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THE OTTAWA NATURALIST.

VOL. XVI.

OTTAWA, OCTOBER, 1902.

No. 7.

ON THE GENUS *TRIMERELLA*, WITH DESCRIPTIONS
OF TWO SUPPOSED NEW SPECIES OF THAT
GENUS FROM THE SILURIAN ROCKS
OF KEEWATIN.

(With two plates.)

By J. F. WHITEAVES.*

In the summer season of 1901, Mr. D. B. Dowling, of the Geological Survey, made an interesting and somewhat large collection of fossils from limestone exposures at five different localities on the Equan River, and at Sutton Lake. The Equan River, it may be mentioned, is the first river north of the Attawapishkat, with which it flows, almost parallel, into the west side of James Bay; and Sutton Lake is the source of Trout River, which empties into the southern portion of Hudson Bay, as does also the Severn River. These fossils have not yet been exhaustively studied, but enough is known about them to show that the rocks from which they were collected belong to the Silurian, as distinguished from the Cambro-Silurian or Ordovician system, and that they are probably of about the same age as the Guelph formation and Niagara limestone of Ontario. They show, moreover, that the limestones and dolomites of the Attawapishkat River and of the Fawn Branch of the Severn River, that were formerly thought to be Devonian on the evidence of a few fossils collected by Dr. R. Bell and Mr. A. P. Low in 1886, belong also to the Silurian system, and that they are of precisely the same age geologically as the Equan River limestones. They include some species that are found also in the Silurian limestones, etc., of Port Daniel and

*Communicated by permission of the Acting Director of the Geological Survey of Canada.

L'Anse à la Barbe, in the Baie des Chaleurs, and in Division 4 of the Anticosti group of Anticosti.

Among these fossils from the Equan River there are seven specimens that obviously belong to the genus *Trimerella*. This genus was constituted by E. Billings in 1862 for the reception of two remarkable species of fossil brachiopoda from the Guelph formation of Ontario. The specimens upon which it was based are a few imperfect casts of the interior of one or both valves, from Galt, Hespeler and Elora, and even now specimens with any considerable portion of the test preserved are quite rare in Canada. The genus was recognized in the Silurian rocks of Gothland by Lindström in 1867, also in those of Ohio by Meek in 1871, and it has been closely studied by many palæontologists. In 1872 Davidson and King made it the type of a new family, which they called the Trimerellidæ, and in 1874 published a comprehensive illustrated memoir thereon in the Quarterly Journal of the Geological Society of London. This family belongs to that large section or Order of the brachiopoda known as the Inarticulata, in which the hinge line has no interlocking teeth, and is believed to be most nearly related to the Lingulidæ on the one hand and to the Obolidæ on the other. The latest detailed information in regard to the Trimerellidæ is contained on pages 30 to 46 of Volume VIII, Part I, of the Palæontology of the State of New York, by Professor James Hall and Dr. John M. Clarke, published in 1892.

As now understood, the family consists of four genera, viz., *Trimerella*, *Monomorella*, *Rhinobolus* and *Dinobolus*. In Canada *Dinobolus* has been found only in the Black River limestone, and the other three genera only in the Guelph formation. Up to the present date seven species of *Trimerella* have been described, five from the Silurian rocks of North America, and two from rocks of similar age in the islands of Gothland and Faro in Sweden. Specimens of each of the five North American species have been found in the Guelph formation of Ontario, and the types of four of them are from that formation and province. The seven specimens from the Equan River that are referable to this genus seem to indicate or represent two species that are distinct from any of

those that have previously been described, and that may be provisionally named and characterized as follows :

TRIMERELLA EQUANENSIS (Sp. nov.).

Plate II, figs. 1 & 2, and Plate III, fig. 1.

Shell rather large, attaining to a length of upwards of three inches. Pedicle valve flattened somewhat obliquely, most convex and deepest at a short distance from the beak, nearly as wide as long, broadly rounded in front, more narrowly rounded at the sides, and obtusely pointed behind, the umbo and beak being moderately produced, their lateral margins meeting at an angle of about 98° , and the beak gently incurved. Characters of the interior of this valve unknown.

Brachial valve regularly but moderately convex, most prominent externally at or about the midlength, a little wider than long, broadly rounded in front and less so at the sides, as in the pedicle valve, but abruptly contracted at the umbo, which is narrowly rounded and but slightly produced, while its beak is strongly incurved and recurved. Casts of the interior of this valve are marked with a longitudinal, linear, median groove, that represents the median plate and that extends from the umbo almost to the front margin, also with a lateral and slightly divergent linear groove, on each side, that extends from the umbo to a little beyond the midlength.

Surface of both valves marked only with a few distant concentric lines of growth.

Falls of the Equan River ; one imperfect and badly preserved specimen with both valves *in situ*, a nearly perfect pedicle valve, three imperfect brachial valves with most of the test preserved, and a cast of the interior of a large brachial valve.

Judging by these specimens, this species would appear to belong to the group of *T. acuminata* rather than to that of *T. grandis*, though it seems to be always much shorter and wider than *T. acuminata*, *T. Ohioensis*, or *T. Lindstræmii*. The marginal contour of its brachial valve is not very unlike that of *T. Lindstræmii*, but in the latter this valve is represented as flattened anteriorly to the umbo, and its pedicle valve has quite a different

outline, the umbo being proportionately broader laterally, and the beak straight rather than incurved.

TRIMERELLA BOREALIS, (Sp. nov.).

Plate III, figs. 2 and 3.

Shell unknown; cast of the interior of both of the closed valves small, compressed, not far from circular in marginal outline, but a little wider than long.

Supposed pedicle valve (Fig. 3). On the cast of the interior of this valve there are five linear grooves, of unequal length, that radiate forward and outward from the umbo. The middle one, that corresponds to the median plate, extends as far forward as a little past the midlength, the two next to it, on either side, are a little shorter, and the two outer ones shorter still.

Supposed brachial valve (Fig. 2). On the cast of the interior of this valve there are two flattened conical casts of the platform vaults in the umbonal region, and between them there is a median, longitudinal linear groove, that is, however, widest posteriorly and that represents the median plate. Each of these casts of the platform vaults is bounded externally by a short but deeply impressed linear groove, and the groove that represents the median plate extends from the umbo to within a very short distance from the front margin.

The only specimen collected is not sufficiently perfect to admit of exact measurements, but the two figures are of the natural size.

Equan River, first rapid; one imperfect and slightly distorted cast of the interior of both valves.

The specimen would seem to indicate a much smaller species than the preceding, with different markings on the interior of at least one of its valves, and a much less produced umbo on the brachial valve. It can scarcely be mistaken for any other American species of *Trimerella*.

EXPLANATION OF THE PLATES.

Plate II.

- Fig. 1. *Trimerella Equanensis*. Outline of a brachial valve with part of the test preserved, partially restored and slightly reduced in size. The vertical line to the left shows the actual length.
- Fig. 2. *Trimerella Equanensis*. Outline of a cast of the interior of a large brachial valve, slightly restored and reduced a little in size. The vertical line on the right shows the actual length.

Plate III.

- Fig. 1. *Trimerella Equanensis*. Outline of a nearly perfect pedicle valve, slightly restored and reduced in size. The vertical line on the left shows the actual size.
- Fig. 2. *Trimerella borealis*. Outline of the supposed dorsal side of a cast of the interior of both valves, showing the impress of the brachial valve. Of the natural size and slightly restored.
- Fig. 3. *Trimerella borealis*. Outline of the presumably ventral side of the same specimen, showing the markings on the pedicle valve.

Ottawa, Aug. 22, 1902.

NESTING OF SOME CANADIAN WARBLERS.

By WM. L. KILLS, Listowell, Ont.

THE MYRTLE WARBLER (*Dendroica coronata*).

The myrtle warbler—known also as the yellow-rump warbler—is among the first members of its family to return to Canada when the winter is over, and the advancing spring-time is renewing the vegetation and insect life in our fields and the remnant of our forest lands. And, again, in the autumn, when the harvest season is over and the chilly western winds and night-frosts herald the approach of winter, it is noted to be, with the palm-warbler, among the last of its family to affect the orchard, the garden and the margins of the woods with its presence and its notes; and not until some pretty severe frosts have occurred does it take its final departure for the year towards its tropical winter home, and we note it no more till the early days of the following May, and these facts, with others in its life-history, show it to be among the members of its family that advance the furthest towards the north to find a summer-home and a nesting place. In the early period after its arrival, it is sometimes quite abundant in our locality and may then be noted gleaning in the tallest trees of our woods, sometimes in isolated groves, and again in the thickest forest, and as the season advances and the buds and blossoms of the fruit trees expand into leaves and flowers, it occasionally visits the environs of human habitation both in the rural districts and the vicinity of villages and towns, and a few remain and nest in suitable locations, but the majority wing their way further to the north where they find more congenial breeding-places and perhaps more suitable and abundant food; and from here they begin their southward departure on the first signs of approaching winter. Those few of the myrtle warblers that remain in south-central Ontario through the summer season retire to the thickest parts of low swampy woods, where there is an intermingling of soft-wood timber and conifers, and here, amid the gloom of brush wood and dense foliage, where there is seldom any intrusion of human kind, and where its presence and nesting site is not suspected, unless the song notes of the male bird betray the secret to some student

of bird life and avifaunian melody, its nest may be looked for. It is well known to every field ornithologist that each species of the warblers has its peculiar haunts, that only a few of them intermingle in the same society, and when they come in contact they evince such jealous rivalry towards each other as soon causes the different species to understand that their ways are not in harmony, and that there can be no special love between them. Sometimes, however, in a small circuit, where the conditions are favourable, a number of species may be heard, in the early summer season, intermingling their melodies. In the same thick underwood, of but a few acres in extent, may be found the nesting homes of the chestnut-sided warbler, the redstart, the black-and-white warbler, the black-throated blue warbler, the oven-bird, the Canadian warbler, and the mourning warbler, as well as other members of the family; but while the nests of some of these will be found placed in the low underwood, in trees at various elevations from the ground, or among the thick vines, others will be found sunk in the earth or in the cavities of low banks or among the roots of fallen trees. So in the same swampy woodland may be found the nests of the bay-breasted warbler, the water-thrush and the myrtle bird, and the former and the latter meet on common ground and may often be observed gleaning their insect food in the tops of the same trees, and at similar elevation, but the latter species appears to select a more lowly and considerably different situation for a nesting-place than that of the bay-breasted species. In all my wildwood rambles and oological researches, I have found but few nests of the myrtle warbler and collected but one set of its eggs, and I believe that the pleasure of finding the nest and adding its eggs to their collection, has been the experience of but few.

On the 18th of June, 1882, I discovered, for the first time in my experience, a nest of the myrtle warbler. It was in a low, black ash timbered swamp, where there was an intermingling of other soft-woods and conifers, near where I had found the nest of a bay-breasted warbler the year before, and of whose nest I was again in search, when I espied in a low balsam, about four feet from the ground, a nest with the mother bird seated upon it. At first sight this avifaunian cradle, in situation, material and construction,

appeared like that of a chipping sparrow, but when the bird flushed off on my near approach, and from a position on a branch near by watched my movements, shifting uneasily and uttering a few "chip"-like notes, I carefully noted her plumage and became certain of her identity as a female myrtle warbler.

This nest contained four eggs, quite fresh, though the bird had begun to incubate, and these, with the nest, are still (1902) in my collection. The ground colour of these eggs is a clear white clouded with a wreath of reddish-brown on the larger end, but there is scarcely a dot on the rest of the surface. The nest itself was composed of stalks of dry weeds, fibres of bark, rootlets and hair from the tails of horses or cattle. Near by, in another low balsam, was an old nest of the same species which had doubtless been occupied the previous year. The next summer I saw another complete nest of this species, but it contained no eggs. This was placed in the top of a small bushy blue-beech underwood, five or six feet high, and situated in a piece of swampy bush land. Since then I have noted this species only as a spring and autumn migrant, though I believe that some of them still nest in the swampy woods of this vicinity. Some of the species are occasionally noted here as late as the last week of October. The myrtle warbler is found to be an abundant summer resident of British Columbia, but as yet has been found chiefly to the west of the Cascade range of mountains. Like all the other species of the warblers it has its particular haunts and home, especially in the nesting period, and the student of avifaunian life who desires to examine the nest and eggs of this species in a state of nature, will be much assisted in the accomplishment of that object by a previous knowledge of the habits of the bird. Deep, high-timbered forests, rolling prairies, open woods, and the surroundings of human habitations, though occasionally visited, are not selected by this bird for a summer home or a nesting-place; but where the muddy brook wends its slow course through a brushwood dell, in swampy thickets, near stagnant pools, where there is an intermingling of various species of soft woods with evergreens, are the places most likely to be affected in the nesting period by the presence of this bird, and many such places exist in the valleys and among the foothills of the southwestern portion of

this land of the evening sunshine, and in some low, thick, leafy underwood or dwarf conifer its nests will be found. The fact that this species is observed to feed much on the fruit of the myrtle tree, especially at the period of the autumn migration, appears to be the reason why it has received the name of the myrtle warbler. The particular kinds of insects on which it feeds are no doubt partial to the vegetation in the localities that it usually frequents, and the fact that certain kinds of insect infest the foliage and bark of certain species of trees that grow only in certain soils, is no doubt the reason why certain varieties of birds that feed specially on those certain kinds of insects, are found only in those locations where such particular woods and their insect parasites abound.

The myrtle warbler was among the few species of the warblers noted by Audubon when he visited the coast of Labrador in the summer of 1833, and it has been traced across the continent, south of Hudson Bay, to the foothills of the Rocky Mountains, and among these to the wave-washed shores of the Pacific Ocean; and we note it on the list of the warblers in the new territory of Yukon. Nelson, in his report of the birds of Alaska, says, regarding this species: "It is a woodland species, and makes but very short stops along the inhospitable coast, but hastens to more congenial localities in the interior, where it rears its young. In the autumn migrations it hastily seeks its more southerly haunts and rarely lingers along the bare coasts of the north, as do some of its relatives."

Turner also speaks of this bird as being found at Fort Yukon, where it breeds, but they inhabit only the wooded portions of the district. It was also found to be quite abundant among the willow thickets on the river banks at Bristol Bay.

Some notes on the nesting of this warbler from my pen were published in the *Canadian Sportsman and Naturalist*, 1882, and some years afterwards a more ample account was contributed to *The Ornithologist and Oologist*, published in Boston. From this article Prof. Davie, in his fourth edition of "The Nests and Eggs of North American Birds," makes quotations, and from this work Mr. Thomas McIlwraith makes extracts in his second edition of "The Birds of Ontario." In his recently published articles on "Birds of the Garden," and "The Birds of Ontario in Relation to

Agriculture," Mr. C. W. Nash, of Toronto, gives some interesting notes on the myrtle warbler, and to these we refer the reader.

The myrtle warbler is between five and six inches in length, and, in his spring plumage, the colours of the male bird are, on the upper parts, of a slaty blue streaked with black, and having some bar-blotches on the wings and tail white, the throat and under parts being pure white, with some yellow on the crown, sides and rump. The plumage of the female is much similar, but of rather a duller hue.

ZOOLOGY.

A CANADIAN TWO-HEADED SNAKE.

In the thirteenth volume of Transactions of the Wisconsin Academy of Sciences, Arts and Letters, Mr. Roswell Hill Johnson has recently published an interesting paper entitled "Axial Bifurcation in Snakes." This paper, it is stated, "contains descriptions and skiagraphs of thirteen two-headed snakes, a recapitulation of others previously described, and a concluding general treatment of this abnormality." Of the thirteen specimens described and figured therein, only one, a small double-headed snake from South America, was "found to have scales impermeable to the Roentgen rays." The specimen referred to in Mr. Johnson's paper as "Case V," and represented on Plate VIII thereof, belongs to the Geological Survey of Canada, and was lent by the present writer. It is a small two-headed garter snake, a little over seven inches in length, that was found on the shore of Moira Lake, near Madoc, Ont., by Mr. Eugene Coste, in August, 1866, and is now preserved in alcohol. In regard to this specimen Mr. Johnson makes the following remarks: "It is a *Eutainia sirtalis sirtalis*, Linn." (or, in other words, an otherwise typical garter snake). "The light dorsal stripe divides caudad to the point of division of the vertebral column. "The angle presented by the frontal planes of the two heads is nearly a right angle, that of the sagittal planes is about 70°. "The right head is slightly longer and broader than the left one."

This Canadian double-headed snake, which would seem to be the first and only one that has yet been recorded, is now and has long been on exhibition in one of the cases in the Museum.

J. F. WHITEAVES.

Ottawa, Sept. 20th, 1902.

FIELD NOTES ON THE GEOLOGY OF THE COUNTRY
ABOUT CHELSEA, QUEBEC.

O. F. N. CLUB EXCURSION, CHELSEA, SEPT. 5TH, 1902.

Several interesting geological phenomena were examined along the valley of the Gatineau River on Saturday afternoon September 6th, 1902.

Along the western side of the falls and rapids at the Island east of Chelsea Station on the C. P. R., the Archæan crystalline rocks consist for the most part of irregularly broken and shredded bands of rusty gneiss, whose strike was almost directly east and west, and at right angles to the course of the river, through which were injected several dykes of coarsely crystalline granite affording excellent examples of graphic granite, micropertthite and pegmatite. These are evidently of later date and origin than the foliated gray shredded gneisses. The water of the falls and rapids tumbles from a hard ledge of finely twisted and banded hornblende gneiss on a softer band of pyroxenite with numerous crystals of mica, mostly biotite, in which are segregated veins of quartz with fibrous hornblende and hematite. Molybdenite crystals were elsewhere observed in masses of rock from this latter band and collected by members of the Club and of the Normal School.

Several pot-holes occur in the softer pyroxene rock of the bottom of the falls showing the erosive action of streams carrying detrital matter in their rushing waters. One of these was fully four feet in depth. The river bed is for the most part rocky at this point. At different levels, however, below high-water mark the geological party observed recent accumulations of sand, gravel and boulders along the shores and on the rocky surfaces of the river bed, which, at this time of the year, are exposed on account of the low water. Accumulations of sands arranged concentrically to the shore line are found in the bays of a semicircular shape and usually at the foot of a prominent ridge which extends into the river and on the lower side of the ledge forms an eddy by the rapid and suddenly arrested flowing waters. The sorting power of water was well exemplified in the different accumulations of sand observed. Not less than five zones or series of sand bands were seen at different levels above low water mark, in which the materials

which composed the sands were clearly seen to be arranged in order of specific gravity, the heaviest at the bottom of the series and the lightest at the top. Thus it was ascertained upon examination of a small bay about 200 yards above the last fall and rapids of the Gatineau at the Island, that the upper sand consisted almost exclusively of fine rounded grains of pure quartz, well sorted and free from impurities, whilst the lowest consisted of numerous grains of magnetite or other ores of iron in the shape of minute crystals, besides other impurities, hornblende, mica, garnet. The intermediate series of sand materials was of a decided gray colour, the lowest being dark in colour, whilst the uppermost sands were of a light yellowish colour, and the grains almost exclusively quartz.

In the band of hornblendic gneiss above the falls were noticed aggregations of the jet black variety of hornblende. This is the rock which has often been collected from the Gatineau valley and brought to Ottawa for examination as coal. It might, from its brilliant black lustre and general appearance, be termed the "Gatineau coal."

Several pot holes were also observed in the harder rocks of the upper portion of the falls, but these were comparatively shallow. In the bottom of one, eleven inches deep, was a mass of gravel and rusty sand five inches deep; the largest pebble was about three inches and a-half in length and two inches in its greatest thickness. Many of the rock surfaces of the river bed now exposed at low water were polished quite smooth by the rushing waters charged with sand, gravel or similarly hard, gritty and rocky detrital matter.

Near the head of the island were seen partially dissolved crystals of light pink coloured orthoclase felspar, held in a paste of somewhat darker coloured pink pegmatite, which appeared as rounded masses resembling plums in a pudding, and giving the whole the appearance of a conglomerate. These crystals vary in shape and size from a few millimetres to four centimetres in diameter. The rock has also a spotted appearance.

Among other phenomena observed and discussed on the spot, in the course of an examination of the rocks of the district about Chelsea, there were noted the well-marked raised beaches and

terraces across the Gatineau river, on the east bank opposite Ironsides. These are conspicuous features in the landscape and are seen to great advantage at the present railway flag station. Four of these terraces are clearly discernible from the station. These terraces correspond to other terraces at practically the same elevations on the west side of the Gatineau River valley, forming the raised beaches which of late years have been subjected to such great denudation. Numerous valleys have recently been formed, and were carved out of the soft marine clays of the Green's Creek formation. This process is still going on, and the young streams are cutting out their beds to a lower level. The growth of the young forest of pines, maples and poplars which has taken place since the great forest fires of 1874, is doing much to preserve the land from erosion and denudation, which would level it down and carve it out even more conspicuously during present times. The bare and denuded aspect which the clay hills presented years after the great forest fire, without sign of plant life upon them, has been replaced by a vigorous growth of trees not very dissimilar from those which the old marine terraces supported fifty or a hundred years ago. If not destroyed by fire this young pine forest will be of great value in the future.

No fossil organic remains were found at any point during the afternoon's outing, but the marine clays and sands of the railway cutting about a mile north of Chelsea station afford fine examples of marine fossil shells of the Pleistocene age, among which may be noted:—*Saxicava rugosa*, *Macoma balthica*, *Leda (Portlandia) arctica*.

H. M. AMI.

Ottawa, Sept. 7th, 1902.

REPORT OF THE ORNITHOLOGICAL BRANCH OF THE
OTTAWA FIELD-NATURALISTS' CLUB FOR
1901-1902.

The report of the Ornithological Branch is comparatively brief, as the notes taken and records made during the year have been to a large extent published in *THE NATURALIST* and are thus already known to the members of this society. Although it is a matter of regret that more active work is not done by our local members, it cannot be said that less has been done than in previous years; but while those living at or near Ottawa have done little more than in previous years, outside members by their work and writings have done much more than in the past to make ornithology a prominent feature of *THE OTTAWA NATURALIST*. The valuable papers contributed by Mr. W. E. Saunders, London, Ont., are deserving of special mention, and the thanks of this committee are tendered to him and others for the stimulus they have given to the delightful study of bird life. Mr. Saunders' lecture on "Native Birds; their characteristics and habits," will also, we believe, do much towards awakening that love for the "Pretty feathered poets of the grove," which everyone must have, did he only know it. Others outside this city who have contributed ornithological papers during the year are: Mr. W. L. Kells, Listowel, Ont.; Mr. H. Gould, London, Ont.; Dr. G. A. McCallum, Dunnville, Ont.; Mr. L. H. Smith, Toronto, Ont.; Mr. Allan Brookes, Penticton, B.C.; Mr. R. C. Scott, Aylmer, Ont.; Mr. W. H. Moore, Scotch Lake, N.B.; Mr. R. Elliott, Bryans-ton, Ont.; Mr. R. Boutelier, Sable Island, N.S. As the titles of the papers contributed by the above may be found in the index of *THE NATURALIST*, it is unnecessary to mention them here.

Last year, as in previous years, all the local members who made bird notes were asked to send them to the ornithological editor for compilation and publication in *THE NATURALIST*, as by this means the earliest records (in the case of the arrival of birds) could best be obtained. This was done, and as a result the dates of arrival of 107 species were published and notes on about 20 more species were received which have not yet been published. A large

proportion of these notes were furnished by Mr. Geo. R. White, who continues to do excellent and systematic field work.

During the spring, Mr. W. E. Saunders and Dr. J. Fletcher arranged with several observers in different parts of Canada and one in Michigan, to have them send in their notes to the ornithological editor of THE NATURALIST for compilation; the object being to have a table in which could be shown the comparative dates of arrival of birds in different parts of the country. This was done and the tables were published. Those who contributed notes were: Mr. Alex. Gow, Windsor, Ont.; Mr. W. E. Saunders, London, Ont.; Mr. J. Hughes Samuel, Toronto, Ont.; Mr. W. P. Mellville, Sault Ste. Marie, Mich.; and Mr. L. McL. Terrill, Robinson Bury, P.Q., and Ottawa members. Unfortunately some of the observers were evidently not very regular in their observations, and the dates of arrivals of some birds may be misleading in some cases. It has not yet been decided whether this co-operative work will be carried on again this year or not.

W. T. MACOUN.

A. G. KINGSTON.

MISS HARMER.

C. GUILLET.

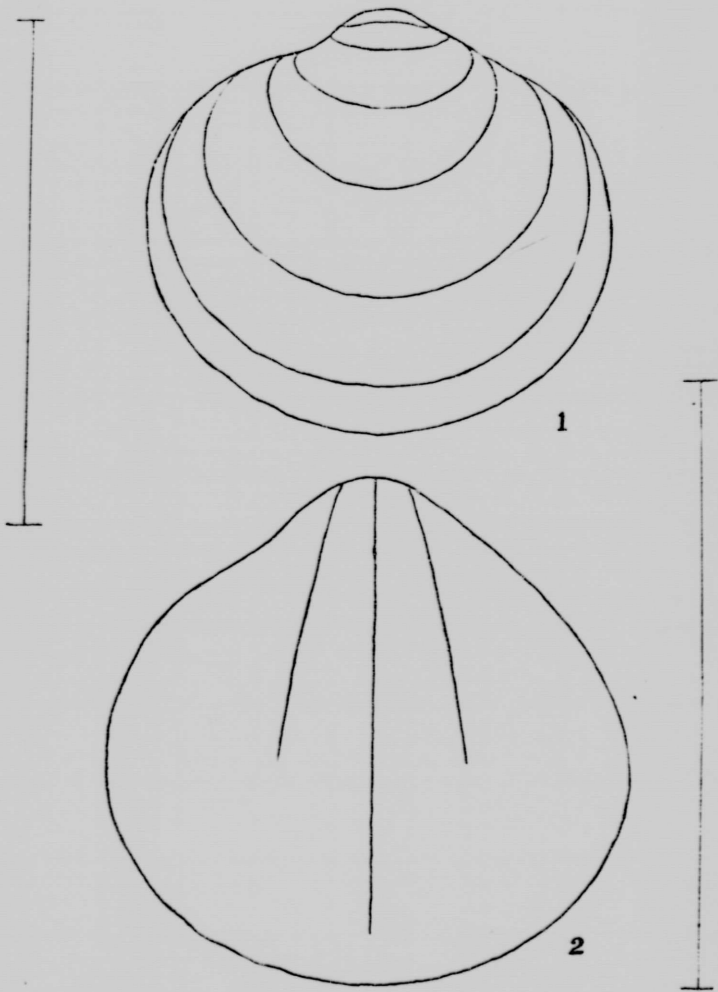
EDIBLE FUNGI.—The dry weather previous to the last week was not favorable to fungi growth and before the end of September few edible fungi of any kind could be procured. The true mushroom, *Agaricus campestris*, is not yet very abundant, and *Coprinus comatus*, usually so plentiful in many places about Ottawa, is seldom met with. The only species which can be collected in large quantities at the present time is *Marasmius oreades*. The golf links and the lawns at the Experimental Farm are the best places to look for this delicious fungus. At both places the dark-colored rings that denote its presence can be seen at many yards distance. Broiled or fried with butter its flavour is more delicate than that of the common mushroom.

Oct. 4th.

J. M. M.

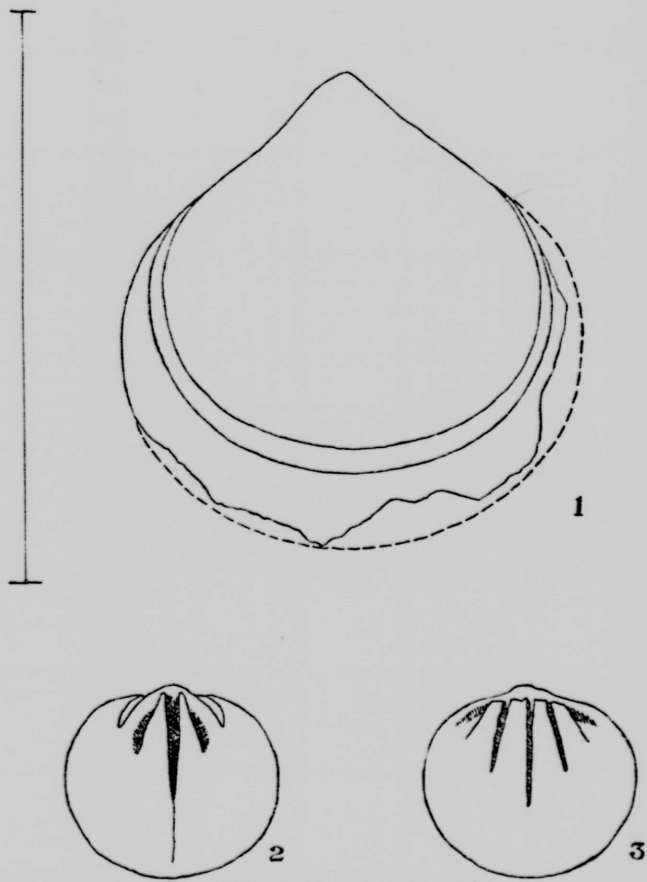
EXCURSION TO CHELSEA.

A successful general excursion of the Club was held on Saturday afternoon, September 6th, when a party of about 150 consisting of the members of the Club, and of students attending the Normal School under the leadership of Dr. Sinclair, went to Gilmour's grove, at Chelsea Rapids and spent a most enjoyable and profitable day. On arriving at the Chelsea station Dr. Fletcher announced what the arrangements for the day were and the whole party then walked down to the island where unnecessary impediments were disposed of and the collecting parties made up. Dr. H. M. Ami took a number of enthusiasts off to examine the rocks and other geological features of the locality. Mr. J. B. Halkett had a numerous following of attentive listeners during the whole afternoon while he pointed out and described the interesting features of the many and various specimens of insects, reptiles, crustaceans, mollusca, and other animals met with. Dr. Fletcher had a large party of botanists and lovers of plants who made large collections and asked many questions which were answered in the field and illustrated by living specimens of plants. At 6 o'clock the addresses were delivered in the open space in the grove near the station and were of much interest. The first address was by Dr. Sinclair who kindly undertook the arrangements for the day and discharged his duties in a gracious and most acceptable manner. Every contingency was provided for and by reason of his forethought it is safe to say that every person who attended this outing enjoyed to the utmost their visit to this beautiful and most interesting spot. Following Dr. Sinclair, and speaking on the most important finds of the day in the different branches of natural history, short addresses were delivered by Messrs Halkett and Fletcher. Dr. Ami had to leave before the lectures, but those who accompanied him during his afternoon ramble were so much pleased with his explanations of the various outcrops that we have followed the suggestion made and asked Dr. Ami to prepare a short note on his observations which is published elsewhere in this issue.



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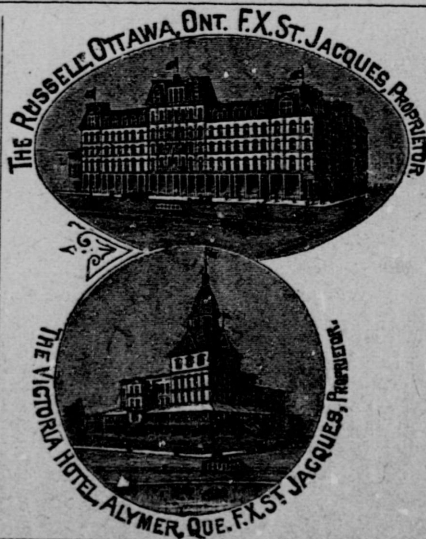
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