ART. IV.—ON THE NORTHERN LIMIT OF WILD GRAPE VINES. BY GEORGE LAWSON, Ph. D., LL. D.

Read 14th January, 1884.

I LATELY received a letter of enquiry from Professor Blytt in reference to the Northern Limit of the Grape Vine, as bearing upon the early discovery of America by Norwegian sailors. As the exact range of our wild grapes had not been made a special subject of enquiry by botanists, and as these plants, wherever they occur, are so conspicuous as to attract the attention of persons who might overlook other plants, I requested publication of a note, for the purpose of eliciting information, in the Halifax Morning Chronicle, Morning Herald, and Acadian Recorder This brought some facts which will be found in the following correspondence. It is now published in the hope that additional information may be obtained. It is not improbable that the range of Grape Vines along the Atlantic Coast region was more extensive before the country was settled than it is now, when the best lands are cleared and the country pastured by cattle. information on this point from old records or reliable tradition would be of special interest.

AMERICAN SPECIES OF VITIS.

The proper Grape Vine (Vitis vinifera) is believed to have been originally a native of the hilly region on the southern shores of the Caspian Sea, and of the Persian province of Ghilan; but it has been cultivated by man from the earliest times of which we have record, and has thus been extensively distributed over the world. It was not known, however, on the American Continent before the settlers from Europe had brought it with them. Nevertheless early voyagers speak of finding Wild Grapes on landing on the American shores. These so-called Wild Grapes are vines very distinct in character from the old-world Grape Vine, but they nevertheless consist of species of the same genus Vitis, several of which bear, even in the wild state, clusters of well-flavoured grapes, whilst the fruit of other kinds is acid or mawkish.

V. bipinnata, which extends through Virginia to Georgia and

west to Arkansas, has a globose depressed berry, size of a pea, blackish when ripe.

V. indivisa grows in the swamps of the Southern States, west to Louisiana and Arkansas, bearing a very small, usually one-seeded berry.

V. æstivalis, the Summer Grape, grows from Connecticut to Florida and west to Arkansas, ripening its blue, pleasantly-flavoured berries in October; original of the Clinton Grape.

V. vulpina, or Fox Grape of the South, grows in Virginia, Florida, and intervening States.

V. incisa is a Prairie Plant confined apparently to Texas and Arkansas, and has black shining berries the size of a small pea.

V. cordifolia and V. riparia, which are more northern in their range, have acid fruit, which sweetens after having been touched by frost, hence they are commonly called Winter Grapes to distinguish them from V. æstivalis, the fruit of which becomes sweet as it ripens in the sun. V. riparia is said to be the original of the Delaware and Taylor-Bullet grapes.

V. Labrusca, is one of the best known species which has very large leaves, and is familiar to us in its garden forms as the Isabella, Catawba, and several other well-known American grapes. Varieties of this species are distinguished by the hairiness or woolly character of the very large leaf, and comparatively large berries.

CANADIAN SPECIES.

Only three species of Vitis extend into Canada, viz., Labrusca, cordifolia and riparia.

V. Labrusca; leaves (thick 5-7 inches) broadly cordate angular, more or less lobed, the sinuses obtuse or rounded, the under surface tomentose; berries, large globose.

V. cordifolia; leaves (thin, 3-6 in.) cordate acuminate, toothed, smooth (except on the veins), berries small.

V. riparia; leaves (thin 4-6 inches) more or less deeply divided into three lobes and incisely toothed; smooth, except on the petioles, veins and margins, which are pubescent; berries small,

V. LABRUSCA, Linn, Canada.—Pursh, Torrey & Gray. Near the Falls of Niagara.—Provancher. Extends south to Georgia and west to Arkansas and Texas.

Torrey speaks of the fruit of the wild plant as having a strong disagreeable flavour, whilst when cultivated "it is as pleasant as any of the varieties of *Vitis vinifera*." In Hooker's Flora (published so long ago as 1833) it is remarked that "two sorts are much esteemed at New York, and known under the name of 'Bland's-grape' and the 'Isabella-grape.'"

V. CORDIFOLIA, (V. vulpina, of Hook.) Shores of Lake Ontario west from Kingston; several places on the banks of the St. Lawrence, as at Thousand Islands, Brockville, La Chine, etc. Extends south through the United States to Florida and west to Arkansas.

V. RIPARIA, Mich. Canada.—Mr. Cleghorn, Mrs. Percival. Lake Huron.—Dr. Todd, extending to the south end of Lake Winnipeg in lat 50 degrees N., (Hook. Fl. B. A.)

Nicolet, P. Q., and Malden Ont.—Dr. P. W. Maclagan. Belleville, common, especially along streams.—J. Macoun. L'isleaux-Coudres.—Provancher. Some of the localities may belong to V. cordifolia. Extends through the United States south to Virginia and west to Arkansas.

Without specimens from the several localities, or careful determinations made on the spot by competent botanists, it is impossible to assign with certainty to their proper species the stations quoted for V. cordifolia and V. riparia. Dr. Englemann made a very careful examination of the distinctive characters of the N. American species of Vitis, and characterized V. riparia, as differing from its ally as follows:—"Leaves larger, usually incisely three lobed, the lobes long-pointed; panicles small, rather simple; berries larger and mostly with bloom; seeds larger, obtuse and somewhat obcordate and with an inconspicuous raphe. May, earlier than the allied species."—See Gray's Manual, fifth edition, eighth issue,—Addenda, p. 679 (January, 1868). V. cordifolia "has the berries black without bloom, the

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small seeds rounded above and with a prominent raphe."-

Englemann.

"V. cordifolia or riparia, grows, on the evidence of collections made on my former journeys, as far north as the south end of Lake Winnipeg, on the 50th parallel. I did not observe it on my late voyage, in which, indeed, I had very little leisure to search for plants, and, if it actually grows in so high a latitude, it does not produce edible fruit so as to attract the attention of the residents, who could give me no information respecting it. It is common in Wisconsin and Minnesota, with V. æstivalis."—Sir J. Richardson; Arctic Jour., II., p. 287.

CHRISTIANIA, NORWAY, 5th JULY, 1883.

Dear Sir,—My friend, Mr. J. Storm, professor of history at our university, wishes to know how far north on your coasts the wild species of Vitis (V. vulpina, Labrusca, &c.,) grow. I cannot make it out for him with the books at my disposal, so I am obliged to turn to you and trouble you with the matter. You would oblige me and my friend very much if you would be kind to let me know the northern limit of the species above mentioned in your coast districts. America was discovered some 1000 ago by Norwegian sailors, who found wild grapes at the shores and named the country after them "Vineland," which means the country of wine.

With much respect, yours,

A. Blytt,

Professor of Botany at the University.

The Honorable Judge Ritchie informs me that, when a boy, he frequently gathered wild grapes between Annapolis Royal and Bear River, and that he has no doubt he could still find the place where the vines grow.

Professor Macdonald informs me that our esteemed President, Robert Morrow, Esq., before leaving for the South, stated that he had seen a Wild Grape vine growing in a garden at Stellarton, in Pictou County, and was told that it had been brought from the neighbouring woods. Some years later, at a distance of several

miles further up the East River, he found the Grape growing wild.

My dear Professor Lawson,—In relation to your enquiry respecting Wild Grapes, I have a recollection of past days that may suggest a quarter in which that enquiry may be successfully prosecuted.

Many years ago I lent the late Judge Haliburton an interesting book that I in vain have often endeavoured to recover. Reclamation of it is hopeless now! The author was a Netherlander of intelligence, who particularly mentioned an indigenous grape seen and noted by him, of which the locality was the neighbourhood of Annapolis.

Perhaps it might be worth your while to direct the proposed enquiry to some old inhabitant of the old French capital.

Yours ever truly,

Windsor, 9th Dec., 1883.

L. M. WILKINS.

My recollection of the book and the fact referred to is distinct and you may regard it as reliable. The book was found by me among those of the Thomas family, by some of whom it was brought from Marshfield, Mass.—the ante-Revolution seat of that family—about the close of the last century.

The discovery of the author would antedate the beginning of this century.

L. M. W.

There is little doubt, I think, that a copy of the book in question is slumbering on the shelf of some Boston library. The author was not a mere traveller, but came to America on some mission for his Government.

I add a circumstance that may serve to identify:—The Book—probably on authority of a redman—indicated phonetically Niagara thus:—"Nee-a-gaw-raw."

Windsor, Dec. 11th., 1883.

L. M. W.

Bridgewater, 11th Dec., 1883.

Dear Sir,—A young Norwegian Captain just left here for Spain, told me some of their professors were to visit our land, as

he put it, in search of marks made by their countrymen long since, and a few days after I noticed in the papers that you had been consulted on the matter. My object is to let you know that there is a large rock sitting on three legs of stone, of the height of 18 inches, which I believe was put up by these old cruisers. It sits on Indian Point, near the County line between this and Queen's County. I met with it when a child, and have taken great interest in it; have frequently visited it as it puzzled me, till of late years. Should you meet those people, if you think well of it, they may easily drive to it now, but not when I used to steer my boat to where it sits. It is plainly seen from entrance of the port. Locality, Indian Point, Port Medway Harbour, Queen's County.

Respectfully yours,

E. D. DAVISON, SR.

See article on Oak Canoe, in Scientific American, Dec. 8th. I have a stone axe by which one could make quite a job at big work.

Just received a note from a friend informing of his having three stone relics, and I have quite a number, all from the Port Medway river, whilst nothing of the sort can I find about the LaHave River, but have two iron axes found in old graves, one having been buried at Wentsill's Lake, where bones and axes were wrapped in birch-bark.

There is an old burying ground and koche for dried salmon, &c., I expect.

E. D. D.

HALIFAX, N. S., DEC. 8th., 1883.

Dear Sir,—In answer to your question about "Wild Grapes," a small sized wild grape grows in abundance on some of the islands in the St. John river, about seven miles above Fredericton, N. B. I have drank the wine made from them and it is very good.

Any more information I can give, will only be too happy to do so, and remain, Sincerely,

ALEX. IRVINE KARNEY, International Hotel, City. In a subsequent letter Mr. Karney observes that Mr. Michael Mitchell, Scotch Settlement, York Co., New Brunswick, is owner of the island where the grapes grow.

LIVERPOOL, N. S., DEC. 10th, 1883.

Dear Sir,—There is a grape vine said to be a wild one growing on the farm of a Mr. Hall, on the other side of Allen's Creek, close to the town of Annapolis.

I have seen and was told it was a wild one, but it may be a degenerate vine planted by the French. Seeing your letter in the *Chronicle* of the 8th inst., I thought well to mention this one. I am very intimately acquainted with the province of Nova Scotia, but do not know of any other wild vine.

Yours, &c.,

MAX D. MAJOR.

"SAINT JOHN GLOBE," EDITOR'S ROOM, Saint John, N. B., Dec. 10th, 1883.

Dear Sir,—Wild grapes are not uncommon along the St. John River.

At Fredericton I know of several vines in gardens, which were transplanted from the woods, and some of which have seeded themselves.

Yours,

JOHN ELLIS.

Annapolis Royal, Dec. 10th, 1883.

Dear Doctor,—Answering your enquiries in the newspapers, I beg to inform you that I have known a wild grape vine within a mile or more of this town. In a ravine whose steep sides prevented culture, it flourished. It was surrounded by cultivated fields, cultivated no doubt by the French, before Nicholson's capture, a mile or more from the steep hills, now as then covered by the forest primeval.

It was very luxuriant, and, though I do not recollect eating the grapes, yet its flowers and half ripened berries I well remember. It was an object of curiosity to me, especially as proving the exactness of old LesCarbot, our most exact and homeliest historian. Without knowing, I thought it the little Fox Grape so luxuriant

on the warm south side of New England and which as a boy I knew so well—very thick skin and very tart flavor. I have no doubt it still exists, but the snow would cover it now. I hear of many other vines about here, but this is the only one I have personally seen. If you want more knowledge let me know and next spring I could send you a specimen.

B. GILPIN.

St. John, N. B., 10th Dec., 1883.

My Dear Sir,-I notice your communication in Saturday's Chronicle regarding the "Wild Grape" and its Northern Limit. Some years ago I was puzzled over the statement, in Demont's account of the discovery of the St. John River, that they noticed (in June 1604 or 5) grapes growing in profusion on its shores. For some time I was under the impression that they had mistaken some other vine for that of the grape. But I found afterwards that in fact the wild grape does grow in several places on the River St. John,—on the sandy points along its south-westerly bank at Westfield in King's County,—luxuriantly on some islands near Oak Point known as "Caton's Islands,"—a little further up and beyond this on the islands Oromoeld and Prince William. Curiously enough I have always heard of it on the south-westerly shore of the River or the Islands, never in a wild state on the northerly or easterly bank, nor can I discover it on the Kennibecasis tributary, where I have searched for it, as I have a summer residence at Lakeside near Hampton, where I am collecting these wild vines from Westfield, Greenwich, etc., with a view to amusing myself testing them as stocks on which to bud or graft some of the hardier improved varieties.

I am, Dear Sir, yours faithfully,

W. M. JARVIS.

Fredericton, N. B., Dec. 29, 1883.

My Dear Doctor Lawson,—I am in receipt of your note referring to the distribution of the wild grape in New Brunswick, but regret to say that I have little information to give upon the subject. I have gathered the fruit in some of the valleys near Fredericton, as at the Falls of the Nashwakasis, and it is quite common on the intervales and islands of the St. John River above this place, but I have never made any special notes regarding its occurrence. I think it likely that Mr. Matthew may be able to tell you something more about it, especially in the southern counties.

I am, Sir, &c.,

I. W. BAILEY.

To the Editor of the Morning Chronicle:

Sir,—In regard to Professor Lawson's enquiry about localities where the wild grape vine is found on the Atlantic coast of this part of America, I would beg to state that I have studied the botany of Prince Edward Island carefully for years and have never seen anything of this plant here.

There is apt to be a great incorrectness in the reports of unskilled observers on plants. Some species of our wild brambles which have a climbing habit, as Rubus occidentalis, might be mistaken for Vitis.

Yours,

FRANCIS BAIN.

North River, P. E. I.

The information so far obtained shows that the present most northerly points of the Wild Grape (Vitis cordifolia, or its near ally V. riparia) are the following:—

Annapolis Royal, Co. Annapolis.

West River, Co. Pictou.

St. John River, New Brunswick.

Isle aux Coudres, St. Lawrence River.