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SEPTEMBER, 1897.

VOL. XI, No. 6.

THE OTTAWA NATURALIST.

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THE OTTAWA NATURALIST.

VOL. XI.

OTTAWA, SEPTEMBER, 1897.

No. 6.

FILARIA OCULI—PARASITE IN THE EYE OF A HORSE.

By DR. A. G. HOPKINS.

(Ontario Agricultural College, Guelph, Ont.)

I have been requested by Dr. Fletcher to write a short account of a parasite occasionally seen in the eye of the horse, and which I had the good fortune to examine. Quite recently, a man brought to my office a mare suffering from an affliction of one eye. The owner stated that he had noticed a bluish-white scum coming over the eye some three weeks previous, and had applied the usual home remedies. After examining the affected eye (I had to anaesthetise the patient to examine her thoroughly), I was surprised to find a thread-like parasite floating around in the eye, and white in colour. Whenever any object approached the pupil, the parasite increased its movements to a great rate of speed. I informed the owner that an operation was necessary, and on his consent being obtained laid the animal in a recumbent position and cocained the eye. In a few minutes the patient was ready to operate on. The operation was as follows: an incision was made with a small scalpel at the upper and outer corner of the affected eye, the scalpel being introduced on the flat at an angle so as to make a valve-like incision, in order to prevent the escape of the aqueous humour after the operation. After withdrawing the scalpel, a fine pair of forceps was used to dilate the wound, which done, the parasite and some of the aqueous humour were at once ejected. The *Filinia* was dead, almost as soon as it was outside poisoned by the cocaine. It was about two and one-quarter inches long and resembled a white thread.

Filaria oculi, the name applied to it, is rare in temperate climates, but is said to be common in India. The life-history of the parasite is not known, as far as I have been able to ascertain. If the operation is attempted in the early stages a cure may be effected, but in the other stages, the sight is usually destroyed.

MONDAY AFTERNOON LECTURES.

A series of four elementary lectures on Birds, Plants, Animals, Rocks and Minerals with Fossils, was delivered early in the season in the Y. M. C. A. Hall, corner of Queen and O'Connor streets, Ottawa, under the auspices of the Ottawa Field-Naturalists' Club. These lectures were undertaken with the special object in view of reaching those interested in natural science studies, and pointing out to them the best methods of hunting, collecting and preserving specimens in the various branches of natural science studies carried on by the Club.

The attendance was most gratifying, and the results accruing from them have already been productive of practical work. The lecturers who took part in this course of Monday Afternoon Lectures were :—

Prof. John Macoun, M.A., F.L.S.

Dr. James Fletcher, F.R.S.C.

Prof. E. E. Prince, B.A., F.L.S.

Dr. H. M. Ami, F.G.S.

The Club desires to take this opportunity of tendering to the authorities of the Y. M. C. A. their sincere thanks for the generous use of the hall on the four occasions referred to.

The following is an abstract of the lectures by Dr. Fletcher and Dr. Ami.

OUR SPRING BIRDS.

On May 10th, the first of the series of elementary lectures on natural history given to the school children of the city was delivered by Dr. James Fletcher in the comfortable rooms of the

Young Men's Christian Association. There was a large audience consisting of students, teachers and many of the general public. Much interest was added to the lecture through the kindness of Prof. John Macoun, who lent beautifully prepared skins of the birds mentioned by Dr. Fletcher. A simple classification of the birds found in Canada was given and delightful anecdotes of the habits of many species which had been observed during a study of twenty-three years by the lecturer. A special appeal for protection was made on behalf of the Pine Grosbeak, Wax-wings and other birds which visit us in winter time. The songs of our birds, the regularity of their migrations and the continuous delight to be found in their study were treated of in an enthusiastic manner which was highly appreciated by those present.

ROCKS AND FOSSILS.

On Monday, 31st May, Dr. H. M. Ami, one of the Leaders appointed last April by the Club, in charge of the geological section, delivered an interesting lecture on "Geology, with special reference to the Ottawa District." In the course of his remarks, Dr. Ami described, first, the leading kinds of rocks to be met with in studying the various geological formations about Ottawa. This done, he gave a careful description of the different formations, pointing out their mineral, stratigraphical and palæontological relations as seen in the field. The best and most typical exposures were then described and the localities, where the best collections of fossil organic remains might be obtained were pointed out.

Many of the students of our educational institutions present took notes on the lecture and asked numerous questions, to which the lecturer replied. The lecture was illustrated by means of diagrams on paper and on the blackboard, and also by numerous fossil organic remains illustrating the geological features of the formations met with in the Ottawa Valley.

ORNITHOLOGY.

NOTES ON OTTAWA BIRDS.

In publishing "Notes on Ottawa Birds," we hope to interest the young in the study of our birds and to assist the older members of the Field-Naturalists' Club, who have not made a special study of birds, to identify the various species when they are seen and heard. The distinguishing characteristics, the song, the nesting, and the habits of our birds will be prominent in these notes, which, with other interesting facts regarding them, will, we trust, make profitable reading.

W. T. MACCOUN.

Associate Editor Ornithology.

THE THRUSHES.—To one familiar with the magnificent songs, the "argent utterances," of our native thrushes, any plain description of them must seem entirely inadequate, and the pen of a poet should be employed, and has been, many times, in telling of these most poetic of all our Canadian forest voices. The different members of the thrush family speak one language it is true, but it is not difficult to distinguish their songs one from another. While that of the veery, which, by-the-way, is not unlike "veer-y veer-y, veer-y," may be compared to three or four rippling waves in a rapid falling gradually downwards, that of the olive-back is a cascade falling upwards, if one may speak of such a thing, and the hermit's song also rises from the first note; but the hermit begins with one clear note, followed as a rule by a brief pause, which emphasizes it; at any rate without the impetuous frothy upward rush of the beginning of the oliveback's song, and the hermit's is a clearer utterance all through more nearly reducible to musical notation. The song of the wood thrush is not likely to be confused with the other three; it is more self-asserting and less meditative, and the notes ring with a bell-like quality which the others hardly possess; then, when one is near by, a faint cluck can always be heard im-

mediately before each outburst, and usually a wheezy whispering sort of thrill immediately after it, neither of which is noticeable in other members of the thrush family.—F. A. SAUNDERS.

HERMIT THRUSH, *Turdus aonalaschkaepallasi*.—This bird is about the size of the Wilson's thrush, that is, about seven inches in total length, olive above shading to a rufous tail, which serves to separate it from all other thrushes; and below white, olive shaded on sides and tinged with buff on breast, with breast and throat marked with large dusky olive spots. It is a summer resident here, common in the hills to the north but scarcer near the city, arriving about the 3rd week of April. It usually prefers dry ground, and an elevation, at least to sing from, though in the migrations it may be found in swamps with the veery. The nest is on or very near the ground and is composed of leaves, rootlets and grass; the eggs four or five, and greenish blue in colour, without spots and hardly to be distinguished from the eggs of the Wilson's and wood thrushes except by actual experience. Its food is largely composed of noxious insects, as is that of the other thrushes, and the influence of the whole family may on this account be considered beneficial, if one excepts perhaps the robin's taste for fruit. The hermit has a peculiar call besides a song very rarely heard, which sounds as though it were a chord of two notes, a low rising whistle by which it may sometimes be recognized in the deep woods when it is not in the mood for much music, more often however one hears nothing, as the thrushes are in their habits a noiseless family, but sees a quiet large eyed bird, perched with on a twig near by, or more likely catches a glimpse of an olive-back and rufous tail disappearing among the trees.—F. A. SAUNDERS.

OLIVE-BACK THRUSH—*Turdus ustulatus swainsonii*.—This member of the thrush family is rather a difficult bird to determine in the woods. It may be described as of the size of the hermit or Wilson's thrush, of a uniform greenish olive colour,

having a distinct yellowish ring close about the eye. It can be separated from the hermit by the colour of the tail, and from the Wilson by the tint of the back and by the eye ring. It is rather a rare bird in summer, breeding near here as far as known only in the Laurentian country to the north (it has been heard near Meach's Lake) but it may be quite common in the migrating flocks, but its quiet habits and rather indistinct characteristics tend to make it inconspicuous. It arrives in Ottawa about the third week of April. Its nest will be found in a tree or bush, six or eight feet from the ground, composed of rootlets leaves and moss and containing four to five eggs of a greenish blue colour, freckled with brown in which latter feature the eggs are distinct from those of the other thrushes on our list.—F. A. SAUNDERS,

WILSON'S THRUSH, *Turdus fuscescens*—The tawny thrush or veery, as he is variously named, is nearly of the size of a blue-bird, of a uniform tawny colour above, including the tail, and white below, olive shaded on sides, with a strong fulvous tint on the breast; and sides of neck spotted with *small* dusky spots. This is perhaps our commonest thrush, arriving in our woods and swamps about the third week of April, and breeding in nearly all favourable localities about Ottawa. Its nest is on or near the ground and is composed of grass, leaves and rootlets, rather loosely put together, without the mud or clay that the wood-thrush and the robin use. The eggs are four or five in number and of a greenish blue colour, unspotted. The veery is readily distinguished from the hermit by the colour of the tail and by the small size of the spots on the breast, and from the wood-thrush by its smaller size, by the fulvous tint on the breast, and again by the spots. It is the thrush which one usually finds in summer in moist woods, and such swamps as the one between St. Louis Dam and the Rideau resound in the June evenings with its splendid song. It has a very characteristic

vocabulary besides its song, and one may often hear a veery whistling in a very human way, much as a man expresses surprise—only that the veery must indicate very much surprise indeed to rise to the pitch of excitement into which he sometimes whistles himself. He also has a low deep cluck by which the initiated may sometimes discover him in the silent wood.—F. A. SAUNDERS.

WOOD THRUSH,—*Turdus mustelinus*.—This is the largest of the thrushes proper being of the size of a robin; above it is bright tawny shading to olive on the tail, and beneath white with little or no buff shading, strongly marked on breast with large dusky spots which stand out very distinctly against the white back ground, and serve along with the size, to distinguish it easily from the other thrushes. It comes rather rarely to Ottawa, and while one or two families may often be found in summer breeding in the wood on or near the southern face of King's Mountain, and doubtless in other places, it would take a very close observer to discover many of them during the migrations, and indeed, the time of their arrival and departure cannot be at all definitely given. Their nest is in a tree, seldom more than twenty feet from the ground, and is composed of twigs, rootlets, grass, leaves and moss, with a liberal supply of clay as a foundation. The eggs are four to five in number and of a deep greenish blue colour. The wood thrush may be readily recognized either by eye or ear. Besides its song it has a distinguishing cluck and sometimes, when disturbed, a curious alarm call, consisting simply of one note uttered separately and interspersed with much twittering. This is the common New England thrush, sometimes known there as the hermit and it is to be hoped that it is really becoming commoner here, as some birds seem to be, as its song, now rarely heard, would be a welcome addition to all our bird choruses.—F. A. SAUNDERS.

BLUEBIRD,—*Sialia sialis*.—A summer resident; among the earliest of the spring arrivals appearing towards the latter part of

March or beginning of April. Nearly seven inches in length, sky-blue above, breast, reddish brown. It is a welcome bit of colour, in the dull tone of the early spring landscape. Lowell brings a familiar view of him to our minds when he says: "The bluebird shifting his light load of song from post to post along the cheerless fence." Of its song, Burroughs says: "The bluebird's note is more pleasing than most bird songs; if it could be reproduced in colour, it would be the blue of the purest sky." Its few low sweet notes are heard with pleasure by those favoured, as it is now rather scarce owing, it is reported, to great numbers being killed by severe and protracted frosts experienced in the southern states, notably Georgia, in the winter of 1895-96.

It favours a partially cleared locality and builds a loose nest well down in a hollow post, stump, or apple tree to hold the four to six pale blue eggs. It used to occupy boxes put up for its use till the house sparrow came. A few years ago a pair took possession of a robin's nest, containing two eggs, that was built on a beam under a verandah close to a railway. The robins fought hard for their home but had to give in.—GERTRUDE HARMER.

COMMON ROBIN, *Merula migratoria*.—The name "robin," given to this bird, which is really a thrush, is certainly a misnomer, and like many other popular errors, may be traced to the early settlers' habit of naming animals or birds after apparently similar forms in the land whence they came. Although much larger, there is in this case some resemblance to the robin red-breast of the Old World, the congener of which in America is the bluebird (*Sialia*). Our robin is a migrant, although stragglers are reported remaining all winter. I have never, however, got an authentic *reliable* record of such fact, and am under the impression the shrike, one of our winter birds, is mistaken for the robin. The latter is not as common as it was some years ago, owing partly to persecution by the sparrow, and partly to indiscrim-

inate slaughter and nest robbing. It is fond of orchards and it nests in trees of considerable size, mostly in a fork, the nest being bulky, rough outside, though compact, and not unfrequently lined with clay within. Its eggs, generally five in number, are greenish blue. It arrives late in March or early in April, according to the season, and leaves late in October, taking to wooded pastures and thickets prior to its final start. This bird is so well known that it needs no description.

Although its depredations on fruit trees, especially the cherry, are heavy, its splendid song and its usefulness in the destruction of noxious insects, makes amends for its fondness for fruit. At the break up of winter its thrilling notes, especially in the early morning are hailed as the overture to the great bird concert of the other feathered songsters to follow. The males are the first to arrive and in a few days the females join them.

It would be interesting to ascertain if any of these birds really remain during winter, whether such are not wounded birds, or incapacitated in some way for a long flight.—H. B. SMALL.

BIRD NOTES FOR SEPTEMBER.

Tame Pigeons Eating Chickweed.—The Common Chickweed (*Stellaria media*, Smith), is by no means a weed of frequent occurrence in Manitoba, but in some damp localities it is sometimes abundant and very troublesome. In September last, whilst staying at Manitoba House with my brother-in-law, Mr David Armit, who has charge of the Hudson Bay Post on Lake Manitoba, I had an opportunity of witnessing what I had before heard of the avidity with which tame pigeons in that locality feed upon the seed pods of Chickweed. The pods only were nipped off, and these were apparently swallowed whole. The birds seemed to spend a great deal of time on the patches of this weed which had grown most luxuriantly and was

giving much trouble in the garden. I also noticed that the plant is spreading rapidly and from its bright-green colour is becoming conspicuous along the fore-shore of the lake. The level of the garden is only slightly higher than that of the lake, and the soil is consequently very moist.

Although Manitoba House is so much farther North than Winnipeg, some plants, such as tomatoes, can be grown there with more certainty of a paying crop than at Winnipeg.

In addition to the Chickweed. I noticed that some other weeds were spreading and becoming abundant along the shores of Lake Manitoba and to some distance back into the adjacent woods. The most noticeable of these intruders were the so-called "Canada Thistle" and the Russian Pigweed (*Axyris amaran-toides*, L.) I have been watching the spread of this latter plant for some years with much interest, as I fear it is going to prove a serious pest upon Manitoban farms. It is a tall, coarse-growing, very leafy annual and is most aggressive in choking out all other plants among which it grows. It matures large quantities of seeds and has spread rapidly through the province during the last ten years. The dead stems of this plant are particularly hard and rigid, making them difficult to clear, and also giving trouble around buildings by catching snow and causing drifts.

W. A. BURMAN, *Winnipeg*.

THE ROYAL SOCIETY, LONDON, ENGLAND.

At the June meeting of the Royal Society, London, Eng., one of our members, Robert Bell, M.D., LL.D., B.A.Sc., F.R.S.C., was duly elected a Fellow of that distinguished body. Dr. Bell's certificate as a candidate for F.R.S. states that he is one of the the Assistant Directors of the Geological Survey of Canada. Has been actively engaged in the field-work of the Survey for forty years. Was concurrently Professor of chemistry and geology of Queen's University, Kingston, Ont., for five sessions.

from 1863-68 ; Naturalist and Medical Officer on the Government Expeditions to Hudson Bay, 1884 and 1885 ; Royal Commissioner on the Mineral Resources of Ontario, in 1888. He is distinguished for his services in Canadian geology, having worked over large sections of the Dominion east of the Rocky Mountains ; has made extensive researches among the Laurentian and Huronian rocks, and also in reference to glacial phenomena ; has added materially to our knowledge of the zoology and botany (more especially of the forestry) of Canada. His writings include upwards of twenty official reports, some accompanied by maps, of geological surveys between 1857 and 1896, giving the results of explorations on both sides of Hudson Bay and Straits, along the principal waters between the Upper Great Lakes and James's Bay, and of those between the Winnipeg Basin and Hudson Bay ; the first survey of Lake Nipigon, geological surveys of the Canadian shores of Lakes Ontario, Erie, Huron and Superior, and in the North-west Territories and the Athabasca region, the Thunder Bay and Sudbury mining districts, the Gaspé peninsula, and in other parts of the extensive regions of Canada. These reports cover about one thousand pages royal octavo. Among many additional publications may be mentioned : "The Causes of the Fertility of the Land in the Canadian North-West Territories," "The Petroleum Field of Ontario," "The Huronian System in Canada," "Glacial Phenomena in Canada," "The Geology of Ontario with Special Reference to Economic Minerals," "The Laurentian and Huronian Systems north of Lake Huron," "The Origin of Gneiss," "The Forests of Canada," "Forest Fires in Northern Canada," "The Labrador Peninsula," "Recent Explorations South of Hudson Bay," "The Geographical Distribution of Forest Trees in Canada."

Dr. R. Bell's supplementary certificate (1897, states that he has been connected with the Geological Survey of Canada for forty years, and up to February 1897, has published 135 scientific papers, reports, &c., besides abstracts of 42 others read by the author. The titles of most of these are published in the Transactions of the Royal Society of Canada for 1894.

His certificate was signed by sixteen Fellows from personal knowledge, among them being Sir Archibald Geikie, Prof. Crum-Brown, Sir William Turner, Prof. Bonney, Lord Kelvin, Sir William Dawson and Sir Frederick Abel.

FIELD EXCURSION TO CHELSEA, QUE.

PLACES VISITED—GEOLOGICAL, BOTANICAL AND OTHER NOTES OF INTEREST—ADDRESSES BY THE LEADERS, DR. FLETCHER AND DR. AMI, ALSO BY MESSRS. SINCLAIR, CLERK, BLUE, HALKETT AND ATWOOD.

Amid the bright crimson and yellow tints of a clear autumn day, the third General Excursion of the season of 1896-97, under the auspices of the Ottawa Field-Naturalists' Club was held on the 2nd October, when the district surrounding New and Old Chelsea was visited. There were one hundred and eight persons present, including a large contingent from the students of the Provincial Normal School. The excursionists left Ottawa *via* Ottawa and Gatineau Valley Railway at 1.45 p.m., reaching Chelsea Station at 2.20 p.m. Returning, the party left Chelsea at 8.04 p.m., arriving in Ottawa shortly after 8.30. Among those present were: Dr. James Fletcher, Mr. S. B. Sinclair, Dr. T. J. W. Burgess (Montreal), Mr. W. H. Harrington, Mr. Halkett, Dr. Ami, Mr. Atwood, Mr. Beddoe, Mr. Pollock (Aylmer). The weather was simply perfect and the "outing" thoroughly enjoyed by all. Botanical, geological and other parties having been formed on arrival at the station, each went in its special favourite direction. Rendez-vous was given at the station for 6 p.m., and by that time most of the excursionists had returned and compared notes on the finds made during the afternoon.

In the absence of Prof. Prince, our President, the Vice-President of the Club, called the Naturalists to order and asked the various "leaders" in the different branches of the Club's work to give some notes on the specimens collected. Mr. S. B. Sinclair, B.A., was first called upon. In a very neat and happy speech, he expressed the pleasure which such an outing afforded not only in the realm of science, but also in its suggestiveness on the ideal side. Mr. Sinclair then went on to show the relations which must exist between the scientific side of our nature and

the ideal—the religious side, the side of art and literature. A love for Nature seemed to embody all these different sides and brought us in touch with the truest and best. He was followed by Mr. Blue, student from the Provincial Normal School, who spoke on some of the botanical finds made during the day. The Asters were conspicuous and other members of the family of the *Compositæ*. On behalf of the students, Mr. Blue expressed the pleasure they had experienced during the day. Mr. Clark then added a few remarks and emphasized the remarks made by Mr. Blue. His remarks were received with deserved applause.

Dr. Ami then addressed the gathering on the subject of geology. At Chelsea, both extremes in the geological scale meet. The newest or Pleistocene formations were seen to great advantage, consisting of marine sands, gravels, clays, covering or overlying unconformably over the oldest or Archæan rocks of the district. These two sets of rock-formations are the most discussed at the present day and afford a vast amount of interesting material for special study, with good prospects of making interesting discoveries and elucidating some of the intricate problems still existing in these the opposite ends of the geological scale. At "The Ravine," near Old Chelsea, the geological section had repaired, and there examined the crystalline limestones, ophi-calcites, besides micaceous and other gneisses, serpentine rocks, &c., of the district. Glacial striæ, an interesting glacial phenomenon was observed in the bed of the stream as indicating clearly the bygone period of glaciation. A glacier once descended the slope in the general direction of the present course of "The Ravine." This might be called the Chelsea Glacier.

Other glaciers existed, whose glacial striæ and other markings are clear near King's Mountain, between the main mountain massif and the spur above Dr. Bourinot's residence, above King's Mere (Humboldt Glacier). These striæ were observed at a previous excursion of the Club.

Along the Gatineau Valley, in the beds of most of the streams which discharge their waters into the Gatineau River,

especially from the west side in each of these valleys which form part of the hydrographic basin of the Gatineau River there was a glacier. Along the banks of LaPêche River at Wakefield, where the Club held excursions on more than one occasion, similar striæ occur on the hard Archæan floor; they indicate clearly the existence of a local glacier which followed the course of the Pêche River, as the direction of the glacial striæ indicate. These local glaciers were probably all united at one time with the larger and more important one, along the Gatineau Valley, which itself can be called the Gatineau Glacier. Its markings are seen all along the sides of the valley, as far as Ottawa city, near New Edinburgh and Rockliffe, especially at the latter place. Huge boulders were transported and lodged firmly and deeply into the Chazy measures of the then existing shore cliff of the Ontario side, or transported over the bluff into the country south and east of this great Gatineau glacier. It was at this time, during the Glacial Epoch, that the glaciers proceeding from the Chelsea Mountains, wended their way from a high altitude, to the cliffs north of Ottawa city, entering the areas now covered by the embayments along the shores of the Ottawa River at the Supreme Court Building, along the line of the Canal locks below, along the Governor General's Bay, where there are distinct dislocations or faults in the strata of the Palæozoic rocks there present, thus affording an easier passage, and offering less resistance to the action of the glacier coming from the north-west. The evidences of glaciation from the slopes of the Chelsea Hills to Ottawa City and over the surface of the Trenton and Utica formations of Hull and Ottawa are everywhere visible. Not only are there the usual striæ, but crescentic cross fractures are also present, chatter marks and various other markings and grooves, all well-known phenomena of ice-action.

Besides these markings observed at Chelsea, which suggest such a multitude of interesting notes on the glaciology of the

district, there were noted and obtained by the members of the Geological Section, several interesting rocks of Archæan age.

Principal Pollock, of Aylmer, an ardent student of geology, is about to devote much of his time to the study of petrographical questions in this district, and we hope to have contributions from his pen in the OTTAWA NATURALIST.

Dr. Fletcher was then called upon and spoke at length on the plants and insects of interest which were collected, observed or captured during the day. He also spoke on the birds which were seen. An interesting addition to our local flora was made in *Deschampsia flexuosa*—a species new to the *Flora Ottawaensis*. In his usual happy, entertaining and practical style, Dr. Fletcher interested the large assemblage present, so also did Mr. Andrew Halkett, who spoke on general zoological topics, and Mr. A. E. Atwood, on "Astronomy." The excursion was pronounced by all who were present as an eminently successful and enjoyable one.—H.M.A.

BOOK NOTICE—BOTANY.

"THE PLANT WORLD," Vol I., No. 1, October, 1897, "a monthly journal of popular botany"—published by Willard N. Clute & Co., Binghamton, N.Y., and edited by Dr. F. H. Knowlton, of the U. S. National Museum, Washington, D.C., together with a staff of eminent gentlemen and lady botanists—has just appeared, and affords its readers accurate yet popular notes of great interest. The editorial staff are all enthusiastic and active botanists. The style and dress of this magazine is excellent and the contents of the first number make it most attractive. The magazine is enriched with good illustrations.—H.M.A.

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NEW EXCHANGE.

"Journal of School Geography," care of Dr. Richard E. Dodge, Morningside Heights, New York City, N.Y.

THE FOREST TREES.*

Spread o'er the vast and lovely earth
 There lives a band,
 With firm feet planted in the soil,
 The product of their ceaseless toil,
 Their mother nature gives them birth
 All o'er the land.

And noiseless, working as they grow
 So tall and grand,
 They silent watch the flowing tide
 Of man's unrest, his sin and pride,
 While rich blood through their hearts will flow
 At God's command.

They clothe the plains, they crown the hills
 From strand to strand,
 In whispers low they breathe of life,
 In wailing sobs they tell of strife,
 By rivers broad and tiny rills
 Look how they stand !

They regal rule where tropic heat
 Glows on the sand,
 Their singing leaves to soul a calm,
 Their tinted greens to eyes a balm,
 Mid winter's snow they crack and beat,
 A hardy band.

With relics of a bygone race
 Who once did stand,
 Where generations toil and rest ;
 In flinty rocks all firmly pressed
 The shadowy footprint we trace
 Of Mighty Hand.

ELLA WALTON.

Ottawa, May 22nd, 1897.

*Lines written on the occasion of the May excursion of the Ottawa Field-Naturalists' Club to Chelsea.

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