress in the development of the geological and kindred resources of this rich and interesting field of research has marked the season just passed. Mr. John Stewart, whose energy and zeal have been rewarded by the accumulation of very extensive and valuable collections of fossils from the splendid exposures of Ottawa and its environs, reports that during the past year he has made a large number of very interesting finds in the various formations of this district. Besides making an elaborate collection of the species represented in the Hudson River formation outlier on the Canada Atlantic Railway some four miles distant from the city and collecting also in the Utica Formation immediately underlying this along the Rideau River, Mr. Stewart has discovered a number of rare and even new species in the Trenton rocks, from which he has made an especially valuable collection, comprising beautiful crinoids and cystideans, for which this locality is already so famous in palaeontological circles. Besides these he has also made an extensive collection of the species associated in the same formation, most of which are readily identified as Prof. Hall's or Mr. Billings' species and are to be found in the various lists of fossils published by the Club. Detailed notes on these will, we hope, be soon forthcoming from the pen of Mr. Stewart whose activity in connection with the interests of geology, and palaeontology more particularly, has been marked, ever since his arrival in Ottawa when he joined the Club. Nor have the old palaeozoics of Ottawa been the only rocks examined by him; his field of research has extended to, and has included, the Post-Tertiary deposits of Green's Creek in Gloucester—a locality often cited for interesting material—one which has been made famous by the pen of Sir William Dawson and others. A very interesting specimen of a fish, rarely met with in these deposits, was found by him and is most probably referable to a form ascribed to the genus *Cottus* in the "Geology of Canada" 1863, p. 917, and which at the present day lives in the Gulf of St. Lawrence and along the Western Atlantic coast. Besides this interesting fish Mr. Stewart has also collected remains of plants and shells

characteristic of the above deposit which afford a great deal of promising material for examination.

Mr. Stewart having reported from the Trenton Rocks of Belleville, Ont. (a locality outside of the Club's radius), *Cyrtolites compressus*, Conrad, for the first time recorded in Canada; Mr. Ami was led to re-examine a form collected by him on the Castor River (*vide* Trans., O.F.N.C., Vol. II, No. 2, p. 257, 1884-85) on the occasion of a sub-excursion of the Geological Branch, and found it to be the same species. At the latter locality it was found associated with *Bucania bidorsata*, Hall, *Bellerophon bilobatus*, Sowerby, and other characteristic species of the Trenton formation.

Mr. Sowter reports that during the past year he has examined a number of fossiliferous localities on both the Ontario and Quebec shores of Lake Des Chenes, in the Chazy and overlying Black River formations, but more particularly in the latter. From these he has obtained a fine suite of fossils which he intends shall form the subject matter for a communication or note to be presented at a subsequent Soirée of the Club, and which promises to be a valuable contribution, including as his collections do some rare, choice and, no doubt, unrecorded species from that district.

Mr. Henry M. Ami reports that during the past season he was present at *three* out of the *four* general excursions which were held under the auspices of the Club, and on which occasions he acted as leader in geology, besides conducting a number of successful sub-excursions, especially in the latter part of the season--the most favourable for such work. These excursions and sub-excursions were held to various objective points in and about the city, so that nearly all the formations comprised in the Ottawa series were visited and examined—from the Laurentian, so beautifully developed in the hills to the north—to the Post-Tertiary deposits overlying all the intermediate formations included. From these, a number of interesting facts were ascertained and noted respecting the geologic structure of their measures and the organic remains contained in them, whether from the Potsdam, Calciferous, Chazy, Black River, Trenton, Utica or Hudson River, as well as from the fossiliferous Post-Tertiary clays and sands.

POST-TERTIARY.—Beginning with these newer deposits, Mr. Ami reports that on account of the numerous excavations for sewers, etc., he has been enabled to obtain a number of interesting sections of the strata from the boulder clay and glacial drift deposits up to the recent overlying sediments. The results thus obtained from various parts of our city, will be embodied in a communication (now in course of preparation) shortly to be presented to the Club entitled: "The Great Ice Age and Subsequent Formations at Ottawa."

HUDSON RIVER FORMATION.—A special visit was paid to the exposures of this formation in October last and a number of interesting forms were found. The collection yielded a number of species new to the list already published in the Transactions of the Club (Trans. O. F. N. C., Vol. II, No. 2, page 255). These were: *Pterinea demissa*, Conrad, an eminently characteristic species; *Strophomena* (*Streptorhynchus*) *subtenta*, Conrad; *Platystrophia lynx*, Eichwald (*Platystrophia bifoveolata*, Schlotheim, var. *lynx*, Eichwald and *Orthis lynx*, Eichwald, of authors); *Leptana sericea*, Sowerby (very abundant); *Calymene senaria*, Conrad; a *Pleurotomaria*, allied to *subconica*, Hall; a trilobite referred provisionally to the genus *Remopleurides*, besides portions of Monticuliporoid corals—each of which last three mentioned require further study. The opening which was made in the field to the north of the Canada Atlantic Railway track some three and three-quarter miles from the city has afforded a good many specimens. The beds are light brown or buff weathering, and consist of a fine grained calcareo-argillaceous dolomitic paste with some arenaceous material in a finely divided state. The fossils which they contain are tolerably well preserved and abundant—and whilst only some fifteen species have as yet been observed in this formation from that locality there is no doubt that future investigations will increase that number considerably.

UTICA FORMATION.—Most of the attention devoted to this formation has been in the direction of ascertaining what were the species associated in the same band of impure limestone with *Siphonotreta Scotica*, Davidson. Several sub-excursions were held to the locality (mentioned in the Report of Geological Branch, in the transactions of the Club for 1885-86) opposite the Rifle Range on the Rideau River in Gloucester, and no less than sixteen species have already been found in

the same bed. In his "Notes on, and the precise geological position of *Siphonotreta Scotica*, Davidson," presented and read at the meeting of the Club—February 10th, 1887—Mr. Ami mentioned these species, and the facts obtained were therein recorded. Besides the above a species of graptolites, obtained from the Utica has been placed at the disposal of Mr. Whiteaves, of the Survey, who has had them forwarded to Prof. Lapworth of Mason Science College, Birmingham, the best authority on these interesting fossils, for examination.

The following species are new to the lists already published from the Utica :—

Orthis emacerata, Meek.

Leperditia minutissima, Hall.

Beyrichia oculifera, Hall.

TRENTON FORMATION.—In this formation which is ever teeming with abundance of fine material, a number of good finds were made which require more study before publishing the notes on them. In this connection it may not be deemed out of place to mention the fact that Prof. E. O. Ulrich, of Cincinnati, Ohio, who on several occasions has generously lent his assistance in determining critical species of Polyzoa from our rocks, was in Ottawa during the past summer and made an extensive collection at the Brigham quarries at Hull and in other parts of the Trenton here, so that when all the Polyzoa which he collected are worked up the number of species from that remarkable group of organisms will be considerably increased.

POTSDAM FORMATION.—The exposures of this formation were visited by the Club during the past summer at a general excursion to Buckingham, Que., where, besides collecting a fine series of the typical *Scolithus Canadensis*. Billings—a number of previously unrecorded facts were obtained on the evidence of glaciation on the quartzites or sandstones of this formation. These sandstones, a bluff of which faces the Laurentian rocks in the immediate vicinity to the north, are seen to be deeply grooved, striated and polished. Of the annelid (?) remains referable to the genus *Scolithus*, Billings Species, *S. Canadensis*, was by far the commoner form met, but two very good examples of *S. linearis*, Hall, were found associated with it. From the notes which Mr. Ami has made on the subject he is strongly of the opinion that the

main difference existing between these two species lies principally in the preservation, *S. Canadensis* B, occurring as hollow tubes or burrows, whilst Hall's species is found as casts of the interior of the burrow or hole. In comparing the form *S. linearis*, Hall with the species recorded from the Potsdam formation of L'anse au Loup, Que. (See Pol. Foss. Billings, Vol. 1, P. 2), they are found to be exactly similar and cannot be differentiated.

In conclusion, the leaders are happy to state that there is a vast field of labour before this Branch of the Club, and it is therefore encouraging to note the good work which many members of the Club have performed. It is hoped that the time is not far distant when a good topographical map will exist upon which it will be possible to lay down the geological features of the district in a more or less detailed manner. What is more important at present is to obtain from the excavations being made in all parts of the city the sections which such excavations afford and collect all the fossil evidence possible, whether in the later or earlier formations of this locality, as both are very fossiliferous and problems of vast import relating to the geology of other parts of Canada, problems as yet unsolved, will be materially helped thereby.

To this end, each member can contribute his or her share towards the gathering of material wherewith to frame at some future time a systematic and comprehensive *résumé* of the geology of Ottawa. In doing so, the members will not only contribute to this, but will materially assist the Council and help the leaders in furthering the work of the Club.

HENRY M. AMI, }
T. E. W. SOWTER, } *Leaders.*

OTTAWA, January 25th, 1887.

REPORT OF THE ORNITHOLOGICAL BRANCH FOR THE
YEAR 1886-87.

To the Council of the Ottawa Field-Naturalists' Club :—

In making up the Report of the proceedings and researches of this branch during the past season the leaders are able to report three additions to the already large list of birds found in this locality. The first was the finding of the Buff-breasted Sandpiper, *Tryngites subruficollis*, a remarkably interesting little bird with a peculiar aspect. It can at once be recognized by the very small and short bill, and by the unique coloration of the primaries, which are gray or white on the inner webs and beautifully mottled with fine black tracery. Two specimens were shot and six were seen.

The second addition was a fine specimen of the Red Phalarope, *Chrymophilus fulicarius*. This is an important addition as it is particularly a maritime bird and the finding of this bird following so soon after the discovery of the Purple Sandpiper and the Great Black-backed Gull found last year would lead one to suppose that some of the coast birds are in the habit of following the Ottawa and Rideau Rivers on their way south. To the former we have to add the Blue Goose, *Chen caerulescens*. Three fine specimens were shot within a few miles of the city, two geese and a gander. The peculiar marking of the bill and feet of these specimens are worthy of special mention. Dr. E. Coues in his valuable work states that the bill and feet are lake red, whereas those shot have the bill and feet black. The markings, however, agree in every other particular with Dr. Coues' description and there can be no question as to the specimens taken being Blue Geese. The capture of a pair of the very pretty, but rather scarce Mourning Warbler, is very encouraging. We have also been informed of the shooting of two specimens of the Shoveller Duck, by Mr. W. P. Lett; one at Richmond and the other at Brigham's Creek. This species is very scarce in this district, only some half dozen specimens being reported as having been killed in the vicinity of Ottawa. We have also to report the capture of a female Yellow-bellied Sapsucker, shot on 17th April, 1886, with the top of the head blue-black instead of scarlet. Appended is a list of the dates of arrival and departure of our summer birds.

- March 3—*Otocornus alpestris*, Horned Lark.
 “ 13—*Carpolacus purpureus*, Purple Finch.
 “ 26—*Merula migratoria*, Robin.
 “ 26—*Junco hyemalis*, Slate-coloured Junco.
 “ 27—*Spinus tristis*, American Goldfinch.
 “ 27—*Loxia curvirostra minor*, American Crossbill.
 “ 27—*Dryobates pubescens*, Downy Woodpecker.
 “ 28—*Lanius borealis*, Northern Shrike.
 “ 29—*Melospiza fasciata*, Song Sparrow.
 “ 30—*Falco columbarius*, Pigeon Hawk.
 “ 31—*Quiscalus quiscula*, Purple Grackle.
 “ 31—*Molothrus ater*, Cowbird.
 “ 31—*Agelaius phœniceus*, Red-winged Blackbird.
 “ 31—*Sialia sialis*, Bluebird.
 “ 31—*Corvus americanus*, Crow.
- April 5—*Tachycineta bicolor*, Tree Swallow.
 “ 6—*Glauclionetta clangula americana*, American Golden-eye.
 “ 9—*Sturnella magna*, Meadow Lark.
 “ 11—*Ardea herodias*, Great Blue Heron.
 “ 11—*Sayornis phœbe*, Phœbe.
 “ 12—*Lophodytes cucullatus*, Hooded Merganser.
 “ 12—*Ammodramus sandwichensis savana*, Savanna Sparrow.
 “ 12—*Pooecetes gramineus*, Vesper Sparrow.
 “ 12—*Spizella monticola*, Tree Sparrow.
 “ 12—*Scolecophagus carolinus*, Rusty Blackbird.
 “ 13—*Progne subis*, Purple Martin.
 “ 14—*Spinus tristis*, American Goldfinch (summer plum. ♂e).
 “ 15—*Larus argentatus smithsonianus*, Herring Gull.
 “ 15—*Ectopistes migratorius*, Passenger Pigeon.
 “ 15—*Regulus satrapa*, Golden-crowned Kinglet.
 “ 16—*Spizella socialis*, Chipping Sparrow.
 “ 16—*Regulus calendula*, Ruby-crowned Wren.
 “ 16—*Zonotrichia leucophrys*, White-crowned Sparrow.
 “ 17—*Colaptes auratus*, Flicker.
 “ 17—*Zonotrichia albicollis*, White-throated Sparrow.
 “ 17—*Ceryle alcyon*, Belted Kingfisher.

- April 17—*Sphyrapicus varius*, Yellow-bellied Sapsucker.
 “ 19—*Passerella iliaca*, Fox Sparrow.
 “ 19—*Lanius borealis*, Northern Shrike.
 “ 20—*Empidonax minimus*, Least Flycatcher.
 “ 21—*Turdus aonalaschkae pallasii*, Hermit Thrush.
 “ 21—*Loxia curvirostra minor*, American Crossbill.
 “ 23—*Anas obscura*, Black Duck.
 “ 23—*Actitis macularius*, Spotted Sandpiper.
 “ 23—*Falco sparverius*, American Sparrow Hawk.
 “ 23—*Charitonetta albeola*, Buffle-head.
 “ 24—*Gallinago delicata*, Wilson's Snipe.
 “ 26—*Philohela minor*, American Woodcock.
 “ 26—*Anas carolinensis*, Green-winged Teal.
 “ 26—*Totanus melanoleucus*, Greater Yellow-legs.
 “ 27—*Aix sponsa*, Wood Duck.
 “ 27—*Branta canadensis*, Canada Goose.
 “ 28—*Botaurus lentiginosus*, American Bittern.
 “ 29—*Pandion haliaetus carolinensis*, American Osprey.
 “ 30—*Nycticorax nycticorax naevius*, Black-crowned Night
 Heron.
 “ 30—*Podilymbus podiceps*, Pied-billed Grebe.
 “ 30—*Dafila acuta*, Pintail.
- May 1—*Circus hudsonius*, Marsh Hawk.
 “ 1—*Clangula hyemalis*, Old Squaw.
 “ 2—*Melanerpes erythrocephalus*, Red-headed Woodpecker.
 “ 4—*Dendroica coronata*, Myrtle Warbler.
 “ 5—*Ampelis cedrorum*, Cedar Waxwing.
 “ 5—*Vireo olivaceus*, Red-eyed Vireo.
 “ 5—*Chætura pelagica*, Chimney Swift.
 “ 6—*Dendroica aestiva*, Yellow Warbler.
 “ 6—*Icterus galbula*, Baltimore Oriole.
 “ 6—*Troglodytes aedon*, House Wren.
 “ 6—*Urinator imber*, Loon.
 “ 6—*Columbus auritus*, Horned Grebe.
 “ 7—*Trochilus colubris*, Ruby-throated Hummingbird.
 “ 8—*Setophaga ruticilla*, American Redstart.

- May 8—*Hubia ludoviciana*, Rose-breasted Grosbeak.
 “ 8—*Mniotilta varia*, Black and White Warbler.
 “ 8—*Buteo latissimus*, Broad-winged Hawk.
 “ 9—*Tyrannus tyrannus*, Kingbird.
 “ 11—*Dendroica caerulescens*, Black-throated Blue Warbler.
 “ 11—*Dendroica maculosa*, Magnolia Warbler.
 “ 11—*Dendroica blackburniae*, Blackburnian Warbler.
 “ 11—*Dendroica pensylvanica*, Chestnut-sided Warbler.
 “ 11—*Dendroica castanea*, Bay-breasted Warbler.
 “ 11—*Compsothlypis americana*, Parula Warbler.
 “ 11—*Seiurus aurocapillus*, Oven-bird.
 “ 11—*Vireo solitarius*, Blue-headed Vireo.
 “ 12—*Harporhynchus rufus*, Brown Thrasher.
 “ 12—*Dolichonyx oryzivorus*, Bobolink.
 “ 12—*Dendroica virens*, Black-throated Green Warbler.
 “ 12—*Sylvania canadensis*, Canadian Warbler.
 “ 12—*Galeoscoptes carolinensis*, Catbird.
 “ 12—*Vireo philadelphicus*, Philadelphia Warbler.
 “ 12—*Antrostomus vociferus*, Whip-poor-will.
 “ 13—*Turdus ustulatus swainsonii*, Olive-back Thrush.
 “ 13—*Myiarchus crinitus*, Crested Fly-catcher.
 “ 13—*Dendroica tigrina*, Cape May Warbler.
 “ 13—*Helminthophila perigrina*, Tennessee Warbler.
 “ 13—*Helminthophila ruficapilla*, Nashville Warbler.
 “ 14—*Piranga erythromelas*, Scarlet Tanager.
 “ 14—*Clivicola riparia*, Bank Swallow.
 “ 14—*Petrochelidon lunifrons*, Cliff Swallow.
 “ 14—*Ceophlaeus pileatus*, Pileated Woodpecker.
 “ 17—*Vireo gilvus*, Warbling Vireo.
 “ 17—*Chordeiles virginianus*, Night Hawk.
 “ 18—*Sylvania pusilla*, Wilson's Warbler.
 “ 18—*Totanus solitarius*, Solitary Sandpiper.
 “ 19—*Turdus mustelinus*, Wood Thrush.
 “ 19—*Oilemia perspicillata*, Surf Scoter.
 “ 21—*Turdus fuscescens*, Wilson's Thrush.
 “ 21—*Archibuteo lagopus sancti-johannis*, American Rough-
 legged Hawk.

- May 22—*Egialitis semipalmata*, Semipalmated Plover.
 “ 24—*Coccyzus erythrophthalmus*, Black-billed Cuckoo.
 “ 27—*Dendroica striata*, Black-poll Warbler.
 “ 28—*Porzana carolina*, Sora.
 “ 28—*Rallus virginianus*, Virginia Rail.
 “ 29—*Geothlypis philadelphia*, Mourning Warbler.
 June 18—*Loxia curvirostra minor*, American Crossbill.
 July 14—*Geothlypis trichas*, Maryland Yellow-throat.
 “ 29—*Larus philadelphia*, Bonaparte's Gull.
 August 3—*Passerina cyanea*, Indigo Bunting.
 “ 5—*Loxia curvirostra minor*, American Crossbill.
 “ 24—*Calidris arenaria*, Sanderling.
 “ 24—*Ereunetes pusillus*, Semipalmated Sandpiper.
 “ 24—*Totanus flavipes*, Yellow-legs.
 “ 24—*Totanus melanoleucus*, Greater Yellow-legs.
 “ 24—*Egialitis semipalmata*, Semipalmated Plover.
 “ 24—*Tryngites subruficollis*, Buff-breasted Sandpiper.
 “ 24—*Tringa minutilla*, Least Sandpiper.
 “ 27—*Tryngites subruficollis*, Buff-breasted Sandpiper.
 “ 29—*Seiurus aurocapillus*, Oven-bird.
 “ 30—*Ampelis cedrorum*, Cedar Waxwing.
 “ 30—*Vireo olivaceus*, Red-eyed Vireo.
 “ 30—*Sylvania pusilla*, Wilson's Warbler.
 Sept. 2—*Progne subis*, Purple Martin.
 “ 2—*Petrochelidon lunifrons*, Cliff Swallow.
 “ 3—*Setopluga ruticilla*, American Redstart.
 “ 4—*Tachycineta bicolor*, Tree Swallow.
 “ 4—*Helminthophila ruficapilla*, Nashville Warbler.
 “ 4—*Dendroica striata*, Black-poll Warbler.
 “ 9—*Scolecophagus carolinus*, Rusty Blackbird.
 “ 10—*Haliaeetus leucocephalus*, Bald Eagle.
 “ 10—*Charadrius squatarola*, Black-bellied Plover.
 “ 10—*Pandion haliaetus carolinensis*, American Osprey.
 “ 10—*Myiarchus crinitus*, Crested Flycatcher.
 “ 14—*Spatula clypeata*, Shoveller.
 “ 14—*Turdus aonalaschkae pallasi*, Hermit Thrush.

- Sept. 14—*Sayornis phæbe*, Phæbe.
 “ 14—*Trochilus colubris*, Ruby-throated Hummingbird.
 “ 16—*Falco columbarius*, Pigeon Hawk.
 “ 16—*Spizella socialis*, Chipping Sparrow.
 “ 16—*Sitta canadensis*, Red-breasted Nuthatch.
 “ 17—*Myiarchus crinitus*, Crested Flycatcher.
 “ 18—*Cyanocitta cristata*, Blue Jay.
 “ 18—*Chelidon erythrogaster*, Barn Swallow.
 “ 20—*Ceryle alcyon*, Belted Kingfisher.
 “ 20—*I'oocates gramineus*, Vesper Sparrow.
 “ 20—*Scolecophagus carolinus*, Rusty Blackbird.
 “ 20—*Compsothlypis americana*, Parula Warbler.
 “ 20—*Tringa maculata*, Pectoral Sandpiper.
- Oct. 2—*Colaptes auratus*, Flicker.
 “ 5—*Branta canadensis*, Canada Goose.
 “ 5—*Accipiter velox*, Sharp-shinned Hawk.
 “ 6—*Ammodramus sandwichensis savana*, Savanna Sparrow.
 “ 6—*Tringa alpina*, Dunlin.
 “ 6—*Tringa minutilla*, Least Sandpiper.
 “ 8—*Zonotrichia leucophrys*, White crowned Sparrow.
 “ 8—*Zonotrichia albicollis*, White-throated Sparrow.
 “ 8—*Spizella socialis*, Chipping Sparrow.
 “ 8—*Regulus satrapa*, Golden-crested Kinglet.
 “ 8—*Regulus calendula*, Ruby-crowned Kinglet.
 “ 9—*Falco sparverius*, American Sparrow Hawk.
 “ 11—*Passerella iliaca*, Fox Sparrow.
 “ 11—*Chen caerulescens*, Blue Goose.
 “ 16—*Tringa fuscicollis*, White-rumped Sandpiper.
 “ 16—*Lanius borealis*, Northern Shrike.
 “ 19—*Melospiza fasciata*, Song Sparrow.
 “ 21—*Crymophilus fulicarius*, Red Phalarope.
 “ 23—*Spizella monticola*, Tree Sparrow.
 “ 23—*Sturnella magna*, Meadow Lark.
 “ 23—*Actitis macularia*, Spotted Sandpiper.
 “ 23—*Gallinago delicata*, Wilson's Snipe.
 “ 23—*Dendroica coronata*, Myrtle Warbler.

- Oct. 23—*Sialia sialis*, Bluebird.
 “ 23—*Junco hyemalis*, Slate-coloured Junco.
 “ 30—*Gallinago delicata*, Wilson's Snipe.
 Nov. 1—*Ceophlæus pileatus*, Pileated Woodpecker.
 “ 5—*Clangula hyemalis*, Old-squaw.
 “ 18—*Merganser americanus*, American Merganser.
 “ 18—*Sitta carolinensis*, White-breasted Nuthatch.
 “ 19—*Plectrophenax nivalis*, Snowflake.
 “ 19—*Pinicola enucleator*, Pine Grosbeak.
 “ 22—*Accipiter atricapillus*, American Goshawk.
 “ 23—*Accipiter velox*, Sharp-shinned Hawk.
 “ 25—*Surnia uhula*, Hawk Owl.

GEO. R. WHITE, }
 J. M. MACOUN, } *Leaders.*

10th March, 1887.

—:o:—

ANNOUNCEMENTS.

The Soiree Committee is arranging a programme for the winter meetings, and requests contributions of papers or notes from the members; titles to be communicated with as little delay as possible, so that the programme may appear in the next number of the Ottawa Naturalist.

— — — — —

International Tent and Awning Company,

184 Sparks Street, Ottawa.

Manufacturers of Tents, Camp Furniture, Awnings, Window Shades, Plain and Decorated Curtain Poles, Curtain Chairs, Flags of all Nations, Waterproof Horse and Wagon Covers, &c., &c., on hand and made to order in any size or style on short notice.

NOTICE—Special Discount to Lumbermen, Contractors, and other large Buyers.

Send for Prices. Catalogues Free on Application

Address, **A. G. FORGIE,**

Manager

International Tent & Awning Co.

TELEPHONE CONNECTION.



NOV 1 3 1886

HENRY WATTERS,
 Chemist and Druggist,
 Corner of Sparks and Bank Streets,
 OTTAWA.

KNABE

Grand, Square and Upright
PIANO-FORTES.
 These Instruments have been before the Public
 for nearly fifty years, and upon their excellence
 alone have attained an Unpurched Pre-eminence
 which establishes them as UNEQUALLED in
 Tone, Touch, Workmanship and Durability.
 Every Piano Fully Warranted for Five Years.
J. L. ORME & SON,
 SOLE AGENTS, OTTAWA, ONT.

C. ROSS & Co. are offering this month a very large assortment
 of New Saxony Costume Cloths, specially adapted for nice Spring Suits,
 at the low price of 25c. per yard.

A beautiful selection of Dress Silks is being offered at 75c per yard.

Two large lots of Black Satin Rhadames, at 75c. and \$1.25 respec-
 tively, are well worth the attention of buyers; they are very cheap.

Samples will be sent, on application, to those living in the country.

C. ROSS & CO.

BOOK LIST.

Studies of Plant Life in Canada, by Mr. C. P. Trull.	
Illustrated with coloured lithos from drawings by Mrs. Chamberlin	\$3.20
Our Arctic Province, Alaska and the Seal Islands, by Henry W. Elliott	5.00
Myths and Marvels of Astronomy, by R. A. Proctor.	2.40
Bananak: the Age of Fire and Gravel, by Ignatius Donnelly	2.40
Manual Training, the Solution of Social and Indus- trial Problems, by Chase H. Ham	5.25
Men of the Reign: a Biographical Dictionary of Emi- nent Persons of British and Colonial Birth who have died during the Reign of Queen Victoria	5.25
A Popular History of Astronomy during the Nine- teenth century, by Clarke	4.80
The English Parliament, in its Transformations through a thousand years, by Dr. Rudolf Giesel ...	4.00
Methods of Historical Study, by Edward Freeman ...	3.00
The Railways of the Republic, by J. F. Hudson	2.10

J. DURIE & SON, SPARKS ST., OTTAWA.

G. W. McCULLOUGH,
 ALL RAIL
 Anthracite & Bituminous Coal
 RUSSELL HOUSE BLOCK.

R. J. DEVLIN,
 HATS AND FURS.

THE LARGEST STOCK OF
CHILDREN'S CARRIAGES
 IN THE CITY AT
BUTTERWORTH & CO.
 110 SPARKS STREET.

A. J. STEPHENS,
FINE SHOES,
 102 SPARKS ST.
Boots and Shoes Made to Measure.

M. M. PYKE,
 MEN'S OUTFITTER,
 99 SPARKS ST.,
 OTTAWA, . . . ONTARIO.

OTTAWA LADIES' COLLEGE
 For terms apply to the
 PRINCIPAL, - - REV. W. D. BALLANTYNE.