Collections of the Minnesota Historical Society. Volume 7

MINNESOTA HISTORICAL COLLECTIONS.

VOL. VII.

Minnesota Historical Society. Collections. v. 7.

Hon. J. V. Brower , COMMISSIONER.

THE MISSISSIPPI RIVER AND ITS SOURCE.

An Historical and Illustrated Geographical Record.

THE MISSISSIPPI RIVER AND ITS SOURCE.

A NARRATIVE AND CRITICAL HISTORY OF THE DISCOVERY OF THE RIVER AND ITS HEADWATERS, ACCOMPANIED BY THE RESULTS OF DETAILED HYDROGRAPHIC AND TOPOGRAPHIC SURVEYS.

BY HON. J. V. BROWER, Commissioner of the Itasca State Park, representing also, the State Historical Society.

WITH AN APPENDIX BY ALFRED J HILL, ESQ.

ILLUSTRATED.

MINNEAPOLIS, MINN. HARRISSON & SMITH, STATE PRINTERS.

1893.

THE LIBRARY OF CONGRESS

DETAILED HYDROGRAPHIC AND TOPOGRAPHIC CHART OF THE ITASCA STATE PARK AT THE SOURCE OF THE MISSISSIPPI RIVER STATE OF MINNESOTA U. S. A. Prepared under Authority of An Act of the Legislature, Approved April 20th , 1891 By J. V. Brower, Commissioner 1892

Physical Characteristics .—Extensive heights of land forming a basin, the distinct curvature of which can be best observed from Rhodes Hill or Alton Heights. Dense forests abound, interspersed with numerous lakes, streams and springs. The principal forests are of white, red, yellow and Banks pine; cedar, balsam fir, tamarack, spruce, maple, ash, elm, basswood, aspen and oak, with an unlimited growth of diamond willow. The soil is a general substratum of sand and gravel, filled with large and small boulders, covered with only a slight mould formation, such as usually characterizes a region of pine forests. The surface is particularly rough and broken, with a predominating appearance characteristic of a picturesque wilderness. The waters are stocked with northern varieties of fish; and in the forests, moose, bear, deer, fox, porcupine, otter, mink, pheasants, etc., abound. The nearest accessible points to the Park can be reached by the Northern Pacific or Great Northern railroad.

PREFATORY NOTE.

The authorities of the Government of the United States, upon the acquirement of Louisiana, then constituted in part by the territory afterwards set apart as the State of Minnesota, took steps to discover physical features at the source of the Mississippi river. The steps thus taken were continued from time to time until 1836, when the foundation

was laid for a scientific report of great value, in which was described, the principal affluent to Irasca lake.

That that scientific report, adopted as a part of the official record of a great Government, should be questioned upon untenable grounds, without a scintilla of evidence, save only the bare statement of an individual, is not, in itself, an extraordinary event; but when public records and educational interests are contaminated and a deception practiced upon the citizen, by that statement, it became a duty to eliminate from the record whatever may be found to be false, and to confirm and acquiesce in, whatever may be found to be true.

Solely upon the broad ground that geographical facts should not and must not be made subservient to the selfish and personal individual interest the present report has been made.

To follow the channel of the Mississippi-river to its utmost source in search of geographic facts, it became advisable to know of the historical record concerning discoveries from the mouth of the river so its source.

The examination of these records, co-extensive with the history of the discovery of the coast line of North America, imposed a duty requiring great care and labor. Examinations in the field at the source of the river have been accomplished with the same great care and labor, that has been exercised in the field of historical research. The results attained are combined and viii classified, in the trust that the record of this labor may be a benefit to my fellow man. In submitting the results of this labor in this volume, the hope is expressed that the facts found and recorded may outweigh the errors of judgment, which undoubtedly exist.

The formal dedication of the Itasca Basin to be perpetually used as a public state park, its legal status having been amply recognized in a grant of lands by the congress, is one of

the benefits of this examination, in advance of the publication of these results, under the official auspices of the State.

To Mr. Alfred J. Hill, who rendered most valuable service in the field of historic research, and to Mrs. Georgiana Demaray, Rev. J. A. Gilfillan, and many others, for valuable assistance and material, I owe and tender sincere acknowledgments.

J. V. B.

St. Paul, Minnesota, January, 1893.

Classification of Sub-Divisions and Contents.

Page.

INDEX TO ILLUSTRATIONS.

SUB-DIVISION FIRST. PRELIMINARY MEMORANDUM AND COMMUNICATIONS.

On the 12th day of February, 1889, the Minnesota Historical Society determined to cause a survey of the source of the Mississippi River, and for that purpose issued the following Commission under the seal of the Society:

St. Paul, Minnesota , Feb. 12th, 1889.

To J. V. Brower, Esq., St. Paul, Minn .

Sir :—Reposing especial confidence in your ability, integrity and good judgment, the Minnesota Historical Society together with other similar Societies, who may unite with us for this object, does hereby appoint and commission you to make a careful and scientific survey of Lake Itasca and its surroundings, with the view of determining by a thorough examination of the spot and of all its physical features, under all circumstances, what is the true and actual source of the Mississippi River.

We therefore request you to select such a corps of assistants as you may need to properly carry on such survey and proceed to Lake Itasca, prior to the opening of spring, to take the necessary observations with the above object.

On the completion of your survey, you will please make a report to us of the result of your investigations.

On behalf of the Minnesota Historical Society.

Henry H. Sibley , President.

J. Fletcher Williams , Secretary

[SEAL]

2

Agreeing to the requirements as stated in the Commission of the Society, a formal letter of acceptance was submitted, as given herewith, to-wit:

St. Paul, Minnesota , Feb. 27th, 1889.

Hon. Henry H. Sibley, President, J. Fletcher Williams, Esq., Secretary, Minnesota Historical Society .

Gentlemen :—I have the honor to acknowledge the receipt of the Commission of the Minnesota Historical Society, under seal, dated the 12th inst., directing me to make, on behalf of the Society, a careful and scientific survey of Lake Itasca and its surroundings, with the view of determining by a thorough examination of the spot and all its physical features, under all circumstances, what is the true and actual source of the Mississippi River.

I believe questions of importance touching geographical and historical researches, should be considered and determined regardless of individuals, and I shall most carefully endeavor to scientifically demonstrate the actual facts as I shall find them in the Itasca Basin, calling to my aid a corps of assistants, undergoing the hardships and privations of visiting the remote locality in search of the facts.

Very respectfully, Your Obedient Servant, J. V. Brower .

On the 28th of August, 1889, the Commissioner reported progress to the Society, in a formal communication as follows:

St. Paul, Minnesota , Aug. 28th, 1889.

Gen. H. H. Sibley, President, J. F. Williams, Esq., Secretary, Minnesota Historical Society .

Gentlemen :—Referring to my Commission of date Feb. 12th, 1889, directing an examination and survey of the Itasca Basin for and on behalf of your Society, I beg, most respectfully, to advise you of the progress and condition of the work at this time.

The necessary labor to properly and accurately determine the question and fulfil the requirements directed in the commission, constitutes a laborious task which may be briefly stated as follows:

First. To ascertain, by astronomical observations, the geographical position of the basin.

3

Second. To ascertain, by a system of actual levels in the field, the extent and outward limits of the water-shed, constituting the basin at the source.

Third. The establishment of a base of operations from which all measurements must be made and computed.

Fourth. The meander of several lakes by latitude and departure.

Fifth. The meander of running streams within the basin.

Sixth. The official meander of Schoolcraft Island, directed and authorized by the Hon. Secretary of the Interior, under date of Aug. 2nd, 1889, acting upon my application to the Department of the Interior dated March 19th, 1889. It has taken nearly five months time to secure this authority from the Department at Washington.

Seventh. An accurate measurement of the unmeandered portion of the Mississippi from Itasca Lake, northerly, to the meandered line of the government survey in order to correctly determine the distance from the sea, in miles, by the channel of the river to Itasca Lake.

Eighth. A line of actual levels in the field across the country from the railroad surveys of the State to Itasca Lake and up the trough of the basin which determines the elevations above the sea more accurately than with the aneroid barometer, which has been found to be very unreliable.

Ninth. The measurement of every running stream within the basin.

Tenth. Topographical examinations in the field throughout the whole extent of the basin. A necessity of no small proportion.

Eleventh. Photographic views.

Twelfth. A scenic map of the basin in perspective.1

1 Omitted for the reason that unavoidable errors appear in the final draft which cannot now be adequately corrected.

Thirteenth. A detailed hydrographic chart of the entire locality from the field notes.

Fourteenth. Detailed charts indicating particular localities and conditions.

Fifteenth. The miscellaneous labor necessarily attending a survey of the character you require, the field of operations being one hundred miles beyond the railroad system of the State, and more than thirty miles from the permanent frontier settlements.

Sixteenth. The office work placing this mass of information in proper order for the use of your Society.

4

Seventeenth. Historical researches concerning the discovery of the Mississippi and its source, co-extensive with the record of the discovery of the coast line of North America.

I commenced operations, under your commission, the 4th day of last March and I will make my detailed report to the Society in the month of December, 1889, everything complete to the best of my ability, trusting that it may prove satisfactory. The field work is well along towards completion, the necessary office work, of course, comes at the closing of operations in the field, to a considerable extent. The relatives of the late Win. Morrison

are furnishing me with a detailed memorandum of his residence near *Lac La Biche* , in 1803, and the only living relative of Henry R. Schoolcraft has promised me, by the first of September, a valuable contribution touching the discoveries of Mr. Schoolcraft, in 1832, at the source—which may constitute an interesting appendix.

Assuring you that this work shall be completely and accurately reported, and awaiting your acknowledgement of the receipt of this communication, I remain

Very respectfully, Your Obedient Servant, J. V. Brower.

At the regular monthly meeting of the Society for December, 1889, the historical researches necessary to an adequate completion of the formal report, were unfinished, and the submission of the same was, for that reason, deferred.

On the 10th of February, 1890, at the rooms of the Executive Council of the Society, the Commissioner reported all the steps taken by him. by virtue of his appointment. and submitted his formal report which treated of the subject in every point of view.

In the following chapters, this report is given entire, with material additions,1 deemed paramount in preparing the report for publication, for which purpose the same was referred back to the Commissioner by the Council of the Historical Society.

1 The report has been edited for publication by the Commissioner and includes detailed information taken from all field notes reduced, up to and including topographic examinations and surveys. which were completed in 1892, for and on behalf of the State, of which the Historical Society is a co-ordinate branch.

SUB-DIVISION SECOND. THE REPORT.

PRELIMINARY CONSIDERATIONS, GEOLOGIC FEATURES, RESERVOIR SYSTEM, MODE OF PROCEDURE.

To the Society:

With the view of determining what is the true and actual source of the Mississippi river, historical researches, detailed surveys and examinations have been made with results as noted in this report.

Sub-divided and classified, these results are respectfully submitted.

The suggestion, long since made, that “all our rivers have their source in the clouds,” might well be discussed in connection with that invisible, demonstrative cause, which creates the movement of the waters on the face of the earth, by evaporation and precipitation, without which, human life, as now constituted. would perish. The precipitation of nearly twenty-four inches of water per annum upon most portions of the earth's surface, when considered in its enormous capacity and influence, well suggests a thought of that distinctive. distributive power, which causes the precipitation.

6

The invincible rule of nature which outpours unlimited quantities of water upon a surface above the level of the sea, requires channels of exit that it may seek its level. Those channels are of greater age than humanity itself. That life is dependent upon these causes, and the effect, creates the desire to discover and know specific particulars. Within the limited sphere of a temperate zone, encircling the earth by an isothermal demarcation, the capacity for minute observation is intensified. With this intensity, there is slight cause for complaint if predominant influences tend toward the acquirement of greater knowledge, particularly so, upon disputed points. He who comes last, not always least, might well consider opportunities for conservative, unimpassioned consideration and research.
It should be his duty to inquire by what authority, under whose auspices, and for what purpose, have mankind acted in discoveries, and the true results noted will be the history of the case. In an examination for the correction of apparent error of judgment, or of

ulterior purposes, state the whole question, that he may himself be weighed in the balance in ascertaining the correctness of conclusions on the part of others.

Such are, briefly stated, an indication of thoughts entertained when the question is suggested: What is the true and actual source of the Mississippi river?

The great drainage basin of the Mississippi river extending from the Gulf of Mexico to the northern limits of the United States, and from the Alleghany range to the summit of the Rocky mountains, covers an area of more than one million square miles. The river itself is known by two principal designations—the Upper and Lower Mississippi—the mouth of the Missouri river constituting the dividing point.

7

By acceptation, if not otherwise, the Missouri river1 is considered an affluent of the Mississippi, thus obviating a consideration of the question of the length of the Missouri, in arriving at a conclusion as to the source of the Mississippi, at this time.

1 The question as to the predominance of the Missouri river over the Upper Mississippi is more particularly adverted to in other portions of this report.

Then comes the question as to what is the source of a river.

Authorities have conflicted upon this point, and in proceeding to a definite conclusion upon the question considered, *the ultimate limit of the drainage basin constituting the water-shed of the Mississippi river. farthest from the Gulf of Mexico by the main channel of the river* , shall be considered to be *the true source* . In reaching the utmost limit of that channel, particular and definite action should be taken to determine the supply of water within the bowl, from which it has its first inception. That supply must be the ultimate source, though, in the case of the Mississippi river, the flanks of the ultimate water-shed have, by nature, been formed into a semi-circular basin of irregular formation, having for its principal reservoirs, two large bodies of water, one at the pit of the basin, from which

the main stream flows, the other at the summit, at a much higher elevation, from which is drawn a constant supply, by subsidiary channels, to the reservoir below, by infiltration, percolation, seepage and perennial surface flowage, all of which is supplied by secular aerial precipitation.

Thus is formed a principal reservoir at the pit of the basin through which *all* the flowing water passes to the main stream, and an ultimate reservoir at the summit of the basin, supplying the streams and lakes below it, still above the pit of the basin. Between these two principal remote reservoirs, 8 the adjustment of the question required to he answered, rests. Thus an easy question to ask, is a difficult one to answer.

Researches as to the original formation of this ultimate reservoir system and its discovery, difficult and long delayed, have been taken up with more than ordinary care and patience, and the results, accompanied by a critical examination of the physical features of the locality, are submitted in the hope that they may prove beneficial, though not without the expectation of just criticism.

The length of the Mississippi has been carefully ascertained, and the Itasca basin is the most remote water-shed upon the main stream, from the mouth of the river at the Gulf of Mexico, the existence and conditions of the Missouri river, being more particularly hereinafter considered, upon an editing of this report for publication.

GEOLOGIC FEATURES.

Prof. N. H. Winchell, of the Minnesota State University, and Prof. Warren Upham, of Boston, Mass., (Mr. Upham visited the Itasca basin in September, 1889) have been consulted as to the geologic features of the source of the Mississippi, and from these gentlemen a general idea of geologic formations has been obtained, and to them full credit is due and awarded in furnishing a basis for opinions herein expressed, concerning the same.

All the country about Itasca lake, consists of the glacial and modified drift, the nearest outcrops of the bed rocks being eastward on the Little Boy river and southward, near Motley, on the Crow Wing river. The thickness of the prift at Itasca, may be estimated between one hundred and two hundred feet, from comparison with the similarly covered 9 drift areas of the Red River Valley,1 and all western and southwestern Minnesota, including the *Coteau des Prairies* , where the depth to the bed rocks is ascertained by wells. Over the pre-glacial surface as it has been sculptured into hills, ridges and valleys, by stream erosion before the ice age, the drift is found to be spread with a somewhat uniform thickness, but it is generally increased fifty to seventy-five or one hundred feet in its depth upon belts of specially hilly and knolly deposits, with abundant boulders, properly designated as terminal moraines.

1 The Red River of the North.

One of the most distinct morainic belts, denominated the Itasca moraine, extends with a width of five to ten miles from the Pokegama falls on the Mississippi river a little less than one hundred miles east from Itasca lake, south of Poke-game and Leech lakes, westward to the Little Man Trap and Josephine lakes and the southern arms of Itasca lake, curving around Hernando de Soto, and Morrison lakes at their outward limit, thence it bends to the northwest and north between the source of the Mississippi and the source of the Red River of the North, and continues northward between the Upper and Lower Rice lakes to Clearwater lake, from which it passes westward along the south side of Clearwater and Lost rivers, entering the area of the glacial lake Agassiz, between Maple lake and Red lake. This is the tenth in the series of moraines in Iowa, Minnesota, South and North Dakota, formed by the last ice sheet that overspread this region, marking its boundary in its maximum area, when it reached south to Des Moines, and in successive stages of halt or slight re-advance, interrupting its recession.

The Itasca moraine is an irregular, uneven, particularly rough and broken range of hills, portions of which are covered to a greater or less extent, at the summit, with large and small boulders, which extend down the slopes in less quantities near the surface. Numerous lakes abound, usually with muddy bottoms, the surface elevation depending upon precipitation, variously influenced by evaporation, infiltration and percolation to bodies of water and streams lower down the sides of this morainic formation. Stony ridge, near the Little Man Trap lake, some six miles south of Itasca lake, no doubt, is the southern border of the Itasca moraine. It consists of small ridges of till, trending from southeast to northwest, with very plentiful boulders, Archæan in character, from the northeast and north, chiefly granite and gneiss. No limestone boulders were observed, but in the vicinity of the White Earth agency and about Red lake they form a considerable portion of the drift, having been brought by glacial currents from the region of Lakes Winnipeg and Manitoba. Along the wagon road reaching from Stony ridge to Mr. Peter Turnbull's cabin on the east shore of the east arm of Itasca lake, irregularly grouped morainic hills rise on each side, especially so along the outlines of Mary valley, where they often reach the height of two hundred feet above the surface of Itasca lake, the road winding, climbing and descending over them. Many empty hollows, very properly called kettle holes. well known as characteristics of morainic deposits, are seen. Several similar hollows, but of larger area and greater depth, contain a series of picturesque lakes throughout the entire extent of the Itasca basin, the surface elevation of which ranges from one to more than one hundred feet above the surface of Itasca lake, in descending 11 order, from south to north. These lakes fill depressions of the drift. Itasca lake, doubtless, owes its existence to greater thickness of the drift in the valley at the mouth of the lake and for several miles down the Mississippi, rather than to greater prominence of the underlying rock there. But the great valley, one hundred to two hundred feet deep and two to four miles wide, in which lie Itasca lake and the Mississippi river, northward to Craig's Crossing,1 and to its rapids2 over boulders in Sec. 8, T. 144, R. 36; also the similar, but smaller, valleys of other streams, successively tributary to the Mississippi, from the south, between Itasca lake and Bemidji,3 existed as distinct topographic features

of the country before the glacial period and were then occupied by streams flowing in the same northward direction as now. It is improbable, however, that Minnesota or any part of the Northern states then had any considerable number of lakes, their condition in this respect having been like that now found in the Southern states beyond the limit of the glacial drift. Let what may be the foundations for the formation of Itasca lake4 and its placid, uninterrupted continuance with the grandest river of this continent, as its only outlet, there would be no Mississippi river at the Itasca basin, perennial in character, without the characteristic system of elevated reservoirs which nature has constructed there, supplied only by precipitation, and the reserved supply

1 Nine miles north of Itasca lake.

2 Ka-Ka-bi-Kons rapids.

3 The Ojibway pronunciation is Bem-e-jig-e-mug.

4 The physical condition of the region of the source was formerly barren, and the causes which formed the Rocky mountains and the Alleghany range constituted the Mississippi basin and features at the source. Volcanic action not at present visible there, whatever may be the indications and probable results, will not be discussed. At the date of the formation of the Itasca basin, remote, unknown and uncertain, it is doubtful if animal life could then have existed there, unless in a perturbed and perilous condition.

12 of water as gradually used as any mechanical contrivance would make it possible.

The progressive discovery of the river and the reservoir system at its source have been the subject of protracted study and research, the results of which in the light of the occupancy of the valley of the river by the governments of Spain, France, Great Britain and the United States successively, are here given, with due regard to the question of aboriginal occupancy.

THE MODE OF PROCEDURE ADOPTED FOR THE RESEARCHES, SURVEYS AND EXAMINATIONS.

The remoteness of the locality to be examined, the intricate, dismembered and scattering lines of discovery from the time the river was first seen of white men, and the gradual acquirement of a knowledge of the river from its mouth to the official survey of its source in 1875, made it desirable to trace the history of discovery and briefly to note down the facts as they have been found to exist, with a reproduction of all maps of interest or importance, to which is added occurrences happening at the source from 1875 to 1892. It was projected that a list of the maps, records, histories, journals, surveys, charts, letters, etc., which have been examined, would be made a part of this report. Inasmuch as the documents and records mentioned, Spanish, French, Italian, English, and Indian, are almost innumerable, the list would be but a burden to the record. All obtainable items, known to exist, touching the discovery of the river and its source have been considered. In the field,1 the work has

1 The survey and examination conducted for the preparation of this work, were, first, in 1888 in the capacity of a private citizen, second, as a Commissioner of the Minnesota Historical Society, and third, as Commissioner of the Itasca State Park, cheerfully responding to the terms of authority indicated in a letter from the American Geographical Society, which covers a period from 1888 to 1892.

13 been prosecuted in the manner indicated in this report. Photographic views taken from nature, are used to illustrate a few of the most interesting localities examined.

SUBDIVISION THIRD. WHAT CONSTITUTES DISCOVERY; THE SPANISH ACCOUNTS; PINEDA; ESPIRITU SANTO BAY; NARVAEZ; CABEZA DE VACA; DE SOTO; APPORTIONMENT OF CREDIT; CARTOGRAPHICAL RESULTS OF DE SOTO'S EXPEDITION; CONCLUSIONS DRAWN; DE LUNA.

Before relating the manner in which the Mississippi river became known to civilized men of European birth, a few lines are necessary as to the definition of the word *discovery* , when used in connection with the subject. Of course no stream can be seen at more than one point in the same time by the same man, nor has it ever been the case that a river, when first visited, has been explored from its source to its mouth—or *vice versa* . A less extensive acquaintance with the course of a stream, however, through one or more visits, is sufficient to entitle a man to the credit of its discovery.

Some men have in their wanderings in wild regions unexpectedly come upon a large river or other important feature of the earth's surface, and have incidentally mentioned the discovery without taking especial interest in it; whilst others have deliberately planned journeys to ascertain the truth about places whose existence had been rumored among the 15 natives, or places before visited but only partially explored. The amount of merit to be accredited to each of these two classes may be left to the casuist; for practical geographers should rather interest themselves in the acquisition of scientific truth.

Should, however, a navigator while on a coasting voyage in strange seas, find among the various streams which he passes the entry of a river which afterwards proves to be the most important of the region drained by them, and yet merely note it along with the others on his chart, without topographical sign, written description, or appropriate name by which to indicate its magnitude and draw special attention to it, is he worthy of being called its discoverer in so doing? An affirmative answer to the question would unsettle the general belief of the world on this subject.

THE SPANISH ACCOUNTS.

Unless we believe that Hibernian missionaries as early as the middle of the sixth century, or Welsh emigrants (Madoc) about 1170, discovered North America, and that, too by way of the Mexican Gulf, we may dismiss from our minds any other idea than that Spaniards were the first men of the old world whose eyes gazed upon the waters of the Mississippi

river. What Spanish man or party of men, is entitled to the credit may be considered as uncertain. A desire for geographical discovery for its own sake was a passion rarely present in the Spanish breast. When the river was first seen it was doubtless at its *embouchure* , in the manner already described, and the appearance of the mud islands and flats of the delta may not have been such as to tempt the navigator to diverge from his general course in order to explore its passes.

16

The very earliest map that can be cited as *possibly* showing the entrance of the Mississippi River is a printed one, known as the “Admiral's Map,” *i. e* ., of Columbus, which has been a subject of much speculation. Though it is well under understood to have been engraved as early as 1507, it was not actually published till 1513, when it illustrated an edition of Ptolemy. On this map can be seen, to the westward of Cuba and the peninsula of Florida, a large bay containing many islands, with streams, etc., along the shore, duly named. Away beyond the last of these names, at the southwest side of the bay, appears a conspicuous delta, through which, by three mouths, a large river empties itself into the sea. Thence the coast stretches southward without salient topography or name, till it turns and becomes the coast of South America, on which, after a space, another set of local names commences. Some writers have taken this northern topography for a representation of Columbus' Ganges, but others for the Gulf of Mexico and the Mississippi. If there be any local meaning to this delta at all, it is, it seems to me, just as likely to be intended to indicate either the Rio Bravo del Norte, or the Panuco river, put down from hearsay. In this case the River of Palms, seen at the center of the north side of the bay, may be supposed to be the Mississippi1

1 Count F. A. de Varnhagen, one time embassador of Brazil to Portugal, made a special study of the life and voyages of Americus Vespucius, the results of which were given to the world between the years 1864 and 1874. His view is that the so-called first voyage of this navigator, upon which so much doubt has been thrown, actually took place in 1497–8, but that it was made to North America and not to any part of the southern continent. He

thinks that the vessels of Vespucius, first striking Honduras, followed the Atlantic coast to the northward as far as some undetermined port (“the finest in the world”), whence they sailed to the Bermuda Islands, and thence home. This “Admiral's map,” he thinks. was compiled from much earlier ones, which had derived their information from the reports of the voyage. The River of Palms, shown on the map on the northern side of the bay, he considers to have been intended to represent the Mississippi.

Varnhagen's ideas concerning the date and scope of this first voyage of Vespucins have not met with much favor until quite recently. John Fiske, in his *Discovery of America*, 1892, has now come boldly forward in defense of them. However, he differs from Varnhagen in thinking that it was the nameless delta referred to in the text which was intended to represent the mouth of the Mississippi, and not the River of Palms.

17

In a royal dispatch, dated Burgos, 1521, there is a short account of Francisco de Garay, governor of Jamaica, telling how when he knew of the discovery of Yucatan, with its riches and beauty, he determined to send out at his own expense “four ships with good pilots, under the command of Alonzo Alvarez de Pineda, in the year 1519, with the object of searching for some gulf or strait in the main land towards Florida;1 in which expedition they went eight or nine months, but they never found it, seeing only, among other low and barren lands, the country that Juan Ponce de Leon had already discovered. They desired to coast along it toward the east, but the continuous shoals and reefs, the contrary winds and the violence of the currents forced them to turn around and to follow the direction of the coast to the west, examining attentively all the country, ports, rivers, inhabitants and the rest of the notable things until they met with Hernan Cortes, who already occupied Vera Cruz on the same coast. Arrived there, they marked the termination or limits of their discovery, which extended more than three hundred leagues, of which land they took possession for the crown of Castile. Having taken this action they turned back and penetrated a river carrying much water, at whose entrance there was a large village, where they were more than forty days, careening their ships and trading with the natives

on terms of much friendship and confidence. They ascended the river six leagues and saw forty villages on one -2

1 Where the word Florida occurs In this article without any qualification it must, be understood as meaning that country stretching all the way from New Spain on the southwest to the possessions of the Portuguese (whatever they may have been) on the northeast.

18 bank or the other. It was called the province of Amichel;1 a good land, peaceful, healthy, provided with abundance of food and fruits; its inhabitants wore many jewels of gold in their noses and ears; they were a kind people and disposed to receive religious and political instruction. Their stature varied in different provinces. In some they say that they saw gigantic people, in others of ordinary stature, and that in some were almost pigmies."

1 In 1699 the French commander, Iberville, made alliance with various native tribes of the gulf coast. Among seven nations mentioned as living to the east of the Mississippi were the Amilcou. Query: May it not have been from the ancestors of this people that Pineda, one hundred and eighty years before. got the name for this land he called Amichel?

It will be noticed that the river is not named in this brief narration, though on the outline chart which Garay sent to Spain in 1520 the entrance of an apparently large bay is seen, at about the center of the northern shore of the Gulf of Mexico, with the name of Rio del Espiritu Santo, or River of the Holy Ghost, attached to it. This river, there shown, has been thought by many writers to have been intended for the present Mississippi. Such a view, however, cannot be generally accepted when it is considered that Pineda and his people "examined attentively" all the various features of the coast, of which the delta of the Mississippi is one, and also when a certain topographical unlikeness is taken into account.

To find at the mouth of the Mississippi river a large village and a beach suitable for the careening of vessels, or to meet with forty villages on its banks within a distance of a little

more than twenty miles, is impossible of belief by any one who has ever seen that locality. The Pineda description, indeed, might be applied with more justice to the Pearl or the Pascagoula of the Mississippi Sound, or to the Mobile 19 and Tensas which empty into Mobile Bay, than to the great river itself. If it were not for the particular description of one river only in this, the first written account of any part of the northern coast of the Gulf of Mexico, for the placing the Espiritu Santo about where the Mississippi should be, and for the absence in the chart of any other stream marked enough to compete for the honor, it is doubtful if any attempt would have been made to identify the two.

EXTRACT FROM CORTES' CHART, SENT TO CHARLES V, 1520

20 It may be remarked in addition, that a map similar to the Garay chart was made by Cortes' order, apparently about the same time, and sent by him to Spain in 1520, which, instead of a mere suggestion of the entry, shows the Espiritu Santo as an extensive bay with two streams at its head reaching far inland. The shape of the bay on this map much resembles that of the Bay of Mobile as now delineated on poor maps of small scale; and, if it were intended to represent said bay, no great stretch of imagination would be required to recognize in the two tributaries emptying into its head, the Tombigbee and Alabama rivers of to-day. It may be reasonably assumed that the two charts were both compiled from information furnished by Pineda and his men. The mouth of the *P o . de Arretisos* of the Cortes map may be that of the Mississippi.

By this voyage of Pineda was the arbitrary and unnamed, line bounding the western sea in this direction, and appearing on some of the earlier maps, proved to represent a reality; and it was now definitely ascertained that at no point between the discoveries of Ponce de Leon in the Florida peninsula, and those of Cortes and his companions on the shores of the Mexican dependencies, could the supposed strait be found by which vessels were to pass to the islands of Asia.

The next expedition was the one in 1528, also fitted out by Garay, which was designed to —“conquer and govern the provinces of the main extending from the river Palmas to the

Cape of Florida." This expedition was placed under the command of Panfilo de Narvaez, "Governor of Florida, Rio de Palmas and Espiritu Santo." The unhappy fate of this party, whose destination was the farther side of the 21 region covered by the patent, is well known to the historical reader. Narvaez had employed a pilot because he professed to have been at the Palmas river and to be well acquainted with all the coast of the north; but he failed to find the harbor he knew of, and when the ships came to the main land it was on the western coast of Florida, where they had to anchor in a bay unknown to him. After a council had been held on the best thing to be done, it was decided that the main body under Narvaez's own command, "should march alone the coast until they reached the harbor, and that those in the ships should take a like direction until they arrived at the same place." Thus the land and sea forces parted and they never saw each other again. After suffering much hardship from excessive hunger and fatigue in passing through a country difficult to travel in, the former came to Apalache, an Indian town supposed to be not far from the present Tallahassee. In view of the poverty of the land, the unfavorable reports of the country beyond. and the continual war made upon them by the Indians. Narvaez determined to go in quest of the town of Aute—now generally supposed to have been situated near the modern St. Mark's—and of the sea beyond it. When he arrived at the coast nothing could be seen or heard of the ships; so he ordered the construction of boats in which to continue his journey by sea. They had but one carpenter among them, and were without tools and the materials proper for ship building, except the trees of the surrounding forests; but to this forlorn band necessity truly became the mother of invention. They erected a forge, making the bellows from horse hides; and hammered out the necessary tools from their no longer needed spurs and stirrups, and from 22 iron taken from their cross-bows and other things. The manes and tails of their slain horses provided the rigging and ropes; stones served for anchors, and out of their own shirts they made sails. In forty eight days their five vessels were completed, which, when loaded with their provisions and with about fifty men each, were so crowded that there was no room in which to move. They left the bay on the 22d of September, and coasted westward laboriously until about the 31st day of October, when they arrived at some estuaries

where they lost two of their men—afterwards heard of by the Soto forces as having been murdered by the natives. This locality has been surmised to be the neighborhood of Pensacola. The ensuing morning early, in spite of the opposition of the Indians, the boats put to sea again. Their next adventure, according to the letter composed some nine years later by the two survivors of the expedition—or rather according to Oviedo's version of it, for the original is not extant—is contained in the following paragraph:

“And our people were ahead and went two more days, at the end of which the boat in which the treasurer was arrived at a point made by the coast, behind which was a river that flowed broad and swollen from freshet; a little behind, the boat of the governor and the others anchored at some islands near by, and the treasurer went to them and made known the discovery of the river. As they found no wood with which to parch the maize they had been eating raw for two days, they agreed to enter the river, of which they took up fresh water in the sea; and on going near to it, the violence of the current at the entrance did not permit them to gain the land. While working to get to it the wind sprung up in the north, and by it and the strong current they were put 23 out more to sea. And they sailed that night and the next day following up to night time, when they found themselves in three fathoms depth, and seeing that evening many smokes on the coast, they did not dare to land in the night time, and anchored,” etc.

Nunez Cabeza de Vaca, who was the treasurer referred to, in the *Relation* that he sent to Charles V the same year, uses somewhat different words, viz.:

“We sailed that day until the middle of the afternoon. when my boat, which was first, discovered a point made by the land, and against a cape opposite passed a broad river. I cast anchor near a little island forming the point, to await the arrival of the other boats. The Governor did not choose to come up, and entered a bay near by in which were a great many islets. We came together there and took fresh water from the sea, the stream entering it in freshet. To parch some of the maize we brought with us, since we had eaten it raw for two days, we went on an island, but finding no wood, we agreed to go to the

river beyond the point, one league off. By no effort could we get there, so violent was the current on the way, which drove us out while we contended and strove to gain the land. The north wind which came from the shore began to blow so strongly that it forced us to sea without our being able to overcome it. We sounded half a league out, and found with thirty fathoms, we could not get bottom; but we were unable to satisfy ourselves that the current was the cause of the failure. Toiling in this manner to fetch the land, we navigated three days, and at the end of this time, a little before the sun rose, we saw smoke in several places along the shore. Attempting to reach them, we found ourselves in three fathoms of water," etc.

24

Now it may be safely concluded that this large river which they could not enter was one of the mouths of the Mississippi of that time, for the present small delta, judging by geological doctrine, must have been mostly built up within the three hundred and fifty years or so, since elapsed. To what point of the coast of the Gulf of Mexico they were carried, however, is unknown, but it was undoubtedly somewhere within the limits of the present state of Texas,

HERNANDO DE SOTO.

In a few years was consigned to another, but hardly more fortunate man, the task of conquering and settling the "Province of Rio de las Palmas to Florida," which had proved so fatal to Narvaez and his people. This was Hernando de Soto, a man already renowned as a *conquistador* , and now Adelantado of Florida

25

With a force of some nine hundred souls, he landed in the month of May, 1539, on the western coast of the peninsula of Florida, at a place that has almost uniformly been assumed to be the present Tampa Bay. After two years' marching through portions of what are now the states of Florida, Georgia, South Carolina, Tennessee, Alabama and Mississippi, the expedition arrived in the neighborhood of the Mississippi River. It was on

Sunday, the 8th day of May 1541 (old style), that they came to the first town of a country called Quizquiz, and at two Spanish leagues beyond (or about seven miles), they saw the great river. Impressed with its size, it being the largest one that they had yet seen in Florida, they called it *Rio Grande* without other appellation. On the 21st the little army passed to a suitable spot on its banks where they tarried four weeks, constructing large boats and making other preparations to cross over to the western side. The passage was safely effected on Sunday, the 18th of June. The place of crossing was at some point not very many miles below the present city of Helena, in Arkansas. The river is described by one of their chroniclers—an eye witness—as being here a league and a half wide, and the narrative says that “The stream was swift and very deep; the water, always flowing turbidly, brought along from above many trees and much timber, driven onward by its force.”

Though they followed a northerly course from where they left the Mississippi at a point some four or five miles above their crossing place, there is no direct statement of these people seeing the river again until they went to it from the native town or village of Pacaha, along a canal described by them as of artificial make, and as being three leagues in 26 length. They were in pursuit of the cacique, who had retreated to a fortified camp in an island of the river for fear of the invading Spaniards and their allies of Casqui. This enclosed town of Pacaha—or, as called in one history only, Capaha—has been considered by commentators as the farthest point to the northward reached by Soto and his soldiers, but where it was situated is unknown, and probably will always remain so, though it was scarcely higher up the river than New Madrid, even if as high. It has been thought by some that, perhaps, the site was near the center of activity of the earthquake of 1811, which caused the subsidence of large tracts of land on both sides of the Mississippi, and that, possibly, what remains of Pacaha now quietly reposes somewhere at the bottom of the “sunken lands,” covered with water.

Disappointed in his expectation of finding gold in the western regions, Soto turned his footsteps towards the river again, and on April 17th, 1542, arrived at its banks, some miles

below the mouth of the Arkansas, where, an Indian village called Guachoya, he made his headquarters. He proposed building ships there by means of which to send to New Spain for supplies and reinforcements, in order to be enabled to settle permanently in the country, but his death in a little over a month prevented the carrying out of his plans; for when he died the desire of most of his followers to remain in so unfortunate a country died too. Luys Moscoso, his successor in command, in agreement with the other captains, decided that they should try their fortunes in the west and southwest, thinking they could go overland to their countrymen in the latter direction. So they left the river on the 5th of June. In about five months, however, they 27 returned to it bitterly disappointed and broken men, and the most ardent desire of the majority now was to get safely out Of the country to the nearest Spanish settlements by the only remaining available route—that of the Mississippi river. It was at another Indian village called Aminoya, about as far above the mouth of the Arkansas as Guachoya was below it, that Moscoso took up his winter quarters, and where he built seven brigantines to carry out of the country the Spaniards, who numbered but a few over one-third of those whom Soto had brought into it four years previously. They left July 2d, 1543, and, sailing day and night, subject to the attacks of the natives in their hundreds of canoes for the greater part of the way, arrived in seventeen days at the place where the river, through two mouths, emptied itself into the sea. Their further adventures do not concern the subject under discussion.

The relation of these men to the discovery of the Mississippi is simply this: They actually traversed its waters, in descending, from a point some seven hundred miles above its mouth, and, in addition, saw more or less of it at two places farther up, viz. the lands of Quizquiz and Pacaha. So it may be safely said that the soldiers of the diminishing army commanded successively by Soto and Moscoso were not only the first white men to see the river where it flowed through the interior of the continent, but were the practical explorers of the lower two-fifths of its course. They really thought, however, that they had hit upon this *Rio Grande* at its very origin. This was a misapprehension, though one interesting enough to be worthy of some references here to the old maps and chronicles

in order to show how it arose. Besides the Garay and Cortes maps already described, on 28 which could be seen the three names of Espiritu Santo, Palmas and Panuco, often referred to in the Soto narratives, there was another one that was used by the officers of the expedition. This was an official coast chart, made by Alonso de Chaves in 1536; but, unfortunately, it has not come down to our time nor any known copy of it. Yet there is a description of the map, or rather an itinerary of the sea coast from high up on the Atlantic and around the Florida peninsula to Mexico, which was compiled from it by the historian Oviedo. The reader should understand, by the way, that though this Soto expedition turned out to have been a roving one, it was not intended in the first place to have been so. A permanent settlement at some point on the sea coast had been contemplated, and would after a while have been made but for the wrongheadedness of the commander.

There was a certain town of the name of Cofitachequi that the party came to, which was situated somewhere in what is now the state of South Carolina. Here Soto was treated by the lady ruler much better than he deserved. When he left he carried her along as a sort of hostage, according to his usual fashion. On the fourteenth day's march the army slept on a level, open ground (*savana*), where they all suffered much from cold, and where the *cacica* managed to slip away from her captors. Speaking of this locality the governor's private secretary, Rodrigo Ranjel, thus expresses himself, as reported by Oviedo: “Here they passed by wading that river on which later the brigantines were launched that they had made. It runs to the sea; and, as the sea map shows, it is the river of the Spiritu Sancto, which, according to the maps of the cosmographer, Alonso

DIAGRAM SHOWING THE PRINCIPAL NAMES AND DISTANCES (LEAGUES) ALONG THE NORTH SHORE OF THE GULF OF MEXICO. DRAWN FROM THE DESCRIPTION BY OVIEDO, IN 1537, TO ILLUSTRATE J. V. BROWER'S REPORT UPON THE SOURCE OF THE MISSISSIPPI RIVER. BY A. J. HILL, 1891.

29 de Chaves, enters into a great bay. The mouth of said river is in salt water, under 31 degrees this side of the equinoctial line.”

Captain Luys Hernandez de Biedma, an officer of the King, also accompanied the expedition. His report, like the diary of Ranjel, first became public in the present century. In it, when speaking of this neighborhood, he says; “Among these ridges we found the origin of the great river by which we came out, and we believed it to be the river of Espiritu Santo.” He also calls the Mississippi at the place where it was crossed Espiritu Santo and Rio Grande.

Garcilaso de la Vega, “the Inca,” who by the way was not with Soto, but drew his information from men who were, in that part of his book where he treats of the extent of the country traversed by the little army, says that they “reached the ultimate springs where the great river is born. Those who pretend to understand something of cosmography say that from where they embarked to the source of the river there are three hundred leagues, and others say much more, but I take the most moderate opinion, so that there are eight hundred leagues of its current to the sea, and thus far the Spaniards penetrated the land.”

The unknown Portugese Knight of Elvas indirectly connects the two streams which they saw; for in giving the nomenclature of the Mississippi, he says that at Guachoya it was known as *Tamalisieu* ; at Nilco as *Tapatu;* at Coza as *Mico* , (Mekko, chief?) and that at its entrance it was called simply *The River* . It may be remarked that Garcilaso alone calls it the *Chucagua* , for Juan Coles told him that was the name the Indians knew it by; and it is an interesting fact that it was also one of the names of the Ohio River in 30 La Salle's time, nearly a century and a half later. The head-waters they had seen and considered those of the *Rio Grande* , were not really such, as may be well supposed, but only those of its extreme southeastern tributary, in other words of the Tennessee River.

A corroboration of this statement may be inferentially had from a certain expression to be found in the account of the Tristan de Luna expedition of twenty years later. This was projected for the initiation of a pacific settlement in Florida, the previous attempts at settlement having failed through the tyranny of leaders. Several of Soto's old soldiers went with it. A small detachment was sent to Coza (in northeastern Alabama) by reason of its

great importance at the time the Spaniards were there before. While in garrison at that place, part of these new visitors went with a Cozan army to make war on a neighboring nation called the Napochies, who lived apparently some two or three days' journey farther away. Of course these people could not resist their hereditary enemies now that the latter were aided by the Spaniards with their fire-sticks and wonderful beasts, so they fled incontinently on hearing of the advance of the allied forces. The Cozans, not finding them anywhere with all their searching, surmised that they had not thought the woods safe enough, and had fled to hide themselves in *Ochechiton* , which signifies the Great Water. Hearing these words, the Spaniards thought that it must be the sea that was meant, “but it was only a great river which our people call the Espiritu Santo, which rises among some great mountains of that land in Florida.”

With some concluding remarks on the guiding cartography and cartographical results of this expedition of 31 Hernando de Soto it may be dismissed from further consideration here. No geographical sketch or route map by any of the party is known to have been made; though possibly there were such, constructed on the basis of the Chaves map they apparently had taken with them. Although curious historians of the present century have caused diligent search to be made in Spanish archives for reports of this and other exploring expeditions, and for narratives of missionaries of the sixteenth century, as well as for maps of the countries of the New World, but very few papers of that kind have been found—at least as regards the region east of New Spain. Prior to the return of the survivors of the Soto expedition there were no materials for filling in the interior blanks of the outline maps already made by the Spaniards; for the few earlier explorers of North America hugged the coast, and scarcely ventured inland beyond tide-water.

It will be seen, then, that the members of the Soto expedition produced no cartography; nor were the cartographical works of others, based on the narratives thereof, much to boast of. The unofficial map-makers of the day, being deprived of all recourse to original Spanish documents, apparently had but two sources of information open to them when they attempted to portray the hydrographical features of the interior of the continent east

of the Rocky Mountains—then unknown—and south of the St. Lawrence. These were the book of the Knight of Elvas, which was printed at Evora, in Portugal, in 1557; and that of the Inca, likewise first printed at Lisbon, in Portugal, (though a Spanish book), in 1605, from his M. S. completed in 1591. Neither work was accompanied by a map, so that it is not much to 32 be wondered at that the geographers produced confused maps. It was on the Florida map of the *Theatrum Orbis Terrarum* of Abraham Ortelius of Antwerp, edition of 1580, that the public of the time first saw an attempt to represent the interior course of the *Rio Grande* .1 On this map the Rio de Spiritu Santo is shown as coming from the northward, divided in the upper part of its course into four branches. Two of these come from the north and northwest respectively and the other two, much longer streams. from the northeast and east; and its mouth is shown as being at the head of a large bay called the Mar Pequena, which means the Little Sea. A misleading error of the map is the extension of the Rio de Canaveral of the coast charts northward until it connects with the eastern branchings of the other river. Maps of the country constructed *after* the publication of the Inca's book make hopeless confusion; for all the towns mentioned in it are scattered over the land without regard to any reasonable placing of them in reference to the order in which they were met with by Soto's

1 This map bears the title La Florida. *Auctore Hieron Chiaves*, and therefore does not claim to be the work of Ortelius himself. I take this Hieron Chiaves to be no other than Jerome de Chares, a cosmographer, who is briefly mentioned in the biographical dictionaries.

That Ortelius, as a geographer, used every effort to obtain information, there can be no doubt. Justin Winser, in his *Narrative and Critical History of America*, (1886), speaks thus of him: “He prefixed to his book a list of the authorities [‘about one hundred and fifty in all’] from whose labors he had constructed his own maps. * * * * It has not a single Spanish title, which indicates how closely the Council for the Indies had kept their archives from the unofficial cartograpers.” No wonder, when Charles V. forbade the giving away of American maps to foreigners!

Besides his extensive reading, it may be added that Ortelius also sought for information from first hands; for in the short description he gives of Florida in the text of his atlas he incidentally speaks of having obtained his information concerning the region from *Jacobus Colius*, who had seen it. Query—May not this man with the latinized name—in spite of the difference of the Christian name—have been Garcilaso's informant Juan Coles? At the time Ortelius was making his maps, and Garcilaso getting materials for his history, there were still men living who had been with the Sore expedition.

33

ARLIEST TYPE OF MAP SHOWING THE VALLEY OF THE MISSISSIPPI, FROM ATLAS OF ORTELIUS, OF 1580. -3

34 army on the march. And into the Mar Pequena, now styled the *Bahia, del Spirito Santo* , four large rivers empty instead of one. The most eastern of these streams is named Chucagua, but more frequently Canaveral; the center ones are nameless, and the one on the northwest side of the bay is called R. del Spirito Santo.

Now the conclusion which I draw from a collection of the Oviedo list with all old maps accessible to me here, in what concerns the subject of this writing, are the following:

1st. That the Bay of Espiritu Santo of the Chaves maps, (whatever that of Garay and Cortes might have been), which was represented by Oviedo as having an extent east and west of twenty leagues of longitude, and in parts of ten to twelve of latitude, was the present Galveston Bay; and,

2d. That either the Canaveral river or the R. de Flores of the maps generally was intended for the Mississippi itself—most probably the former.

This embarrassing “Bay of the Holy Ghost.” with its plenitude of tributary streams, stood in the way of correct map-making for more than a century and a half, or until the re-discovery and full identification of the mouths of the Mississippi from the direction of the sea, by

Iberville in 1699, afforded the means for rightly adjusting the geography of the interior to that of the coast.

Yet there still remains unsettled, and probably always will remain so, the historical question as to who gave the information by which the three quoted places were located on the earliest maps of the sixteenth century. A correct answer to this question might give a clue to the first discoverer of the entrance of the Mississippi; though it may 35

SECOND TYPE OF MAP SHOWING THE VALLEY OF THE MISSISSIPPI, FROM SANSON'S MAP OF NORTH AMERICA, 1656.

36 reasonably be presumed that there were many pilots from whom the lfacts could have been derived.

In the seventeenth century, prior to the time of Joliet and Marquette, the Mississippi river was certainly seen again by the Spaniards, as is evidenced by the following extract from the account of the expedition under the command of Governor Penalosa of New Mexico, which left Santa Fe in the year 1661 to visit the “Quivera” Indians:

“Through these most pleasant and fertile fields we marched during the months of March, April, May and the kalends of June, and arrived at a large river which they call Mischipi, where we saw the first Indians of the Escanxaques nation, who might be to the number of 3,000 most warlike.” etc. The only report extant of this journey and its incidents was written by an eye witness, Father Nicholas Freytas, whose words are quoted above, and he therefore is the first European, so far as now known, to record the name of the great river in its Algonquin form, although the Arkansas Indians he here came amongst were not of that stock; it. may, however, have been given to him by the “Quiveras,” whoever they were.1

1 This Father, being a man of education, was probably acquainted with the published writings of the Jesuit missionaries who went from France to Canada, but he could not have obtained the name of the river from that source, as it does not appear in the *Relations*

till 1667, and he wrote in 1663. His ideas of the geography of the interior of the country, however, may well have been derived from these works, in connection with those of Champlain and others, for he speaks of “known nations” about as follows: The first, he says, are the Escanxaques, having to the north of them the Land of Fire (*i. e*. the Maskoutens country), and higher up the Fresh Water lake, of excessive size (Lakes Michigan and Huron), into which empties another lake called Puela (*i. e*. Poualak—Lake Superior). He then describes how, proceeding from said nation towards New France, there were met with the Neuters, Antivorinos (Antouoronons of Champlain's map), Raised-Hairs, Petuns and Hiroquees, these last being the fiercest of all.

It will be seen from the foregoing historical abstracts that the discovery of the Mississippi river by the Spaniards was 37 incidental only; for, as before said, their colonization projects rather contemplated coast settlements than interior ones, and journeys inland were mostly made from the incitation of the “thirst for gold” ascribed to them by the English poet. In spite of the first discovery of the Mississippi valley by its subjects, the government of Spain never very strenuously pressed any claim to territorial possession on that account, nor attempted colonization on the banks of the river until more than two centuries after Soto's time, nor even, so far as is known, prosecuted any further exploration towards its true source. Still, they may have ascended it more or less for trading purposes, but of that there are scarcely more than vague reports.

REDUCED FROM ORONTIUS FINES' GLOBE 1531.

SUB-DIVISION FOURTH. THE FRENCH ACCOUNTS.

THE PAPAL BULL; JACQUES CARTIER; CHAMPLAIN; JEAN NICOLET; RAYMBAULT AND JOGUES; GROSEILLIERS AND RADISSON; LA SALLE ON THE OHIO RIVER; JOLIET AND MARQUETTE.

It was on the 4th day of May, 1493, that a Roman Pope, Alexander VI., published a bull by which the right by discovery to the new lands of the globe was divided between the

crowns of Spain and Portugal; and the possession of whatever they had discovered, or should thereafter discover, was confirmed to them respectively. The document thus coolly disposing of all of the Americas, most of Africa, the eastern part of Asia, and the islands of the great oceans between two European powers alone, made the line of demarcation a meridian passing north and south through the Feroe islands and the Azores. But a year later this line, at the instance of Portugal, was shifted far to the westward. The geographical results of the new arrangement, so far as concerned the western hemisphere. were to give to Portugal the 39 eastern part of the continent Of South America, with little more of North America than the island of Newfoundland, while the remainder of both continents became the property of Spain.

France and England, however, and subsequently other nations, after a time, seem to have looked upon this proclamation as a *brutum fulmen* , for they do not appear to have ever given their formal consent to it, and evidently had no great fear of offending the governments of the Iberian peninsula by disregarding it. Frenchmen and Englishmen, with or without the consent of their rulers, soon made voyages to the shores of the New World to obtain codfish, to trade for furs or to attempt colonization.1

1 The interests of historical truth, however, require the acknowledgment of the fact that in spite of the neglect of the Spaniards to occupy more than a few places along the coasts of the Atlantic ocean and of the Gulf of Mexico, in addition to the territory originally acquired by conquest, and their practical acquiescence in the settlement of the northeastern part of the continent by other nations than their own, they really had not abandoned their claims to be the rightful possessors of the whole country.

Queen Elizabeth's words, in replying to a remonstrance of the Spanish Embassador concerning a projected expedition of Sir Francis Drake, were: “That she did not understand why either her subjects or those of any other European prince should be deprived of the traffic in the Indies; that as she did not acknowledge the Spaniards to have any right by the

donation of the Bishop of Rome, so she knew of no right that they had to any place other than those they were in actual possession of."

In 1701, when the French under Iberville had seized, with the intention of permanent occupancy, the mouths of the Mississippi and the contiguous country, the the king of Spain, by way of protest, forwarded to the king of France, "his well-beloved brother," a report on the subject made to him by his Junta of War of the Indies. In this document it was stated, among other things, that the Spanish king looked upon the Mississippi river as "the greatest ornament of his crown," and that with all the rest of the country it had been given to him by the bull of Alexander VI. Allusion was also made to the expedition of Hernando de Soto. The French minister of marine, in a state paper replying to these representations. claimed that the Popes themselves were no longer of the opinion that the "line of demarcation" had any further force in bestowing all of the New World on the crowns of Castile and Portugal. He stated that the diocese of Quebec had been created and bulls issued at various times to the bishops who ruled over it; that authority was furnished to vicars apostolic going to the French colonies; and, moreover, that all this was done without thought that those who should establish themselves in the country were liable, as the Spaniards now claimed, to the penality of ex-communication.

40

Among the earliest navigators in northern latitudes were the French, who, commencing their explorations and settlements on the Atlantic coast, a little over forty years after the first voyage of Columbus, worked gradually westward into the interior of the country. In just a century their people at last reached the water-shed of the upper Mississippi, where no white man had ever been before them.

The man who first began this western movement was Jacques Cartier, who, in 1535, on the occasion of his second voyage, ascended the St. Lawrence river to the Indian town of Hochelaga, the place where Montreal was subsequently built by those who came two or three generations after him. In his third voyage he proceeded no farther, nor did anyone

else immediately succeeding him; and it was nearly fifty years before the natives of the St. Lawrence were again startled by the apparition of foreign ships.

In 1603, Samuel de Champlain made his first voyage to Canada; but he could not at that time push his explorations beyond the rapids or *Sault* of St. Louis, not far from the eminence he named *Mont Real* . Five years later he again visited the St. Lawrence river, and laid out the town of Quebec. The first white man to advance beyond the rapids of St. Louis, however, was not Champlain himself, but one of his people, a young man, whose name is now unknown, who volunteered to visit the Hurons in their villages, and who wintered there with them in 1610–11. The route thither was by way of the Ottawa river, Nipissing lake, French river and the Georgian bay of Lake Huron. Later, preceded immediately by Father le Caron, of the Recollects, the pioneer religious order in New France, Champlain made his visit to the tribe in 1615; but he had to prolong his stay with them 41 into the next year. The Hurons lived at the eastern extremity of a large lake, since called by their name, which Champlain always spoke of as the *Mer douce* , or Fresh sea. The time he spent here, on the southeastern shore of Georgian bay, he put to good use; among other doings, by visiting the Nation of Tobacco, and that of the Dressed Hair, in the neighboring west and southwest, and he made inquiry as to the tribes beyond them. Regarding the regions lying farther to the west, he wrote that they could find out but little about them, as the tribes he visited had only acquaintance with them for two or three hundred leagues, or over, in the direction whence came the great river described (the St. Lawrence); besides, the savages with whom he was sojourning were at war with the other nations lying west of the great lake mentioned, which, he says, “is the reason that we have not been able to obtain fuller information about it, except that they have many times told us that some prisoners from one hundred leagues away had related to them that there were people there similar to us in whiteness and other ways, having seen among them scalps of these people, very blonde, which they treasure highly, because, they say, they are like us. I do not know what to think about it, unless it may be that there are people more civilized than they, and who they say resemble us. It were a thing much to be desired to have the

truth about this known by eye, but help is needed; there remain only time and the courage of some persons of means who could or would undertake to assist this project, so that some day we could make a full and perfect discovery of these places, in order to have a complete knowledge of them."

Thus spoke Champlain, the true lover of science, but 42 assistance for the purposes of discovery was not forthcoming in those days more than it is at the present time! Though Champlain remained in charge of the affairs of New France for many years, he was never able to make journeys to the upper country again; from which resulted the fact that the mouth of the French river, on the northern shore of Lake Huron, marks the extreme western limit of his explorations.

Sixteen years later, (in 1632), accompanying the complete edition of his "Voyages," he published a large general map of the northern country, drawn by himself, on which appeared all the geographical information in his possession, both that which he had gained from his own experience and that which he had gathered from others. Unfortunately, the latter, so far as regarded the country beyond his fresh sea, was very scanty and much distorted. Although the eastern end of a very large lake is shown, with a *sault* , or fall at its outlet, (of course Lake Superior); yet the placing on the south Shore of it "a great river which comes from the south," and the putting the river *des Puans* , with the habitations of the tribe of that name, (in other words the present Fox river and the Winnebagoes), to the north of Lake Huron immediately below the *sault* , made great confusion. This may be accounted for by the difficulty of correctly conveying geographical information through the medium of interpreters, a difficulty supplemented by inability on the part of Indians to perceive erroneous relationships on maps drawn in connection with such processes as were then used It might be supposed that the mysterious reports Champlain had heard concerning the interior of the country were shortly cleared up, but they were not in fact. Traveler 43 after traveler added to the stock of geographical knowledge, but each

expedition seemed somehow to fall short of its promise; the queer stories changed, but continued, in one shape or another for a full century after Champlain's time.

The next man to continue the work of discovery was one Jean Nicolet, of whose western journey but little is known; for nothing from his own pen is extant, nor any map known to be compiled from notes taken by him. For the only original information concerning the life and travels of this man we are indebted to the letters and reports of the Jesuit Fathers contained in the well known “Relations,” which were a sort of *Missionary Herald* from New France, very carefully edited and published each year in Paris for the encouragement of the faithful. From two of these it is learned that Nicolet came to Canada in 1618, and was shortly sent to what is now the Isle des Allumettes, on the Ottawa river, to learn the language of the Algonquins there; and that he lived with that tribe two years. Afterwards he lived similarly with the Nippissings, much farther west, on the lake of that name, whence he was recalled by his employers, the Company of New France, and appointed clerk and interpreter in the settlements below. In this capacity he was commissioned to make a voyage to the nation known as the *Gens de Mer* , or People of the Sea, (subsequently known as the Winnebagoes), hitherto unvisited by white men, and to negotiate a peace between them and the Hurons, beyond whom they were distant in a western direction about 300 leagues. Reaching his destination, he held a council at which four or five thousand savages were present, and at which the required peace was concluded. 44 He returned to the Hurons and after a while to Three Rivers, where he continued to perform his duty as clerk and interpreter “very satisfactorily.” It has been demonstrated almost conclusively, that this journey took place in the latter half of 1634 and first half of 1635; but. unfortunately, his route cannot be so well shown. From the names of the tribes whom, as Father le Jeune says, “he visited himself for the most part in their own country,” it would appear that he followed the north shore of Lake Huron to the *Sault* , then coasted around Lake Michigan to the second *Mer douce* , now the sheet of water known as Green Bay, which he ascended until he came to the “Ouinipegou, sedentary tribes, very numerous,” called by some the nation *des Puans* , (the stinking ones), but more properly the *Gens de*

Mer . “In the neighborhood of this nation are the Naduesiu, the Assinipour, the Eriniouaj, the Rassouakouetons, and the Pouutouatami.” Here is found the first mention of the Dakotas, under a form of the name from which Originated their modern appellation of Sioux.

Had it not been for the death of Champlain, on the Christmas day after Nicolet's return home, the world might have been favored with a full report of the expedition of 1534–35: for this indefatigable man, equally apt as draughtsman, map-maker and author, would doubtless have published the information. As it was, the results of this journey were not represented in the cartography of the day, and nearly a generation more passed away before a clear idea was obtainable as to where the savages enumerated by Nicolet really lived. But though this journey and its resulting information made so little impression on the world at large, the Jesuits of Canada bore them in mind; for Father le Jeune, already 45 quoted, writing five years later, after expressing the opinion that a passage might be found by the second great lake of the Hurons (Green Bay) and the tribes named, to a certain sea already talked about, continues as follows: “Sieur Nicolet, who has penetrated the farthest in these very distant countries, has assured me that if he had sailed three days farther on a great river which leaves this lake he would have found the sea. Now I strongly conjecture that this is the sea which leads to the north of New Mexico, and that from this sea one might have access towards Japan or China; nevertheless, as it is not known whither this great lake or fresh sea tends, it would be a noble enterprise to go to discover these regions. Our fathers who are among the Hurons, having been invited by some Algonquins, are just about turning their attention to these people of the other sea, of whom I have spoken above; perhaps this voyage will be reserved for one of us who have some slight knowledge of the Algonquin.”

A few words concerning the farthest point west reached by Nicolet are now necessary. On the strength of the literal exactness of the “three days farther” distance to the “sea,” reported by the Jesuit writer, the theory has been advanced that by the latter expression the Mississippi river should be understood, and that Nicolet came within three days'

journey of it by descending the Wisconsin. But seeing that the entire length of the latter river below the portage from the Fox is no more than can be traveled in three days, this position is not tenable. A second view is that he went to the said portage and no farther. A third, and the present generally accepted opinion is, that he went only as far as the village of the Maskoutens, which was situated on the Fox 46 river, about half way between the present Winnebago take and the portage.1

1 For discussion of this point, see foot-note farther on.

In support of this idea it is supposed that the Rasaouakouetons of Nicolet were the Maskoutens—whom he does not mention—but this is not the case. These first named people were the Nasaouakouetons, Nassauakuetons, or Ounasacoetois, a tribe living beyond Green Bay, towards Mackinaw. Nicolet could not have visited the Maskoutens on Fox river, because they were not there at the time of his journey. It was some twelve or fifteen years later that the irresistible assaults of the Iroquois on their red enemies caused a western flight of the Algonquin nations, which made the Nation of Fire or Maskoutens—who were of that stock—to migrate, too. There is, indeed, nothing to show that Nicolet went beyond the immediate neighborhood of the head of Green Bay, where the Winnebagoes had lived from an unknown time. Had he done so, his Jesuit eulogist, keen for geographical information, would have known it, and would not, it may be well supposed, have left the fact unrecorded.

Three great strides from the Atlantic Ocean towards the Mississippi had now been made in succession, of nine, eight and seven degrees of longitude, respectively, viz.: By Cartier to Montreal, by Champlain and his friends thence to the Georgian bay, and by Nicolet beyond that to the country of the Winnebagoes, but no mention yet of the large river in the interior running southward through the Indian nation living on its upper waters, had come to light. Only about three degrees intervened between the discoveries of this last explorer and the immediate valley of the river itself, 47 and within a quarter of a century Frenchmen crossed that space, too.

The second mention of the Dakotas, the native lords of the upper Mississippi, is by Father Raymbault and Jogues, who made a visit of missionary inquiry to the *Sault* of Lake Superior in 1641. There they were reid of a great number of sedentary people who had never known Europeans and never heard of God, among others of a certain nation of Nadouessis, situated northwest or west of the *Sault* , eighteen days journey farther on. “The first nine are made through a great lake which begins above the *Sault* . The last nine one must ascend a river which penetrates back in the country. Their towns are large and well defended by reason of the continued wars had with the Kiristinons, Irinions,” etc.1

1 (*Relation* of 1642.) The immediate country of the Sioux of the Lakes, who were. apparently, the Indians these priests referred to here, was the region of the upper Mississippi, and of the headwaters of the St. Croix and St. Louis rivers. It is not likely, however, that any of their towns were situated on or near to Lake Superior, nor, perhaps, very near the sources of the Mississippi; for the Christinos and the Assiniboins, who were their enemies, lived to the northward of the Dakotas.

To return now to the direct question of the Mississippi river. M. Chouart des Groseilliers and Pierre Esprit de Radisson were two Frenchmen who emigrated to Canada in the first half of the seventeenth century, and, besides being connected by marriage, were such firm friends and so congenial in their taste for travelling and trading among the “wild men,” that they spent more than twenty years together in that manner of life. Until the publication of the Radisson MSS. the only extant contemporary knowledge of the discoveries of these men in the northwest was the incidental mention of them (if the two young Frenchmen alluded to be they) in the *Relations* referred to, and 48 two entries in the Journal of the Jesuits, kept at Quebec, in which latter Groseilliers is mentioned by name.1

1 For some reason the editors of the *Relations* left out of these compilations the names of certain explorers, though they used or quoted their work. It has been remarked by the historian. Parkman, that not the slightest reference is made in these annals to La Salle, a man who had become well known to the authorities of Canada, lay and clerical. long

before the discontinuation of said publication. The studied silence, in this regard, of the methodical Jesuits, is now regretable. Their Journal, on the other hand, does not seem to have been intended for the edification of the public, and the name of Groseilliers is four times mentioned in it. Radisson, the younger man, does not appear by name in any of the histories of the time, till mentioned in connection with his brother-in-law, when the two, some years later than these upper country voyages, were in the English interests in connection with Hudson's Bay trade.

These entries, or such portions of them as are of geographical significance, for the present purpose, being somewhat plainly translated, are condensed, paraphrased, or transcribed as follows:

1. In the *Relation* of 1654, it is stated that tidings were being received almost every day concerning the discovery of new nations speaking the Algonquin language. One father said that in the islands of the lake of the *Gens de Mer*, (Green Bay,)whom some improperly called the Puants. there were many tribes whose language had a great affinity to the Algonquin; and that it was only a nine days journey from this great lake to the sea which separated America from China.

2. “The sixth day of August of the year 1654, two young Frenchmen, full of courage, having received permission from the Governor of the country to embark with some of the tribes who had arrived at our French settlement, made a voyage of more than 500 leagues under the leadership of these Argonauts, conveyed, not in great galleons nor ramberges, but in little gondolas of bark. These two pilgrims expected surely to return in the spring of 1655, but these tribes did not bring them back till the 49 end of the month of August of this year, 1656, * * * * * * In the third place there have been pointed out to us many nations in the neighborhood of the nation *de Mer* , called by some the Puants, by reason that they formerly lived on the banks of the sea that they call Ounipeg, that is to say, stinking water. The Linouck, who are neighbors to them, are about sixty villages. The Nadouesiouek have fully forty. The Ponarek have at least thirty. The Kiristinons excel

them all in extent, they reach as far as the sea of the North. The country of the Hurons, which had only seventeen villages in the extent of seventeen leagues, or thereabouts, maintained fully thirty thousand persons. A Frenchman1

1 Supposed by Mr. Butterfield, in his life of that explorer, to have been Nicolet.

told me formerly that he had seen about three thousand men in an assembly which was held for treating of peace, in the country of the *Gens de Mer* .”2

2 *Relation* of 1656.

3. “But hardly had I arrived at Quebec when I met two Frenchmen who had just arrived from these upper countries with three hundred Algonquins, in sixty canoes loaded with furs. Here is what they have seen with their own eyes, which represents the condition of the Algonquins of the west, having hitherto spoken of those of the north. They wintered on the banks of Lake Superior. * * * * Our two Frenchmen, during their wintering, made various excursions to the surrounding tribes; they saw amongst other things, at six days' journey beyond the lake, towards the southwest, a people composed of the remains of the Hurons of the Nation of Tobacco, forced by the Iroquois to abandon their country, and to bury themselves so far in the forest that they could not be found by their enemies. These -4 50 poor people, fleeing and making their way over mountains and rocks, across great unknown woods, happily met with a fine river, wide, deep and comparable, so they say, to our great river St. Lawrence.1

1 The Huron settlements of Georgian Bay were warred upon ferociously by the Iroquois in 1648 and 1649, and, together with the missions of the Jesuits there, totally ruined. The shepherds were smitten and the sheep scattered. One of the Fathers says that of the thirty or forty thousand Hurons living there, the enemy killed and burned but the smaller part; that famine, which follows war, attacked them still more roughly; and that the remainder who could escape, drifted away on all sides like a defeated army pursued by the conqueror. Their relatives the Petuns (or Tobacco nation), had soon to fly, too, and they, going westward, were joined by the Ottawas at *Missilimakinak*. By circuitous

ways they appear to have arrived at the Mississippi, which they ascended after a time as far as the islands lying between Red Wing and Hastings. Minnesota, on one of which they lived until, having become embroiled with the Sioux, they fled to the Black River; and at last, though temporarily separated, both tribes brought up at La Pointe on Lake Superior, where after a time they formed the nucleus of a mission. Thus history began in the upper Mississippi valley, in the middle of the seventeenth century with this invasion of the territory of the Dakotas by foreign tribes—history, curiously enough, preceding discovery there.

They found on this river the great nation of the Alinouec, who received them very well. This nation is composed of sixty villages, which confirms us in the knowledge we already had of there being many thousands of persons filling all these lands of the west. Let us return to our two Frenchmen: Continuing their tour, they were much surprised when visiting the Nadouechiouec. * * * * * Our Frenchmen have visited the forty towns of which this nation is composed, in five of which are counted as many as five thousand men." In a succeeding chapter, referring to the opening for further missions,—"Secondly, to the south, inclining towards the west, the nation of Tobacco have deputed one of their chiefs, who is here ready to lead some Frenchmen, the next spring, for sixty leagues beyond the lake of the maritime people. where his tribesmen having fled believe themselves in security, as being in the center of many Algonquin nations, sedentary from time immemorial; but the way thither is not safe. Thirdly, to 51 the west, a great nation of forty towns called Nadouechiouec awaits us since the alliance just recently made with the two Frenchmen who returned from them this summer."1

1 Relation of 1660.

4. The Outaouat arrived at Three Rivers August 24, 1660. "They were to the number of three hundred. Des Groseilliers was along with them, who had gone there the year before. They left Lake Superior in one hundred canoes, forty returned on the way and sixty arrived here loaded with furs. * * * * They came from there in twenty-six days, and were

two months in ascending. Des Groseilliers wintered with the nation of the Bœuf, which he considers to be four thousand men. They belong to the sedentary *Nadouesseronons* .2

2 (*Journal of the Jesuits*.) The Jesuit writers quoted do not seem to have had a very clear, notion of the geographical facts learned during the first and second voyages of Groseilliers and Radisson, nor to have credited these men personally with the discovery of the Mississippi river; but that may have arisen from the agreed upon reticence of the travelers themselves, as mentioned farther on.

”

Turning now to Radisson's own account of his third and fourth voyages—the first made in company with Groseilliers—the results of the journeys can be concisely stated. They went by the usual way of the Ottawa river and Lake Huron to the islands near the mouth of Green Bay, where, on one of them, they were the guests of fugitive Hurons and Ottawas. While there they visited the Pottawattamies and, through them, made the acquaintance, in the spring, of another nation called Escotecke, signifying Fire. They extended their peregrinations to the southern part of a large lake, (doubtless Michigan), and to what was evidently the country of the Illinois and neighboring nations. The Nadouesserons, however, being farther to the north, were not seen by 52 them on this first journey. Towards the end of the narrative of events, related in a manner very discouraging to the modern reader, Radisson gives an interesting though too concise and not over clear geographical summary of their wanderings in these words:

“We weare 4 moneths in our voyage without doeing anything but gee from river to river. We mett severall sorts of people. We conversed with them, being long time in alliance with them. By the persuasion of soin of them, we went into ye great river that divides itself in 2,1 where the hurrons with some Ottanake & the wild men that had warrs with them had retired. There is not great difference in their language as we weare told. This nation have warrs against those of forked river.2 It is so called because it has 2 branches, the one towards the west, the other towards the south wch we believe runns towards Mexico, by

the tokens they gave us. Being among these people, they told us the prisoners they take tells them that they have warrs against a nation, against men that build great cabbans & have great beards, & had such knives as we

1 This could only have been the Mississippi, seeing that that river, as shown in a previous note, was the one whither the Hurons and Ottawas fled: but why it is called The River that Divides itself in Two is a matter for conjecture. Possibly the division was transverse, and the falls of St. Anthony the solution of the enigma. Or it may be that the name came from the fact that the wavers of the upper Mississippi and those of the Missouri flow side by side, but without uniting for many miles below the mouth of the latter. Or, to go still farther down the river, a third explanation can be ventured, In olden times the Indians considered that the river divided itself in its lower part and made a sort of island, which stretched from the Yazoo pass of to-day on the north down to the mouth of the river of that name on the south. The western boundary of this island was formed by the Mississippi as we understand it now; its eastern by various interior bayous and water courses, which were connected in such a way as to admit of navigation. The second theory, however, seems to me to be the true one.

2 The Forked river here mentioned must also, from its very definition, be taken for the Mississippi; the name having reference to its bi-furcation at the mouth of the Missouri.

53 have had. Moreover they shewed a Decad of beads and guilded pearls, that they have had from that people, wch made us believe they weare Europeans. * * * * * We weare informed of that nation that live in the other river. These weare men of extraordinary height and biggnesse,1 that made us believe they had no communication with them. They live onely on Corn & Citrulles wch are mighty bigg. They have fish in plenty throughout ye year," etc.

1 The Osages, before they were driven into the interior of the country by their enemies, were Inhabitants of the lower Missouri, and may possibly have been the big people referred to above, judging by what travelers have said about their large proportions.

Radisson had heard similar stories a few years before, when with the Iroquois, from a traveled chief of that nation, who told him of his adventures, and what big people he saw whilst on a three years' journey with a war party of thirteen men, “in ye upper Country of the Iroquoits neere the great river that divides itself in two.”

When they returned home the two travelers agreed not to tell what they had seen, because they had not yet made a “full and whole discovery” by personally visiting the bay of the North, (Hudson's.) Nevertheless, Radisson thought that through his partner's family in some way an inkling of their doings and further plans must have leaked out, as the Jesuit Fathers wanted to find out from them how the beaver might be brought down from the bay of the North, and wished him to engage in that voyage so that Groseilliers might give up his own—Des Groseilliers had been with these missionaries in the Huron country in former years—but the two would make no arrangement with them. Neither 54 would they listen to the avaricious proposal of the governor of Three Rivers, and preferred to go entirely untrammelled. They left the town in the night time, overtaking the Saulteur Indians who had come down in August and were awaiting them above in the river. This second voyage was mostly to Lake Superior and to the regions north of it, as contemplated. Following the south coast they reached Chagouamigon bay, where they halted and selected a site for winter quarters. In a short time they left there and went back into the country several days' journey to a lake where there was a native village. Snow beginning to fall, they all separated to hunt, a rendezvous having been appointed at which the various tribes were to meet the Frenchmen in two and a half moons. The place was a small take upon the lands of the Nadouesseronons. Embassadors from that nation, “which we will call the nation of the beefe,” came to see our travellers. When the time had come they repaired to the appointed place, and in three days eighteen nations had arrived on the ground. A fort was built in case of possible attacks from the Christinos, and place near by cleared off for an assembly ground. The time was spent in councils, feastings and games. The “feast of the dead” was what they had been summoned to, and fourteen days in all were occupied with it. When the ceremonies and festivities were over every

one returned to his own country. Keeping their word, the two Frenchmen went to visit the “nation of the beefe,” seven small days' journey from the general rendezvous. They found themselves in a town where were great cabins mostly covered with skins and close mats, 55 and were told there were 7,000 men there. There was no wood there and moss was used for fuel. These people were doubtless the sedentary Tatanga, [buffalo,] included in the list of nations Radisson gives at the end of his account of the two voyages. If, as is possible, the Tatanga, or *Bœuf* , were the tribe called in more recent times the Titonwans, and Groseilliers and Radisson visited them in their western home, these two Frenchmen must have personally seen and crossed the Mississippi river, whether they did so on their previous voyage or not; still they make no mention of it on this occasion.

There is yet another kind of evidence that they saw the Mississippi, which may be deduced from the language used by Radisson, immediately after mentioning the fact that there was no wood for fuel in the country of the people of the Beefe. His words are:

“They sow corne but their harvest is small. The soyle is good, but the cold hinders it, and ye graine is very small. In their countrey are mines of copper, of pewter, and of ledd. There are mountains covered with a kind of Stone that is transparent and tender, and like to that of Venice. The people stay not there all ye yeare; they retire in winter towards the woods of the North, where they kill a quantity of Castors.”

From this general description, which intimates an extension of the country of the Beefe as far as eastern Iowa, it is possible that this nation was the one afterwards known to other Frenchmen as the “Otoutanta or Mascoutens Nadouessioux,” Sioux of the Prairies; to reach whom one might ascend either the Minnesota or the Des Moines river1 .

1 Notwithstanding the narratives of Radisson are very insufficient as regards facts of time and space, and consequently forbid decided opinions as to his routes of travel, yet two assumptions may be ventured upon by way of working hypotheses. They are:

1st. That the place of rendezvous was somewhere between Kettle and Snake rivers in eastern Minnesota; and

2nd. That the “nation of the beefe” were no other than the modern Titonwans or people of the “village of the prairie,” (as suggested in the text,) who, in the seventeenth century lived in the neighborhood of Big Stone and Traverse lakes. The philology of this theory may appear somewhat forced, seeing that Tatanga (buffalo) and Tintah (prairie) are not much alike in sound and entirely distinct in signification; but when one takes into account the fact that the strength and probable location of the Tatanga of Radisson and those of the Tintons of the early French maps are much alike, it may not be a wild conclusion. In addition, it may be stated that the name as spelled by Le Sueur, some forty years later, together with his definition of it, came very near to proof of tribal identity—“Titanga-oughiatons, Village of the Great Cabin.” No other French writer appears to have used the word *Bœuf* in connection with any tribe or band of the Dakotas, and it is barely possible that Radisson in some way confounded the two words of their language. Another philological idea can be brought forward in this connection, which is that the root of the words Outoutanta and Tinton may be the same. Radisson confessed his total ignorance of the language of the Nadouesseronons, and stated that he had to rely upon an interpreter in conversing with them; so he may have misunderstood and unintentionally perverted the name of their western brethren. The “arms” of the Tintons were not the buffalo, but the deer. It certainly does not seem very likely that there should have been in existence at the same time two very populous tribes living in the same region and bearing names enough alike to justify in later years a theory that they were one and the same people.

56

But vague and elliptical in description as is the geography of these two voyages, here given by Radisson, the chronology is yet worse, indeed may be said to have no existence. Commentators on these writings make the year in which the travelers set out on their first joint voyage to be 1658, presumably because the author, in accounting for his actions the

preceeding year when he was contemplating a journey to the Iroquis country, incidentally gave a date for the time of the departure—“which was to be in June, 1657”—although from that place on in the book the reader finds no further mention of a calendar year again, only the succession of the seasons. Were nothing else than his narrative to be taken into account there would be no excuse for refusing to give credence to this direct deduction; but there is *exterior* evidence as 57 to time which should not be overlooked, though it would take up too much space to consider it here in detail. It consists in the record to be found in the *Relations* and other books of certain events, with their dates, which, when compared with the way the same incidents appear interwoven with the narratives of Radisson develope irreconcilable chronological differences. It may be safely assumed that the two young Frenchmen of the *Relations* for 1656, 1658, and 1660, quoted are the same in each case and identical with Groseilliers and Radisson, or at least that those were who set out in the two later years; in which case there are good grounds for the conclusion that the upper Mississippi river was first seen by white men, two, if not four years earlier than the date 1659, at present accepted. Had not Groseilliers, like Joliet at a later date, lost his “book of annotations” when he was upset in the St. Lawrence on his return from the second voyage, we should probably have a clear account of the time and manner of this discovery of the Mississippi river by him and his young brother-in-law, in lieu of the involved and imperfect narratives of the latter, who, though a Frenchman, unfortunately chose to write his book in English, a language which he did not understand.

The Jesuit fathers after awhile were able to establish missions, more or less permanent, in the upper country. Among these the nearest ones to the Mississippi valley were that of St. Esprit, at La Pointe on Lake Superior, and that of St. Marc of the Outagamis, on the Wolf river to the westward of Green Bay, and that of St. Jacques, at the Maskoutens' village on the Fox river above Lake Winnebago. The St. Esprit mission was established with especial reference to the 58 Hurons and Ottawas, who, after having been expelled from the regions of the Mississippi and Black rivers, finally settled on Chagouamigon bay. The priests here were often visited by the Illinois, who lived far to the south of them. and Father Allouez

first made personal acquaintance with the Nadouessiouek when he was on a missionary trip to the extreme west end of the lake. He speaks of these people as “tribes who live to the west of here, towards the great river called Messipi;” a memorable remark, being the first time this Algonquin name of the river appears in any of the writings of the French.1 The fathers had probably heard about both the Sioux and the Mississippi from these other tribes, and also in later years from the Maskoutens when they were first visited by Perrot and other traders in their stockaded village on the upper Fox River. Thus it was, probably, that from the time the “Great River” was first heard of through the travels of Grosselliers and Radisson till 1672, hardly one of the *Relations* appeared which did not contain more or less in the way of hearsay information or conjecture concerning the Sioux and other distant tribes, the sea of the West, and the river Mississippi, the natives who inhabited the banks of the latter, and which sea it might empty into.

1 *Relation* of 1667.

Nor were these enthusiastic priests the only important people to take an interest in the prosecution of voyages of discovery, Courcelle and Talon, who were respectively governor and intendant of Canada between 1665 and 1672, sent out “men of resolution” at various times, particularly in the years 1669, 1670, and 1671, in different directions; some to report on the copper of Lake Superior; some to look after the prospects of a trade in furs on the Hudson's Bay slope, 59 and to search for routes thither; and still others towards the west, southwest, and south, to look for ways leading to the seas of the west or south, or to the Gulf of Mexico. Talon in a letter to the king, dated October 10, 1670, said that these men were to keep journals, and on their return to furnish written reports to the government, and that they were to take formal possession of the country wherever they went.1 Posterity, however, has seen but little of such official reports, and still less of the journals from which they were to be compiled.

1 Nicholas Perrot was doubtless one of these men. Baqueville de la Potherie, in his *Histoire de l'Amerique Septentrionale* (1722), says of him: “Sieur Perot has best known

these nations; the governors general of Canada always made use of him in their plans. His familiarity with native languages, his shrewdness, and his worth of character, enabled him to achieve discoveries which were the occasion of M. de la Salle's making all those efforts that have resulted so favorably for him. It was by his means [Perrot's] that the Mississippi became known.” The fact that this man was not the first to discover any part of the Mississippi river, so far as now appears, made needless any mention of him here in the text, but he was too good a man to be left entirely out of a writing of this nature. His name should have been honored by the people of Minnesota, like those of Hennepin, Du Luth, and Le Sueur, his contemporaries.

SIEUR DE LA SALLE.

Among the men referred to, the most eminent was Robert Cavelier, afterwards better known as the Sieur de la Salle, who had long thought much about making discoveries in the southwest. In 1669 he obtained the sanction of the authorities to his undertaking an expedition in that direction. About the same time, too, the Sulpitian priests at Montreal were contemplating a similar journey to find out something about the savages of the west, with a a view to doing them good, and fathers Dollier and Gallnee were selected for the undertaking.

60

At the instance of the government both parties were combined into one expedition, which left the settlements in July for the Iroquois country and a certain river which they had heard of that they were thence to follow into unknown regions Unable to procure guides among the people on the south side of Lake Ontario, they went to its western end, expecting to make another beginning from that neighborhood; but the meeting there with Sieur Joliet, who had been looking for copper at Lake Superior and who told them about the northern route, now changed their plans, at least those of the clergymen. The party separated, the priests going to visit the mission at the *Sault de Ste. Marie* , and La Salle going, it is not known exactly where; but, as regards the discovering of any great river these

persons set out to find, the expedition was a failure. What they had in their minds may be surmised from a letter written by Patoutet to minister Colbert, shortly before the close of the year in question, in which it was stated that La Salle and Dollier had gone off to examine a passage they expected to find which would connect with Japan and China. An official report of the voyage made by governor Courcelle to Lake Ontario in 1671 refers to the same matter when it tells about two priests who a couple of years before had set out to visit savage nations living “along a great river that Iroquois called the ohiO, and the Outaouas the Mississipy,” 61 but had failed in their purpose by reason of unforseen difficulties. The writer of the report further says that they nevertheless ascertained that this river was greater than the St. Lawrence; that there were many nations on its banks; and that its general course was from east to west. He, therefore, after having examined all the maps of the Atlantic coast and that of the Gulf of Mexico, without finding there the mouth of any river comparable to the St. Lawrence, thinks it must fall into another sea, most probably that of New Spain. From the autumn of 1669 to the summer of 1672 nothing certain is known of La Salle's movements. That he was not idle, part of the time at least, is shown by Talon's letters to the King. In that of November 10, 1670, he says that Courcelle and himself had sent La Salle to look for an opening to Mexico by the St. Lawrence, and the western lakes; in that of November 2, 1671, that La Salle had not yet returned from his voyage made to the south of “this country.” Some time within these two years it was that La Salle followed the valley of the Ohio River downward for an unknown distance, but not much farther than the falls of Louisville it is supposed. The only document accounting for his doings during the blank period is not looked upon with much confidence; and statements about the Ohio falling from a height into marshes and losing itself there, to be gathered into one channel lower down, sound more like the tales of Indians invented to discourage explorers than information derived from an honorable and sensible man such as La Salle was.

In spite of the desire and intention La Salle had entertained for years to make the discovery of the lower Mississippi river and to follow its current to the sea, with a view

to 62 the territorial aggrandizement of his country, the establishment of colonies, and the development of the resources of the country as well as the building up of his own fortunes, he was preceded in the valley by Joliet. Some of La Salle's friends thought that Joliet had been pushed forward in this way by intrigue. Whether that were so or not the fact was that the king himself, in the summer of 1672, impressed on his minister Colbert the importance of the discovery of the passage to the South Sea, desiring a large reward to be offered to those who should make it. Under such an august monarch it is safe to assume that steps were taken in this direction sooner than they otherwise would have been, and it may be thai La Salle was so circumstanced that he could not avail himself of the opportunity now afforded him to carry into execution his design of years, and that some one else therefore had to be chosen: but this is merely a conjecture. What we actually do know is that Governor Frontenac, in his memoir to Colbert of Nov. 2, 1672, says that “He, (Chevalier de Grandfontaine, governor of Acadia and Pentagouet), has likewise judged it expedient for the service to send Sieur Joliet to the country of the Makouteins, to discover the South Sea, and the great river they call the Mississipi, which is supposed to empty into the sea of California. He is a man very skilful in this kind of discoveries, and has already been quite near to this great river, the mouth of which he promises to find;” also, that in a similar communication to the same minister of Nov. 14, 1674, he says: “Sieur Joliet, whom Monsieur Talon advised me, on my return from France, to dispatch for the discovery of the South Sea, has returned three months ago, and discovered some very fine countries.”

63

With Louis Joliet, on the expedition referred to, went Father Jaques Marquette, S. J., who had for years meditated a voyage to the nations living on the Mississippi, particularly to the Illinois who had often invited him when they were visiting the mission at La Pointe. No full report of the voyage by the hand of Joliet is extant, as he lost his box of papers and nearly his life too, in the rapids of the St. Lawrence river by Montreal, on his way to report to the governor, (Frontenac,) to whom however he furnished the best account he could from memory. Father Marquette never returned to Canada, It is to the narrative of

this priest, therefore, that the world has had to look for the fullest account of the celebrated voyage. In was on the 7th day of June, 1673, that the party arrived at *Maskoutens* , the actual commencement of their voyage of discovery; for Marquette writes thus: “Here is the limit of the discoveries made by the French, for they have not yet gone in the slightest degree beyond this point.”1 Thence they continued

1 The location of this village has been more of a puzzle to historians than it should have been. Marquette's placing it three *leagues* from the Wisconsin portage has led them astray. Those who take his words literally do not reflect that within so short a distance as eight and a quarter miles there could not well be comprised all the tedious hydrographical features spoken of by the priest and other travellers who came after him. Those who think that *thirty* leagues was meant have never produced much, if anything, in the way of proof to sustain that theory, which would imply a site half way between Berlin and Eureka, somewhere in the northeastern part of Green Lake County, Wisconsin. Those who believe he intended three *day's journey* are the wisest; for it is obvious that Marquette could only have obtained his information from the Indians at the village, who did not reckon by the measures of white men. Father Dreuillettes, as quoted in the *Relation* of 1658, says that he made up his list of nations partly from what two Frenchmen had told him and partly from information received from various savages. By thus taking his facts from unlike sources he seems to have made two places out of one. in briefly describing these several Indian nations he refers them geographically to the town of the Oupouteouatamik on Green Bay. His third town was distant about three days' journey going by water, and was composed of the Makoutensak and Outichakouk; (Kikabous?,) concerning whom he adds that—“The two Frenchmen who have travelled in this region say that these tribes are of a very mild disposition.” His fourteenth locality was thirty straggling villages (*bourgades*) inhabited by the Atsistagheronnons (i. e. the Nation of Fire) situated to the southwest one quarter south, six or seven days journey off. These localities are doubtless the same though the distances differ. Three days journey up the Bay and the Fox river to reach the Maskoutens would be entirely out of the question, as that would scarcely take one to Lake Winnebago; but the six or seven days agree well with the statements of Perrot. Allouez

and Marquette, touching the time taken by them in their respective journeys from the St. Francois-Xavier mission near the mouth of the river to the village in question. Comparing the actual length of the river as shown by our modern surveys with all the accessible estimates of time and distance of these early travellers, one is irresistably drawn to the conclusion that there is but a limited tract of country within which to locate the barbarian settlement visited by them. The “little mountain” or ridge (*coteau*) on which it was situated should be looked for somewhere to the east or south-east of Princeton, about a league —2¾ miles—back from the river, which is the distance given more than once in the old records.

64 thier ascent of the Fox river in a west southwest direction. through the marshes, little lakes, and rice fields, with which it abounded, till they reached the farther side of a portage of 2700 steps, or say half a league, that brought them to the Miskousing river, now called Wisconsin. Here their Indian guides returned home, and the seven Frenchmen were left to prosecute their discoveries alone. They had quitted the waters which were continuous from this point as far as Quebec four or five hundred leagues away, to take those which should lead them into strange lands The river they now embarked on came from the northwest and ran towards the southwest, and they followed its course till they reached its mouth, situated. according to their observations in latitude 42° 30#. Here they entered the Mississipi on the 15th day of June, Joliet says, but Marquette makes it the 17th. The latter here remarks: “The Mississippi river derives its origin from various lakes which lie in the country of the tribes of the north1 (a representation of which lakes, from the reports of the Indians of course may be seen on one of Joliet's maps.)

1 The first reference, in detail, concerning the source of the Mississippi.

65

They now tranquilly descended the river through a country apparently only inhabited by beasts and birds, the course being to the south and southeast as far as latitude 42 where the face of the country changed somewhat. They had made more than sixty

leagues (probably to Muscatine, Iowa,) when the direction of the river was south and south southwest, and after a while partly southeast and partly southwest. Having sailed more than one hundred leagues from the mouth of the Wisconsin they saw, on the 25th of June, the first traces of human occupancy in the shape of a little path on the west side (at Keokuk or a few miles above it) which they followed for two leagues till they came to some Indian villages on the banks of a stream. This river was the Moenguena, now the Des Moines, and the people of the villages were of the Peouarea tribe of the Illinois nation. The travellers remained with them till the end of the month when they re-embarked on the Mississippi. Farther on they came to the Pekitanoui, or river of the Missouris, coming from the west northwest, where they saw a similar sight to that which met the eyes of Soto's forces at the place where the latter crossed the river much lower down. Marquette writes: —“I have seen nothing more frightful; a tangle of entire trees, of branches, of floating islands, issued from the mouth of the Pekitanoui with so much impetuosity that one could not attempt to cross it without great danger. The commotion was such that the water was made all muddy by it and could not clear itself,” The next river noted by the travellers was the Ohio, which Marquette calls the Ouaboukigon, coming from the east. Lower down they came across a tribe of Indians on -5 66 the east bank who seem to have had dealings with the Europeans of the Atlantic coast. Finally they arrived at the village of the Mitchigameas, on the west side, eight or ten leagues above that of the Akansea, which later was on the east side of the river, in latitude 33° 40# according to their reckoning, and opposite a large stream from the west—doubtless the present Arkansas river. Here they landed and were well received. The travellers held a private council to decide whether they should proceed farther on, or should content themselves with the discovery already made. After having carefully considered the fact that they were not far from the Gulf of Mexico, as they erroneously supposed; and that the Mississippi river undoubtedly had its discharge into that sea, and into no other, for the route had always been in a southern direction, they resolved to turn back.

They further took into account that being, as it were, at the gates of Spain, to proceed beyond the Akansea would not only be to risk the personal safety of themselves and their men. but also to incur the danger of losing the fruits of their voyage, which they would have no means of publishing if they became captives in the hands of the Spaniards. Still another possible peril was that from the hostile savages, allies of the Europeans, who infested the lower part of the river and whose attacks they would be utterly unable to resist. They therefore left the village where they were on the 17th of July, returning by the way they had come, except that on reaching the Illinois river they ascended it to go to their own people instead of keeping on to the Wisconsin. Though this voyage was a mere flying trip, 67 devoid of any lasting consequence in the way of the establishment of missions or trading posts, it has yet come to be looked upon as an important and imperishable

JOLIET'S MAP OF THE MISSISSIPPI. 1674.

geographical datum. It is indeed certain that by it were the course and character of the Mississippi river between 68 the mouth of the Wisconsin on the north and that of the Arkansas on the south first definitely ascertained and published; and, as it was from the latter locality that the remains of Soto's army had in the preceding century descended by the river to the sea, it came about that by the junction of the two explorations, Spanish and French, two-thirds of the length of the Mississippi river had been clearly “discovered.”

With Marquette practically close the geographical writings of the Jesuit fathers, so far as regards the Mississippi river. The home government of the day, siding with Frontenac, it is supposed, in the polite quarrel between him and the Order, allowed no further publication of *Relations* after the one of 1672; an ace now regretted alike by both Catholic and Protestant capable of appreciating—at least in worldly things—the value to later generations of these matter-of-fact records. *Translata est gloria ab Israel* .

SUBDIVISION FIFTH. THE FRENCH ACCOUNT, Continued.

LA SALLE ON THE ILLINOIS RIVER; HENNEPIN AND HIS COMPANIONS; LA SALLE ON THE MISSISSIPPI; IBERVILLE; SAGEAN AND LE SUEUR; CHARLEVILLE; MINOR REPORTS AS TO THE SOURCE OF THE MISSISSIPPI.

Reappearing in local history about 1672, La Salle soon became a conspicuous figure in colonial affairs. In 1674 he made a voyage to France, returning to Canada in 1675. In 1676 the building of the new Fort Frontenac was placed in his hands, and later he obtained the command of it. He left for France again in November, 1677, and returned to Quebec in September, 1678, bringing with him a patent from the King authorizing him “to discover the western part of New France,” and requiring him to complete his enterprise within five years. He then went to Frontenac at last fully prepared to make an actual beginning of his projects for western and southwestern discovery and settlement. 70 Next month he sent out fifteen men with goods, with orders to go in canoes and await him at the Illinois, who lived in the neighborhood of the Mississippi. They were to trade with the Indians, accumulate provisions, fell trees for timber with which to build a fort there, and make all other necessary preparations for settlement and new discoveries. In the beginning of 1679, he sent out a party, which included Father Louis Hennepin. to Niagara, to build a fort and storehouse there, and a ship for the navigation of the lakes above. When, having embarked in this ship, he arrived at Missilimakinak, in August, he found that most of the men he had sent on ahead the year before had betrayed their trust, having traded on their own account alone, and had separated into smaller parties and scattered, without making any attempt to begin the settlement ordered. Although he recovered a portion of his merchandise, and arrested some of the deserters, he was necessarily much crippled. Yet he continued the voyage unhesitatingly. Arriving at the island of the Pottawattomies, at the entrance of Green Bay, he sent the ship back to the establishment at the end of Lake Erie,1 and having procured canoes with

1 This ship, as is well known, never arrived at its destination; it was last seen in the northern part of Lake Michigan, but its fate was never surely ascertained. La Salle on his return voyage up the Mississippi river in 1682, obtained from some tribe a young

Pana Indian, who after a while learned to speak French so as to make himself easily understood. He told his master that he had seem three years before, in the villages of the *Emissourites*, where he was a prisoner, two Frenchmen, who were all that remained of seven that were captured by the Nadouessioux while ascending the Mississippi in bark canoes. One of the two had obtained grace for himself and surviving companion by displaying and exploding a grenade. The next spring they were taken to these villages of the *Missouris* on a treaty of peace. and there they again astonished the Indians by firing off another grenade. LaSalle felt assured that the boy had actually seen two of his men; his words are: “Whom he depicted to us in such a way that I cannot doubt that one of them was my pilot.” He considered that the little savage could no more invent the description of the grenade than he could the portrait of the pilot, and thought that the plan of the deserters had been, after wrecking the ship, to join Du Luth, who was in the Nadouessioux country, and to trade there; finally, to save themselves with the English at the Bay of the North, should things go wrong. They could only have taken this route in going by the mission at the bay (St. Francois Xavier), he wrote. The relevancy of this note is, that these misguided men, thus taking their lives in their hands, by starting northward from the mouth of the Wisconsin whence Joliet and Marquette had started southward six years before, to some extent were the forerunners of Hennepin.

71 which to convey the party and all their *impedimenta* , coasted along the western and southern shores of Lake Michigan, until the mouth of the river of the Miamis, the St. Joseph of to-day, was reached. This they ascended to the carrying place between it and the headwaters of the Teakiki, now the Kankakee. It was in December, 1679, that La Salle now entered upon land through which flowed streams whose waters ran to the Gulf of Mexico; and he continued down the Kankakee and Illinois rivers, passing the native village (then temporarily abandoned) situated about where Utica now is. On January 5, 1680, he arrived at the camp of the Illinois at Pimetoui, or Peoria lake, and here he lodged with them, and soon began to arrange for the building of a fort near by, and for a ship in which to descend the Mississippi river to the sea.1

1 There are reasons for thinking that during the time La Salle was making his discoveries referred to that were never exactly reported. he had explored the Illinois river from its head, near the Chicago portage, to the permanent village of these Indians opposite the “Starved Rock” familiar to lovers of the romantic. If this be so it fully explains how he so confidently sent men into the wilderness to prepare for his coming, and even how he, possibly, may have had this very eminence in mind as a fitting site for the proposed fort, for which he had even selected a name in advance—“Fort Dauphin”—as appears by his letter of October 31, 1678. Circumstances prevented his lieutenant Tonty from building a fort on “The Rock” (as the French called it) in the spring of 1680, according to orders sent back to him by La Salle then en route eastward; but within three years it was built here, under the supervision of both. This establishnent was the civilized nucleus of the native settlements the latter had long been endeavoring to gather around him. A confirmation of the idea that La Salle had a prier knowledge of the upper part, at least, of the Illinois valley may be derived from an incidental expression to be found in a memoir from his pen, written when in Paris endeavoring to Interest men of position in his projected settlement near the mouth of the Mississippi. “M. de Lagny had proposed the establishment of this fort in 1678 after having learned its importance; after which Mgr. Colbert permitted Sieur de La Salle to make it and gave him the ownership of it.” La Salle was a courtier, and doubtless contrived that these high officials should believe that they were making strikingly original suggestions; when the first named proposed the building of a fort on the Illinois, and the latter desired a port for French vessels to be discovered in the Gulf of Mexico.

72

Although the head men of the Illinois Indians here had assured him, on his first arrival, that the Mississippi was navigable to the sea, yet they shortly after were tampered with by an emissary and then they endeavored to deter the Frenchmen by tales of the great dangers to be encountered in the lower part of its course. There were to be found there warlike barbarians who would stay all strangers; the water was full of serpents and other monsters; falls and precipices extended for leagues with a current so violent that no one

could escape who was once drawn in; and finally, the whole river disappeared in a great chasm and ran under the ground, and no one knew where it came to light again. La Salle refused to be swerved from his purpose by these frightful accounts, and went on with his work; but six of his men deserted him through fear. Indeed, he did not believe these stories at all, though he obtained by stratagem a more reassuring account from one of their returning war-chiefs, which was confirmed later by visitors from the Chicaches, Akansas. and Osages, from the south. In his letter of Sept. 28, 1680, he writes that besides these tribes, and the Matoutantas from the west, “Others called *Chaa* who live on the upper part of the great river arrived on February 24 and invited us to go to their homes. where they said was a great quantity of beavers and furs. and that they were not far from the sea of the West.1 One of the

1 There has been some speculation as to who these people were,but seeing that it was customary then, as now, to contract Indian and other proper names for colloquial purposes—as for instance Nadouessioux to Sioux, Pouteouatamis to Poux, Osages to Os, Kansas to Kans, etc—the Chaa may have been the Chaiena of the Joliet map, the same as the Shyennes, or Cheyennes, of to-day, who have gradually been driven to the west and southwest of their former habitations. This map, entitled *Carte generale de la France septentrionale*, shows eight tribal names strung along the east side of the upper Mississippi above the “Siou”; of which names Ihanctoua is lowest down, Chaiena the fifth in order, and Alimoupigoiak (supposed to be the present Assiniboins) farthest to the northwest. That the Chaas were not one of the Dakota bands proper, or Nadouessioux, would appear probable from the fact that Accault Understood most of the northwestern languages except that of the Sioux; but as he was not going to them with his party a knowledge of their language was nut indispensable, as La Salle showed when defending himself. Although the Shyennes seem to have been for long time the friends and allies of the Dakotas, yet modern research has shown that philologically they are not akin to them but to the Algonquins. In this aspect they form the counterpart of the Assiniboins who, though their language is similar to that of the Dakotas, to whose stock they belong, are their hereditary enemies and affiliate with the Algonquin nations instead. Dr. F. V. Hayden,

in his *Indian tribes of the Missouri valley*, (1862,) gives among the various names by which the Shyennes were known those of Sharas, Shawhays, and Sharshas, from any one of which three the abbreviated word Chaa (ch pronounced like sh) might have been formed.

73 three reverend Recollect fathers who had accompanied me that far offered himself, with two of my bravest men, to make this voyage, in order not to lose the opportunity to announce the gospel to tribes who had never heard speak of it. They left the last day of February in a canoe."

This vicarious expedition was the one, so well known to posterity, which enabled Father Hennepin to discover the great falls of the Mississippi river. never before, it is supposed, seen by European eyes. The books published by Hennepin, together with the reports and letters of La Salle and his friends, supplemented by the paper of Duluth, are sufficient to enable a good account of the geographical results of this journey to be compiled, in spite of the absence of journals showing lines of travel in detail. The men selected to accompany Hennepin were one Michael Accault and another Anthony Auguelle nicknamed the Picard, and they were furnished with goods for presents to the Indians. La Salle at a later time 74 (1682), when defending himself from invidious criticism, says expressly that he did not send Accault to the Nadouessious, but to ascend the Great River; adding, to show the eminent fitness of the man for such a task, that he had spent two winters and one summer among the nations, whose acquaintance they made when with the Illinois, and had seen several of the most important villages by which he was to pass1 .

1 This statement, if taken exactly, is worthy of notice. Seeing that less than two months elapsed front the time La Salle's party arrived among the Illinois till Accault and his companions left for the upper Mississippi, this man could not have made the acquaintance of the western Indians unless he had been sent there some time in prior years. Probably he was among the fiteen men who were sent in advance, as mentioned in the text a few pages back, and may have extended his travels to the Mississippi, afterwards being taken into favor again when La Salle arrived at Lake Michigan. Reckoning the two months stay

with the Illinois as the second winter of Accault's residence among the Mississippi tribes, may be considered a pardonable exaggeration for rhetorical purposes.

These three men left Fort Crevecœur on the 29th of February, 1680, in their loaded canoe, and arrived at the mouth of the Illinois river March 7th, where they had to wait five days on account of the floating ice. Ascending the Mississippi, they passed on the left the river of the Outontantas, Paote, and Maskouten Nadouessioux, (Sioux of the Prairie,) now the Des Moines. Somewhere above this stream it was, between Burlington and Rock Island but nearer to the former, that they met with the large Sioux war party, who took them captive, and who, having abandoned their original plan, now returned home ward. Next beyond the Des Moines they noted on the east side the river Ouisconsin, or Wisconsin, also known to the savages as Meschetz Odeba. Next to that came the Chabaouadeba of the Nadouessioux, otherwise the Noire, now the Black river between La Crosse and Trempeleau. 75 Higher still, on the same side, was the river Des Bœufs, Oxen river, now the Chippewa, which they explored for ten or twelve leagues. Half a league above this commenced the *Lac des Pleurs* , Lake of Tears or Weeping, as Hennepin named it, now called Pepin. Next, a stream without name, to which Hennepin gave the appellation Du Tombeau, or Grave river, now the St. Croix. In nineteen days from the time of their capture they all arrived at a landing place in a cove four or five leagues below the falls of St. Anthony.

This landing place was probably somewhere on the *Grand Marais* of the modern French, the Pig's Eye fiats of the Americans, two to five miles below Phalen's creek in the lower part of the city of St. Paul. Here the Indians hid their canoes, and everything else was carried by them and their captives overland for sixty leagues to the villages of the former on or near the *Lac des Issati* , now Mille Lacs, or the Rum river which issued from it. This lake was estimated to be sixty leagues west of Lake Superior, and it was there, as well as in the islands and country surrounding it, with other lakes whence rise several rivers, that lay the country of the various tribes then comprehended under the general name of Nadouessioux. In the beginning of July, the Indians set out in separate parties on a buffalo

hunt. Hennepin and his companions accompanied the one that descended Rum river, the river of the Nadouessioux, but now christened St. Francis by our missionary. Arriving at its mouth the party camped on an eminence opposite it, most probably the rising ground in the southern part of the present village of Champlain. Although the Indians had ascended the Mississippi river very far, they could say 76 nothing about its source; but they told the Frenchmen that at twenty or thirty leagues above the great falls there was a second fall at the foot of which were some villages of the prairie people called Tintonha, who lived there a part of the year. There will probably be no opposition to the theory that this fall was what was later known as Sauk Rapids. Hennepin and Auguelle were allowed to leave the Indians at the camp opposite Rum river in a canoe together, as Accault preferred to stay behind with the Indians there, in order to go down to the Wisconsin river where La Salle had promised to send men to meet them with supplies and news from the settlement. Seven or eight leagues down the river they came to where it forms a cataract of thirty or forty feet high, which they beheld first of all white men, so far as is known, and which Father Louis named after St. Anthony of Padua. The two men did not quite reach the Wisconsin; for one of the chiefs overtook them and went hastily ahead to arrive there first and seize whatever goods he could. But within three days they met him returning discomfited, having found neither Frenchmen nor goods, the fact being that the former had been discouraged or dissuaded and did not go as far as where they were ordered to go. Hennepin and his companion, therefore, now turned back again and rejoined their Indian party at the Chippewa river, as far as which the latter had descended, hunting as they came. Accault was with them. The hunting party continued down the river apparently about as far south as what is now the stream called Apple river in the northwest corner of the State of Illinois, taking their former captives along with them. Having finished their hunt they turned northward again, and on the 25th of July, they met the Sieur Du Luth 77 and his men, who were descending the river expressly to find Hennepin and the two Frenchmen. The place of meeting was probably about ten miles above the present city of Dubuque.1

1 Du Luth's name has to be introduced here Incidentally, but it may not he out of place to show, in addition, how he came to be so opportunely on hand. He was an independent explorer or adventurer, who the year before had visited the Nadoussioux, reaching the “great village of the Izatys” on July 2, 1679. at which place he says there had been no Frenchman before him. The next year he thought he would enter the Sioux country from Lake Superior by the more circuitous water route; so he ascended the Brule and descended the St. Croix. At the mouth of the latter he met some Sioux who told him about the captivity of Hennepin and his canoemen, which caused him to set out to overtake the hunting party and the captives, instead of proceeding directly to the village of the Nadouessioux. This incident caused him to change his plans, he says, which had been, in his own words, “to push on to the sea in a west-northwesterly direction, which is that which is believed to be the Red sea, whence the Indians who had gone warring on that side gave salt to three Frenchmen whom I had sent exploring, and who brought me said salt, having reported to me that the Indians had told them that it was only twenty days journey from where they were to find the great lake of which the waters were worthless to drink.” The men he refers to here who were impliedly sent out in 1679 from the “Izatys village,” must have gone beyond the Mississippi river some distance and thus have been among its discoverers; but the headwaters of the river presented no such charming prospects of trade and power as its lower portion did, and were conseqnently talked about and thought of merely in an incidental way, when at all.

The combined parties now continued their journey, by the Rum river route, to the Issati villages, where they arrived on August 14. Towards the end of September, having no means with which to begin an establishment, they resolved to return to the French settlements; and so accompanied by Du Luth, eight Frenchmen in two canoes, they descended the Rum and Mississippi rivers and ascended the Wisconsin, to return to Canada by the Green Bay route.

In addition to the various Hennepin books, there was published in France, in 1697, a volume purporting to be written by the Chevalier Tonty, but the authorship of which he disavowed. The work contains, however, in an incidental way, some interesting information, which, if true, is of 78 the highest importance in this connection. In it is stated how La Salle appointed “M. Dacan” to make an exploration of the lands lying along the river Mississippi running

PART OF CARTE DE LA NOUVELLE FRANCE, ET DE LA LOUISIANE. REVEREND PERE LOUIS HENNEPIN. 1683.

northeast, and selected the Recollect Father Louis with four other Frenchmen to accompany him. They embarked the 28th of February, 1680, on the river of the Illinois, which they descended to the Mississippi, and then ascended the latter “as far as 550 leagues towards the north, at seven 79 leagues from its source, diverging from time to time on one side or the other of the banks to reconnoitre the different nations who lived there. This river issues from a great spring [*source*] on the top of a hill, which borders a very beautiful plain in the country of the Issati, in 50° of latitude. At four or five leagues from its source it becomes so enlarged by five or six rivers which empty into it, that it is capable of floating boats.”

Further on it states that Dacan “placed, at two leagues from the source of this Great River, the arms of the king on the trunk of a great tree in sight of all these nations.”

This publication was very likely a piece of bookseller's hack work, and its account of the expedition differs widely from that given in the works of Hennepin himself and the La Salle documents. Still the description of the source of the Mississippi has such suggestions of the actual truth as regards the grand topographical features of the country, the *hauteurs des terres* and the great plains of the Red river west of them, that it is more likely to have been derived from Indian sources, through the medium of Accault or some other French

voyageur, than to have been conceived entirely in the brain of a compiler in a Paris Grub Street.

The doings of La Salle, from the time he left his Illinois fort near Peoria lake two days after Hennepin's departure, till he descended the Illinois river two years later to proceed on the long meditated journey to the mouth of the Mississippi, are well known and need only a passing reference here. In these two years this “much enduring man” made long journeys by land and water between the colony and his settlement. He was in danger from war parties of savages, 80 exposed unsheltered to the rigors of winter; suffered many times from hunger; and lastly was betrayed by some and ill supported by others of those who served under him. Yet he never faltered, but with whatever means he had still did his best. In the light of our present knowledge, he was not the discoverer of the lower part of the Mississippi river and of its mouths; in his own eyes he was, and reasonably and honestly too, as will be hereafter shown; therefore in a geographical memoir like this it would not be right to omit reference to the journey he had so set his heart upon.

It has been maintained by some of La Salle's more enthusiastic admirers that the waters of the Mississippi itself, as well as those of the Ohio and Illinois, were seen by him sometime between 1669 and 1672, prior to the voyage of Joliet; but this theory, at the best, has not met with more than respectful attention. It is a little singular, had he already seen the Mississippi, that in his own writings, and in official papers friendly to him, no statement can be found showing that at the time he made his settlement on the Illinois river, and later when ready to start upon the actual journey of discovery, he had in mind any other idea than that he was going to a river no portion of which he had ever seen before. Writing in September, 1680, he plainly states that he had diligently inquired of the natives when at the Illinois village on Peoria Lake, as well as of the visiting Indians from tribes down the river, concerning the character and navigability of the Mississippi; and that they told him marvels of it, which he says, he postpones writing about until he shall have ascertained their truth. His idea was to have the productions of the country (buffalo hides apparently) exported by way of the Gulf; but he considered 81 that even if the river did not prove

navigable to the sea, it would not be necessary to return to the expensive and dangerous way of the lakes, but that by means of the river which he had found the commodities of the country of the Illinois could be transported to Fort Frontenac. This river he says was the one called by him *Baudrane* , by the Iroquois the *Ohio* , and by the Outaouas *Olighin-cipou* , which entered into the Colbert 20 to 25 leagues south-one-quarter of southwest of the mouth of the Illinois1 . When all was ready they began the descent. Arriving at the Akansas villages, Joliet's lowest point, possession was taken of the country of Louisiana2 in the name of the king of France. This occurred on March 13, 1682, with great ceremony at Kapaha3 .

1 The very incorrect distance, less than one-third of reality, and the false bearing here given, do not favor the idea that La Salle was speaking from his own knowledge of the localities. Indeed it did not require a personal visit to conclude that the Ohio flowing westward must enter somewhere into the Colbert flowing southward.

2 Margry shows that the first known use of this geographical term was by La Salle, in a private document dated June 10th, 1679.

3 The reader will probably be reminded here of the *Kapaha* of the Soto expedition mentioned by the historian Garcilaso, but the locality is not the same. This word together with Casquia, Chisca, Chicaca, and Chukagoua, were all that were met with by La Salle of those streams and villages the nomenclature of which belongs to the Soto narratives. It is true that when with the Illinois he speaks of hearing from the Indians of the geographical names reported by the prior expedition referred to, among which was Aminoia, the place of Moscoso's embarking; but on going down the river he must have found he had misunderstood it, for neither he nor his lieutenants mention the word again. The name of this ancient village seems to appear, under a somewhat different form, in a certain sentence to be found in a book of American travel by J. F. D. Smyth, published in 1784. Among the tributaries of the Mississipp mentioned by him is “the Imahans or Arkansaw river.”

The proclamation included all the country between the mouth of the St. Louis, called also Ohio, Olighin-sipou, and Chukagoua; and along this and each of the rivers which empty into it on the east; also the country as far as the mouth of the river of Palms on the west, along the -6 82 Colbert called Mississippi, and all the rivers which descend into it on the east. The three passes of the river were reached in April and descended to their mouths; and on the 9th, at the first firm land above the head of the delta, formal possession was again taken; and the terms of possession were to the same effect practically as at Kapaha, but contained some additional geographical definitions. There was included all the country along the Colbert or Mississippi and the streams emptying into it “from its source beyond the country of the Sioux or Nadoussioux” to its mouth at the sea or Gulf of Mexico, “on the assurance that we have had from all this nation that we are the first Europeans who have descended or ascended the said river Colbert.”

Later, when at leisure at his fort of St. Louis on the Illinois river, as appears by some loose sheets in his hand-writing, La Salle seems to have pondered on the geographical results and relations of his discovery, and arrived at the conclusion that the river he had just explored was not the Chucagua or Rio Grande of Soto and Moscoso. However, the identifying the Ohio with the Chucagua in the two proclamations is not necessarily to be looked upon as a strict geographical definition, but rather as a political precaution employed to cover and anticipate all adverse claims to possession.

When in the next century the geography of the interior of the country became better understood, it was seen that he was mistaken; but he had argued well, though from scanty and erroneous data. The Soto expedition was in his mind, and he looked for populous nations; for an open country on the banks of a very wide river; and for other 83 things which he did not meet with. Below the mouth of the Ohio he neither saw nor heard of large streams flowing from the east, from far back in the interior of the country, emptying themselves into the Mississippi river, similar to the Arkansas and Red rivers, on the west side. These things made him think that the Chukagoa could not be very far off to

the eastward, running southerly to the Gulf. Still he had been told that it did enter the Mississippi, which he considered possible; for the following reason. Commencing above the Akansa villages there was a great island, or rather many islands, which extended for sixty or eighty leagues; and he thought that somewhere on the eastern side of this island the Chucagoa might come in1 . However, he was not able to decide the question because they took the west channel in descending and had to use it in coming back; for they had left most of their baggage with the Akansa.

1 The same island already described in a foot-note treating of Radisson's *River that Divides Itself in Two*.

A reasonable explanation of the geographical complications caused by the somewhat mythic, and yet real, Chukagoa river may be offered. Away to the eastward, in the Appalachian mountains, the army of Soto had come upon the headwaters of a river which ran westward and which (where they struck it again a year later) the natives called Chucagua; meaning as La Salle afterwards said, “The Great River, like Mississipi in Outaouas and Masciccipi in Illinois.” Now this stream was the Tennessee which these Spaniards, ignorant of the abrupt bend it makes to the northward at a point far beyond where they left it, not unnaturally supposed to continue the same general course. 84 Arriving at the Mississippi itself they concluded they were on the lower part of the same river of which they had already beheld the sources. Could La Salle have realized the truth that his river and Soto's were one and the same, he might have spared himself much thought. His error in supposing that they were not may have been partly owing to the maps of the day. As already mentioned here, in treating of the Spanish discoveries, these maps portrayed in the interior of the country a complicated hydrography, of which the Spirito Santo bay and river were prominent features, and which proved later to be entirely irreconcilable with the truth. They were evidently useless to an explorer descending a stream from the interior, who might have desired to find at what part of the Gulf coast he

had arrived. No delta of a large river appeared on the north shore in any of these maps or charts and, with the exception of the bay referred to, the topography was very obscure.1

1 La Salle's real ideas about the position of the mouth of the river were that it was a long way west of the Saint Esprit or Spirito Santo bay. He wrote in the detached leaves before mentioned, “Moreover, all the maps are worthless, or the mouth of the Colbert is near to Mexico; because it has its mouth to the east-southeast and not to the south, as all the south coast of Florida faces, except that which runs from the river called Escondido on the maps as far as Panuco. This Escoadido is surely the Mississippi.”

He further showed that it could not be the peninsula of Florida where the river emptied, as that was not wide enough for the Colbert, which “bears to the east, or at most to the southeast, making in this direction at least one hundred and twenty leagues from the 30th to the 27th degree of latitude when it discharges itself Into the sea; which is impossible within the width of the Cape of Florida, but precisely suits the bearing of Escondido. That it is which makes me maintain that we were near Mexico and consequently in another river than the Chucagoa, where the Spaniards were so long a time before arriving in Mexico.”

This Escondido, or Hidden river, of the Spaniards, was subsequently known to them as the Rio Bravo del Norte, at present Rio Grande, and in part forming the international boundary between the United States and Mexico. Besides his being misled by the exaggeration of the Sore story and by the indefinite coast line topography of the then current maps, La Salle had failed by two degrees in Chutalning the true latitude of the mouths of the Mississippi, which are in about 29° instead of 27°. These considerations show how he was drawn into irretrievable error, though having the best intentions. He was thus the innocent cause of the very erroneous way in which the lower part of the river that he had explored to The sea was represented on the great map of the geographer Franquelin.

Somewhat in the sense in which La Salle discovered the lower portion of the Mississippi river in 1682, it was also discovered seventeen years later by Iberville. As has already

been shown, the former was finally led to believe that Soto had not preceded him in his descent of the river, and therefore, considered himself an original discoverer. In its turn La Salle's claim was not universally admitted; 85 for it was said at Paris, even by some high in authority; that the river which he descended was nothing new as it doubtless emptied into the bay *Saint Esprit* . In reality said bay had only been a “geographical expression” to him, and certainly was no more to his critics.

The story of La Salle's expedition by sea, in 1684, to the Gulf of Mexico for colonizing purposes is well known, and only needs mention here. In a few years the explorer was dead and the colony a thing of the past. After a while various men of enterprise solicited the French government for authority and means to continue the work; not in the region towards the Spaniards where La Salle lost himself, but at the entrance of the Mississippi. The government, however, was no way anxious to form establishments at the mouth of the river at once, but only desired to complete the discovery in order to hinder the English from taking possession there.

The fortunate man to have charge of this expedition was Le Moyne d'Iberville. He sailed westward along the coast from the peninsula of Florida, intending to carefully examine all the land for fifty or sixty leagues beyond it. Above all he wished to note the rivers as far as the “Bay of Saint-Esprit,” where all his vessels were to rendezvous, and into 86 which he would go and ascertain if the Mississippi really entered it. The bay was said to be one hundred leagues. east of the Bay St. Louis where La Salle had settled down. When Iberville arrived at Mobile bay he considered the river there large enough to be the Mississippi sought for; but for sufficient reasons concluded that it was not the one the travellers descended.

Thence he coasted westward until he found a harbor for his vessels, afterward known as Biloxi, where they anchored. Here he learned from the Indians that the river he sought for was some fifteen or twenty leagues farther and that it was known to them as the Malbanchia, and was the same as that called by the Spaniards the River of the Palisades.

On the 27th of February he left his fleet in the harbor and with a strong force in smaller craft departed to reconnoitre the environs of the Lago de Lode or Mud Lake, “which is what the Spaniards call the one named on the maps the *Baye du Saint-Esprit* .” On the night of March 2, 1699, he put into the entry of the Mississippi River.1

1 Up to this time the Spaniards seem to have acted like the dog in the manger in respect to the lower Mississippi river, and the shores of the Gulf of Mexico to the east and west. Although the entire coast line had long ago been explored by their ships no information concerning it was directly published. They evidently knew about the embouchure of the river, for they had called it the River of the Palisades ou account of the bristling appearance presented by the trees which had drifted down from above and lodged at the outlets at the delta, where they remained and helped to form bars. They, the Spaniards, told Iberville, that by reason of these bars there was no entry, but he writes that he did not believe the report. A Spanish pilot told Chasteaumorant, one of the French officers, that he did not know any Mississippi river, but that he had heard speak of a river called the River of Canada, beyond the “Islands of San Diego.”

Through the efforts of himself and his brother Bienville, the lower part of the river was thoroughly examined, but he was surprised and disappointed in not being able to recognize the islands and branches of the river he had read about 87 Neither could he find the Quinnippissas and Tangipahoes of the expedition of La Salle; but he afterward explained this on the ground that the true names of some of the tribes had been suppressed through policy. When, however, the letter which Tonty in 1685 had left behind with the Indians to be given to La Salle when he should ascend the river again, was placed in his hands, all doubts vanished, and Iberville knew that the riddle was at last read. He knew now that the Mississippi did not debouch in any *Spirito Santo Bay* of doubtful identity, nor was an *Escondido* emptying into the gulf at its extreme western side, but on the contrary that it was identical with a river in the centre of the northern coast, whose

well defined delta, however, through neglect or accident, had never yet been represented, apparently, on the charts of a sea already navigated for nearly two centuries.

With this first voyage of Iberville the story of French discovery and exploration of the Mississippi river, so far as regards the lower four-fifths of its course, is virtually brought to an end. Concerning this upper fifth, or that part of the river which lay beyond the farthest point reached by Hennepin in 1680—the entrance of the river of the Nadouessioux, now Rum river—there only remain some minor incidental Henmates, remarks and rumors, to be found in various Henneous books and documents. Such as they are, however, they are here collected together, and may not be unworthy of the reader's attention.

In the year 1701, a man named Mathieu Sagean claimed that he had been with La Salle in 1683 at the Fort St. Louis on the Illinois, and, having obtained Tonty's permission, had left there with a number of companions to ascend the Mississippi river to make discoveries. His story ran, that at 88 about 250 leagues from the mouth of the Illinois, they came to a high fall in the river, around which it was necessary to make a portage of six leagues; that beyond this they travelled 40 leagues or more to a place where they staid for two and a half months, and hunted all around, but saw no Indians; that at 14 leagues away (given elsewhere 40) they found a river running south-southwest, upon which they embarked and descended for 240 leagues, until they arrived at the populous country of the Acaaniba, some 200 leagues in extent. Of this region he told wonderful tales; about its immense riches in gold and other property; its king, standing army; brave men and virtuous women, etc. Sagean was an illiterate man, so, after being questioned by government officials about his travels, his account was reduced to writing, but it was soon decided to be unworthy of any confidence. or at least the first part of it which describes the journey west of the Mississippi. The narrative remained in MS. until within a few years; when published it made some sixty pages or so, the first quarter of which describes the fabulous south-western travels. Had he been a man of education, like Hennepin or La Hontan, he would undoubtedly have written a book, and have accompanied it with some sort of a plagiarized or imaginative map, as they did, which would have been an infliction on geographers for

a generation or two, but, fortunately for posterity, he was not. There are probably but few general readers, who, though the names of the first two *archers* may be familiar to them as household words, are acquainted with the abortive hoax of Sagean.

The trader and explorer Pierre Le Sueur, when at Paris, in a letter written in 1701, showed that this man Sagean was an imposter, as he had known him in Canada bearing 89 a different name; and that his story of new discoveries was a falsehood, as in statements which were susceptible of verification he was clearly wide of the truth. After saying that more than two years before he had been at the Falls of St. Anthony with the Sioux and had ascertained the length of the portage there to be no more than 1500 paces, Le Sueur continues: “I have already said that I had ascended more than 100 leagues above the Falls of St. Anthony, which is the only place where it is necessary to carry one's canoe and baggage, in ascending the Mississipi from its mouth to its source, and the Sioux with whom I went up assured me that there were yet more than ten days journey to ascend. It is at least 100 leagues before coming to the sources of the Mississipi. I say sources, because there are many of them, according to the report of the savages.”

The distance of 100 leagues here given would bring Le Sueur to a point about four miles below Sandy lake, but as, of course, that was only an estimate, the termination of his journey may be safely put at that place, where, doubtless, as in more modern times, the Indians had a village. His estimate of a like distance beyond, of 100 leagues to the source of the river from the place where he turned back, if it be Sandy lake, is also a good approximation, being within twenty-one miles of the actual distance if the Itasca branch were meant; but is still nearer the truth if the Turtle river source were understood, as it probably was.

Le Page du Pratz, author of a well-known History of Louisiana, written in 1757, went to that colony in 1718 and remained there sixteen years. In this book, speaking of the Mississippi river, he states that, “Many travelers 90 have tried in vain to reach its source, which. however, is known, whatever some ill-informed authors may have said; here is what is the

most certain concerning the source of this great river of North America." He then relates a story, which, having been received by him at first hand, we have no reason to doubt. He says that a M. du Charleville, a relation of the governor Bienville, told him that at the time of the settlement of the French, curiosity had led him to ascend the river to seek its source.

PART OF CART DU CANADA, OU DE LA NOUVELLE FRANCE, DE L'ISLE. 1703.

With two Canadians and two Indians, in a birch bark canoe he went up the river 300 leagues above the Illinois, where he found the fails called St. Anthony's, a flat rock crossing the river giving it only eight or ten feet descent. Making the portage there, he ascended 100 leagues farther to the country of the Sioux, whom he found engaged in hunting, and who were very much surprised to see him. They told him that it was a very bad country, very little game in it, and that the source was as far from the falls as the fails were from the sea. Du Pratz says the latter distance was reckoned at 800 leagues. and considered the Indian estimate probable taking 91 into account the size of the river above the falls. There are there 30 to 35 fathoms of water, he writes, with a breadth in proportion, which amount of water could never have come from a source not far removed; and all the Indians, informed by those nearer the head of the river, were of the same opinion. Charleville seems To have been deterred by these reports of the Indians, who exaggerated matters, probably, to make him turn back; for Du Pratz says he did not see the source of the Mississippi. Elsewhere, in concluding his observations on the Sioux and the upper Mississippi, our author says: "However, we need not trouble ourselves concerning our interests in this very distant region; many centuries must pass before we shall have penetrated these northern countries of Louisiana."

Penicaut, one of Le Sueur's men, in his *Annals of Louisiana* , wrote "To the present time [say 1722] no one has discovered the source of the Missouri, any more than that of the Mississippi."

Sieur Mandeville, in a memoir written in 1709, says:—“They ascend (*on remonte*) the Mississippi as far as its source, which is about 1000 leagues from the sea. They descend it without much trouble.”

Lamothe Cadillac was a French army officer stationed at Mackinaw and Detroit in the early years of the eighteenth century. In an elaborate memoir by him dated 1718, written probably during his enforced leisure in the Bastile, he uses these words:—“As regards the source of the Mississippi river, we can say that it is in 48° latitude and 276° longitude. It apparently has its origin in some lake, which forms another river, going to the north and discharging itself into the great lake of the 92 Assiniboels, which forms rivers without end that empty themselves towards Fort Nelson, and into other great bays. This lake is called by the savages the Grandfather of All the Lakes, meaning by that expression that it is incomparably greater than all the others.”

The Company of the Indies, authorized in 1717, states, in an undated memoir or prospectus, that it is formed to make establishments in Louisiana and other countries of enormous extent, from the mouth of the Mississippi and Mobile rivers “as far as the two sources of the river Mississippi in the north, about 800 leagues, which is the general course of that river.” Possibly by this expression of “two sources” is meant the head-waters of the Mississippi proper and those of the Missouri.

The elder Verendrye in 1737 sent to France a general map of the country lying to the westward and northwestward of Lake Superior, as known to the French by that time from their explorations or from information received from the Indians. On it our Red lake is represented as emptying through the Red river into Winnipeg lake on the one side, and on the opposite is shown as connected by a stream with the Mississippi. This stream is naturally a combination of the upper Red Lake river and Turtle river. From the mouth of the latter another little river reaches out westward and heads in a small lake to the south or southwest of Red lake, which stream and lake bear the expression *Source du Mississipy* .

From this time on till the speculations of the English travellers and authors, beginning a quarter of a century later, were printed, nothing seems to have been written concerning the source of the river; nor do the maps published 93 during that interval throw much additional light on the subject.

N. B. As may be readily imagined, the books consulted by me in the compilation of this monograph are entirely too numerous for individual mention. The greater part of them are to be found on the shelves of the library of the Minnesota

PART OF CARTE DES NOUVELLES DE' COUVERTES A L'OUEST DE LA NOUVELLE FRANCE, DRESSE SURLES MEMORIES DE MR. DEL' ISLE. 1750.

Historical Society, which possesses a good collection of French authorities treating of American history in the 16th, 17th and 18th centuries, and has made a beginning towards obtaining a similar one of Spanish works relating to the discovery of America, and to its history while under the rule of Spain. There are, however, among all these a few which have been of such signal use in furnishing original facts, that it would be sheer ingratitude not to indicate my great 94 obligations to them. These books are enumerated as follows:

1. *The Historia general y natural de las Indias Occidentales* of Oviedo, (1535,) as reprinted at Madrid in 1851–55, in 4 vols., 4to. The entire fourth volume had never before been published.

2. *Relation des Jesuites, &c., dans la Nouvelle France*, 1632–1672. Reprinted at Quebec in 1858, in 3 vols., large 8vo. This was a practically new book, for the original issue, in forty-one volumes. was entirely out of reach of the ordinary scholar.

3. *Le Journal des Jesuites*, 1645–1668. Edited by Abbes Laverdiere and Casgrain, and first published at Quebec, 1871.

4. *Decouvertes et Etablissements des Francais dans l'ouest et dans le sud de l'Amerique Septentrionale*, 1614–1754. [Edited by Pierre Magry] 6 vols. Paris, 1876–1886. A very

valuable historical quarry. Still, though officially declared completed, this work has neither alphabetical index nor atlas of maps, which much detracts from its completeness and availability.

5. *The Expedition of Don Diego Dionisio de Penalosa—from Santa Fe to the river Mischipi and Quivera in 1662*. Edited by John G. Shea and first published by him, New York, 1882.

6. *Voyages of Peter Esprit Radisson, 1652 to 1684*. First published by the Prince Society, Boston, 1885.

7. *The Narrative and Critical History of America*. Edited by Justin Winsor, Librarian of Harvard University. 8 volumes, Boston, 1884–1889. This work, like the Jesuit Relations, is a cyclopedic one and a true *thesaurus*.

95

On examining the above dates of imprint it will he seen that a man writing thirty-seven years ago on the historical geography of the Mississippi valley would have now, if living, and jealous of his credit, to re-write his whole work; in view of the new facts brought to light by the first six of these publications. It is to be hoped that the efforts now being made to unearth manuscripts and maps of the time of Columbus, hitherto unknown or known and lost, referring to the discovery of the New World may be successful. And it is also much to be desired that such searching should not stop there, but be continued with a view to finding like valuable papers concerning the voyages and expeditions of the Spaniards to and in North America in the sixteenth century, and concerning their subsequent doings at the forts and missionary stations which they maintained there, particularly on the coasts of the Gulf of Mexico and the Atlantic ocean.

SUB-DIVISION SIXTH. EARLY TERRITORIAL CLAIMS; EXTENT OF CANADA AND LOUISIANA; TRANSFER OF LOUISIANA BY FRANCE TO SPAIN; BOUNDARY BETWEEN FRENCH AND ENGLISH POSSESSIONS; WESTERN BOUNDARY OF THE

UNITED STATES; TRANSFER OF LOUISIANA BY SPAIN TO FRANCE; CESSION BY FRANCE TO THE UNITED STATES OF AMERICA; INDIAN OCCUPANCY, TRADITIONS AND WARS; CAPTAIN CARVER'S TRAVELS; THE JOURNEY OF DAVID THOMPSON.

It is a somewhat difficult matter to properly formulate the political geography of the Mississippi valley. Prior to the nineteenth century, the interior of the country was so little known that grants were made, and claims founded or decided, on such definitions of territory or descriptions of lines as now appear vague in the extreme.

Spain, by virtue of the discoveries of Columbus and others, confirmed to her by papal grant,may be said to have been the first European owner of the entire valley of the Mississippi; but she never took formal possession of this part of her dominions other than that incidentally involved in Soto's doings. The feeble objections which she 97 made, in the next two centuries after the discovery, to other nations exploring and settling North America, were sucessfully overcome by the force of accomplished facts.

The name of Florida, now so limited in its application, was first applied by the Spaniards to the greater part of the eastern half of North America, commencing at the Gulf of Mexico and proceeding northward indefinitely. This expansiveness of geographical view, was paralleled later by the definition of a new France of still greater extent, which practically included all the continent.1

1 Sieur de la Roche was appointed January 12, 1598, Lieutenant-General of “Canada. Hochelaga, Newfoundland, Labrador, the river of the great bay of Norembegue, and the lands adjacent to the said provinces and rivers which are the whole length and depth of the country, provided they are not inhabited by the subjects of any other Christian Prince.”

L'Escarbot, in his history of New France, written in 1617, says in reference to this: “Thus, our Canada has for its limits on the west side the lands as far as the sea called the Pacific, on this side of the Tropic of Cancer; on the south the islands of the Atlantic sea in the

direction of Cuba and the Spanish island; on the east the northern sea which bathes New France; and on the north the land, said to be unknown, towards the icy sea as far as the arctic pole."

Judging also by the various grants to individuals, noble or otherwise, and "companies," which gave away the country in latitudinal strips extending from the Atlantic westward, the English were not far behind the Spaniards and French in this kind of effrontery—not dead even yet, it would appear, if Africa be looked at. As English colonists never settled on the Mississippi river in pursuance of such grants, and never performed any acts of authority there, such shadowy sovereignties may be disregarded here, in spite of the fact that it was considered necessary, many years later, for various states concerned to convey to the United States their rights to territory which they never owned nor ruled over.

Thus, in the most arbitrary manner, did the Mississippi -7 98 river, though yet unknown, become the property successively of the Iberian, Gaulish and Anglo-Saxon races—of three peoples who, in later times, by diplomacy and force of arms, struggled for an actual occupancy. Practically however the upper Mississippi valley may be considered as having been in the first place Canadian soil; for it was Frenchmen from Canada who first visited it and traded with its various native inhabitants. The further prosecution of his discoveries by La Salle in 1682 extended Canada as a French possession to the Gulf of Mexico, though he did not use the name of Canada, nor yet that of New France. He preferred to call the entire country watered by the Mississippi river and its tributaries, from its utmost sources to its mouth, by the new name he had already invented for the purpose—Louisiana.

The names of Canada and New France had been differently used to express about the same extent of territory, but the new name of Louisiana now came to supercede them in being applied to the conjectural regions to the west. Although La Salle had applied the latter expression to the entire valley of the Mississippi, it was not generally used in that sense after his time: the upper part of the region was called Canada and the lower Louisiana; but any actual dividing line between the two provinces was not absolutely

established. and their names and boundaries were very variously indicated on published maps.

In 1712, when a patent was granted to M. Crozat by the French government, the first authoritative definition was made, by describing the territory in which he was empowered to trade; though the right was reserved to 99 increase, if thought proper, the extent of the government of Louisiana. As regarded the Mississippi more particularly, the province extended from the sea shore on the Gulf of Mexico to the Illinois (country) and included all the basin of the Ohio to the east and that of the Missouri to the west. In 1717, was added by the government the country of the savages called the Illinois. Speaking generally, the *Canada* of the last century included the Great Lakes, and the country drained by their tributaries; the northern one-fourth of the present State of Illinois, i. e. so much as lies north of the mouth of Rock river; all the regions lying north of the northern watershed of the Missouri river; and, finally, the valley of the upper Missouri itself, where it was explored by the Verendryes for some unkown distance above and below the country of the Mandans.

Hard pressed by the English during the Seven Years' War, France found Louisiana too heavy a burden to carry alone any longer. In October, 1761, she solicited aid in money and supplies from Spain, but the latter power did nothing more at the time than to take the into consideration. The next important step was the Preliminary Treaty of Peace, signed by England, France, and Spain, at Fontainebleau, on November 3, 1762. In the sixth article of this treaty it was “agreed that for the future the limits between the possessions of his Most Christian Majesty and those of his Britannic Majesty in that part of the world, shall be irrevocably fixed by a line drawn along the middle of the river Mississippi, from its source to the river Iberville, and from thence by a line in the middle of that stream and of the lakes Maurepas and L. of C. 100 Pontchartrain to the sea.” The nineteenth article read—“His Catholic Majesty cedes and guarantees, in absolute ownership to his Britannic Majesty, all that Spain possesses on the continent of North America, to the east or southeast of the Mississippi.”

On this very day, November 3, 1762, the French and Spanish plenipotentiaries signed another act, by which the French king “ceded to his Cousin of Spain and his successors, forever, * * * all the country known by the name of Louisiana, including New Orleans and the island on which that city in situated.” The Spanish king accepted the gift on the 13th of the same month, but both donation and acceptance were kept secret by the two powers.

On the 10th of February, 1763, the definitive treaty of peace was signed, on the part of the kings of Spain and France on the one side, and the king of Great Britain on the other, Portugal consenting. The seventh article of this treaty repeats literally the wording used in the preliminary treaty, as to limits between the possessions of the French and English in North America.

Having now obtained possession of eastern Louisiana and Canada, the king of Great Britain at once proceeded to divide his new acquisitions into provinces. Among them were East and West Florida, bounded on the north by the 31st parallel of latitude. Understanding that there were yet settlements to the northward of this line, on the east side of the Mississippi river, he substituted for it, in the next year, another line in order to include them; which line commenced at the mouth of the Yazoo river and ran thence due east.

As regards the country on the west side of the river, and that between it and the Iberville, it was not until April 21, 101 1764, that the king of Franco officially notified his governor at New Orleans of the cession of Louisiana to Spain, made nearly two years before. The Spaniards were also dilatory and did not actually arrive at that city to take possession of their new dominion before the early part of 1766.1

1 General Collot (1796), in his *Voyage dans l'Amerique*, writes as follows:

“As England at the time of the peace of 1763 could not claim the possession of Louisiana for herself, she was well satisfied to see its ownership pass into the hands of Spain. She

felt assured that the Spanish government was less fit than the French one to develope the resources of this vast country, which she herself was anxious to turn to advantage, and that the former would be least in her way in that respect, and in the design she doubtless entertained to ultimately render herself mistress of the entire territory."

The United States of North America next came on the scene, as successors of Old England in the valley of the Mississippi. The Provisional Articles of Peace between the two nations were signed at Paris on November 30, 1782. By the second article, the western part of the boundaries of the territory of the now republic was defined as a line which should run from the most northwestern point of the Lake of the Woods "on a due west course to the river Mississippi;2 thence by a line to be drawn along the middle of the said river Mississippi until it shall intersect the northernmost part of the thirty-first degree of north latitude. South by a line to be drawn due east from the line last mentioned in the latitude of thirty-one degrees north of the Equator, to the middle of the river Aplachicola or Catahouche," etc. There was also a separate

2 In Robert Rogers' account of North America, 1765, is found the statement that this river [Mississippi] "takes its rise at the southerly part of the Central Mountains, upwards of 3,000 miles, as the river runs, from its mouth at the Gulf of Mexico. Its highest source is a lake of considerable bigness, opposite to, or northwest of which is a notch or opening in the mountain from which a large stream flows to the lake, carrying with it a red, sulphurous substance; on which account this is called the Red lake. The course of the Mississippi from the Red lake is nearly southwest for upwards of two hundred miles, where it is joined by a smaller stream from the westward, and its course is turned nearly southeast for more than three hundred miles, when it is joined by the Muddy river, and later that of another, not so large, flowing to it from the northeast."

102 article attached to this treaty, which provided "that in case Great Britain, at the conclusion of the present war, shall recover or be put in possession of West Florida, the line of north boundary between the said province and the United States, shall be a line

drawn from the mouth of the river Yassous, where it unites with the Mississippi, due east, to the river Apalachicola."

The third article of the Preliminary Articles of Peace between Great Britain and Spain, dated January 20, 1783, says that "His Britannic Majesty shall cede Eastern Florida to his Catholic Majesty, and his said Catholic Majesty shall retain Western Florida."

The Definitive Treaties of Peace between Great Britain and the United. States, and between Great Britain and Spain, were both signed on September 3, 1783, the first at Paris, the second at Versailles. In the former treaty the boundaries of the United states are repeated as they appear in the Provisional Articles already cited. In like manner no change was made in the wording of the Spanish treaty, in which the Floridas were ceded to Spain without any definition of limits whatever. Seeing that the northern boundary of these provinces had years before then been moved northward from latitude 31° to the Yazoo river, as previously stated, Spain naturally had a right to feel grieved; for such a double gift of the same land as was involved in these two treaties, whether meant or not, was sowing dragons' teeth for a future crop of armed men.

From this time on the political affairs of the lower Mississippi country became exceedingly complicated. The Spaniards, still the rightful owners of the left bank of the Mississippi—so far as governmental treaties can confer 103 right—were reluctant to abandon territory of which they were in actual possession. They thought that there might be a new Declaration of Independence west of the Alleghanies, and that the Kentuckians might be induced to become the friends of Spain as a republic separate from that of the United States—or possibly even join themselves to her outright; but all intrigues between apprehensive Spaniards and ambitious Americans looking towards such ends came to nothing.

On October 27, 1795, Spain and the United States entered into a "Treaty of Friendship, Limits and Navigation," in which it was agreed that the boundary between the Floridas and the possessions of the Republic should be at the northermost part of the thirty-first

degree of latitude, then due east etc.; and that any troops, garrison or settlements, on either side of said line should be withdrawn within six months, or sooner if possible, after the ratification of the said treaty. The treaty, after the various necessary ratifications, was proclaimed on August 2, 1796. The Spanish authorities however showed no alacrity in complying with this provision, and it was not until they were threatened by the forces of the United States with a set attack, in 1797, that their troops evacuated the posts held by them; and Natchez. with all the eastern part of the valley north of the thirty-first parallel, fell into the hands of the Americans, without a blow having been struck.

It is now clearly seen that the affairs of the Old World had much to do with transfers of colonial possessions between European powers, and that American countries were apparently but distant pawns on the “political chess board,” which could be sacrificed to subserve important 104 moves. The Corsican soldier Bonaparte, First Consul of the French Republic, began to unsettle the boundaries and names of Italian and other European states, and so it happened that the name of far-off Louisiana was brought into conjunction with the dignified appellations of Tuscany and Parma. Secretly as Spain had received from France in 1762 the immense but indefinite territory of Louisiana did she give it back again to the donor. The treaty of San Ildefonso was signed on October 1, 1800, and by its third article it retroceded to France, six months after certain stipulations concerning the “kingdom of Etruria” should have been complied with, the colony or province of Louisiana, “with the same extent that it now has in the hands of Spain, and that it had when France possessed it.” The fact of this second transfer of the Mississippi valley leaked out very gradually, but within two years it had become, to statesmen, a good instance of an open secret.

Time flowed on now for a year or two without any striking event occurring in connection with the Mississippi valley. In Europe there was a lull in the storm of war; for the Treaty of Amiens was signed March 27, 1802, and France and England were at peace for a short time again. On July 22, 1802, the First Consul stipulated to Spain that France would never sell nor alienate Louisiana—a political promise which he had later to break, facts being

more stubborn things than even arbitrary First Consuls. Toward the end of this year. the Spanish authorities at New Orleans imprudently took away from the Americans the *right of deposit* at that city—i. e. the right of landing and storing merchandise there—without designating any other point where this might be done. Such bad faith incensed the 105 people of the United States, and a cry arose that they should forcibly take possession of New Orleans and of the outlets to the sea; in fact a cry for war. There were also spirited debates in both houses of Congress as to what should be done, but their action fell short of recommending immediate resort to hostilities.

The executive branch of the government of course fully sympathized with the outraged feelings of the western people but the condition of affairs was peculiar. Spain yet garrisoned New Orleans, and was still both actual possessor and titular owner of what remained of the province of Louisiana, in spite of the fact that she had bargained all of it away to France, except western Florida. It was not until the 26th of March, 1803, two years and a half after the transfer, that the colonial prefect Laussat arrived from France; but no troops accompanied him or were sent after him, and no transfer of the government of the province could yet be made to him.

In February and March, the President of the United States caused representations to be made to the French government concerning the matter, specifically, as to a project for the annexation of the Floridas and the island of New Orleans. The American plenipotentiaries labored hard with the French ministers, go-betweens of the First Consul, but little progress was made till Bonaparte himself astonished the former by sending word that he would sell the whole of the province for a certain consideration. He had known his own mind all the time. Hostilities with England were imminent, and in view of that fact, he considered, as he told his ministers, that the colony was entirely lost, and therefore that it would be more useful to France in the hands of the 106 Americans than if he attempted to keep it, for the English would at once seize it, as he naturally supposed, on the renewal of the war. Having to fight with a rich nation however he wished to obtain as much money from the purchasers as possible. The treaty of cession was signed on April 30, 1803, and on the

18th of May England declared war against France; so there had really been no time to lose. The former government had, however, expressed to the American embassador their complete willingness to see the United States obtain possession of Louisiana.

On the 18th of May also, as it happened, the Spanish comssioners, appointed to deliver the province to France, issued a proclamation at New Orleans. It was stated that the limits on both sides of the river St, Louis or Mississippi should continue as they remained by the fifth article of the Definitive Treaty of Peace of December 10, 1763, so that the settlements from Bayou Manchac to the line separating the dominions of Spain and those of the United States should remain a part of the monarchy of Spain, and be annexed to the province of West Florida. The Spanish government did not relish this alienation of Louisiana by France, and protested against it.

They complained that the stipulations of the treaty of San Ildefonso had not been complied with; but all to no effect, and there the matter rested. Spain had seen her best days, and was now more of a lamb than the wolf she had been for centuries. On June 1, the prefect referred to was appointed commissioner on the part of France to receive possession of Louisiana from the Spanish commissioners and deliver it to those of the United States. By the end of October the “Louisiana Purchase” was consummated by the action of the U. S. Senate. On November 30, the ceremony 107 of the formal transfer of the province from Spain to France took place at New Orleans, and on December 20, that from France to the United States.

All that remained now of the Mississippi river1 which any foreign power could claim to possess, was 200 miles of its left bank between the 31st parallel and the mouth of the Iberville. This, as a part of its province of West Florida, Spain still clung to tenaciously, in spite of the evident feelings of the Americans concerning the “manifest destiny” of their republic.

1 That the government of the United States was curious about the boundary question is shown by the instructions of Thomas Jefferson to Capt. Lewis, the head of the Missouri River Expedition of 1803, for he requested information concerning the country contiguous to that traversed. Mr. Jefferson said: “If you can learn anything certain of the most northern source of the Mississippi, and of its position relative to the Lake of the Woods, it will be interesting to us.”

By virtue of a proclamation dated October 27, 1810, the President directed that possession should be taken of the territory south of the Mississippi territory, and eastward of the river Mississippi, and extending to the river Perdido.

The acts of Congress passed in 1811 and 1813, authorizing the seizure of the Floridas in certain contingencies, and the ruthless invasion of eastern Florida in 1816 by General Jackson and his Tennesseans, followed by the capture of fortified places there held by the Crown of Spain, with which at the time the United States were at peace, were the beginning of the end. By the treaty signed February 22, 1819, the Spanish government ceded to that of the United States about all that was left to it of the ancient province of Florida; the formal surrender of the land itself was made at Pensacola on the 21st of July, 1821. Now it was that actual control of the Mississippi river, from its source to its mouth, 108 for the first time fell into the hands of a government fully competent to maintain itself against all comers.1

1 Extract from the speech of Daniel Webster in the U. S. Senate, March 7, 1850, on the Slavery Compromise.

“Sir, nobody can look over the face of this country at the present moment—nobody can see where its population is most dense and growing, without being ready to admit, and compelled to admit, that ere long America will be in the valley of the Mississippi.”

Though forty years later the authority of the United States on the waters below the Ohio was set at defiance through a formidable civil war—when the river “rained bullets,” as prophesied by an American statesman years before—yet it was but for a short time. It is to be hoped that future generations may not behold the disintegration or overthrow of the republic, nor the transfer of the historic valley of the great river to another and less worthy supremacy.

Abstract, aboriginal and pre-historic2 questions would, however interesting, be out of place in an examination of

2 There is no doubt that the immediate valley of the Mississippi river supported, in pre-historic times, a far more numerous population than was found there by the first explorers of our modern epoch. Who these people were, it is impossible to state.

Whether a number of warring tribes, each independent of their neighbor, or nations living under one or more semi-barbarous but well organized governments similar to those of Mexico or Peru, or otherwise, is problematic hardly proper to consider as a geographical question.

The evidences of the existence of the human race in pre-historic times is everywhere met by those who search for them. The most striking feature to be found is the mounds of earth, artificially shaped, which are not easily overlooked, and which exist all the way from Louisiana to Minnesota, though differing much in form, size and style in different localities. Ordinary tumult are found all along the valley and for that reason have not had much systematic attention paid to them by inquirers in search of information concerning the same. From the lower Red river to the Illinois, is found a class of mounds flattened on top with rectangular bases, often with upper and lower summits, and with broad approaches which are styled platform or temple mounds; but above those well known ones on the Illinois bottoms at Cahokia, earth structures of this class are nor often met Beyond them, beginning somewhere above the Rock river, commence the still more mysterious remains

known as imitative or effigy mounds, low heaps of earth constructed, undoubtedly, to represent in their ground plan, animated beings of various kinds and even weapons of war. These effigy mounds have been proved by Prof. T. H. Lewis—who has of late years made a special study of the subject to extend up the Mississippi nearly, if not quite to the St. Croix and beyond that point; but back in the interior at considerable distances, he has found isolated specimens widely separated from each other, as far to the northward as the valley of the Crow Wing river. Stone graves and forts are found in the latitude of southern Illinois, not very far from the Mississippi. Ordinary village sites and shell heaps are at places thickly strewn along the bunks of the river, and at very many points where the rock formations are exposed the early inhabitants left their symbolical markings engraved or painted on cliffs or in caves. All these things denote many people in the valley of the Mississippi for a moderate time, or a much smaller number living there for a much longer time—probably an occupancy in all of more than scores of centuries—but this question must be left for a decision, if ever decided, to the facts to be derived from gradual and painstaking investigation and research One thing is certain, that as regards the upper Mississippi, at least, in the time of the earliest explorers referred to, tumuli, effigies, shell heaps and village sites had all long been forgotten and become unknown to the Indians of the day, who only knew of some of the grotesque figures drawn on the rocks by reason of the improbability of overlooking them and who knew nothing of their origin, but were inclined to think them of super-natural import, and accustomed to make offerings to them in passing.

Between the mouth of the Rum river of Minnesota and the neighborhood of the Arkansas river, the French traders or missionaries found no Indian tribes or nations living permanently on the banks of the Mississippi. At that time, the river had ceased to be a safe dwelling place for pacific and sedentary natives, and those Indians who did go upon the waters of that portion of the river, went in the full force of their tribe to hunt as they travelled, or in smaller bands as war parties. In other words, the Mississippi river was then practically a solitude.

109 the present character. The time is past when the aborigines are needed, or their aid required for reliable geographic facts; indeed, as a rule, Indian maps have always been but distortions. When first known in history, the banks of the Mississippi were peopled nearly its entire length. Those people had stamped upon their countenances the color of their origin, and as they probably floated across the Pacific Ocean and reached the coast of the New World, that color indicating their mental capacity precluded the possibility of their grasping opportunities, not yet fully availed of by the Anglo-Saxon race.

Those people, by instinct and nature, at long continued warfare, adopted habits in the northwest, and those habits made the timber line a division line between the contending 110 tribes. The timber line in the process of natural growths, reaches from the southeast to the northwest, dividing the great plains from the great forests. Itasca lake is on the southern border of that great forest; consequently, the locality ultimately became Ojibway territory, and the Dakotas were their warring neighbors of the extensive prairies immediately to the southwest, known in later years as “the plains.” From these Indians, the first direct information was gained concerning the source of the river, crude, uncertain, but now interesting.

The Spanish and French maps bear earmarks of information communicated by Indians, coupled with the accuracy and improvement of civilized observation, until the days of M. Nicollet, in 1836, when the first exhaustive chart of the upper waters of the Mississippi was constructed and he, too, depended largely upon semi-civilized1 knowledge. Accurate and detailed governmental surveys in the field from 1848 to 1875, by six mile square townships immediately superceded Nicollet's chart, to and including Itasca and Elk lakes. Yet in 1881, there was a crude map of the Itasca Basin constructed by an Ojibway Indian, from memory, and in ignorance of the existence of governmental stakes, witness trees and land marks, then standing in plain sight on the shores of Itasca and Elk lakes. This Indian map, a geographical curiosity, was adopted by unscrupulous hands and foisted upon the geographical world as indicating *original* discovery at the source of the Mississippi.

1 French half-bloods, and often, by interpretation, those who were still farther removed from the influences of civilized information.

As the aboriginal occupancy of the locality was attended only by obscurity, ignorance and barbarity, there is no 111 record from which to describe the first appearance of uncivilized humanity at the headwaters of the river. A people not competent to record the facts of history and render an instructive record of the chain of discoveries, have not been and ought not to be, accorded the honors of discovery. That Indian tribes were the only pre-historic occupants of this territory is not entirely certain.

The facts of record indicate the territory to be probably neutral ground (possibly occupied by the Sioux) followed by the encroachments of the Ojibways—the former no distinctively a prairie people and the latter as distinctly a people of the woods. The conquests between these tribes, of unknown duration, followed by a series of indian treaties with the United States, constitutes the territory at the source of the Mississippi a part of the public domain.

As to actual Indian occupancy and possession, the record which comes down to us is by no means clear, and any statement concerning the same must be, of necessity, based, to a considerable extent, upon traditionary information from tribal sources. A brief reference to this occupancy is given from the most reliable data obtainable.

The ultimate headwaters of the Mississippi were remote from all the places visited by the early French traders and missionaries in the seventeenth century, and as the source was unknown to them, so also was the fact whether or not there were any permanent Indian settlements or villages in this immediate vicinity.

The maps and books of the times of the earliest discoveries, do not justify the supposition that the Itasca Basin was within the territory of the Sioux, whilst, as for the Ojibway Indians, they were then no nearer the Mississippi 112 river than the Falls of St. Mary at the outlet of Lake Superior. As between the Sioux and the 0jibway tribes and the tribes

of savages who at that time occupied the territory to the northward, the source of the Mississippi, remote and isolated, was probably intermediate territory belonging to no particular tribe of savages and claimed by none.

When the westward migration of the Ojibway tribes occurred, is not very clear, but migrate they did in that direction, first tarrying for a long time at La Pointe until they finally came to Fond du Lac—in closer contact with the Sioux, whom they had fought and were again to fight. This Indian war, as is well known, was maintained for generations, until the time when the whites on account of the Sioux massacre and insurrection of 1862, drove the Sioux, then living no farther east than the upper Minnesota river, out of the reach of their former enemies into the valley of the Missouri river. The time when the savage hostilities between the Ojibway and the Sioux began, is not certainly known. Carver was told that it had already lasted forty years, at the time of his visit, which would make its commencement about 1726.

Warren, in his history of the Ojibways, derived from traditional sources, writing in 1852, estimates the beginning of the war upon the Sioux at Mille Lees, to have been five generations previous to that time. He narrates how the Ojibways first drove the Sioux, by hard fighting, from their villages on Rum river and Mille Lacs lake and its vicinity; from the head of the St. Croix river; from Sandy Lake village; from the neighborhood of Pokegama falls; from Lake Winnibigoshish, and how they would have driven 113 them from Leech lake had not the Sioux, by a previous retirement, saved them the trouble.

There is nothing in the reports of the traders and officers connected with the French fur companies trading in this region, to denote any general war and expulsion of the Sioux from the northern country, but yet it might have happened to some extent.

The exploration regarding the upper Mississippi, made under English auspices may be discussed in a few words.

PART OF A MAP OF CANADA. JEFFERY'S, 1762.

There is, unfortunately, a documentary gap between the time of the French traders in Minnesota and that of Capt. Jonathan Carver, which may never be filled and which deprives us of information that could probably clear up the mystery of the abandonment by the Sioux of the country north of Watab river in the vicinity of Sauk Rapids—the point on the Mississippi river where the boundary line between the two nations was made to cross it, by formal treaty. -8

114

In Capt. Carver's book, speaking of Red lake, the author says: “The parts adjacent are very little known or frequented, even by the savages themselves.”

On the map which is reproduced may be seen the important remarks which tend to show that the Itasca Basin, was in his time at least, neutral ground if not debatable territory. The first remark which appears upon the map immediately to the south and southeast of Red lake and “White Bear lake”—whichever lake that may be, reads as follows:

“This is the road of war between the Nadowessie and Assiniboils.

N. B. All country not possessed by any one nation where war parties are often passing, is called by them the Road of War.”

The next appears a little farther to the south and reads thus:

“The head branches of the Mississippi are little known.

Indians seldom travel this way except war parties.”

As Carver did not ascend the Mississippi any farther than the present St. Francis river, he was not able to settle by personal observation the question whether the Sioux were driven from their former habitations by force of arms, or voluntarily relinquished them to be nearer

the trading posts to the south of them on the Mississippi, and possibly on the Minnesota also; nor does he attempt to settle this question. He states that three bands of the tribe lived between the St. Croix and the Minnesota, on both sides of the Mississippi, and that eight other bands lived in a country lying more to the westward—the Sioux of the plains.

DRAWN FROM A PLAN OF CAPTAIN CARVER'S TRAVELS IN THE INTERIOR PARTS OF NORTH AMERICA IN 1766 AND 1767.

116

In June, 1766, Capt. Carver, as a British subject, set out from Boston to explore the country tributary to the upper portion of the Mississippi, in pursuance of a declared desire to enlighten his countrymen concerning the country and its inhabitants, bordering upon the waters of the Upper Mississippi.

CAPT. JONATHAN CARVER.

It would appear that the policy adopted by the French concerning a geographical knowledge of the territory of the Upper Mississippi, obscured its importance from the eyes of the world, from evident selfish motives, that the revenues from trade, the occupancy of the country, its physical features and productive possibilities, might be known and availed of only by themselves

A careful perusal and consideration of Capt. Carver's visit to the savage tribes occupying the territory adjacent to the present site of the City of St. Paul, Minnesota, demonstrates that there was but little or no information touching the source of the river, which he describes as being within thirty miles of the source of the St. Lawrence and Bourbon rivers, the “Origan,” or river of the West, having its source rather farther to the west.

Capt. Carver's sojourn among the Sioux Indians, his acquirement of a knowledge of their language and his 117 extended observations and the geographical information he gained

of the territory to which he was a visitor, resulted in his constructing a map of the locality of much interest at the time it was published, following his voyage to the northwest.

Carver County, Minnesota, formed of territory at or near where he spent the winter of 1766, with the Sioux Indians, permanently inscribed his name upon the geography of Minnesota.

David Thompson, an English Astronomer, entered the service of the Northwest Company in 1797. In the performance of the duties required of him, he passed from the north shore of Lake Superior to Manitoba and the Mandan villages on the Missouri and prepared to “connect” the waters of the Red river and the Mississippi. He left the Mouse river February 25, 1798 with a dog train. He successively reached and passed the mouth of the Assiniboine and Pembina rivers, passed up the Red river of the North to Red Lake river, and on the 17th of April arrived at Red lake. Passing to the southward, he reached Turtle lake, April 27th, from which flows “Turtle Brook.” He was accredited, to some extent, as the discoverer of the source of the Mississippi at Turtle lake. He descended Turtle river to Cuss lake, and thence down the Mississippi through “Winnipegoos” lake to the north of “Sand Lake river” and thence across the divide to Lake Superior. Notes of his travels have been preserved and to some extent published, making his voyage the first authentic account of an examination of that part of the Mississippi river between Cass lake and Sandy lake. His voyage from the Mississippi river to Lake Superior at so early a date, 118 during cold and inclement weather, across what is now North Dakota and Minnesota, and a part of Manitoba, was regarded as a remarkable and hazardous undertaking.

William Morrison

SUB-DIVISION SEVENTH. THE FIRST KNOWN OF WHITE MEN AT ELK LAKE; THE NAME DEFINED; WILLIAM MORRISON; THE ONLY RECORD OF HIS VOYAGE TO ITASCA LAKE IN 1803; LOST NOTE-BOOKS.

In the detailed and intricate examination into the Spanish, French, English and Indian occupancy of the territory now comprised within the limits of Minnesota, more particularly that portion at the headwaters and source of the Mississippi, no reliable statement can be found, written or printed, showing or in anywise indicating that any person but the native savage had, previous to 1803, visited that portion of it now known as the Itasca Basin, the Omoskos of the Chippewa, the *La Biche* of the French, the Elk of the English.

The topographical formation of the locality in its physical features,—the shape of an elk's head with the horns representing the east and west arms,—no doubt gave it the name “Elk.” It may be a fact, recently demonstrated by the discovery in the bed of one the creeks there, of a large pair of elk antlers, that the locality was formerly the breeding place of that animal, and as a hunting ground, was known as Elk lake, (Omoskos Sogiagon). The French, by 120 translation, followed the same name and even after the change in the name by Schoolcraft and Boutwell, it still attaches, by authority of action on the part of the United States officials, and by enactment of the Legislature of Minnesota, to one of the lakes of the locality.

An authentic writing, concerning the first discovery of the Source in 1803, is that of William Morrison. The original draft of his letter is extant, and for the first time appears in print as an important document in the question of discovery now under consideration,1 of much interest in a deliberate determination to state questions of fact, devoid of all problematic embellishments.

1 The Wm. Morrison letter, published in the collection of the Minnesota Historical Society in vol. 1 p. 417 is a composite production.

Of William Morrison's life and times, and the causes of his residence in the then northwestern wilderness, a most thorough inquiry has been made. The result of the inquiry necessarily brought to the attention all the principal incidents of his life,—an eventful one among the traders and tribes of the Northwest.

It was known that Mr. Morrison recorded a daily account of his movements, and to Mrs. Georgiana Demaray, his accomplished daughter, was assigned the labor of searching for these records in Canada—his last place of residence—but it is now known that they were lost.2 Mrs. Demaray during her father's lifetime received from his lips a detailed account of his visit to Elk lake, a description of his written accounts noted down at the time, which were lost, except those from 1824 to the close of his northwestern career, and

2 Mr. Morrison lost his record books, by an accidental capsizing of his canoe, and like the records of some of his French predecessors, definite information found a watery grave. To replace, from memory, the notes of twenty years, was an impossibility.

121 a detailed verbal statement of his residence of a quarter of a century in the neighborhood of the headwaters of the Mississippi. It is highly probable that Mr. Morrison was the first known of white men who visited in 1803, 1804, 1811 and 1812, the Basin surrounding the source of the Mississippi. In those days of isolation and a consequent carelessness, it is fair to presume that Mr. Morrison had no available opportunity to make known his visits there, unless in casual reports to his employers, and then only in matter-of-fact communications, soon to be laid away and almost as soon forgotten, and relegated to an oblivion which tests the patience of those who now seek, with ill success, after the lapse of nearly a century, to verify the record of an important geographical discovery, with adverse claimants in its history.

MRS. GEORGIANA DEMARAY.

Mr. Morrison was elected a member of the Superior, Wisconsin, Historical Society, September 27th, 1855, on the record of his services and discoveries in the region of the headwaters of the Mississippi. His residence in the Northwest, for a quarter of a century, should be regarded as of sufficient importance to append a brief outline of his birth, and the incidents of his lifetime, that, while there is yet an opportunity, 122 opportunity,

mankind may be advised of him who consistently claimed the honors of a first discovery of the source of the Mississippi.

Mr. Morrison's correspondence upon this question during the last years of his life, was had with his brother Allan Morrison of Crow Wing, Minn., in 1856, more than fifty years after the occurrence of the events described, yet the remembrance of circumstances seems to have been fresh in his mind, and undoubtedly from the fact that he had always considered himself the first of white men at the source of the river. Of this fact, Mrs. Demaray is a living witness, and Mr. Alexander H. Morrison of St. Joseph, Michigan, a member of William Morrison's household, as a ward, remembers the fact that, as early as 1837, and prior to that time, the circumstances of this first discovery were freely discussed and related to himself and others by William Morrison.

This is the best evidence at hand. It is certainly a matter of regret, that the memorandum book, written from day to day in 1803–4, by Mr. Morrison, during a long winter's residence near the source, cannot now be produced. That book may have contained a sketch of the locality. It certainly would describe the route of travel and the particular points of location, facts now beyond the reach of those who seek to perpetuate in definite form the first discovery of Itasca lake, if such it was.

Among several letters1 written by Mr. Morrison on this

1 Berthier, 16th January, 1856.

“ My Dear Brother:—Your letter of the 26th ultimo has come to hand. We were happy to hear from you and yours. George's letters likewise are received. Fanny will answer him and his mother also.

You do not say a word about your trip to the States this winter and your intended visit to see us. Will not the treaty take place this winter?

I note what you say concerning the source of the Mississippi. You wish to know who was the first person who went to its source. For the information of the H. Society, I will state to you all about what came to my knowledge, by which you will perceive that H. R. Schoolcraft is in error and that he was not the first person who made the discovery of the source of the Mississippi.

I left the old Grand Portage, July, 1802, landed at Leech lake in September. In October, I went and wintered on one of the Crow Wing streams near its source. Our Indians were Pillagers; in 1803–4, I went and wintered at Lac La Folle. I left Leech lake, passed by *Red Cedar lake*, up river Lac Travers to the lake of that name, then up river La Biche or Elk river, to near Lac La Biche, when we made a portage to fall into Lac La Folle. Lac La Biche is near to Lac La Folle. Lac La Biche is the source of the Great River Mississippi, which I visited in 1804, and if the late Gen. Pike did not lay it down as such when he came to Leech lake it is because he did not happen to meet me. I was at an outpost that winter. The late Gen Pike laid down on his book *Red Cedar lake* as the head of the Mississippi river. I did not trace any vestige of white men before me. In 1811–12, I wintered again at Lac La Folle near to the plains. We went down river La Folle some distance. I then overtook a gentleman with an outfit from Michilimackinac, Mr. Otepe, with whom I parted only at Fond du Lac. He took the south towards Meh'a and I north to our headquarters, which had been changed to Fort William north of the Grand Portage. This I expect will explain that I visited in 1804, Elk lake, and again in 1811–12. With respect to the first Fond du Lac traders, we all came from Mackinac. Some came by Lake Superior and others up by Prairie du Chien, up to Crow Wing and some went to Lac La Que de l'Outre—Otter Tail lake—Messrs. Reaume, Cotton, Casselais, Sayers, Letang and several others, some came by Lake Superior and others up the Mississippi by way of Prairie du Chien. These persons were persons who preceded us. The French had trading posts on Lake Superior, but not in the interior of F. D. L. that I could ever discover. The late Mr. Sayers returned from Mckina and found that his bands of Indians had died by the smallpox—1780—I think.

Perhaps it is not amiss to mention that I went to the Indian country engaged to Sir Alexander McKenzie & Co., who had joined stock with the X. Y. Co,, formerly the Richardson & Co.

I went into the country in opposition to the old N. W. Co. I found in Fond du Lac, N.W. traders, Messrs. Sayers at Leech lake, Cotton at Fond du Lac and Bousquai at Sandy lake. My party were Michel and Antoine Cheniers—brothers, John McBean and Messrs. Bouviu and Grignon.

We opposed all the N. W. posts until 1805, when a coalition took place between McKenzie and N. W. Co. The trade was carried on jointly until after the late war in 1816. J. J. Astor of New York, bought out the whole stocks of the company which was within the U. S. territory. J. J. A. gave the name of his concern the A. M. F. Co., who extended their trade from the old Grand Portage to the Lake of the Woods. Their route was up the St. Louis to the heights of land and then down the Rainy lake river to Lake of the Woods. Our grandfather Waddin was killed by Pierrepont and Lesiur in 1780 and buried at Lac Le Rouge.

I have not McKenzie's travels before me for the precise years of his voyage.

Francheu is pretty correct ill his statements. Mr. Bond, your writer, must have seen these gentlemen's travels.

I will send you enclosed a letter from my old friend Geo. Nelson, who wintered at Folle Avoine in 1802–3–4.

I have had the honor of having been named a member of the H. S. of Superior, who have a just right to claim any information they may require that I can give them.

Your affectionate brother, WILLIAM MORRISON.”

123 subject, one is given in full, and just as written and signed by himself, and addressed to his brother, Allan Morrison.

Mr. Morrison was born in Canada in 1783, and died there August 7th, 1866; the records indicate, however, that he be came a citizen of the United States by naturalization.

It is but right and proper that, to commemorate the event of his visit to the Basin, his name should be inscribed there upon its list of geographical designations, a recognition which has been awarded.

Concerning the presumable fact, that, antedating the first known visit of white men at Lac La Biche, French voyageurs may have reached the Basin, no reliable statement in writing is known to exist, describing such visit. In the absence of any known record as to the movements of the French fur traders and voyageurs who first established themselves in 124 lines of trade and traffic with the Indians, across the northern portion of the territory which now constitutes the State of Minnesota, no definite record can be found concerning a mere probability that they may have reached Elk lake. To the writers of the future must be left the task of discovering the record of the manner in which “Lac La Biche”1 first became known to the French and of any visits they may have made to the locality, if any such record exists, which now seems doubtful. Certain it is that Mr. Morrison's letter is the only record of the *first* visit to the source of the Mississippi of which we have any knowledge.

1 Itasca Lake.

SUB-DIVISION EIGHTH. LIEUTENANT Z. M. PIKE'S EXPEDITION IN 1805–6; HE REACHES THE MOUTH OF TWO RIVERS AND ERECTS BLOCK HOUSES; BUFFALO, ELK AND DEER HUNT; SLEDGE JOURNEY TO LEECH LAKE; THE BRITISH FLAG; INDIAN WARFARE; KILLED AT YORK.

GEN. Z. M. PIKE.

The cession of Louisiana, (alternately Spanish and French territory,) in A.D., 1803, to the United States, brought a very important territory under the dominion and ownership of this government, with a conservative policy, but active and energetic operations for its control and welfare.

126

Lieut. Z. M. Pike was dispatched from St. Louis to explore and examine the Mississippi and tributary country to the headwaters. He sailed from St. Louis in keel boats up the river, August 9th, 1805, at the head of a detachment of twenty men. With varying hardships, conferences with the Indians and traders, subsisting in part on game and fish, the detachment reached the Two Rivers of Morrison County, Minnesota, on the west bank of the Mississippi at the beginning of winter, erecting a fort of block-houses. The south branch of Two Rivers was named Pine creek, and the other Second creek. From November 1st to December 10th, Lieut. Pike and his detachment erected the fort, hunted the buffalo, elk and deer, then in great numbers at the points now known as Rice's in Benton County, and Brockway in Stearns County, Minnesota.

Lieut. Pike commenced a sledge journey with a detail from the detachment from his block fort December 10th, cached provisions underground above Little Falls, passed the De Corbeau (Crow Wing) river, and on Christmas day was encamped a short distance above the point where is now situated the City of Brainerd, reached the mouth of Pine river December 31st, and January 3rd, 1806, discovered the British flag floating at an Indian encampment. On the night of January 4th, the party lost their tents and portions of their wearing apparel by accidental conflagration, barely escaping from an explosion of the ammunition supply. Bringing to their use a supply of snow shoes and toboggans, the detachment arrived at Leech lake on February 1st, exhausted and worn out by cold, hunger and exposure. Pike says: “I will not attempt to describe my feelings on the accomplishment of my voyage, for this is the main source of 127 the Mississippi,” and on

February 12th, he wrote, after a march to Red Cedar lake: “This may be called the upper source of the Missippi river.”

EXTRACT FROM LIEUT. Z. M. PIKE'S CHART NEAR SOURCE OF THB MISSISSIPPI, 1805–6.

The Red Cedar lake of Pike's map is the Cass lake of the State Map of Minnesota of the present time. Examining the surrounding locality, taking observations for his position which he gave as “Lat. 47°, 38#; Long. 95°, 08#.” Conferring with the Indians who designated him and his detachment, “neither Frenchmen nor Englishmen, but white Indians,” advising the traders of the supremacy of the United States over that portion of the public domain, making extraordinary efforts to curtail and suppress Indian 128 warfare between the tribes, the return march was, after many hardships and sufferings, accomplished, to the blockhouse at Two Rivers, in March, 1806, and spending some days in the hunt for subsistence, at the opening of spring, the boats on the river were resumed, and on the 30th of April, after an absence of eight months and twenty-two days, the detachment reached St. Louis.

Of Lieut. Pike it may be said that he was constituted, and his physical and mental energies peculiarly fitted him for, the leader of a hazardous trip into an unknown country. Surrounded by the dangers and sufferings of a northern winter, beyond civilization, with no facilities for communication, and warring tribes of savages on either hand, subsistence only for four months, and that partly destroyed, and, in his absence, squandered by the sergeant of the detachment, he accomplished a task certainly requiring the ability he so successfully displayed. He successively received promotion as Captain, Major and Colonel, and as Brig. General led the American forces in 1813 against York (now Toronto) Canada, where he fell mortally wounded from the explosion of the British magazine.

He was born at Lamberton, N. J., January 5th, 1779, was twenty-six years of age at the time of his expedition to the source of the Mississippi, and was but thirty-four years of age at the time of his death.

In 1806, it was believed that Pike had actually penetrated to the source of the river, and it was a misfortune that he did not meet at that time William Morrison, from whom he could well learn many facts of geographical importance. Mr. Morrison, at the time of Pike's expedition, it will be remembered, was at an outpost.

129

That Pike believed that he had penetrated to the source is certain, but one consideration above all others predominates. His information was entirely hearsay and he took for granted the stories told him of the Turtle lake source. That locality then had a considerable population of Indians and white traders from the Canadian provinces. No actual exploration in the field along the upper branches of the Mississippi was had by him, the whole country, lakes, rivers and streams being covered with ice and snow, and to all the points visited by him he was guided by the inhabitants of the locality. His voyage at the time was considered as successful as it was remarkable. Certain it is that exposure and want of knowledge of the country made it a hazardous undertaking. Pike says nothing whatever of Itasca (then Elk) lake. -9

SUB-DIVISION NINTH. THE LEWIS CASS EXPEDITION; THROUGH LAKE SUPERIOR; CAMP AT SANDY LAKE; VOYAGE DOWN THE MISSISSIPPI FROM CASS LAKE.

October 9th, 1782, at Exeter, New Hampshire, Lewis Cass was born. His father was a major in the Revolutionary Army. In 1799, he was stationed at Wilmington, Del., where his son Lewis secured employment as a teacher. Removing to Ohio in 1800, Lewis Cass took up the study of law, was two years later admitted to the bar and was elected a member of the legislature, where he became prominent in active consideration of the designs of

Aaron Burr. He was an officer in the war of 1812, Ohio Volunteers, and was promoted to the rank of Brigadier General.

In October, 1813, he was appointed Governor of Michigan Territory, a position he held for eighteen years, acting also *ex-officio* , as Superintendent of Indian affairs of his territory. In his capacity as governor, on November 18th, 1819, he addressed a communication to Hon. John C. Calhoun, Secretary of War, proposing an expedition to and through Lake Superior and to the sources of the Mississippi, for an examination of the principal features of the Northwest, tributary to Lake Superior and the Mississippi river. The Hon. Secretary of War, January 14th, 1820, sanctioned the proposed expedition and gave instructions for its equipment, 130 departure and route for observation. This expedition embarked in canoes at Detroit, Michigan, May 24th, 1820, accompanied by a detachment of soldiers, Henry R. Schoolcraft as mineralogist, Capt. D B. Douglass as topographer and astronomer, and a number of boatmen and Indian hunters.

GEN. LEWIS CASS.

Governor Cass' expedition ascended the St. Clair river, coasted Lake Huron and reached Sault Ste. Marie in safety after much delay on account of head winds. Gov. Cass by his intrepidity and fearless action, compelled the Indians to relinquish designs against him, negotiated the treaty of June 16th, 1820, and on the morning of the following day, proceeded on his voyage. At the end of the forty-third day (July 5th) the expedition reached in safety the 132 mouth of the St. Louis river, at the western extremity of Lake Superior. Passing up the St. Louis river, Gen. Cass and his party accomplished a difficult portage across the summit dividing the waters of Superior from those of the Mississippi valley, reaching Sandy Lake station, a trading post of one of the fur companies, July 15th. Lieut. Pike had reached this station fourteen years before them on his winter voyage to the sources.1

1 It is probable that Le Sueur ascended the Mississippi as far as Sandy Lake.

Here Gov. Cass encamped his principal force and in two canoes proceeded, with Mr. Schoolcraft, Maj. Forsyth, Capt. Douglass, Dr. Wolcott and Lieut. Mackay, as attaches of his sub-expedition, to discover and explore the sources of the Mississippi. The party left Sandy lake July 17th, and reached the upper Red Cedar lake the 21st, which Mr. Schoolcraft named Cass lake2 in honor of the leader of the expedition, and by this name it has since been known. From the Chippewa Indians at Cass lake, the governor learned that the source of the river was Lac La Biche, about fifty miles to the “west-northwest” of Cass lake. Upon the same information, he also learned that the water was very low and that it was next to impossible to stem the currents of the main stream, entering Cass lake at its southwestern extremity, in their canoes, during the low water. Gov. Cass submitted these items of interest to his associates and upon consultation, it was determined to commence the return journey to Detroit, via the Mississippi to St. Anthony Falls and the Wisconsin river. He and his party embarked on their return journey July 21st, 1820, and successfully reached and passed St. Anthony Falls, Fort Snelling, Lake Pepin, Prairie du Chien, thence up the valley of the Wisconsin

2 At first called Cassina lake.

133 and down the Fox river. Soon after, the expedition was divided for the purpose of coasting the shores of Green Bay and of Lake Michigan. Gov. Cass arrived at Detroit, September 15th, 1820, having crossed the southern peninsula of

SECTION OF A MAP SHOWING THE TRACK PURSUED BY THE EXPEDITION UNDER GOV. CASS IN 1820. BY HENRY R. SCHOOLCRAFT.

Michigan in the saddle. His voyage occupied one hundred and fifteen days. Subsequently, Gov. Cass attained a national reputation, was sent abroad, and May 22nd, 1848, he was nominated as the Democratic candidate for President 134 of the United States. His career as United States Senator from Michigan, and as Secretary of State under President Buchanan, is a part of She history of the Federal Republic. He died at Detroit, June 17th, 1866, at the age of eighty-four years.

The Cuss expedition of 1820 to the source of the Mississippi, upon a different and more extensive route, and under more favorable circumstances than that of Lieut. Pike, proved to be an important event in the history of the northwest, and paved the way in enabling Mr. Schoolcraft to easily reach, twelve years later, the Itasca Basin.

The highest point reached by Gov. Cass and his party, was at the north shore of Cuss lake, west of the mouth of Turtle river. The map of the route traversed by the Cass expedition, prepared by Mr. Schoolcraft and published in 1821, is the first definite chart establishing the existence of Lac La Biche, at the Itasca locality of the present day. The direction, however, was erroneously given as northwest, instead of southwest, from Cass lake.

Cass County, Minnesota, was named in honor of the leader of this expedition, and the nomenclature of the Upper Red Cedar lake soon gave way upon the suggestion of Mr. Schoolcraft, since which time it has gone down on the maps as Cass lake.

When Gov. Cuss abandoned his purpose to ascend the Mississippi, to its source, he was within an easy distance, comparatively speaking, to the goal sought for. Less timidity had often been displayed in canoe voyages, even in the face of low water, and an O-za-win-dib, or a Keg-wed-zis-sag,1 would have easily won the battle of the day for Gen. Cass.

1 Gay-gwed-o-say.

BELTRAMI.

SUB-DIVISION TENTH. J. C. BELTRAMI; CIVIL, MILITARY AND JUDICIAL PURSUITS; THE COUNTESS OF ALBANY; AN EXILE; HERO WORSHIP; VOYAGE TO AMERICA; THIRST FOR GEOGRAPHICAL DISCOVERY; VOYAGE UP THE MINNESOTA AND DOWN THE RED RIVER; AT PEMBINA; BELTRAMI REACHES RED AND TURTLE LAKES; LOCATES THE SOURCE OF THE MISSISSIPPI AT JULIA LAKE; DOE LAKE;

SUCCORED BY CHIPPEWA INDIANS; RESEARCHES OF MR. ALFRED J. HILL; BELTRAMI COUNTY

J. C. Beltrami, known in his native land as Giacomo Constantino Beltrami, was born in Bergarno, Italy, in 1779, his father being a custom-house officer of the Venetian Republic. A family tradition indicates the derivation of the name from *Beltrand des Goths* , refugees from Paris in 1572. The subject of this review was a student of the law, likewise acquiring a mastery of the languages. He was attached to the army of his native country as vice-inspector. Returning to civil pursuits, he was made a judge of the Civil and Criminal Court at Macerata. Retiring in 1812 to Florence, he formed relations with the Countess of Albany1

1 Madame La Comtesse Compagnoni, nee Passeri.

136 and others of high rank, and was commended for appointment to the chair of the President of the Court of Forli, subject to the imperial sanction of France. The disturbed condition of his native country changed the entire life of young Beltrami. He appears to have been a man of high aspirations, peculiar abilities, a partisan, standing upon the question of honor rather than emolument, for his country as well as for himself. Thus we find him in 1821, when, suffering from the effects of an injured thigh, he was compelled to leave the Romagna and go into exile.

That he was a hero-worshipper, with but one hero, and that himself, regretting his own misfortunes and those of Italy, which seemed to prosper without his presence, are opinions forced upon a student of history in a careful examination of his writings.

In a voyage across the ocean to the shores of America, he experienced a stormy passage, with resultant indisposition and a great want of sympathy on the part of the officers of the ship and the passengers—a portion of whom he thought to be pirates. He reached the American Republic in a half starved condition, thankful that he was still alive, after a voyage of three and one half months.

It appears he took upon himself the task of geographical discoveries in America, proceeding to Philadelphia, thence to St. Louis and to Fort Snelling, from which place he addressed a characteristic communication to “The Countess” on May 24, 1823. He remained at Fort Snelling until the following July when he asked and secured permission to accompany Maj. Long, who was in charge of an expedition for the United States government, on a journey up the Minnesota river to Big Stone lake and down the Red river of the North 137 to Pembina. He wrote: “My first intention, that of going in search of the real sources of the Mississippi, was always before my eyes.”

The causes of the contempt in which Major Long held Beltrami, the journey up the Minnesota and down the Red river, buffalo hunts, conferences with the Sioux Indians and the refusal of Major Long at Pembina to further permit Beltrami to remain with his detachment, are well known to readers of events occuring at that time.

At Pembina, Beltrami undertook to accomplish the dream of his existence—the discovery of the source of the Mississippi river,—and with two Chippewas and one mixed blood, he started on his voyage to Red lake, but before reaching that place, his guide returned and he was deserted by his Indian companions, after an attack from a body of Sioux, and he was left alone to propel his canoe up the stream to Red lake. Not knowing how to manage a birch canoe, it capsized, throwing him into the stream, but he finally proceeded on his journey up the river by wading in advance of his canoe, and, with a tow line, carrying it by main force against the current. He reached Red lake and engaging a guide and interpreter, proceeded, considering himself in a country “where no white man had previously travelled.” Now commenced what Beltrami regarded as a rapid advancement to the pinnacle of fame. He was guided to different lakes in the locality, to which he attached names. He proceeded upon the theory that “the sources of a river which are most in a right line with its mouth, should be considered as its principal sources, and particularly when they issue from a cardinal point and flow to the one directly opposite.”

He left Red lake August 26th, 1823, and proceeded by well 138 known portages under the direction of his guide, toward Turtle lake, attaching names to the different lakes he passed on his route, subsisting on game and wild rice. On the 28th of August, he was guided to a spot he describes as the highest land of North America, and casting his eye around, he perceived the flow of waters, south, to the Gulf of Mexico; north, to the frozen sea; east, to the Atlantic; and west, towards the Pacific Ocean.

The language used by Beltrami in describing this spot is so extraordinary that it is well worth a careful study. It is a key to the character of the exile who came to America to perform feats in discovery sufficient to astonish the world, and as a specimen of his writings the following quotation is given:

“A vast platform crowns this distinguished supreme elevation, and what is more astonishing, in the midst of it rises a lake. How is this lake formed? Whence do its waters proceed? This lake has no issue! And my eyes which are not deficient in sharpness cannot discover in the whole extent of the clearest and widest horizon, any land which rises above it. All places around it are, on the contrary, considerably lower.”

Beltrami proceeded to examine the surrounding country, its characteristics, searched for volcanic action, sounded the lake to find it bottomless, named it “Lake Julia.” and pronounced it the Julian sources of Bloody river and the Julian sources of the Mississippi. This, without even investigating whether the waters of Lake Julia, so-called, found their way into the Mississippi or not. He accepted the statement of his guide that they did—that seemed to be sufficient, and Lake Julia was published to the entire civilized world as the source 139 of the Mississippi river. His claims to original discovery were variously commented upon, to some extent accepted, principally in Europe, but the active explorations of American geographers soon superceded him in actual discoveries and the fanciful “Julian Sources” were exploded to give place to the real source. It is a singular coincidence that Beltrami wrote of his lake: “It is formed in the shape of a

EXTRACT FROM BELTRAMI'S CHART, 1828.

heart, and it may be truly said to speak of the very soul." There appears, later on, another heart shaped lake in the history of the source. His guide advised him of the existence of Lac La Biche, and he placed it upon the chart as "Doe lake, W. source of the Mississippi."

It is a fact that the astronomer Thompson had, twenty-five years previous to Beltrami's visit, surveyed the Julian 140 lake region with somewhat different results, and certainly with less exaggerated claims to discoveries, without Pike's map to guide him.

Beltrami found his way into the waters of Cass lake, visited Leech lake and after varying hardships and privations, reached Fort Snelling, Fort St. Charles on the Missouri, and New Orleans. At the time of his arrival at Fort Snelling, his raiment had been entirely exhausted, his apparel now being only such as had been supplied him by the Indians—with a piece of bark for a hat.

A copy of his map1 is given herewith, showing Lake Julia, upon which also, will be noticed Doe take, now known as Itasca. This map has a pointed similarity to that of Lieut. Pike's—1805–6.

1 Beltrami's map should be compared with that of Lieut. Pike.

Beltrami found his way to New Orleans, where he published LA DECOUVERTE DES SOURCES DU MISSISSIPPI, in 1824. It would appear that he was severely criticised by American newspapers at that time.

The researches of Mr. Alfred J. bill have brought to the attention of Minnesotians, Beltrami's personal history, from the records of, and correspondence with, the authorities of Bergarmo.2 He embarked at New Orleans for Mexico. which country he traversed from the Gulf to the Pacific Ocean and returning reached London about A. D. 1827. where he published his "Pilgrimage in Europe and America" in two volumes, a work from which is

taken, in connection with the publication of Mr. Hill, these brief facts of Beltrami's history and assumed geographical discoveries. That he was an adventurer of considerable nose, will be readily admitted. His career during the remainder

2 Beltrami's native town.

141 of his life from 1828 to 1855 was of no special interest. He died at the age seventy-five at Filotrano. Two portraits of Beltrami appear—one in his Indian costume while he was at Leech lake, produced in his “Pilgrimage” and a reproduction of Prof. Scuri from the former, supplemented by traditionary information—the latter portrait, a conspicuously imaginary production, is given herewith. Prof. Scuri, no doubt, drew largely upon his fancy, inasmuch as the facts point with an unerring certainty to Beltrami's abject condition, with but little food and scanty apparel while he sojourned near the head-waters of the Mississippi, and but for the kindness of the charitably inclined Chippewas who accompanied him from Leech lake to Fort Snelling, he would probably have perished. Due credit is given Beltrami in placing upon his map, “Doe lake, west source of the Mississippi,” afterwards named Itasca, though of its existence and name, Gen. Cass' Expedition of 1820 gave the first published information.

He gathered and transported to Europe many Indian curiosities, which are now in the possession of the authorities of the city of Bergamo, commemorative of his voyage through the lines of hostile and warring tribes of the Northwest at so early a date, and of his claims to the discovery of the Julian sources.

Beltrami County has been inscribed upon the geography of Minnesota in honor of his memory, and singularly enough, the Itascan as well as the so-called Julian source, are both situated within its limits.

SUBDIVISION ELEVENTH. HENRY ROWE SCHOOLCRAFT; HE ACCOMPANIES GEN. CASS IN 1820; PROCEEDS TO LAC LA BICHE IN 1832; SELECTS THE NAME ITASCA; DISCOVERS THE LAKE; SCHOOLCRAFT ISLAND; OZAWINDIB.

The peace of Utrecht, 1713, controlled the destinies of an English gentleman of education and refinement, who came to America during the reign of Queen Anne. He settled in Albany County, New York, establishing an English school, and his descendants continued their residence there for a hundred years. One of the descendants of this family was Col. Lawrence Schoolcraft, a Revolutionary soldier, and commanding, in the war of 1812, the first regiment contributed by his locality. He was united in marriage with Miss Barbara Rowe, of German parentage. Henry Rowe Schoolcraft, the subject of this portion of the present inquiry and examination, was the seventh of a large family, the issue of this union. Enjoying the advantages of an early education, he pursued an advanced course at Union College, Schenectady, and Middlebury, Vermont. At the time the attention of this country was drawn to the resources of the Mississippi valley, he accepted the offer of De Witt Clinton, at the age of twenty-four,

Your affectionate Father Henry R Schoolcraft

143 to engage in an exploration of the country west of the great river, spending two years in the territory now comprising the states of Missouri and Arkansas, publishing on his return two treatises, which brought his capabilities as a geologist and geographer before the public, and his services were called for as geologist and mineralogist to the expedition of Lewis Cass, from Detroit, Michigan, in 1820, to the sources of the Mississippi.

Leaving New York city by stage, March 5th, 1820, visiting Niagara with horse and buggy, embarking for Detroit on the steamer Walk-in-the-Water, he arrived at his destination on May 8th. The Cuss expedition, with Schoolcraft as a scientific attache, left Detroit May 24th, 1820, and by an extraordinary canoe voyage, memorable in the history of the Northwest, proceeded to the great lakes, to the west end of Superior, up the St. Louis river, portaging to the Mississippi, and up the great river to Cuss lake; thence down the river by way of Fort Snelling, visiting Carver's cave, proceeding to Prairie du Chien, across the territory of Wisconsin, arriving at Detroit, September 23d.

During this extraordinary canoe voyage, Mr. Schoo1craft made daily observations of geologic formations and mineralogic deposits through the entire region traversed, including the copper mines of Superior, the lead mines at Galena, and the clay deposits at Milwaukee, making a detailed report to the Secretary of War, accompanied by charts, of all his observations.

The Cuss expedition failed to discover the ultimate Basin at the headwaters of the Mississippi. However, the peculiar capabilities of Mr. Schoolcraft, indicated by 144 his scientific report to the authorities at Washington. placed his services in demand, and in 1830, as United States Superintendent of Indian Affairs for Michigan, residing at Sault de Ste. Marie, he received instructions from the department at Washington to visit the Northwest in charge of an expedition, ostensibly for conferences with the Indians, but in reality to determine the true source of the Mississippi. Not until 1832 did the Schoolcraft expedition make its final and successful discovery. The Rev. W. T. Boutwell, representing a Board of Commissioners for Foreign Missions, accompanied this expedition.

REV. W. T. BOUTWELL.

The Lac La Biche was already known to exist, and Mr. Schoolcraft was determined to reach it, carrying out his other objects of observation while en route by canoe voyage through Lake Superior. Messrs. Schoolcraft and Boutwell were personal associates, voyaging in the same canoe through Superior, and while conversing on their travels along the south shore of the great lake, the name “Itasca” was selected in the following manner, in advance of its discovery by Schoolcraft's party.

SKETCH OF THE SOURCES OF THE MISSISSIPPI RIVER. DRAWN TO ILLUSTRATE SCHOOLCRAFT'S INLAND JOURNEY TO ITASCA LAKE, 1832.

Mr. Schoolcraft, having uppermost in his mind the source of the river, expecting and determined to reach it, suddenly turned and asked Mr. Boutwell for the Greek and Latin definition of the headwaters or true source of a river. Mr. Boutwell, after much thought, could not rally his memory of Greek sufficiently to designate the phrase, but in Latin selected the strongest and most pointed expressions, " *Veritas* ", and " *Caput* ,"—Truth, Head.1 This was written on a slip of paper, and Mr. Schoolcraft struck out the first and last three letters, and announced to Mr. Boutwell that "Itasca shall be the name."

1 The first words given by Mr. Boutwell, however, were " *Verum*", " *Caput*," and Mr. Schoolcraft obese the last words given.

However, Mr. Schoolcraft says: "Having previously got an inkling of some of their (Indian) mythological and necromantic notions of the origin and mutations of the country, which permitted the use of a female name for it, I denominated it Itasca." From Rev. W. T. Boutwell2 in person, a vivid description of the naming of Itasca as above given was secured.

2 Recently deceased.

The party passed over nearly the identical route traversed by the Cass expedition, reaching Cass lake July 10th, 1832, and upon the advice, information and guidance of Ozawindib, a Chippewa Indian, proceeded in birch canoes, up the main tributary of Cass lake, up the smaller fork of the Mississippi, thence by portage to the east shore of the east arm of Itasca lake, and to an encampment on Schoolcraft island. During the day, Mr. Schoolcraft traversed the shores of Itasca, erecting the Stars and Stripes on the island, and returned to Cass lake; -10 146 thence to Leech lake. down the Crow Wing river, and to his destination upon the return voyage.1

1 In 1823, while at Sault Ste. Marie, Michigan, Mr. Schoolcraft became acquainted with John Johnston, Esq., and his attractive family. Mr. Johnston was an Irish gentleman,

In fact, an aristocrat, of superior education and courtly manners, who claimed among his kinsmen the Bishop of Dromore and Mr. Saurin, Attorney General of Ireland. Mr. Johnston was attracted by the beautiful daughter of one of the renowned Indian chiefs of the Ojibways, Wauhojeeg, and married her. Their eldest daughter, Jane, was sent in her early childhood to Dublin, to be educated under the supervision of Mr. Johnston's kindred there. Mr. Johnston's means enabled him to dispense a hospitality almost princely, and Mr. Schoolcraft was among those who shared in it, and when Miss Jane Johnston returned home, Mr. Schoolcraft was immediately captivated, not only by her personal attractions, but by the grace and culture of a mind that added to the advantages of education and accomplishments the refinement of a poetic nature After her marriage with Mr. Schoolcraft, she was a true sympathizer in all his pursuits and a valuable helper. The romantic pride which she felt because of her descent on the mother's side from one of the native kings of the country, induced lief to perfect herself in the Indian language and thus she became of eminent service in promoting her husband's knowledge of and influence among the tribes. She is credited by some as being the authoress of a portion of Mr. Schoolcraft's “Archives of Aboriginal Knowledge”, and other works.

Mr. Schoolcraft was retained in government service at Sault Ste. Marie for some ten years, when he was assigned to the “Agency” at Mackinac where his home was a social center, and where many travelers of distinction found a generous hospitality under his roof. About the year 1840 he returned to his native state. In 1842, he made his long desired visit to England, and while he was absent his wife died.

MRS. JANE SCHOOLCRAFT.

For nearly fifty years Mr. Schoolcraft was in the service of the government of the United States as geologist, mineralogist, and geographer, and his reports and communications are voluminous, and for the period of time during which his observations were made, were considered highly valuable and creditable, as well to himself as to the authority he represented.

We must judge of Mr. Schoolcraft as of the time in which he lived—geology, in its infancy in the western 147 country, geographic discovery incomplete, and a Schoolcraft, young and ambitions to sieze the opportunity offered for exploration and topographic examination, commissioned with authority, endowed with energy, enlightened in his younger years by civilized contact, sensible of his surroundings and opportunities—the educated gentleman, representing his country in an important field of labor. He has given us “Itasca,” and the name will live until the end of time—a monument to those who so uniquely constructed its name.

Mr. Schoolcraft wrote:

“Within a beauteous basin, fair outspread Hesperian woodlands of the western sky, As if in Indian myths a truth there could be read, And these were tears indeed, by fair Itasca shed.”

It is not proposed herein to express any opinion as to what purpose Mr. Schoolcraft had in withholding from the public the manner in which this name was selected, nor to discuss the inference drawn from the record he has left us, in which he plainly intimates that the name was that of a female, mythological, necromantic or otherwise; it is but of small consequence. Certain it is, the word was never heard of or known in Ojibway mythology. “There is no such word nor even any remotely resembling it in the Ojibway language,” writes Rev. J A. Gilfillan, for sixteen 148 years a student of the language1 . Prejudices existed to some extent against Mr. Schoolcraft, for it was but natural that voyageurs in those early days should deride the exploits and successes of others in whom they had no interest, and of whose labors they heard but to condemn.

1 During an interview with Rev. W. T. Boutwell, by the writer, a few months previous to his death, he made the following statement:

“Mr. Schoolcraft and myself were personal friends and at his instance I became a member of his party in 1832. We proceeded on our westward journey along the south shore of Superior in the same canoe, as companions. I think it was at a point west of the Pictured Rocks, while we were voyaging in our canoe, that Mr. Schoolcraft suddenly turned to me one day and asked the question, ‘what is the Greek and Latin definition of the headwaters or true source of a river?’ After much thought I could not rally my memory of Greek sufficiently to designate the name; but in Latin, I selected the strongest and most pointed expressions. The first words given by me were *Verum Caput*. But I told Mr. schoolcraft, if he wanted stronger words, he could take *Veritas, Caput*, which meant, ‘Truth’ ‘Head.’ I wrote the words on a slip of paper and Mr. Schoolcraft told me he should strike out the first and last letters of *Veritas, Caput*, and that ‘Itasca shall be the name.’”

This interview was a very interesting one, had at Mr. Boutwell's home, during which he related many circumstances concerning the voyage of 1832. He said no religious cermonies were held at Itasca lake at that time. Being a missionary he was known among the Indians as “The Black Coat.”

SOURCES OF THE MISSISSIPPI RIVER, DRAWN TO ILLUSTRATE SCHOOLCRAFT'S DISCOVERIES, BY CAPT. S. EASTMAN, U. S. A. 1855.

As to Mr. Schoolcraft's sojourn at Itasca and the manner in which he reached the lake, much might be said. The tale is a simple one of ordinary occurrences and extraordinary results. The Ojibway, Ozawindib, residing with his tribe at Cass lake, had his hunting grounds in the direction of the Basin and knew the locality well, in fact it was his home and field of subsistence, and he, an uncrowned king of the forest, with an undisputed title to a domain 149 since squandered for a mess of pottage. His distinguished guests were given the liberty of his domain and as their guide and host, he led the party into the wilderness, up the main stream, to the head of the lesser branch, across the hills and valleys and swamps of the intervening country to the east shore of the east arm of Itasca, near the mouth of the southeastern affluent, on July 13th, 1832. At the summit of any

considerable hill there, the outlines of the Basin with its distinct blue lines of curvature can be seen resting against the shadows of the horizon. Thus Schoolcraft viewed the Basin. He hurriedly—almost carelessly—examined the shores of Itasca lake from Ozawindib's canoe, noted his observations in botany and geology, and accepted his Indian guide's suggestion that there was a small brook entering the arm of the lake immediately to the south of Schoolcraft island. There is no evidence that he saw that brook. Dr. Houghton, Lieut. Allen and Rev. W T. Boutwell, his companions, busied themselves in as hasty an accomplishment of their requirements as did Schoolcraft himself, and within twenty-four hours after their arrival they were all far on their return journey down the main stream. Mr. Schoolcraft's map indicates the haste with which he delineated the shores of the lake, and Ozawindib was undoubtedly his principal draughtsman at that time. The camp on Schoolcraft island attached its name to the place by common consent as Schoolcraft's camp—hence the name of the island. No record, except Lieut. Allen's, is found as to any definite action 150 naming the place. They had the right to place these names there and that right is amply recognized. As to the character

SCHOOLCRAFT'S MAP OF ITASCA LAKE, THE SOURCE OF THE MISSISSIPPI RIVER. 3160 MILES FROM THE BALIZE. *a* MISSISSIPPI RIVER, *b* . ROUTE OF EXPEDITION. *c* . SCHOOLCRAFT ISLAND. AS MODIFIED IN 1855 FROM MAP OF 1832.

of Ozawindib—the real leader of Schoolcraft's party from Cass to Itasca and return. directing all their movements. pointing out the route of passage, controlling the footsteps of the ambitious explorers, discovering to Schoolcraft the real lake and its importance—he appears to have been a characteristic red chief of the forest, as competent as he was undeceiving, and without him, or some other Indian as well equipped in knowledge and canoes, the Schoolcraft party would have wandered into the wilderness to an unsuccessful conclusion. With the intelligent aid of Ozawindib, the party were led to their discoveries, and within the calendar week were on their way to Leech lake, down the Crow Wing river in canoes to attend a council of Chippewas appointed to be held, long before. Itasca

was reached for a specific date. 151 Thus, the haste of the expedition to leave the Itasca Basin, without judicious exploration, is accounted for.

MRS. JANE SCHOOLCRAFT HOWARD.

It is presumed, reasonably, that Mr. Schoolcraft would have been astonished to learn that nearly one hundred bodies of water1 existed within that basin, and that the principal affluents came from beyond the lake he so artistically named, chiefly from Greater and Lesser reservoirs, the ultimate water-shed of nature's formation, there.

1 In Miss Bishop's “Floral Home,” 1857, p. 27, she says: “We believe, on good authority, that the reported source of the Mississippi is not the correct one. Captain Eastman of the U. S. Army, and others having equal facilities for making a correct opinion, with whom I have conversed, assert its origin to be a hundred or more lakes, of which Itasca is one, all centering in one point to form the mighty river.” A statement not very far from the truth.

On the return journey, Mr. Schoolcraft separated himself from his escort, under command of Lieut. Allen, by going forward at a rapid rate, occasionally in the darkness of night.

SUBDIVISION TWELFTH. A MILITARY ESCORT; LIEUT. JAMES ALLEN AND DETACHMENT ACCOMPANY SCHOOLCRAFT; HIS OBSERVATIONS AND REPORT.

At Washington city, May 9th, 1832, Gen. A. Macomb, Major General commanding the army, ordered a detail of one officer and ten or twelve men from the garrison at Fort Brady, to accompany Mr. Schoolcraft into the Indian country.

The detail consisted of Lieut. James Allen,1 one corporal and nine privates. Lieut. Allen was directed to keep an accurate journal and report at length a description of the country, a topographic map of the route, and points of importance, the character and manners of Indian tribes, subsistence, game, fish, and mineral and geologic observations, and his views upon questions of natural history.

1 Appointed to West Point military academy, July 1st, 1825, from Madison, Jefferson county, Indiana; graduated in 1829, and assigned to duty as 2d Lieutenant, 5th Infantry.

Lieut. Allen was subject to the orders of Mr. Schoolcraft, so far as his escort duties were concerned, and proceeded with that gentleman to the Itasca Basin. By placing a compass in the bottom of his canoe, Lieut. Allen was enabled to note down extensive observations as to topography, keeping a very accurate record of distances

EXTRACT FROM LIEUT. J. ALLEN'S MAP, 1832. SCHOOLCRAFT'S EXPEDITION.

153 and directions. Arriving at Itasca lake, July 13th, 1832, with Mr. Schoolcraft, having encamped his detachment at Cass lake, he says the party spent a couple of hours at Schoolcraft island, and after raising the Stars and Stripes, they coasted nearly the entire shores of the lake, which was about seven miles long and from one to three broad, having but one small creek entering the west arm, not of sufficient size to admit of the use of even a small canoe. He noted on his map the position of Itasca lake as follows:

Latitude 47° 10#

Longitude 95° 54#

It would appear that the name of Schoolcraft island was selected by Lieut. Allen, as described in his journal. Mr. Boutwell, however, remembers the name of the camp there as “Schoolcraft camp”, which by common consent of all present attached also to the island. As memory may be more at fault than a well noted journal of each day, possibly Lieut. Allen gave the name, though the difference is of no special consequence.

Lieut. Allen found the Mississippi at its outlet from Itasca, to be twenty feet broad and two feet deep, current two miles per hour. The statement in his journal of July 17th, is made, that Mr. Schoolcraft, by the presentation of a medal, constituted his guide, Ozawindib (Yellow Head) a chief of his band.

Lieut. Allen's name has been geographically attached to one locality of the Basin, remembered for a most intelligent and detailed journal, of more than ordinary interest. With his report to his commanding officer, he 154 transmitted a map of different proportions than that of Mr. Schoolcraft.1

1 Lieut. Allen's military service commenced with his regiment in 1829, at Fort Brady, Michigan. On detached service, June 6th, 1832, up Lake Superior and to the source of the Mississippi. Also on detached service, engineer duty, at Chicago, 1837–8. Promoted successively to 1st lieutenant, March 31st, 1835, and as captain, June 30th, 1837. He died at Fort Leavenworth, Kansas, August 23d, 1846.

The Rev. Jeremiah Porter, of Beloit, Wisconsin, states, in answer to a communication concerning Lieut. Allen, addressed to him by the commissioner: “It would give me much pleasure if I could meet your wishes concerning Lieut. James Allen, though in Mr. Schoolcraft's family when he and Dr. Houghton and Lieut. Allen discovered Lake Itasca, and on their return they told me how they had named so beautifully the lake from the two Latin words. In English they do not exactly express “Itasca.” I am glad the name is retained by your commission. There was no harbor at Chicago when I reached that little village in 1833, Lieut. Allen was one of the party engaged to survey that city now so full of attractions. I do not now find his name in the history of early times there, and regret I cannot give you additional facts of a later date than 1833. How wonderful the progress of our country since the naming of that lake!”

yours forever J. N. Nicollet

SUB-DIVISION THIRTEENTH. NICOLLET'S SCIENTIFIC EXPLORATIONS; ASTRONOMICAL ABILITIES; AN EXILE FROM FRANCE; MAP OF THE SOURCES; EMPLOYED BY THE UNITED STATES; DETAILS OF HIS VOYAGE TO ITASCA LAKE; DISCOVERS FIVE CREEKS; DESCRIBES THE LARGER AS THE INFANT

MISSISSIPPI; A CRADLED HERCULES; DISCOVERS THREE LAKES; CONFUSION OF LOCATION; IDEAS AS TO THE SOURCE OF A RIVER.

During his lifetime, Jean N. Nicollet was a very important factor in discoveries touching the source of the Mississippi. He was born of poor parentage at Clauses, Savoy, in 1790, and was in his youth a musician. Apprenticed to a watchmaker, he remained with him until 1808, when he removed to Cambray, where he subsisted upon the emoluments of his occupation, prosecuting at the same time studies in mathemathics. He afterwards appears as an instructor in mathematics in his native town, pursuing studies in Latin and the languages. His natural abilities and ambition soon guided him to the opportunities of higher courses and he removed to Paris, where he was admitted to the senior class of L'Ecole Normale, soon succeeding to a professorship in the college of Louis Le Grand. Judging from the results 156 which followed, he must certainly have possessed natural ability to an extraordinary extent. Publications by him upon mathematical deductions as to the probable duration of human life, upon probabilities, and one upon assurances, soon placed him where he commanded the respect of financiers and admitted him to the higher circles of society. His astronomical studies, afterwards so conspicuously employed in the Mississippi valley, commenced in 1819, and he soon gained a reputation by his observations and the computation of the parabolic elements of several comets, one of which he discovered, which placed him in an honorable position in the “Bureau des Longitudes.” He now entered upon a most successful career, rapidly advancing in fame, knowledge and financial success. As a natural consequence, in cases of great opportunities, the goal of ambition is not always easily reached and the ambition of Nicollet, to become wealthy as well as learned, proved disastrous. Acting as the financial agent of trusting friends, he met with losses. Admiring associates became implacable enemies, and he was rejected as an applicant for membership in the Academy of Sciences, probably on the views entertained by Dominique Francois Arago, the perpetual Secretary. With financial ruin and disaster as his unwelcome companions, Nicollet left France in 1832, an exile. never to return. Landing upon the shores of America. with only the learning of a polished scientist and

astronomer, an entire stranger, he may have keenly contemplated his position, but he became the master of his circumstances and by the force of character and the manliness of a refined nature, he rose above the difficulties of his position and imprinted upon American geography during but a brief 157 period, a name that will endure the ravages of time; not, however, without exposures and hardships that resulted in an early and untimely demise.

He visited the Allegheny range, the Gulf of Mexico, ascended the Red, Arkansas and Missouri rivers, for purposes of astronomical and geographic observations, and elected to construct a topographical map of the sources of the Mississippi and North Red river, from actual astronomical observations and surveys in the then remote Northwest. This arduous labor was performed in the field during the years 1836–7. Retiring to Baltimore for rest and recuperation, the attention of the government of the United States was called to his valuable and scientific labors, and by invitation, he accepted the patronage of his adopted country, in the final construction of his map, with Lieut. John C. Fremont as a detailed assistant. He continued in the active service of the government, but before the completion of his elegantly written report, exhausted by exposures, blighted by the failure to attain his early and most honorable ambition, in the year 1843, he died, respected by every American who enjoyed the honor of his acquaintaince.

That portion of Mr. Nicollet's labors having reference to, and especially connected with the source of the Mississippi, are considered at length.

He was at Fort Snelling when he decided to visit the Itasca Basin. On the 26th of July, 1836, he bivouacked at the Falls of St. Anthony, where he was robbed by Sioux Indians of his canoes and provisions. Major Taliaferro, the Indian agent at the fort, supplemented his losses that he might continue his voyage. His party consisted of himself, a Frenchman named Desire Fronchet and a number of mixed 158 bloods and Ojibway Indians. On the 29th his flotilla of canoes laden with his supplies, arms, ammunition, bows and arrows, “sticks to notch down the days and the chronometer to measure time,” was fast ascending

the Mississippi above the falls. He noted particularly the character of the country to the mouth of the Crow Wing river, passed up the latter to the mouth of Gull river, which he named from the Ojibway word “Gayashk;” thence up its channel and portaging to Pine river, he reached the Little Boy, and thence by canoes he arrived at Leech lake, where he remained for a week's observation. Francis Brunet was his guide, whom he describes as a man over six feet in height, a giant in strength and a natural geographer. At Leech lake he met much displeasure from the Indians in the absence of presents to give them, and his record indicates that he considered his life imperiled, from which he was rescued by the kindly offices of Rev. W. T. Boutwell, the missionary, then residing at that point.

He proceeded from Leech lake with Messrs. Fronchet and Brunet and a Chippewa Indian named Keg-wed-zis-sag,1 who was well acquainted with the Itasca region, calling it his hunting ground. The party under the guidance of Keg-wed-zis-sag (Gay-gwed-o-say) reached Kabekona lake, thence portaged to La Place river, or Schoolcraft's branch of the Mississippi,2 ascending the same to Assawa lake and again portaged about six miles to Itasca lake, across what is now known as the “Big Burning,”3 a territory to the eastward

1 Gay-gwed-o-say, anglicised, Trying-to-walk, erroneously given in Nicollet's report, “Keg-wed-zis-sag.

2 Yellow Head river.

3 A strip of territory, commencing on the northeast shore of Mary lake and extending northeasterly for many miles, narrow at its commencement, thence widening.

159 from Itasca, denuded of timber by fire. Nicollet's instruments were a sextant, barometer, thermometer. chronometer, compass, artificial horizon, tape-line, etc. Reaching Itasca lake, he ascertained the elevations of the surface to be one hundred and twenty feet above the lake by barometrical observation, and proceeded to Schoolcraft island where he camped, discovering the flag-staff stationed by Schoolcraft four years before, upon which he erected his artificial horizon preparatory to locating his position.

His record of observations shows the following:

“Itasca lake, Schoolcraft island. Estimated distance by water from the Gulf of Mexico, 2,890 miles. Elevation above the sea, 1,575 feet. North Latitude, 47° 13# 35#; Longitude, west from Greenwich, 95° 2#.”

He then proceeded under the guidance of Keg-wed-zis-sag1 to explore the affluents of Itasca lake. He found five creeks that flowed into it, formed by innumerable streamlets oozing from the clay beds at the bases of the hills, known by the name “ *Hauteurs des Terres* ,” (Heights of Land,) covered by thick forests forming a semi-circular region south of Itasca, all of these streamlets having boggy bottoms. He says: “The waters supplied by the north flank of these heights of land, still on the south side of Itasca lake, give origin to the five creeks of which I have spoken above. These are the waters which I consider to be the utmost sources of the Mississippi.”

1 Gay-gwed-o-say or Trying-to-walk.

He visited all of the five creeks mentioned, one entering the east bay or arm of the lake, the four others into the west arm. Among the latter, he found one remarkable above all the others—its course longer and its waters more abundant— 160 and in obedience to a geographical rule “that the sources of a river are those which are most distant from the mouth,” made the following declaration in his report: “This creek is truly the infant Mississippi; all others below, its feeders and tributaries.”

August 29th, 1836, he explored this principal creek. It was found to be 15 to 20 feet wide and from 2 to 3 feet in depth; He stemmed its brisk current until fallen trees prevented the passage of his canoe, passed southward on foot at the brow of the hills keeping in sight of the creek, descending into the valley (Nicollet valley) and found numerous streams oozing from the bases of the hills. He found that the waters united at a short distance from the hills whence they originated, forming a small lake (Nicollet's Upper lake) from which he

saw the Mississippi flowing with a breadth of a foot and one half and one foot in depth. This stream uniting with others, forms another, minor lake from which issues Nicollet's memorable stream the “Cradled Hercules,” forming sand bars, transporting the branches of trees, widening, of higher temperature, subsiding into another small lake, and trying its consequence upon an additional mile or two, it empties into Itasca lake, the principal reservoir of all the sources to which it owes all its subsequent majesty.

The above, while not quotations, are almost the identical words used by Mr. Nicollet. He considered the east branch of the main river (Yellow Head) quite as long as the main stream, but inasmuch as its waters were less abundant, it could not be considered the main stream. He modestly awards to Mr. Schoolcraft the honors of a first discovery; claiming only for himself a completion of the work necessary

EXTRACT FROM TOPOGRAPHICAL MAP OF THE SOURCES OF THE MISSISSIPPI AND NORTH RED RIVER, FROM ACTUAL ASTRONOMICAL OBSERVATIONS AND SURVEYS IN 1838 AND 1837, BY J. NICOLLET.

161 for a more perfect knowledge of the source, aided by the use of astronomical instruments along the entire course; of the river.

He regarded Beltrami's claims as deserving a critical review and a severe refutation. He found the outlet of Itasca lake to be sixteen feet wide, fourteen inches deep, current swift, water transparent, and, after having devoted three days and portions of the nights in explorations and astronomical observations, with his canoes and guides, he passed down the main river to Cass lake, and thence returned to Leech lake, where he remained some time with Rev. W. T Boutwell, as a guest. He then passed down the Leech lake river and the Mississippi, accompanied by a number of Ojibway Indians, to Fort Snelling. Thus ended the explorations of Nicollet at the source. From Gen. H. H. Sibley and Rev. W. T. Boutwell, who were Mr. Nicollet's personal friends, much has been learned of his modest virtues as a man, scientist and scholar. He rose above his misfortunes and inscribed upon the pages of the geography of his adopted country, an enviable reputation and name,

which will forever be known and quoted in the physical geography of the commonwealth of Minnesota, constructed from the territory with which he so closely allied his name.

Of his personal peculiarities but little need be said. His patience and perseverance overcame almost insurmountable obstacles. Of slight physical demeanor, he could not withstand the ravages of exposure, and his early demise followed; a resultant expectation by himself as well as by the friends who often admonished him without success.

He contemplated the publication of extensive observations -11 162 concerning the valley of the Mississippi, but life was too short to permit of the accomplishment of his designs. A portion of his map and a copy of the only portrait of Mr. Nicollet to be found in America, taken from a painting upon ivory, are reproduced.

Many would award to Mr. Nicollet the honor of a first discovery of the true source, but he can hardly be credited with this distinction in justice to the memory of those who preceded him at the Itasca Basin. That he pointed out and accurately described the principal affluent of Itasca lake, there is no doubt whatever, nor can there be any doubt that he visited Elk lake and laid the same down on his map as a bay to Itasca, connected by a wide, short and sluggish channel, which he denominated an affluent. The waters of Itasca lake have, since Nicollet's visit, receded to some extent and its surface is accordingly lowered, separating itself from Elk lake, leaving it as waters gathered at one side. A particular inspection of that portion of Nicollet's map will admit of no other view.

The discovery of three small lakes by Mr. Nicollet, up the channel of the main tributary, so graphically described by him, and the manner in which he located them upon his map, without careful courses and measurements, has misled observers of the locality as to his three lakes. Mr. Hopewell Clarke was led to presume that his third lake was a small body of water (now a dry bed) to the eastward of his middle lake, while the casual examination of 1888,1 in the confusion of location in which Mr Nicollet placed these three bodies of water, indicated that the third lake up the tributary, did not exist, and

1 See subdivision Twenty-sixth.

163 a belief accordingly was publicly expressed. No one question has been more puzzling than the identity of Nicollet's third lake,1 and after an exhaustive consideration of the question, it is believed that the underground channel. now distinctly defined between Nicollet's upper and middle lakes possibly might have been, in 1836, a surface channel, and, accordingly, a declared determination upon the question of the three lakes has been made with much doubt;2 no, however, without considerable study and thought upon a mooted question, insufficiently and hastily considered by Mr. Clarke in 1886, and the parties to the casual examination of 1888.

1 There is a probability that Mr. Nicollet in passing up the valley and affluent discovered by him, became bewildered in the thickets of the locality, which precluded the possibility of his correctly delineating the topography of the spot. It is absolutely impossible to certainly and accurately trace his steps after he left his canoe and passed along the brow of the hills, being careful to remain within sight of the stream that he might not become lost. It is possible since it is certain that he passed up the valley on the east bank of the stream, that he only saw two lakes, for the peculiarities of the topography there, in hassing up the valley on the brow of the hills on the *east* side of the stream, brings the middle lake in sight *first*, and Continuing, the lower lake comes in sight, thence passing up the stream the middle lake *again comes to the view*. Query: May it not have been that Nicollet, passing the middle lake *first*, reaching the lower lake *second*, and then again arriving at the middle lake, may have made the mistake of describing the two lakes as *three*, having arrived in sight of the middle lake a *second time?* Such a view is forced upon the reader of his report, in the light of a survey in detail, of Nicollet's lower and middle lakes; especially so, since it is known that the waters, in abundance, ooze from the base of the hill immediately above Nicollet's middle lake, and uniting form a stream of continued surface flowage to Itasca lake. It is very doubtful if Nicollet ever saw the pool of water which has been

designated as his third lake, for purposes of correct geographical delineation. It, however, is the only pathway out of a dilemma at this time.

2 St. Paul, Minn., Dec. 18th, 1889.

After due deliberation, and with a copy of Nicollet's original map of the sources of the Mississippi and North Red river before us, we conclude that the three lakes noted by Nicollet on the principal affluent to Lake Itasca, as shown by his, said map, are the two lakes in the southeast quarter of section 21, and the small lake in the southwest corner of section 22, township 143, range 36.

Signed: HOPEWELL CLARKE, J. V. BROWER.

164

In honor of Mr. Nicollet; have been named the following.:

The principal affluent to Itasca lake, discovered by Nicollet in 1836—Nicollet's Infant Mississippi;

The first lake up this stream—Nicollet's lower lake;

The second lake—Nicollet's middle lake;

The third lake—Nicollet's upper lake;

The valley there situated—Nicollet's valley;

The principal springs—Nicollet's springs;

The height of land—Nicollet heights.

There was erected at the summit of Morrison hill by the I. B. T. & Co. expedition of 1886, a wooden slab, engraved to the memory of Nicollet, as the discoverer of the source of the

Mississippi in 1836. This slab, nailed to a cedar post, is in a perfect state of preservation, and upon its margin has been written many names of visitors to that most sightly spot.

But little more need be said of Nicollet's visit and discoveries. His conclusion that the waters supplied by the north flank of the *Hauteurs des Terre* , south of Itasca lake, gives origin to the creeks found there, and that those waters constitute the utmost sources of the Mississippi, is eminently a correct one, and regret may well be expressed that he failed to reach and make known the location of the large body of water then and now existing near the summit of that north flank, which supplies that never ending perennial flow found in Nicollet's “Infant Mississippi.” Had he clone so, no uncertainty as to the true origin of the Mississippi river would have been possible.

He did not know of or visit numerous lakes and streams immediately above and beyond the waters which he found oozing from the base of the hills, nor is it believed 165 that he saw or knew of Howard and Demaray creeks,1 and likewise he failed to note the existence of the Mississippi springs.

1 These two perennial creeks do not appear on Nicollet's chart, and no reference to them is made in his report.

SUB-DIVISION FOURTEENTH. THE “DOLLY VARDEN” EXPEDITION TO ITASCA LAKE; JULIUS CHAMBERS VISITS ELK LAKE AND DECLARES IT THE SOURCE OF THE MISSISSIPPI; OBSERVATIONS AND EXPLORATIONS BY A REPRESENTATIVE OF THE NEW YORK HERALD.

Representing the New York *Herald* , Mr. Julius Chambers, in 1872, made a canoe voyage to Itasca lake, thence down the Mississippi river to the Gulf of Mexico. His published writings constitute contributions to the columns of the paper he represented.

From an examination of these writings, it appears that he contemplated a canoe voyage from the very springs near Itasca lake to the mouth of the river at the Gulf. He reached

Oak Lake Station four miles west of Detroit, on the Northern Pacific railway, May 31st, 1872, with his canoe which he had christened “Dolly Varden.” Overland, he reached White Earth, and by a series of portages reached Itasca lake, via Wild Rice river and lakes, and encamped upon Schoolcraft island, where he took observations for his position with “ships instruments” and chronometer with the following result:

Latitude 47° 12# 58#.

Longitude, 95° 2# 1#.

Julius Chawbers

167

Satisfied that all former explorers had stopped short of the true source, he determined to make a thorough examination of the vicinity. Leaving Schoolcraft island, in his canoe he coasted the east arm, noted surroundings and reached the mouth of the creek at the south end of the arm, which he followed about fifteen hundred feet to a hill on one side and a meadow on the other, concluding that the stream could not be perennial in character, and that there were no lakes up the stream. Returning to the island, he continued a search for inlets, and at a southwestern angle of the west arm, a small inlet was seen about four feet in depth, and scarcely more in width, which the channel had cut through the thick turf. Pushing his canoe through this channel, reaching shallow water, dragging his canoe over sticks and logs, at the end of “about one-third of a mile,” he reached a small round lake. Crossing to the opposite shore, he found a floating bog with no creeks entering the lake. An Indian had told him that the Red river and the Mississippi took their rise from the same bog1 , which he doubtless believed to be the bog he had then reached. He says, “Here then is *the source* of the longest river in the world, in a small lake, scarcely one quarter of a mile in diameter, in the midst of a floating bog, the fountains which give birth to the Mississippi. The greatest depth of the lake was found to be only twelve feet.”

1 The bog referred to is not within the Itasca Basin. It is at the head of Division creek which comes in from the west, two miles down the Mississippi, north of Itasca lake. This creek takes its rise at the summit of the Hauteurs des Terre, west of the great basin of the Mississippi. Waters at that summit also flow westward to the North Red river.

Naming the lake “Dolly Yarden,” after his canoe, he returned to Itasca lake and continued a search for other 168 inlets, finding but one small one on the west shore. Recording the declaration that there was but one perennial stream entering Itasca lake—that which connected it with “Dolly Varden” lake—he reached his camp at sunset, June 9th, 1872, and the next day proceeded upon his successful canoe voyage down the Mississippi. It is certain that Mr. Chambers

SKETCH MAP OF THE ITASCA LAKE REGION JULIUS CHAMBERS.

169 visited Elk lake, finding his way to that point up the Chambers creek1 of the present time. The deepest sounding of but twelve feet, the tamarac swamp where stands Morrison hill, and other apparent errors upon Mr. Chamber's map, are explained by the haste with which he conducted his explorations.

1 The creek connecting Elk lake with Itasca lake, one thousand, one hundred feet in length, has been recently changed in name from Elk creek to Chambers creek, in recognition of its discoverer. This change still leaves an Elk creek flowing into the southwest angle of Elk lake.

Mr. Chambers' absence in Europe during the better part of 1889, and a disinclination to respond to a request for manuscript discribing his visit to Itasca, places the information derived, upon the basis of an examination of his letters to the *Herald* , written in 1872.2

2 These letters were written to the *Herald* during his sojourn at Itasca lake.

When Mr. Chambers concluded that there were no lakes to the southward from the end of the east arm, he was then within seven hundred feet of one of the most picturesque

lakes3 within the basin, concealed from his view by a low range of hills. As to the floating bog discovered by him, it is probable heavy rain storms, then prevalent, were deceptive to some extent, in connection with an examination of but one day's duration.

3 Mary lake.

It would appear that Mr. Chambers either did not visit Nicollet's Infant river, or visiting it, failed to make a careful examination into the question of its importance. Upon reaching Elk lake he found it much larger than he at first supposed. M. Nicollet saw the same stream and lake, and gave it no importance, whilst, *vice versa* , Mr. Chambers failed to award due recognition to Nicollet's discovery. 170 Such was the difference in the observation of the two explorers, that, although Chambers creek was sluggish and short in 1836, it had become somewhat longer in 1872, by the invincible process of nature, whereby the surface of the water in Itasca lake receded from its former and higher elevation.

SUB-DIVISION FIFTEENTH. OFFICIAL ACTION BY THE AUTHORITIES OF THE LAND DEPARTMENT OF THE UNITED STATES: HOW ELK LAKE WAS FINALLY NAMED; OFFICIAL PLATS CERTIFIED AND APPROVED.

GEN. J. H. BAKER.

As Surveyor General for the District of Minnesota, representing in an official capacity the United States government, James H. Baker assumed the duties of his office May 1st, 1875, and by limitation, retired in April, 1879.

The Surveyor General, other official requirements, is especially empowered by statute, and the regulations of the Interior Department of the United States government, to contract for the official surveys of the public domain within the limits of his district.

During General Baker's term of office, he directed the 172 survey of Townships 142, 143 and 144, Range 36, west of the 5th principal meridian, placing the public contract therefor

to the credit of Edwin S. Hall, in 1875. No special or particular instructions were given relative to the meander of Itasca lake or the examination of the Itasca Basin, situated in the townships named, further or to any greater extent than were the requirements concerning the public survey of any other Government townships. Upon the completion of the survey by Mr. Hall, the official plats were drawn at General Baker's office at St. Paul, Minn., and at that time, upon enquiry as to the names of lakes within each township, there were placed upon the official plat the names “Lake Itasca” and “Elk lake,” pursuant to a requirement contained in the general instructions of the Interior Department, which provides that the names of lakes upon the official plats, should be the same as they had been designated previous to the public survey.

The original Elk lake, having been changed in name by Mr. Schoolcraft to “Itasca.” which action had received due recognition by the authorities of the government, Gen. Baker judiciously and very properly adopted the traditionary name of “Elk lake” for the body of water gathered at the side of the west arm of Itasca lake, and under his instructions the name was extended upon the official plats, and certified by him February 3rd, 1876. He then submitted these plats to the Commissioner of the General Land office at Washington, who duly approved the same. Of the three plats for each of said Townships, one is on file at the General Land Office, one at the Surveyor General's Office at St. Paul, Minn., and one at the local Land Office, then at Detroit, Minn., now at Crookston. Thus before the end

THE OFFICIAL PLAT, (REDUCED SCALE) 1876.

173 of the first half of the year 1876, the official requirements of the public survey of the Itasca Basin had been completed. Then followed the selection of swamp lands in favor of the State of Minnesota, pursuant to Congressional enactment, the withdrawal of odd sections subject to the grant of the Northern Pacific Railroad Company, forty miles north of its definite location, which extended to within short distance from Schoolcraft Island, leaving the balance open to settlement, excepting sections 16 and 36, reserved for purposes of public instruction. For more than fifteen years, the local land office has held the public lands in those townships subject to disposal upon the application of qualified

preemptors, homestead claimants and beneficiaries under the Indian treaties and other statutory privileges permitting the selection of public lands. Thus, the casual observer may readily understand the official recognition of Elk lake by the government of the United States, its definite location and meander and in 1875, the erection of official corners upon its shores in the same year, which are still intact and plainly visible, and the approval of the official plats in 1876. Thus ended the official acts of the Government Survey.

General Baker in another capacity was connected with the question as to the true source of the Mississippi in 1887, which will be adverted to in the consideration of action taken by the Minnesota Historical Society in another portion of this report.

SUB-DIVISION SIXTEENTH. EDWIN S. HALL'S GOVERNMENT SURVEY; HIS PARTY REACH THE ITASCA BASIN; MEANDER OF ELK AND ITASCA LAKES; OFFICIAL CORNERS AND LAND MARKS.

Mr. Edwin S. Hall, who made the official survey, for the government of the United States, for Townships 142,143 and 144, Range 36, West of the Fifth Principal Meridian, in the year 1875, within which Townships the Itasca Basin is situated, was awarded a public contract, by the authorities of the government, to officially survey the Townships herein before described. Actual service in the field as a surveyor. of public lands, endowed with

MR. EDWIN S. HALL.

175 qualities of judgment and decision, made the appointment of Mr. Hall a good one. He dispatched his supplies and camping outfit overland by ox teams in the month of September. By stage, Mr. Hall joined his teams near Brainerd, on the Northern Pacific Railroad. Crossing the Mississippi river, the Hall party proceeded with their ox teams on the Leech take road to Fourteen Mile Creek, thence on the White Earth road to Shell Prairie, where was found a standard parallel line—the base of their operations.

Discovering an intermediate deficiency of six miles in established lines, Mr. Hall returned to St. Paul and had inserted in his contract, power to establish the township line from the

southeast corner of Township 141, Range 36, to the southeast corner of Township 142, Range 36, where his work commenced. The task of pressing his way northward with his teams through a dense wilderness, was no light one. He maintained his northerly direction until he reached Stony Ridge and the Little Man Trap lake, where he commenced the construction of a rough road in a northwesterly direction towards the centre of the tier of townships he surveyed. The direction taken brought him immediately to the southern rim of the Itasca Basin, four miles south of the south end of the west arm of Itasca. Passing around the interesting lakes at the summit of the hills, to which his party are the first known white visitors, he encamped on the north shore of the most southerly lake, opposite the island1 , and continued the establishment of the township and section lines and sectional and meander. corners. Continuing the construction of his road to the northward, he again encamped with his party on the north

1 Brower island in Hernando de Soto lake.

176 side of “Spring brook” which he named by a scribing, still visible near the centre of section 27, on the bank of the creek. The endeavor to construct a road through the swamps of Nicollet valley failed, but the signs of his choppings are still visible there. He continued his road due north and encamped on Morrison bill from which point the survey was continued by supplying his force in the field through the instrumentality of “packers.” Mr. Hall's several camps are still plainly to be seen, and his road, then made, has become one of the highways of the locality. The rule of the government which obtains in locating its official lines by sections regardless of and ignoring interior topography, paying a niggardly stipend for valuable, and what ought, by all means, to be a correct work, placed Mr. Hall in the same category of all other government surveyors of the public domain, and he conscientiously and honestly made a regulation government survey much better than the average of his time, and after the lapse of fourteen years, all the official corners and lines are plainly visible and easily found. These several lines and official corners, recognized as of binding and official force, have been found to be a very convenient requisite in the location of the Itasca State Park.

At Mr. Hall's first camp within the basin on the north shore of Hernando de Soto lake, was found the following scribing:—

“Ed. Hall's Lost Explorers.

Hazleton.

Ed. Hall's Camp, October 9th, 1875.”

Had Mr. Hall received instructions from his superiors at 177 Washington to make at the expense of the government an accurate hydrographic and topographic survey of the source of the Mississippi, personal enterprise for geographic facts would not now be necessary.

In the days of Hall's survey, the overpowering influence was a grand rush for the possession of pine timber for speculative purposes, and that influence, widespread and powerful, invisibly controlled the surveys of the public domain in the Northwest, and notwithstanding the fact that the Itasca townships contain magnificent tracts of pine timber, not an acre of value remains the property of the United States, all that portion of value, not included in the odd section grant to the Northern Pacific Railroad or the swamp grants of Minnesota, having passed to private ownership for speculative purposes. In the days of 1875 and subsequently, that portion of Minnesota was overrun with timber inspectors, commonly called “Cruisers,” whose sole and only object was the selection and acquirement of all the valuable timber lands of the region they inspected, for themselves and their employers, and it is safe to say that at the end of the winter of 1880, every tract of timber within the Itasca Basin had been examined by at least half a dozen “Cruisers,” oblivious to every fact connected with the source of the Mississippi.

Many land marks and traces remain of the Hall survey, old rafts and paddies at the crossing of lakes; the highway now so useful, subsequently more extensively opened by

Henry Bohall and Peter C. Sweeney, from which it has often been erroneously designated as the “Sweeney Road.”

It appears beyond doubt that when Mr. Hall descended -12 178 into the valleys of the basin with his party, he had but the one purpose in his mind—that of the ordinary government survey,—completed the same as fast as possible, and returned from the wilderness to receive but a stipend for an important public survey of an historical locality, bedded in the depth of the wilderness, which for nearly three hundred years was unknown to the governments which exercised the right of ownership by discovery, purchase or cession.

SUB-DIVISION SEVENTEENTH. THE ROB ROY EXPEDITION; A. H. SIEGFRIED AND COMPANIONS REACH ITASCA LAKE; THEY VISIT ELK LAKE AND PHOTOGRAPH IT; THE PARTY DESIGNATE ELK LAKE THE HIGHEST TRIBUTARY TO THE MISSISSIPPI; WILLIAM MORRISON DESIGNATED AS THE FIRST SEEN OF WHITE MEN AT THE SOURCE.

The first of July, 1879, Mr. A. H. Siegfried, representing the Louisville *Courier-Journal* , accompanied by Mr. J. M. Barnes, now of Georgetown, and Mr. Lucien Wulsin of Cincinnati, Ohio, projected a visit to the Itasca Basin. Leaving the Northern Pacific railroad at Detroit, Minn., the party proceeded to White Earth, and made preparations for their inland journey to Itasca, and from thence down the Mississippi river in canoes. Three Rob Roy canoes, a store of

MR. A. H. SIEGFRIED.

180 provisions and camping material, a guide, interpreter, and Indian “packers”1 were provided for the journey. With varying hardships, the party reached the banks of the river several miles below Itasca lake, accomplishing portages across the Hauteurs des Terre from Rice lake. Dismissing their guide and “packers,” the party proceeded alone up the river, discovering that they had reached the stream far below the point promised by their

guide, necessitating a tedious amount of labor in propelling their canoes up the rapids and over fallen trees and debris, through rushes and across shallows, and it was not until after ten days of hardships that they reached Itasca lake, and camped on Schoolcraft island, July 12th. They particularly examined the lake, and searching for its principal affluent, passed up the stream laid down by Nicollet, as the Infant Mississippi, until their progress was impeded by fallen trees. Leaving their canoes, and with aneroid barometer and photographic paraphernalia, they crossed the hills to the shores of Elk lake which they thought to be the "Highest tributary to the Mississippi." Taking a photographic view2 of the place, they returned to their canoes, sustaining the loss of their barometer. Mr. Siegfried estimated the distance between Itasca and Elk lakes to be about one-half of a mile, requiring his party to make a tiresome walk in the heat of the day through

1 The use of the word "packers" is introduced in this work, only in such places as the same is quoted. It means, in common parlance, among woodsmen and voyageurs, the persons who carry, in packs upon their shoulders, the provisions, etc., for the voyage; usually by a "packstrap" across the breast or forehead.

2 In a letter Mr. J. M. Barnes, the photographer of the party, says: "Am sorry indeed, to say that the plate exposed for Elk lake was light struck, and therefore useless to print from." Mr. Siegfried states that the plate exposed for Elk lake was ruined, in handling, before his party had reached a point where the same could be developed. A desire to reproduce this plate of Elk lake is, consequently, necessarily abandoned.

181 the dense timber, consuming thirty-five minutes of time. Thus, it is seen, that they did not visit Morrison hill, where the distance between the lakes is less than five hundred feet. The trip was not projected with a view of geographical discovery, but simply as a recreative "outing," the party considering the valuable work of Schoolcraft and Nicollet, in that regard, as paramount, and sufficiently definite to gainsay the necessity of further exploration for geographic facts, although they thought Elk lake to be the highest tributary.

Upon examination the mouth of Chambers creek, as it enters Itasca, was found by this party to be struggling through bogs. Awarding to William Morrison the honor of the “first seen of white men,” in 1804, at the source, this party of adventuresome explorers departed from Schoolcraft island on the morning of July 15, 1879, to endure the hardships and adventures of a canoe voyage down the Mississippi to civilization. They designated their visit as “The Rob Roy Expedition of 1879” after the character of their several canoes which they had named the “Betsie D,” “Hattie” and “Kleiner Fritz.” The party were particularly successful in all they had at first contemplated, disappointed only, in the hardships they were compelled to endure. The photograph of Elk lake, taken by this expedition, was from a point at the west shore near the mouth of the small stream now very appropriately named Siegfried creek, in the absence of any other name recognized by acknowledged authority. Siegfried creek is particularly described in the consideration of the Elk lake locality.

SUB-DIVISION EIGHTEENTH. GEOLOGIC AND BOTANIC EXAMINATION AT ITASCA LAKE BY O. E. GARRISON; LOST AT THE LITTLE MAN TRAP; HE REACHES ELK LAKE; PORTAGE TO ITASCA; CAMP ON GARRISON POINT; ITASCA LAKE COASTED.

June 28th, 1880, under the auspices of the 10th census of the United States, Department of Forestry, and incidentally representing the Geologic Survey of Minnesota, under Professor N. H. Winchell, Mr. O. E. Garrison of St. Cloud, Minnesota, departed from his home with one assistant, for an extended tour to and beyond Itasca lake, and down the Mississippi. Detailed reports of his examination of that locality were made which have become public documents Mr. Garrison,

MR. O. E. GARRISON.

183 who for many years was a Government Surveyor of the public lands in portions of the northern part of Minnesota, was also during his lifetime proficient as a civil engineer, and pursued studies in botany and geology, and he was admirably fitted to conduct the

examination now under consideration—hampered only by a want of breadth, caused by almost total deafness.

Mr. Garrison passed down the Wing river from Verndale, Minnesota, to the Crow Wing river. He passed up the last named stream by canoe, variously noting geologic and botanic examinations until on the 13th day of July, he reached the neighborhood of the Little Man Trap lake, and putting off in his canoe in search of a portage from the north end of that lake, he became bewildered in the coils of the well named Little Man Trap, near the southern edge of the Itasca Basin and seeking a return from his difficulty, Mr. Garrison spent the following thirteen days in a circuitous route in reaching the southern portion of the Basin, only four miles to the northwestward from his camp of the 13th. Here Mr. Garrison entered upon a most interesting spot, the highest reservoir, the Ultimate Basin of the Mississippi river; but intent upon reaching Itasca lake, he seems not to have either considered or examined the importance of the locality he was visiting. Pushing by portages through lakes, over hills and across ponds, he noted down very accurately the route from the lakes at the top of the hills to Whipple lake, to the west shore of Elk lake, stranding his canoe in Chambers creek, between Elk and Itasca lakes, in the absence of a sufficient depth of water to permit of passage in his canoe. He reached the summit of Morrison hill overlooking Itasca lake, July 30th, and by 184 portage, reached the lake, camping at the point opposite the mouth of Chambers creek on the west shore of the west arm. The following day, Mr. Garrison skirted the shores of Itasca, examining the different kinds of timber, and returning to camp, left the locality the next morning, August 1st, for a continuance of his voyage down the Mississippi.

He places his record in two series, commencing his second series, on the shore of Elk lake. His estimate of the height of land south of the Greater Ultimate Reservoir. and his subsequent notice of his visit to the beaver dam with its running stream into Floating Moss lake, his portage across the hills to Elk lake, the climbing of the tree to view the locality, and his conclusion that “None of the hills were more than twenty or twenty-five feet high,” place him in the category of a stranger in a strange land, for he had already descended

into the valley of the Basin more than one hundred and eighty feet in his advance toward Itasca lake from the Heights of Land, less than three miles to the southward from his camp on the west shore of Elk lake.

There is, however, let it be said to the credit of a faithful servant of the government, a reasonable explanation of this apparent error in regard to the height of the hills. Mr. Garrison had reached the west shore of Elk lake from Whipple lake by a descent of ninety-three feet, passing through a heavy body of pine timber, many of the trees standing more than one hundred feet in height, and in endeavoring to view the locality at an elevation above the surface, by ascending the tree, his view was obscured by the height of the timber he had passed in reaching Elk lake.

185

Mr. Garrison's description of the outlet of Elk lake where—“the water was low, and a few rods down from Elk lake, the canoe stranded on the pebbly bottom of the brook”—when he landed and portaged across to Itasca, is excellent evidence of the condition of that stream on the 30th day of July, 1880. Mr. Garrison's scientific research upon his canoe voyage of sixty days and his reports thereon, contribute valuable additions to sources of information on the various topics he discusses.

The point upon which he camped has been named Garrison point.

SUB-DIVISION NINETEENTH. EARLY VISITORS TO ITASCA; CHARLES LANMAN'S CLAIM; ALLAN MORRISON.

Among the minor early visitors to Itasca lake, or those

MR. CRARLES LANMAN.

who claim to have visited the locality, are Charles Lanman, in 1846, the Rev. Frederick Ayer and son1 , in 1849; Mr. Bungo, a representative of the colored race, in 1865, who

originally claimed that he was “the first white man who discovered Itasca lake;” the several employes of Edwin S. Hall in 1875, and several land cruisers from 1875 to 1881.

1 Application was made to the Rev. Mr. Ayer's son for a detailed report of his father's visit to Itasca, the reverend gentleman being long since deceased, but no answer came. Application for this record being renewed though Mr. J. H. Rhodes, the following reply was received:

“Yours came in due time. I saw Mr. Ayer, who said that he would took the matter up. I delayed writing you, thinking that he would report to me. As so much time has elapsed, I presume that he may have reported directly to you, which I hope may be the case.”

Nothing has been found to show that any of these gentlemen performed any 187 special or particular service or made any discoveries of note, touching or in anywise affecting geographical information at the Itasca Basin.

There seems to be a disposition on the part of early settlers of Minnesota, to require some further light1 regarding Mr. Lanman's visit to Itasca lake in 1846. As it does not appear that he claims to have made any discoveries there, information given by himself will probably be all that is required.

1 A communication from Mr. Lanman is noted:

“Dear Sir:—

I have your letter of the 15th inst., and am sorry that I cannot send you a more satisfactory reply. I cannot at this late date prepare a more complete record about my visit to the headwaters of the Mississippi than the one to be found in my *‘Summer in the Wilderness’* and that you will please remember, was written by a boy-tourist and landscape painter. As to the picture which I enclose, It only represents a fellow who once shot a raccoon within the limits of what is now the City of St. Paul.

Very truly yours, Charles Lanman."

J. V. Brower, Esq., St. Paul, Minnesota

It has been stated that his voyage was the "outgrowth of a wandering tour from the sources of the Mississippi to the waters of Lake Superior, Performed in a canoe in the summer of 1846, with a party of Ojibway Indians and piloted by the Indian trader, Allan Morrison2 .

2 Mr. Morrison Is credited with the statement that he could claim the discovery of the source of the Mississippi, having visited the locality before Schoolcraft, but after his brother William, to whom he awarded the honer of a first discovery.

"Knowing as Mr. Lanman did that his friend H. R. Schoolcraft had long before explored the romantic region as a discoverer, his own object was simply to describe what he saw and heard from the standpoint of a landscape painter and lover of the romantic in nature and frontier life."

SUB-DIVISION TWENTIETH. SOJOURN OF REV. J. A. GILFILLAN'S PARTY AT ITASCA LAKE; WHIPPLE LAKE NAMED; FIRST SERMON AT THE SOURCE; AN INTERESTING EPISTLE.

In May, 1881, in company with Mr. W. W. Cook, now Professor of Chemistry in the University of Vermont, the Rev. J. A. Gilfillan, an Episcopal missionary stationed at white Earth. Minnesota, made a pilgrimage to Itasca lake, not for the purpose of discovery as it is now understood, but purely one of curiosity to visit and see the Itasca Basin. Their guide was an Ojibway Indian, named Sha-wun-uk-u-mig.

Leaving the old Red River trail, the party walked due north several miles over a level prairie, entering upon a difficult country, extending thence to Itasca, considerable to the northward, across swamps, over hills. through forests and tangled thickets, until they

reached a small lake one mile south of Nicollet's chain of lakes, naming the same, Whipple lake—in honor of the Bishop of the Protestant Episcopal Diocese of Minnesota. This was the most important action had by the party, as it attached a name to the locality that will endure to the end. Following their course to Itasca lake, the party reached Elk lake and named the same Lake Breck—not accepted by geographers and map makers,

REV. J. A. GILFILLAN.

189 for the reason that its proper name is Elk lake, so designated by the legal authority elsewhere quoted, (An act of the Legislature of Minnesota) and the action of the properly constituted authorities of the United States in its public survey, who placed the name “Elk lake” on the official map in 1876.

The party passed on to Itasca lake and for the first time in its history, religious services were celebrated by a recitation of the Creed with surplice and stole, and a sermon from

“Then had thy peace been as a river.”

The party visited Morrison hill, saw traces of Edwin Hall's wagon road, examined the locality in a casual way, but did not see or visit the outlet at the north end of the north arm. The party returned after a tedious and tiresome trip to the place from whence they came and resumed their several avocations, spending but one day in their march to and from Itasca.

An article mostly upon religious topics was published descriptive of this pilgrimage, in the *Minnesota Missionary* for the month of July, 1881, (Vol. 4, No. 10, page 3). With the exception of the name “Lake Whipple.” the results of this visit are not of sufficient importance to warrant further consideration. The common acceptance of the name “Whipple” as applied to the locality, places Mr. Gilfillan in the list of those who have from time to time, constructed the geographical nomenclature of the Basin by piecemeal.

In this article referred to, the reverend gentleman erroneously distinguishes the small stream which flows from the north end of Whipple lake, as passing through Elk lake, on its downward course. Such is not the case, as it passes successively through Floating Moss lake, the unique 190 Mississippi springs, the upper, middle and lower Nicollet lakes, and thence by the principal channel to the Gulf.

Mr. Gilfillan, in addition to his personal visit to Itasca lake, has been an important factor, otherwise, in connection with the investigation concerning the source of the Mississippi.

A man of spotless character and superior intelligence, a residence of twenty years among the Ojibway Indians makes the information he has given, coming from tribal sources or otherwise, for the purposes of this report, the most trustworthy and reliable.

SUB-DIVISION TWENTY-FIRST. THE GLAZIER FIASCO; AN INDIAN MAP DISTORTED; HUNGER AND HASTE; A FICTITIOUS SOURCE; PLAGIARISM PERSONIFIED; HIS CLAIMS SHOWN TO BE FOUNDED ON FALSE STATEMENTS; DISCREDITED BY GEOGRAPHICAL SOCIETIES AND THE CONGRÈS INTERNATIONAL.

In the light of all the historic and geographic information, upon which is predicated the foregoing sub-divisions, which, it is hoped, succintly combine all the more material facts concerning discoveries from the mouth of the Mississippi river to Itasca lake and its principal tributaries, including Elk lake and its creeks, it is related in the published writings of Mr. W. Glazier1 that he regretted that there was much uncertainty as to the true source of the Mississippi river.

1 Mr. George C. Hurlbut, Librarian of the American Geographical Society, is authority for the statement, that “the name Willard Glazier is not to be found in the U.S. Army Register, nor in the list of Officers of Volunteers, 1861–1865, in the records of the War Department, nor in the U. S. Navy Register.

From Cleveland, Ohio, in May 1881, he proceeded to St. Paul, Minnesota, where he was joined by George Glazier, his brother, and Mr. Barrett Channing Paine, of Indianapolis, Indiana, employed as a newspaper correspondent and otherwise. At St. Paul supplies were procured preparatory 192 to a departure over the Northern Pacific Railway, for Brainerd, Minn. At Brainerd the party prepared to proceed to the Itasca Basin by way of Leech lake, engaging an overland conveyance. It is stated that on July 17th, 1881. with an Indian guide he called Che-no-wa-ge-sic, Mr. Glazier and his companions departed from Leech lake in canoes for the headwaters of the Mississippi, over the identical route traversed by M. Nicollet, forty-five years previously, from the latter lake to Schoolcraft island.

Preparatory to this canoe voyage, the Indian guide had been requested to prepare maps of the country, in the absence of copies of the official plats of the government, which, as subsequent events indicate, were not known to exist by the Glazier party. Following the lead of their Ojibway guide,1 depending upon him and his crude map as a base of action, and seized with the idea that there was lake beyond Itasca, undiscovered and unknown, the party left Leech lake in three birch-bark canoes, and by a series of portages, “in blissful ignorance of what a portage really was,” they passed to the westward from Leech lake, up small streams, across lakes, over hills and through swamps, attaching names to streams and lakes on the assumption that no white man had preceded them. The party reached the east shore of the east arm of Itasca lake on July 21st, 1881, precisely where Schoolcraft and Nicollet had arrived

1 The name as given by Rev. J. A. Gilfillan, a student of the Ojibway language, is She-na-wi-gi-shick. Mr. Gilfillan, than whom no more reliable individual speaks the Ojibway language, Interviewed She-na-wi-gi-shick, and credits this Indian with the following statement:

“I well knew that Lake Breck, the Elk lake of the maps, was not the true head. but only the place where the waters were gathered; I knew that the true head was a little stream a mile

or two to the west, running into the west arm of Lake Itasca Glazier never asked me to take him to the true head, and I well knew that I did not take him there."

193 more than forty years before, and where the stakes and blazed lines of the public survey were in conspicuous view.

AN INDIAN MAP OF THE SOURCE OF THE MISSISSIPPI, DRAWN BY SHE-NA-WI-GI-SHICK, AN OJIBWAY INDIAN, 1890.

This map was drawn at the request of Rev. J. A. Gilfillan by the Indian employed by Glazier in 1881, as a guide. The map is the same, in all essential particulars, as the one drawn by the same Indian in 1881, from which all the Glazier Maps have been taken. -13

194

At this time, it had been discovered that after their four days travel, their supply of provisions and ammunition was about exhausted, the fishing tackle had been lost, and the party considered themselves in imminent danger for want of subsistence. In this condition, they reached Schoolcraft island and camped for the night. On the morning of the 22d, after an equal distribution of a ration among the six persons, the party, at about 8 o'clock A. M., embarked for Elk lake1 , two miles to the southward from Schoolcraft island.

1 Mr. Gilfillan in a private letter, Sept. 29th, 1886, wrote: "The above (naming his visit at the lake) occurred, as I have said, two months before Glazier's trip; and it was well known to him before he started that I had been there before him as I went from Lake Itasca straight to Leech lake where he started, and told the people there I had been to Itasca lake, and he heard it from the resident clergyman there and many others. * * * * * * But it was no feat anyway to go to Lake Breck (Elk) as he did, nor was he or our party the first that had been there, for we found a cleared place there near Lake Breck and the dung of horses and other signs of white men's habitation for a considerable time, and an old wagon road leading into it from the southeast. I have talked since Glazier's expedition with Che-na-wi-gi-sic, as he called him, his guide and boatman, whom I have known for years.

All the speeches, etc., attributed to him, by Glazier, are fables as might be expected, and never occurred. He speaks no English and Glazier no Ojibway, and all ascribed to him comes from Glazier's imagination. Indeed, all his book and claims, as you know, are a work of imagination, except that he went to Lake Breck (Elk) which is a perfectly simple thing and can be done by any one who would give a Leech lake Indian perhaps twenty dollars to take him there in a canoe and back, and is nearly as simple and as little worth talking about as going in a canoe from St. Paul to Hastings."

The party experienced great difficulty in propelling their canoes through the rushes at the mouth of Chambers creek and up its channel, removing logs and reducing diminutive sand bars with canoe paddles, in order that their canoes might pass up the creek between Itasca and Elk lakes, a distance of but little more than one thousand feet. Reaching Elk lake, they passed to the point2 indenting its southern shore.

2 Julius Chambers reached this point June 10th, 1872, and then wrote: "Here, then, is *the source* of the longest river in the world." See page 8, *N. Y. Herald* of July 6th, 1872. Thus more than nine years previous to Mr. Glazier's alleged discovery, the work of Chambers gave to the world all there was to give, concerning Elk lake, in the absence of an actual hydrographic survey, though as to its being the source of the Mississippi, he fell into the same error as did A. H. Siegfried, who, July 13, 1879, two years before the Glazier party reached this lake, stood upon its western shore and declared it to be the "highest tributary to the Mississippi." See Louisville *Courier-Journal*, August, 1879.

The discovery by Chambers must take precedence so far as Elk lake is concerned, owing solely to the fact that Schoolcraft and Nicollet made no statement concerning it, it then (1832–6) being a bay of Itasca lake, since separated by natural causes, as stated and believed to be the fact. Thus discoveries at Elk lake (so-called Glazier) are 1st, Jean N. Nicollet, 1836; 2nd, Julius Chambers, 1872; 3rd, Edwin S. Hall, 1875; 4th, A. H. Siegfried, 1879; 5th, O. E. Garrison, 1880; 6th, Rev. J. A. Gilfillan, 1881, and two of these publicly proclaimed it the source of the Mississippi river (erroneously) before Mr. Glazier saw it or

knew of its existence. His expedition is consequently the 7th to reach Elk lake and the third in the order of declaring it the source of the Mississippi.

So he discovered nothing there, and then boldly plagiarized Schoolcraft's writings in an endeavor to show that he did.

Subsequent events indicate, with an unerring certainty, the deep seated purposes and plans which were so adroitly made use of, in an egregious geographic misrepresentation of natural conditions existing near the source of the Mississippi.

195 declared the lake to be the source of the Mississippi, and named it “Lake Glazier.” From the Indian map1 they fixed names to small creeks entering Elk lake; returned on

1 Concerning this Indian map Mr. Gilfillan wrote:

“I have just received a letter from my Leech lake friend, enclosing the within map, drawn by She-na wi-gi-shick. He says: ‘I had She-na-wi-gi-shick draw the enclosed map. We had no map, nor was there any at the agency but the Glazier map.’ N. B. I told him to show She-na-wi-gi-shick on the good map which he would find at the agency, the lakes you spoke of, quoting to him your description of them, location, etc.

‘I simply had to take that and go by your question. He says there are no two large lakes besides the one called Glazier. The lake noted as Glazier is called Ozh-a-wush-ko, meaning Green lake. The map in Glazier's pamphlet or book, purports to be from the one he drew, but he says it has been deviated from. The one enclosed is just such a one as he furnished Glazier. He said to me that the party went around the lake, (Elk lake) but did not explore the streams flowing into it from the south. They took no measurements of its depth, nor altitude above the sea level.’

In reference to the Indian name of Breck (Elk) lake, given in the above extract by She-na-wi-gi-shick as Green lake, I would say that he told me long ago it was Pe-ke-gu-mag, anglicised Pokegama, meaning ‘a water jutting off from another water,’ something as a

finger from a hand. The explanation in my mind is either that lake, lying in a region, visited, until very lately, by but very few Indians, had no very distinctive name, but was described in both the above ways, to make those who did happen to know it, know what lake they were talking about, and so described in two ways its two prominent characteristics, either as Green lake, from its color, or its peculiarity of jutting, or being a sort of annex of Itasca lake.

I knew before that there would be no Indian names for the lakes you wrote about. I hope that you now have all the information needed. If there be anything else in which I can help you please let me know and I will have it attended to.

My friend paid She-na-wi-gi-shick $1.00, he writes me, for his trouble in drawing the map, etc., which very small contribution, it is a pleasure to me to make to the cause of science.

If after you are done with She-na-wi-gi-shick's map, you do not care for it, I would be glad to have it returned. I am Respectfully yours, J. A. GILFILLAN.”

From this entirely trustworthy statement, it would appear that She-na-wi-gi-shick never saw or knew of the large lakes south of Whipple lake, now first named—either by indians or whites—Morrison and Hernando de Soto lakes. She-na-wi-gi-shick omits these lakes from has map also Whipple lake, the Triplets and several others. It is a curious fact that She-na-wi-gi-shick includes distinctly the three Nicollet lakes upon his map, indicating the natural division between the Upper and Middle lakes and the detached upper fork of the Mississippi, which he very correctly delineated as being longer than any stream found there.

196 the same day to Schoolcraft island, and hastily proceeding to the north end of Itasca lake, passed down the Mississippi about ten miles and camped for the night of July 22nd, 1881. But one-half of one day, without the use of any instruments for observations or measurements, was expended in an alleged location of the source of the Mississippi river, years after others had done the same thing, at the same place.

This brief statement is based upon the published report of the Glazier voyage to Elk lake, which is accepted as the action taken by him at that time. The party, racked with the pangs of hunger, consumed the carcass of an otter, and for days subsisted on whatever they were able to capture without fishing tackle and on a short allowance of ammunition, finally reaching the outskirts of civilization in an exhausted condition from exposure and hunger, seeming to have been entirely ignorant of the necessities of subsistence, until a bitter experience taught the party a necessary lesson.

It has been stated as a fact that Willard Glazier and Mr. Paine performed a remarkable canoe voyage to the Gulf of 197 Mexico1 , which was in accordance with the plans contemplated at the inception of the trip to Itasca lake,

1 Prof. T. H. Lewis, a well known archælogist, whose scientific investigations have made him familiar with the entire valley of the Mississippi, is authority for the statement that there is much doubt concerning this canoe voyage, the canoe itself, which he saw at St. Louis, not bearing upon its face any considerable signs of having been used for so long a voyage. Messrs. Glazier and Paine undoubtedly became personally acquainted with the comforts of lower Mississippi river steamboats during the continuance of their voyage.

In an interview Mr. Paine is reported as follows:

“I accompanied Mr. Glazier on his journey at a stipulated salary per week. Our objective point was Itasca lake. Glazier had no idea of exploring any lake beyond that. The idea first entered his head when we were part way between Brainerd and Leech lake. There we met an old man who told us that Itasca was not the farthest lake, and that there was another a little beyond Itasca. He had no more claim to the discovery than you had. In Mr. Glazier's recent letter I see that he puts forth the statements that the lake was named Lake Glazier contrary to his wishes. That statement is not true.”

Previous to their arrival at the Gulf of Mexico, there was commenced a studied and thoroughly organized effort to force upon an unsuspecting public the impression, that Elk lake had been discovered by the Glazier party, and that it was the principal reservoir at the source of the Mississippi. Discovering that Elk lake had been definitely located and duly named, showing its connection by surface flowage with Itasca lake by the official surveys of the United States government, Mr. Glazier subsequently receded from the position taken and substituted the claim that his party had discovered that Elk lake was the “primal reservoir” and they the first to discover and make known its importance as such. Imperfect and misleading maps were made to conform to the several claims assumed, the test of which, placed a fictitious length to the creek connecting Elk and Itasca lakes, presumably that Elk lake might appear to be situated much farther beyond Itasca lake than it really is, thus to more effectually impress upon the public mind that Elk lake is the source, preparatory to at least a tacit recognition of a baseless claim.

198

Books, magazine articles, maps, newspaper contributions, paid advertisements, proceedings of informal meetings, lectures, correspondence, garbled quotations from authorities, literary notices, and an incalculable amount of relevant and irrelevant matter has been printed and published with the one important result in view—to manufacture public sentiment sufficient to secure recognition, that Elk lake might be changed in name and permanently fixed as the source of the Mississippi. To this end public officials, map-makers, publishers of school-books, editors of newspapers, academies and societies in Europe1 and America, educators, professors of colleges and citizens generally, were sought to confirm the claim of alleged discovery. That this deep-seated and well-managed scheme of deception failed in its purpose, is owing to several causes2 .

1 The Royal Geographical Society of London, seemed to have considered this fictitious claim as worthy of notice and endorsement.

2 The Minnesota Historical Society, upon a consideration of the question, caused to be prepared a report, by Gen. J. H. Baker, severely denouncing the attempt to change the geography of Minnesota.

The Legislature of the State passed the following enactment:

Be it enacted by the Legislature of the State of Minnesota:

Section 1. That the lake known for many years to the Indians and early explorers as Elk lake, situated in Beltrami county in section twenty-two (29) of town one hundred and forty-three (143) north, range thirty-six (36) west, fifth principal meridian, shall be known and designated hereafter on all official ma s of the State and named in all the County and State records referring to the same as “Elk lake.”

Sec. 2. No edition of any school geography published subsequent to January one eighteen hundred and ninety, which contains any map giving any name to the lake specified in section 1 other than “Elk lake,” shall be used in the schools of this State.

Sec. 3. This act shall take effect and be in force from and after its passage.”

Approved April 24th, 1889.

There also appeared under the title of “Captain Glazier and his lake” a refutation of his claims, under the auspices of Ivison, Blakeman, Taylor & Co. of New York.

Minor causes could be briefly stated, among which are the published claim that Mr. Glazier discovered six creeks falling into Itasca lake—the sixth originating in a lake about five miles south of Itasca lake, which is not true. Mr. Glazier discovered none of them, and his own account admits of his having visited but one of them.

ONE OF THE GLAZIER MAPS, 1881–6.

Mr. Glazier caused to be published a book, entitled “Down the Great River,” descriptive of his claims, which was copied almost bodily, in its principal subject, from the published works of Henry R. Schoolcraft1 , without credit.

1 From “Narrative of an expedition through the upper Mississippi to Itasca lake” by Henry R. Schoolcraft, 1832. Published by Harper and Brothers, 1834, page 40:

“My father, the country you are going to see is my hunting ground. I have traveled with you many days. I shall go with you farther. I will myself furnish the maps you have requested and will guide you onward. There are many rapids in the way but the waters are favorable. I shall consult with my band about the canoes and see who will step forward to furnish them. My own canoe shall be one of the number.”

From “Down the Great River” by “Captain Willard Glazier,” published at Philadelphia, 1887, by Hubbard Bros., p 49:

“My brother, the country you are going to visit is my hunting ground. I have hunted their many years and planted corn on the shores of Lake Itasca. My father, now an old man, remembers the first white chief who came to look for the source of the great river. But my brother, no white man has yet seen the head of the father of waters. I will myself furnish the maps you have called for and will guide you onward. There are many lakes and rivers in the way but the waters are favorable. I will talk with my friends about the canoes and see who will step forward to furnish them. My own canoe shall be one of the number.”

“Schoolcraft's Narrative,” 1834. p 52:

“Oza Windib soon pushed his canoe into the weeds and exclaimed “ *Oma mikunna*” (‘here is the portage.’) A man who is called on for the first time to debark in such a place will look

about him to discover some dry spot to put his feet upon. No such spot ever existed here. We stepped into rather warm pond water with a miry bottom. After wading a hundred yards or more, the soil became firm and we soon began to ascend a slight elevation where the growth partakes more of the character of a forest.

Glazier's “Down the Great River,” p 60.

“Che-no-wa-ge-sic soon pushed his canoe into the rushes and exclaimed ‘ *oma mikunna*’ here is the portage. A man who is called on for the first time to debark in such a place will cast about for some dry spot to put his feet upon. No such spot, however, existed here. We stepped into rather warm pond water with a miry bottom. After wading a hundred yards or more, the soil became firm and we began to ascend a slight elevation where the growth partook more of the character of a forest.

“Schoolcraft's Narrative,” 1834, pp. 53, 54.

The portage from the east to the west branch of the river is estimated to be six miles.

Beginning in a marsh it soon rises into a little elevation of white cedar wood, then plunges into the intricacies of a swamp matted with fallen trees, obscured with moss. From this the path emerges upon dry ground. It soon ascends an elevation of oceanic sand having boulders and hearing pines. There is then another descent and another elevation. In short, the traveler now finds himself crossing a series of diluvial sand-ridges which form the height of land between the Mississippi valley and the Red river.

Glazier's “Down the Great River,” 1887, pp. 64, 65.

The distance from the eastern to the western branch of the Mississippi is between six and seven miles. Beginning in a marsh the portage soon reaches a slight elevation covered with a growth of cedar, spruce, white pine and tamarack, then plunges into a swamp matted with fallen trees obscured by moss. From the swamp the trail emerges upon dry

ground, whence it soon ascends an elevation of oceanic sand presenting boulders and bearing pines. There is then another descent and another elevation. In short, this portage carried us over a series of diluvial sand-ridges which form the height of land between the Mississippi and the Red river of the North.

“Schoolcraft's Narrative,” 1834, pp. 55, 56.

Every step we made in treading these sandy elevations seemed to increase the ardor with which we were carried forward. The desire of reaching the actual source of a stream so celebrated as the Mississippi—a stream which La Salle had reached the mouth of a century and a half (lacking a year) before, was perhaps predominant, and we followed our guide down the sides of the last elevation with the expectation of momentarily reaching the goal of our journey. What had been long sought at last appeared suddenly. On turning out of a thicket into a small weedy opening, the cheering sight of a transparent body of water burst upon our view. It was Itasca lake, the source of the Mississippi.

Glazier's “Down the Great River,” 1887, p. 71.

Every paddle stroke seemed to increase the ardor with which we were carried forward. The desire to see the actual source of a river so celebrated as the Mississippi, whose mouth had been reached nearly two centuries before, was, doubtless, the impelling motive. * * * What had long been sougth at last appeared suddenly. On pulling and pushing our way through a network of rushes similar to the one encountered on leaving Itasca, the cheering sight of a transparent body of water burst upon our view. It was a beautiful lake, the source of the Father of Waters.

“Schoolcraft's Narrative,” 1834, p. 58.

The height of this lake above the sea is an object of geographical interest, which in the absence of actual survey it may subserve the purposes of useful inquiry to estimate. From notes taken on the ascent it cannot be short of one hundred and sixty feet above Cass

lake. Adding the estimate of 1,330 feet submitted in 1820, as the elevation of that lake, the Mississippi may be considered to originate at an altitude of 1,490, say 1,500 feet above the Atlantic. Its length, assuming former data as the basis and computing it through the Itascan or west fork, may be placed at 3,160 miles.

Glazier's “Down the Great River,” 1887, p. 75.

Its height above the sea is an object of geographical interest, which in the absence of actual survey, it may subserve the purposes of useful inquiry to estimate. From notes taken during the ascent, it cannot be less than three feet above Lake Itasca. Adding the estimate of 1,575 feet, submitted by Schoolcraft in 1832, as the elevation of that lake, the Mississippi may be said to originate in an altitude of 1,578 feet above the Atlantic ocean. Taking former estimates as the basis and computing them through its western fork, its length may be placed at 3,184 miles.

“Schoolcraft's Narrative,” 1834, p. 59.

Its origin in the remote and unfrequented area of country between Leech lake and Red river, probably an entire degree of latitude south of Turtle lake, which still figures on some of the maps as its source, throws both the forks of this stream out of the usual route of the fur trade, and furnishes, perhaps, the best reason why its actual sources have remained so long enveloped in obscurity.

Glazier's “Down the Great River,” 1887, p. 76.

The origin of the river in an untraveled and secluded region, between Leech lake and the Red river of the North, not less than a degree of latitude south of Turtle lake, which was for a long time supposed to be the source, removes both forks of the stream outside the usual track of the fur-traders, and presents a good reason, perhaps, why its fountain head has remained so long enveloped in uncertainty.

“Schoolcraft's Narrative” 1834, pp. 80–81.

I went to his residence at the proper time accompanied by Mr. Johnson. I found him living in a comfortable log building of two rooms well floored and roofed, with a couple of small glass windows. * * * There was no other person admitted to the meal, but his wife who sat near him and poured out the tea, but ate or drank nothing herself.

Tea cups and tea spoons, plates, knives and forks of plain manufacture, were carefully arranged, and the number corresponded exactly with the expected guests. A white fish cut up and broiled in good taste, occupied a dish in the center from which he helped us. A salt cellar in which pepper and salt were mixed in unequal portions allowed each the privilege of seasoning his fish with both or neither. Our tea was sweetened with the native sugar and the dish of hard bread seemed to have been precisely wanted to make out the repast.

Glazier's “Down the Great River,” 1887, pp. 43–44.

I went to his residence at the appointed hour accompanied by my brother. I found him living in a comfortable log house of two rooms, well floored and roofed with a couple of small glass windows. A plain board table stood in the centre of the front room upon which the dinner was spread. * * * The wife of Flat Mouth sat on his left and waited upon him and those whom be had invited. Tea cups and teaspoons of plain manufacture were carefully arranged, the number corresponding exactly with the expected guests. A large dish of bass and white fish cut up and broiled in good taste was placed in the center of the table from which we were served. A birch bark salt cellar in which pepper and salt were mixed in unequal proportion allowed each the privilege of seasoning his fish with both or dispensing with it altogether. Our tea was sweetened with maple sugar. A dish of blue berries picked on the shore of the lake completed the dinner.

“Schoolcraft's Narrative,” 1834, p. 81.

This chief brought me a letter from the interior, some years ago at St. Mary's, in which he is spoken of as “the most respectable man in the Chippewa country.” And if the term was applied to his mental qualities, and the power of drawing just conclusions from known promises, and the effects which these have had on his standing and influence with his own band, it is not misapplied. Shrewdness and quickness most of the chiefs possess, but there is more of the character of common sense and practical reflection in the Guelle Plat's remarks than, with a very extensive acquaintance, I recollect to have noticed in most of the chiefs now living of this tribe.

Glazier's “Down the Great River,” 1887, p. 44.

I was much gratified on this occasion by the presence of White Cloud, whom I had frequently been told was the most respectable man in the Chippewa country, and if the term has reference to his intellectual faculties, and the power of reaching correct deductions from known premises, and the effect which these have had on his standing and influence with his own tribe, it is not misplaced. Shrewdness and quickness of perception most of the chiefs possess, but there is more of the character of common sense and practical reflection in. White Cloud's remarks than remember to have noticed in any of the chiefs of my acquaintance.

“Schoolcraft's Narrative,” 1834, p. 53.

Having followed out this branch of the Mississippi to its source, it may be observed that its existence as a separate river, has hitherto been unknown in our geography. None of the maps indicate the ultimate separation of the Mississippi above Cass lake into two forks.

Glazier's “Down the Great River.” 1887, pp. 60 and 63.

Having ascended this fork of the Mississippi to its source, it may be noted that it has not as yet been given a place as a separate river in our geography. None of the maps* indicate the ultimate separation of the Mississippi above Lake Bemidji into two forks.

*(N. B.: See Schoolcraft's map, 1832; also Lieut. Allen's map, 1832; Nicollet's map, 1836; the government surveys, and all the State maps of Minnesota, each of which shows the two branches of the Mississippi.—J. V. B.)

The plagiarism, so palpable, stamped upon his purposes a true character, and its dedication did not save it from a condign refutation.

201

His statements are so devoid of truth and veracity that his claim as a discoverer ignominiously subsides by reason of the weight of its absurdity, repugnant to historical and geographical facts.

The selections noted are so strikingly convincing of the real character of the two writers of 1832 and 1884–7, that it 202 would seem prudent to believe that no statement made by Mr. Glazier can in any way be considered reliable, and a cloud is thrown about his claims, by his plagiarism, which, in the several stages of his writings, have passed from undeserved credit to doubt, and then to disrepute.

These facts are not considered other than as a criterion upon which to base a comparison of character, for certainly 203 our geographic history should not be constructed from other than reliable data, and that construction can only be predicated upon the reliability and character of the men who have heretofore given cause for researches concerning discoveries—now considered.

204

A REMARKABLE CLIMATE.

Observations on the sources of the Mississippi river, from Schoolcraft's “Summary Narrative.” 1834, p. 423.

5 A. M. 7 A. M. 8 A. M. 12 M. 2 P. M. 8 P. M. 9 P. M. July 17 76 80 79 78 Morning rainy, then fair. " 18 51 64 66 53 50 Fair. " 19 46 63 70 55 Night rainy, morning cloudy, then fair. " 20 60 80 84 75 " 21 68 86 88 85 74 " 22 73 88 90 77 Cloudy, some thunder. " 23 70 82 88 78 Night and morning rain, afternoon thunder. " 24 74 87 80 78 Fair. " 25 85 74 Fair. " 26 61 81 61 Morning fair, evening cloudy and rain, clear. " 27 62 80 75 Morning fair, evening fair. " 28 62 76 61 Morning fair, rain in afternoon. " 29 50 74 52 Clear " 30 60 76 63 Wind N. W., weather clear. " 31 65 81 69 Wind W weather clear. Aug. 1 67 83 70 Fair. " 2 72 * Fair.

* Broke instrument.

Meteorological observations at the headwaters of the Mississippi, from Glazier's account “Am. Met. Journal,” 1884, p. 328.

5 A. M. 7 A. M. 8 A. M. 12 M. 2 P. M. 8 P. M. 9 P. M. July 17 76 80 79 78 Morning rainy, then fair. " 18 51 64 66 53 50 Fair. " 19 46 63 70 55 Night rainy, morning cloudy, then fair. " 20 60 80 84 75 " 21 68 86 88 85 74 " 22 73 88 90 77 Cloudy, some thunder. " 23 70 82 88 78 Night and morning rain, afternoon thunder. " 24 74 87 80 78 Fair. " 25 85 74 Fair. " 26 61 81 61 Morning fair, evening cloudy and rain, clear. " 27 62 80 71 Morning fair, evening fair. " 28 62 76 61 Morning fair, rain in afternoon. " 29 50 74 52 Clear " 30 60 76 63 Wind N. W., weather clear. " 31 65 81 69 Wind W weather clear. Aug. 1 67 83 70 Fair. " 2 72 Fair.

The plagiarism is so apparent, that consideration availeth nothing, and further comment is deemed unnecessary; the 205 quotations, though limited in number, bearing witness to facts as they have been found to exist.

Notwithstanding these conclusive facts which have come to light concerning Elk lake, its discovery and measure of importance, the Glazier absurdity is persisted in, but its fraudulent character has finally become well understood1 .

1 In Vol. VII, p. 553, Justin Winsor's Narrative and Critical History of North America, is given the following:

"'Still further detailed examinations as made(1855–56 and 1875–76) by the engineers of the United States lake survey and Surveyor General of Minnesota show that the principal feeder broadens into a small lake, called Elk lake, and it is this lake that Capt. Willard Glazier visited at a later day (1881) and claims to have first discovered in it the source of the Mississippi.' (*Royal Grog. Soc. Proc*. Jan. 1885). The claim is considered audacious."

Mr. Winsor's authority is in error concerning the principal feeder, which does not fall into Elk lake, but, through Nicollet's lakes to Itasca lake and the Gulf.

From the *Proceedings* of the Royal Geographical Society for October, 1891, the following extract is quoted:

"* * * * It would seem that Captain Glazier was premature in arriving at the conclusion that he was the real discoverer of the source of the Mississippi and that, as a fact, the map he prepared does not show the sources of that great river."

Mr. Glazier was charged2 with falsifying the record of discoveries at the source of the Mississippi, for self-laudation and pecuniary gain, to such an extent, that, if not true, the charge was a *libel* , yet he has remained *silent* in the presence of a remedial offer, if he were wrongfully accused.

2 AN OPEN LETTER.

St. Paul, Dec. 22nd, 1888.

To Willard Glazier, Sir: You have published to the world that on or about the 22nd day of July. A. D.. 1881, you made the original discovery of the true source of the Mississippi river. You have designated that source and platted and published the same as being

Elk lake, Minnesota. You have, for self-laudation, published to the world a false map of said lake and source, designating the same as “Lake Glazier.” You have falsely, and with shameful erroneousness, endeavored to appropriate to yourself the honor and fame justly due other and more distinguished gentlemen who preceded you in the accurate and conscientious discovery of the source of said river. You have endeavored to this end to wrongly and falsely pervert the correct history of the discovery of the true source of said river for purposes of self-laudation and personal gain. I challenge the correctness of your assumptions in that behalf, and for the purpose of testing the genuineness of your claims relative to said lake, source and river, I admit in case my above statements are found to be false by the proper judicial tribunal, that I am indebted to you in any sum found by an impartial court and jury. I now demand as a proper test of the question of discovery, that you file your bill of complaint against me in the United States Circuit Court for the District of Minnesota. Each party to have until the December term, 1889, to produce evidence; that the case shall be adjudicated before the court in December, 1889, or as soon thereafter as counsel call he heard, and that the undersigned will offer no technical objections to your suit, but that the Same shall be tried on its merits, I propose and offer to pay any judgment you may obtain against me, and to give good and sufficient bond therefor. You are thus publicly charged, to the end that you may have an ample opportunity to adjudicate your rightful claims, if you have any, or to forever hereafter stand publicly branded as a false and fraudulent claimant of the rights of others. The eminent and impartial jurist* before whom the case can be tried, warrants the statement that an unprejudiced and impartial trial on its merits can be had.

J. V. BROWER.

(Note: This challenge has been corrected by adding the word “original” in the fourth line after the word “the” and immediately preceding the word “discovery.”)

*The eminent jurist referred to is Judge Brewer, recently elevated to the Supreme Bench of the United States.

The falsification of the state map of Minnesota, by these means, became so notorious that the governor of Minnesota requested a report1 from its state park commissioner, on the application of citizens, correcting the errors.

1 See report entitled “Official Folder,” “The Source of the Mississippi River,” on file with the librarian of the American Geographical Society, Harvard College, the Royal Geographical Society and other geographical societies throughout the world.

The Congrès International at Berne, on the 12th of August, 1891, upon a consideration of a paper2 prepared by Mr. George C. Hurlbut and presented by Mr. Francis A. Stout, respectively, librarian and vice president of the American Geographical Society, appointed Sir George Bowen. Maj. Post, U. S. A., Messrs. Napolèon Ney, A. de Claparède and E. v. Hesse-Wartegg, a committee of the Congrès, upon a report of which, August 13th, the claim of Mr. Glazier was declared without foundation, and an award of original discovery in favor of Schoolcraft, Lieutenant Allen and Nicollet, was accorded unanimously.

2 See George C. Hurlbut's paper upon page 378, Bulletin of the American Geographical Society, Vol. XXIII, and proceedings of the Congrès International des Sciences Geographiques, August. 1891.

Definite action, of this nature, seems not to have lessened the ardor, nor thwarted the purposes of Mr. Glazier, for 207 immediately following the action of the Berne Congrès, he called about himself a few of his personal friends, two or

three of whom had for years strenuously advocated his claims, and engaging the services of an obscure and convenient 208 person to act in the capacity of a surveyor, the party proceeded to Elk lake, the latter part of August, 1891, remaining encamped there six or eight days, during which time they claim to have surveyed the locality, and, of course,

endorsed the Glazier claim. Protracted rainstorms and the density of the flora there, in August, 1891, made it absolutely impossible to accurately survey the locality at that time. It appears that they reported the longer streams there, short; and the short streams, the longer; in order to carry out their purpose, for certain it is, they report Nicollet's Infant Mississippi several thousand feet shorter than it really is, and attempted to broaden out the Elk lake locality to an undue proportion, plagiarizing Nicollet's report by purloining the name “Infant Mississippi,” which they attempted to attach to Chambers creek, conspicuously ignoring other important hydrographic conditions. Upon their return, the 3rd of September, a map of their operations was published.

Mr. Glazier and his personal friends were the moving spirit in this last geographic farce.

Two or three members of the party1 , however, have

1 Mr. Henry R. Cobb, in a letter dated September 11th, 1891 says:

“While I enjoyed the very pleasant companionship of the Glazier party, all the observations which our brief time allowed us to make only confirmed the accuracy of J. V. Brower's work in that region.”

Mr. C. D. Cutting, who accompanied the Glazier party, says under date off Sept. 7th, 1891:

“I have recently visited Lake Itasca and Elk lake and the largest and longest stream entering Lake Itasca is the stream called Nicollet creek”

Mr. J. C. Crane under date of Sept. 29th, 1891, admits the correctness of J. V. Brewer's Detailed Hydrographic (Chart as follows:

“I will, say that the map sent me, is an excellent one. The location of the lakes I believe are correct and I see no reason as yet to think otherwise.

“Another member of the party wrote:

“The only other important feeder of Lake Itasca is Nicollet creek which enters Itasca about a quarter of a mile west of the outlet of the creek from Elk lake. This was carefully explored and measured from mouth to source; near its mouth It carries about twice the volume of water which leaves the Glazier lake.”

209 admitted that the Nicollet stream was found to be the larger and longer.

Mr. Cyrus C. Adams, as the editor of Goldthwaites Geographical Magazine, has conspicuously, and ably exposed1 the pretensions of this last distortion of geographical facts, by this so-called second Glazier expedition of 1891.

1 P. 719, Vol. 11. Goldthwaite's Geographical Magazine, November, 1891.

It seems an evil to burden a record with a sub-division of this nature, but since the facts are to be stated, they have been given, in as short a space as possible, convenient for a proper understanding of deceptive practices, which, too easily, obtained recognition in geographical quarters, where better things might well be expected, in Europe as well as in America.

It cannot be claimed, with any degree of veracity, that any further or more extended measurements were made by Mr Glazier and his selected friends, in 1891, than are shown on his map, herewith given, as it was published September 3rd, nor can it be successfully denied, that those measurements are *false ones* .

The map, as may be readily noticed, is worthless, as a basis for correct information.

Of the man who has reveled in such dishonorable practices, what more need be said, unless— *Asinus ad lyram* . -14

SUB-DIVISION TWENTY-SECOND. PIONEER SETTLEMENT AT ITASCA LAKE; PETER TURNBULL AND FAMILY; THE SECOND COMING OF CIVILIZED OCCUPANCY.

Mr. Peter Turnbull, formerly a surveyor and civil engineer under the Dominion Government of Canada, made the first actual permanent settlement at Itasca lake, with his family, in the month of September, 18831 .

1 Charley F. Turnbull, the first child born of white parentage at Itasca lake, June 5th, 1884, survives his mother, Mary J. Turnbull who died at Park Rapids, Minn., In May, 1889.

Mr. Turnbull had prospected for a favorable location, and selected the east shore of the east arm of the lake, a short distance north of the point where the Schoolcraft Expedition had reached the lake more than fifty years before.

With a force of assistants, he constructed the “Turnbull road” which leads from Stony Ridge to the east shore of Itasca lake, through Mary valley. That road has become the main throughfare to and from the Itasca Basin.

A Post-office was established, since discontinued, and in rapid succession, different portions of the locality were marked by the cabins of settlers. Mr. Turnbull's family

PETER TURNBULL AND FAMILY.

211 were permanent residents upon the lake shore about two years, during which time, roads were opened through the forests to different localities, by I. N. Marsh and others, and the wilderness assumed the appearance of a first indication of advancing civilization. Of the long list of settlers who have resided at or near the source, from Mr. Turnbull's inception of actual occupancy, the records of the Land Department of the United States, at Washington, contain an official history1

1 Among the numerous claim holders, the names of the following are noted from the record:

James H. Blake, John C, Ryle, A. M. Benham, Lottie E. Mead, E. M. Shelly, W. H. Naylor, P. C. Sweeney. Cearles Lowe, George D. Mandigo, Albert N. Tull, F.A, Kribs, E, Trask, Albert Sample, Samuel McClure, S. M. Ronning, Ida May Blair, Eugene Williams, Wm. H. Green, H. C. Williams, F.A. Vanderpool. Wm. McMullen, J. H. Mattoon, James Parks, Wesley Gill, D. S. Patterson and T. S. Finney.

It is proper to state that the character of the locality is a forest, and with its hills and valleys and streams it is picturesque, and a natural wilderness, unsuited for agricultural pursuits, and as soon as title is secured by the proofs of settlement and occupancy, the land is abandoned by most of the settlers for more inviting homes nearer civilization.

Mr. Turnbull removed to Park Rapids, Minnesota, where he was Chairman of the Board of County Commissioners of Hubbard County. His services, secured in 1889, while an examination was being had in the field, were of inestimable value, faithfully and carefully rendered by the man who had resided at the Itasca Basin, and was willing to tender the benefit of his skilled labor, and his personal knowledge of the locality.

The cabins of the locality, as a rule, remain but empty shells, no longer the habitation of former owners. The reason for this is that the land is valuable, principally for 212 its pine timber, and the claims, for a consideration, have passed to a non-resident ownership.

The second coming of civilized occupancy will follow the construction of railroads to and beyond the source, and not until then.

MR. HOPEWELL CLARKE.

SUB-DIVISION TWENTY-THIRD. THE RELATION OF HENRY D. HARROWER, AND OF IVISON, BLAKEMAN, TAYLOR AND CO.; SURVEY OF THE BASIN BY HOPEWELL CLARKE.

In *Science* , an illustrated journal published in New York City, there occurred in 1886, a discussion concerning discoverers and discoveries at the source of the Mississippi. The first communication to that journal was signed by Russell Hinman, who had noticed that the Glazier accounts of the source revealed the now apparent fact that the descriptive narrative of Henry R. Schoolcraft of 1834, had been, to a very great extent, silently appropriated and incorporated, without credit, into the Glazier writings, as original matter, with but a slight change in the verbiage. Following this communication, there appeared another in which it was stated that the distance between Itasca and Elk lakes, was about five miles, etc. (The actual distance across the brow of Morrison Hill is 393 feet and by the channel of the creek, 1,100 feet.)

Following this in the same journal is the reply by Henry D. Herrower, pointedly stating the case of Glazier and its absurdity. At this time Mr. Harrower seems to have taken 214 up a careful consideration of the case for and on behalf of Ivison, Blakeman, Taylor & Co.1 He carefully compared the Glazier writings with those of Schoolcraft, publishing an account of his researches in an *Extra Educational Reporter* , in October, 1886.

1 Publishers of School-books at the City of New York, who had refused to incorporate, in their publications, that Elk lake was the true source.

The final announcement in this publication was the organization of The Ivison, Blakeman, Taylor & Co., Expedition to supplement the work of Nicollet and Edwin S. Hall by a careful examination of the Itasca Basin.

This expedition was placed in charge of Mr. Hopewell Clarke who was connected with the Land Department of the Northern Pacific railroad and is now Land Commissioner for the St. Paul and Duluth railway at St. Paul, Minnesota.

HOPEWELL CLARKE'S SURVEY.

Mr. Clarke selected two assistants, proceeded to Motley. Minnesota, and thence by team and stage to Cat creek, Park Rapids and to the south end of the east arm of Itasca lake. His equipment consisted of a camping outfit, pocket sextant, aneroid barometer, drainage level, thermometers, hand level, surveyor's chain and compass, levelling rod and pocket compass.

The party arrived at Itasca lake October 13th, 1886, and at once embarked for the west arm without making any special examination of the Mary creek and valley. They camped between Elk and Irasca lakes and for five days labored incessantly to discover the facts connected with the source of the Mississippi. A critical examination of the locality between Elk and Itasca lakes was had; Nicollet's 215

HOPEWELL CLARKE'S MAP, 1886.

216 Infant Mississippi was found to be the principal affluent and it was carefully explored to its source, which Mr. Clarke determined to be at the lake in the northwest quarter of section 34, township 143, range 36, (Whipple lake), with no connection with the lakes to the south. Underground passages forming artesian springs at lower levels were distinctly noted, and a puzzling search for Nicollet's upper lake, ended in the expressed opinion that it was over a hill on the east side of his middle lake, at a basin of water then existing, but now a dry bed. The feeders of Elk lake were critically examined and traced to their sources. An examination of Mr. Clarke's map and a careful purusal of his valuable report, impresses the reader with his anxiety to secure and present nothing but the facts, and it is to be regretted that the natural ability and readiness of perception so conspicuously demonstrated by him upon this survey, were curtailed by the diminutive limit of five days

time. Under circumstances of that kind, it is not a matter of surprise that he erroneously placed the summit of the *Hauteurs des Terres* on his map immediately bordering the south end of Whipple lake.

On December 7th, 1886, Mr. Clarke made a detailed report of his survey to Ivison, Blakeman, Taylor & Co., who published it in pamphlet form1 .

1 In his report Mr. Clarke says:

“Our little party of three was fully satisfied that fifty years ago Nicollet had discovered all there was to discover of the sources of the Mississippi, and that if he had lived to complete his report on the sources of the Mississippi and the North Red rivers and to give to the world his unpublished map, there would have been no chance for any Glazier to confuse the geographical world or to play tricks upon the learned societies of two continents.”

This pamphlet is entitled “The Source of the Mississippi.”

217

The action2 taken by Ivison, Blakeman. Taylor & Co., appears to have been for the purposes of educational interests and publications.

2 Mr. Henry Gannett, Chief Topographer. United States Geological Survey, it has been claimed, first suggested the consideration given to the question by this company.

SUB-DIVISION TWENTY-FOURTH. THE ASSISTANT SUPERINTENDENT OF PUBLIC INSTRUCTION FOR MINNESOTA AT ITASCA; HE DESCRIBES THE LAKE AND ITS AFFLUENTS.

In 1887, a public institute was to have been held at Park Rapids, Minnesota, under the auspices of the Department of Public Instruction for Minnesota, but was abandoned.

Prof. T. H. Kirk, now the Assistant State Superintendent of Public Instruction, who was to have been conductor of the institute, then proceeded to Lake Itasca upon a tour of observation.

In response to a request for detailed information as to the results of his observations there, Prof. Kirk submitted the following interesting paper:

“ St. Paul , Minn., Dec. 18th, 1889.

On the 9th day of May, 1887, I was at Park Rapids, Hubbard county, with a few days of leisure at my disposal. This fortunate circumstance of time and place enabled me to carry out a cherished purpose; namely, to explore Lake Itasca. An intense interest awakened during a historic research in which I had followed the movements of Morrison, Schoolcraft and Nicollet, gave zest to the undertaking1 .

1 Professor Kirk is the author of a School History of Minnesota.

J. St. Kirk

I invited Mr. F. A. Venderpool, and a young man named Patterson to accompany me. A span of horses, a light spring wagon, an axe, a revolver, a Winchester rifle, to which we added another of the same kind while in the woods, made up our equipment, mechanical and defensive. A few rations, mainly hard bread, constituted our food supply; for we were to depend for subsistence upon game and such supplies as one is able to purchase at a settler's cabin.

We began our journey about noon of the 10th, following the single trail that leads toward Itasca. This trail extends ever ridges covered with jack pines, through tamarac swamps, and anon over the stony summits of the *Hauteurs des Terres* .

At Hay creek, a brace of the wagon tongue broke and a mile farther on the other. The tongue itself was soon pulled out of the cross bar. With great difficulty, we reached Lowe's cabin four miles farther on and half a mile north of the trail. Here we found Mr. Green who had come down from Lake Itasca to visit his daughter, Mrs. Lowe. This was fortunate for us; for he was something of a carpenter and promised to repair our wagon, as well as he might with a few wood working tools and no blacksmith to aid him.

After supper, with nothing to impede us but our fire arms and scant rations, we pushed on foot through the dark woods, whose silence was only broken by such sounds as the occasional cry of a wild animal, and the tireless exhortation of the whip-poor will. Our route was still over the summits of the *Hauteurs des Terres* , which in this section seem to be composed of little else than boulders that, frequently cropping out, obstruct the trail. We made only five miles that 220 night and lodged in a cabin which belonged to a bachelor friend of Vanderpool. We accepted, in the owner's absence, the mute invitation of his blankets and bed of pine boughs. In the morning, we breakfasted on boiled rice and black coffee. Thus refreshed, we continued our journey.

We soon crossed the southeast divide of the ltasca Basin, not far from the iron post1 which marks the northeast corner of Becker county, and a corner of Beltrami county. From this point, our course was northwest through a narrow valley2 lying between fertile ridges, for the most part heavily timbered. In the center of the valley is a chain of small but beautiful lakes more or less definitely connected by water courses. The last of the water courses3 empties into the southeast arm of Lake Itasca.

1 At Sibilant Lake.

2 Mary Valley.

3 Mary Creek.

My survey of the valley was quite cursory; but the maximum volume of water pouring into Itasca, an apparent lack of connection in the chain, the possibility, therefore, that those farthest southeast are related to the drainage system on the other side of the divide alluded to above, made it to my mind an interesting problem in the final determination of the source of the Mississippi.

We found Mr. Green's cabin on the summit of the hill which is situated on the west side of the extremity of the southeast arm of Itasca. A note tacked to his door directed one to look for the key at the southeast corner of the cabin under the shakes, and was a sufficient invitation to all, save Indians and other illiterates, to accept his hospitable shelter and whatever of good cheer was to be found within. We 221 were not slow to accept, and for two days made the cabin our base of supplies.

On the swampy shore at the foot of the hill, we found an old, leaky scow, stud two broken paddles which when mended served us for oars. In this uncertain craft, we made the complete circuit of Lake Itasca.

Our first objective point was Schoolcraft Island where we landed to bail out and take observations. We next visited the Mississippi where it leaves the lake, roughly estimating its width, depth, and volume of water, and observed the soft alluvial character of its bed. We then pitched our camp on the northeast shore. While we were here, the wind rose and the white caps began to roll in the lake and threaten to end our explorations for the day. But time was precious to us, so we carefully ajusted our lead in the scow, prepared for swimming in case of need, and pushed out. The scow shipped a part of every wave, and threatened momentarily to capsize, but, by dint of bailing and persistent rowing, we made the lee of points on the western shore and finally that of Schoolcraft Island, coming out at length in the smoother waters of the southwest arm. We landed half way down the eastern shore, then at the mouth of the outlet of Elk Lake.

This lake is only a few rods from Itasca, and is separated from it by a hillock1 which is the extremity of a spur of the *Hauteurs des Terres* . The outlet of the former lake winds tortuously along the eastern base of the hillock through the edge of a swamp. I determined to pole up this stream. Vanderpool and Patterson both declared it

1 Morrison Hill.

222 impossible to do this, but goodnaturedly labored to please me. And labor it was, as much like crossing a portage as sailing. In most places, the real channel was very narrow, making it difficult to turn the curves, and so shallow that two had to get out and drag while the other remained in the stern and pushed. Another difficulty was to get under the trees that had fallen across the stream I doubt if a boat, unless an Indian's canoe at flood water, ever ascended it before.

By one standing at the summit of the hillock, both lakes are seen near at hand; and it has been many years, if ever, since the forest trees were heavy enough to obstruct the view. Only a short distance from Elk Lake, and separated from it by the spur of the *Hauteurs des Terres* , to which the hillock belongs, flows Nicollet Creek2 where it debouches into Itasca. We measured the volume of water in this stream a few rods above the mouth, and estimated it to be five or six times greater than that of Chambers Creek. Taking these facts into consideration, together with the statement of Nicollet and others, that the ultimate source of the creek bearing his name is four or five miles from Itasca, much farther indeed than the ultimate sources of the Elk lake inlets, I reached these conclusions:

2 Nicollet's Infant Mississippi river.

First, if mere hydrographical observation is to determine, to Nicollet belongs the honor of having discovered the ultimate source of the Mississippi; because his map of 1836 is but a record of his personal explorations, showing all these lakes and streams in relative topographical positions and degree of importance.

Second, if priority of judgment is to determine, then too 223 the honor of discovery is his; because he fixed upon the source of the stream which bears his name.

Respectfully Submitted. T. H. KIRK."

The examination of the streams at Lake Itasca, by Professor Kirk, bears relation to the source to such an extent, that the results of his examination are given in full.

SUB-DIVISION TWENTY-FIFTH. THE DEFINITE ACTION OF THE MINNESOTA HISTORICAL SOCIETY AS TO THE SOURCE OF THE MISSISSIPPI; REPORT BY GEN. JAMES H. BAKER ADOPTED; APPOINTMENT OF A COMMISSIONER ORDERED TO DEFINITELY SURVEY AND LOCATE THE SOURCE.

The Minnesota Historical Society is a co-ordinate branch of the State government, having been, by statutory enactment, constituted a State institution, with its library, offices and council rooms located at the State capitol. On the 8th of February, 1887, this State institution adopted a report, written and presented by a committee of its members, pursuant to the requirements of a resolution of December 13th, 1886, which report1 , rendered by Gen. James H. Baker, exhaustively presented facts then known to exist concerning the source of the Mississippi. This report, which forms part 1 of vol. VI of the historical collections, upon motion of ex-Secretary of War Alexander Ramsey, was adopted.

1 In his report Gen. Baker says: "The bold assumption of the man Glazier is without a parallel in the annals of geographical history. His conduct is a total disregard of all the rules and dignities of a true scientist. Scientific knowledge has scarcely before been made the prey of a charlatan, The measure of his as rounding fraud has not yet fully penetrated the public mind."

J. Fletcher Williams.

Subsequently, February 11th, 1889, the Historical society authorized an accurate survey of the source of the Mississippi river, and for that purpose issued, under seal, a commission, directed to the present Commissioner, requiring an accurate survey of Lake Itasca and its surroundings, with the view of determining by a thorough examination of the spot, and of all its physical features, under all circumstances, what is the true and actual source of the Mississippi river1 .

1 A committee of the society was appointed to confer with the Commissioner concerning the honor of a first discovery and to designate proper geographical names.

Under the authority of this commission a hydrographic exmination was conducted,2 with results as noted in this report to the society. The council of the society took effective steps to create and establish a permanent park reservation at the source of the Mississippi, 35 square miles in exent. -15

2 The society, having received a report from Mr. Willard Glazier in the form of an unauthorized, voluntary communication, concerning the hydrographic condition of Elk lake and neighboring waters, appointed a committee to examine the communication, and the following report thereon was adopted:

“The special committee appointed by you to consider the communication of Capt. Willard Glazier relative to his alleged discovery of the source of the Mississippi river, has to report as follows:

First—His charts are hydrographic and topographic misrepresentations.

Second—His claim that among his assistants were noted geographers and expert engineers is a bold fiction apparently devised to mislead the credulous.

Third—Many of his assertions are willful perversions of well established geographic and historic facts, and others betray a gross, and in the light of his claims, culpable Ignorance concerning the country surrounding the head-waters of the Mississippi.

Fourth—In tone Capt. Glazier's statements are discourteous to this society and its representatives; to the faithful living engineers and explorers who preceded and followed him, and a dishonor to the memory of Morrison, Schoolcraft and Nicollet.

Fifth—Throughout, Capt. Glazier as on all other occasions when he has discussed this matter, seems to seek a cheap notoriety, the only thing in the light of real discoveries and explorations that is left to him.

For the reasons cited, your committee would respectfully recommend that the Communication of Capt. Glazier be tabled as in every sense unworthy of your adoption.

T. H. Kirk, John B. Sanborn, N. H. Winchell, Committee."

226

During the period of time, when the controversy, touching the relative importance of Itasca and Elk lakes, was at its height, no member of any society in the world took greater interest in the matter than J. Fletcher Williams, the secretary of the Historical Society of Minnesota. As a result of his watchful care, there has been deposited with the society all the available literature and clippings, from every clime, having special reference to this matter, and his services in creating the Itasca State park and securing a public grant of lands from the government therefor, have demonstrated his conspicuous interest in the matter. The society as a body has continuously depended upon Mr. Williams to superintend the care of whatever it has done in the matter as a society and the corresponding membership of similar bodies throughout the world have found in him a preferable reference for information and knowledge, always correct in statements of fact.

Concerning the history of the explorations of Morrison, Pike, Cuss, Beltrami, Schoolcraft and Nicollet, Mr. Williams' accurate knowledge coupled with a ready memory, is, in itself, almost an invaluable reference. It seems unnecessary to say that he has a supreme contempt for those who have so persistently misrepresented the historical and geographic facts concerning Itasca lake and the region beyond it.

SUB-DIVISION TWENTY-SIXTH. THE CASUAL EXAMINATION OF J. V. BROWER AND COMPANIONS; THE GREATER MAN-TRAP BASIN; THE PARTY ARRIVE AT ITASCA LAKE AND EXPLORE THE SOURCE.

On the 2d of October, 1888, the writer of this report in company with Mr. W. A. Avery1 ,

JOHN LEYENDECKER.

of Frankfort, Indiana, and Mr. John Leyendecker, formerly of the Adirondack mountains, New York, determined to make an unostentatious visit to the Itasca Basin2 . Reaching Park Rapids, Minnesota, soon after, and visiting Sand lake and the greater Man-Trap basin with its flowing stream and no visible outlet, a characteristic of the *Hauteurs des Terres* , the party reached the north end of Itasca lake. October 19th, with no

1 Recently deceased.

2 Mr. N. W. Rice joined the party in the month of November and remained in camp at Green's cabin several days.

228 instruments for observation more than a pocket compass, steel tape and general outfit of a party away for pleasure and recreation. The Itasca Basin was selected as the destination of the party, pursuant to a determination to visit the scenes at the headwaters of the Mississippi river. Very naturally, the historic locality brought memories of its discovery, and jealousies and disputes as to the true source, and, without the hope of reward, other than a personal knowledge of facts, the writer of these pages commenced a personal examination of the Basin with no other instruments than hereinbefore stated, for

personal satisfaction and information. The great river, on its course northwest from Itasca lake was visited and found to be an ordinary stream of no special pecularities, with willow thickets, balsam-fir groves, a range of hills on either side and the surroundings ordinarily attendant in a pine region. Fire had materially destroyed the growth of pines and many hills were nude; underbrush, old fallen and burnt timber, and a general air of an uninhabited wilderness prevailed. Next was visited in a comfortable boat, Schoolcraft island and the east arm of the lake; camp was then moved to the south end of the east arm; the west arm was visited, Elk lake and its creek, the Nicollet's Infant Mississippi and lakes, Whipple lake, and the creek running north from it; Boutwell creek, the dense forest south of Elk lake and its creeks; Mary valley and its creeks and lakes; the numerous springs of the Basin, the surrounding hills—and every day from October 19th until November 17th, 1888, some portion of the Basin was examined in a casual way, until a very good general idea of the more prominent features of the locality was gained. Running water was accurately measured 229

J. V. BROWER'S SKETCH MAP OF ITASCA LAKE, 1888.

230 and its flowage timed and the preponderance of Nicollet's Infant Mississippi over all the other streams at that time, ascertained beyond any doubt on the part of those present. A detailed memorandum of these explorations was noted down from day to day, and on the 17th of November, 1888, the party broke camp and returned to their respective homes.

A correspondent of the *Daily Pioneer Press* , communicating with that paper from a distant part of the State, misstated the facts of this visit to Itasca lake, and it became necessary to correct the errors so appearing by a communication to the columns of that paper under date of December 1st, 1888.

With this communication appeared a small sketch map, made only from observation in a casual way, with no more extended measurements than a careful test of the current, depth, width and flowage of the several streams supplying Itasca lake.

This map was re-drawn at Philadelphia or elsewhere, grossly distorted, and in the latter form, published by Willard Glazier as an argument in his own behalf, and the communication was criticised by individuals having for an apparent purpose the setting aside, or rather an appropriation of, the honors of discovery due Win. Morrison, Henry R. Schoolcraft and Jean N. Nicollet.

An open letter was published challenging the correctness of Mr. Glazier's claims to original discovery, in which was formulated proper and reasonable avenues for redress, in case his claims were genuine and true.

No reply has been made to the challenge; after a lapse of several years.

231

Following this visit to Itasca lake, application in person was made to the Minnesota Historical Society for authority to definitely examine and survey the source of the Mississippi river.

The application was granted and the commission issued.

On the 8th day of March, following, all arrangements for an expeditionary examination having been consummated, the survey was proceeded with, partly upon the frozen surface of the lakes, and continued after the rainfall of the spring season, and during the summer and autumn months, which presented opportunities for extended observations and measurements.

The results of this examination, with a detailed hydrographic chart, were reported to the historical society. The chart was published in 1891.

SUB-DIVISION TWENTY-SEVENTH. THE ITASCA STATE PARK; THIRTY-FIVE SQUARE MILES OF TERRITORY AT THE SOURCE OF THE MISSISSIPPI FOREVER

DEDICATED TO THE PUBLIC; A COMMISSION APPOINTED, AND A TOPOGRAPHIC SURVEY COMPLETED; A FINAL CHART.

It has been known that the lake region of Minnesota, a large portion of which is called the “Park region.” owing to its elegant lakes, picturesque groves of timber, forests, fertile prairies, and flowing waters, afforded many opportunities for a public State park, but no organized effort for a State park seems to have been made until 1890, when Mr. Emil Geist, of St. Paul, submitted to the State Historical Society a suggestion in writing,1 that the region about the source of the Mississippi be secured and set apart for that purpose. It was also recommended by Professor N.H. Winchell of the Geological and Natural History Survey. The location is remote from and outside of the Park region of the State.

1 Mr. Geist's letter to the society, enclosed an editorial from the pen of Mr. Joseph A. Wheelock, ably advocating a measure of that kind, in the St, Paul Daily Pioneer Press.

There seems to be some doubt as to the identity of the first suggestion of the creation of the park, but the first definite suggestion that can be found, was made by Mr.

GEN. JOHN B. SANBORN.

233 Alfred J. Hill, March 28th, 1889. Mr. Hill says he does not know that his suggestion was the first one made.

The Historical Society appointed a committee from its council membership, which reported, and the matter was finally placed in the charge of Gen. John B. Sanborn, as a Senator, in the State legislature. Gen. Sanborn introduced a measure establishing and creating “The Itasca State park,” to be composed of thirty-five square miles of territory at Itasca lake, to be forever dedicated to the public, and the measure passed and became a law. The Governor, by executive appointment,1 selected the Commissioner of the Historical Society, to also act as the Commissioner of the State park.

1 STATE OF MINNESOTA, EXECUTIVE DEPARTMENT. Executive Department.

William R. Merriam, Governor of said State, to J. V. Brewer of Ramsey county, sends greeting:

Reposing especial trust and confidence in your prudence, integrity and ability, I have appointed you, the said J. V. Brower, as commissioner of the Itasca State park, pursuant to an act of the legislature of this State, approved April 20th, 1891.

You are therefore by these presents appointed and Commissioned Commissioner of the Itasca State park, as aforesaid, to have and to hold the said office, together with all the rights, powers and emoluments to the said office belonging or by law in anywise appertaining, until this commission shall be by me or other lawful authority superseded or annulled, or expire by force or reason of any law of this State.

In Testimony Whereof, I have hereunto set my name and caused the Great Seal of the State of Minnesota to be affixed at the Capitol, In the City of St. Paul, this fourth day of May, in the year of our Lord one thousand eight hundred and ninety-one and of the State the thirty-third.

By the Governor, WILLIAM R. MERRIAM.

F.P. Brown, Secretary of State.

[L. S.]

One of the duties imposed by law upon the Commissioner, was the preparation of a detailed chart of the park, and in performing the duties required by the law, a special topographic survey and examination was made during the year 1891, the results of which show that practically all the 234 lakes and streams within the Itasca Basin are included in the designated territory.

The hydrographic survey of 1889 and the topographic examination of 1891, made by the same Commissioner, have been combined, from which has been prepared a final chart of the source of the Mississippi river, so far as the present examination is concerned. It is claimed for this final chart that it excels in correctness of detail and the location of lakes and streams, elevations, topography and physical features, any chart1 of the locality that has ever been made, and it is herewith reported, with the complete results of the two surveys combined, so far as the same relate to the geographical question as to what particular waters constitute the source of the Mississippi river.

1 See Detailed Hydrographic and Topographic chart of the Itasca State Park 1892, facing frontespiece

The Hon. J. N. Castle, member of Congress from Minnesota, by conspicuous ability and tact, has secured the passage of a bill by the Congress, granting to the State the government lands situated within the park to be forever used for park purposes.

DETAILED HYDROGRAPHIC CHART OF THE ULTIMATE SOURCE OF THE MISSISSIPPI RIVER DRAWN BY J. V. BROWER, A COMMISSIONER.

SUB-DIVISION TWENTY-EIGHTH. THE DETAILED EXAMINATIONS AND SURVEYS OF THE SOURCE OF THE MISSISSIPPI RIVER, CONDUCTED UNDER THE PERSONAL DIRECTION AND SUPERVISION OF J. V. BROWER, COMMISSIONER.

The drainage basin of the Mississippi river extends from the Gulf of Mexico, at the mouth of the river, to an ultimate limit above and beyond Itasca lake. This great basin, more than 1,000,000 square miles in extent, is bordered on the east by the Alleghany and other ranges, and on the west by the Rocky mountains, and contains about 100,000 rivers and streams, which flow toward and finally discharge their waters into the Mississippi, principally through the mouths of the larger and more important confluent and affluent tributary rivers. These waters are entirely supplied by the copious precipitation

characteristic of the fertile basin drained, from north to south, by the Mississippi as its principal and most important river.

To follow the proper rule in ascertaining, under commission, the true and actual source of this principal river, for geographic purposes, European and American geographers, scientists and authorities, were consulted and the 236 following varied information as to what constituted the source of a river was gained:

“That the main stream of a river is that which flows along the lowest depression of the basin, and that a tributary which descends into it from a higher elevation, even if longer, is not to be considered the main stream.”

“A river cannot have a source, but many sources.”1

1 Should this be the proper rule the Mississippi would have a hundred thousand sources, more or loss.

“All our rivers have their source in the clouds,”2

2 This is from a standard educational work, given as a basis for theoretical deduction.

“The head of the longest continuous channel.”

“The sources of a river which are in a right line with its mouth, particularly when they issue from a cardinal point and flow to the one directly opposite.”3

3 The rule followed by Beltrami in locating the Julian source.

“The true source of a river is a point at the remotest distance from its mouth, but the largest lake must not be rejected to accept one of less magnitude.”4

4 This rule, if followed strictly, would place the source in Winnibigoshish lake. the largest lake through which the main river passes.

Other authorities, some remote, and but a few reliable, suggest that the source muss be a lake; must be the largest lake; should be the inner flanks of the heights of the land surrounding it; should be the source, because it was next to the historic pass, by which one river had, from ancient times, been left to reach another; because it was farthest from the mouth of the system; because it led down to the axis of the general valley of the basin; because it was at the head of the stream of largest volume; because it was geologically oldest, etc.

This widespread variance of authorities, good, bad and 237 indifferent, gave but little comfort, in an interesting geographic and historic research, the source of no two principal rivers of the world being alike.

The conditions and peculiarities of the more important drainage basins of the earth, are so varied and widely different, that geographic terminology in respect of the term “source” is at fault, and until some more definite and conclusive understanding is reached as to the term “source of a river” in geographic science, it would seem that there was a necessity to follow and adopt the literal meaning of the word, for this present time and occasion, in the absence of a more explicitly defined propriety and signification. The standard authority gives the meaning of “source” as “to spring forth or up.” “The place from which anything proceeds.” “That from which anything rises or comes forth.” “Especially, the spring or fountain from which a stream of water proceeds, or any collection of water within the earth, or upon its surface, in which a stream originates.” “A spring.” “Fountain.” An original beginning of the stream is sought, and nature presents its own best method and law, and that *method* and *law* do not in any sense dictate that a lake must be selected as the source, for the word does not in any sense whatever mean, the body of a lake. The great majority of the rivers of the world have no lakes at their respective sources. Then we must discover, know and describe “the source” of the Mississippi. The river originates in

a swampy, lacustrine region, and the location of the source has not been an easy task. All of the facts are now given, from which theoretical deductions are eliminated. Theorists may select a choice of location, while the sentiment of a widely acknowledged recognition in favor of 238 Itasca lake still continues. But it must be acknowledged that “the springs” from which Itasca draws its principal supply are above and beyond it, and they are likewise above and beyond Elk lake.

For these reasons, and in the absence of any fundamental term upon which to proceed, a reliable rule of no uncertainty, the rule dictated by nature, in ascertaining where the waters were gathered which form the remotest source of the Mississippi, was adopted, and for that purpose the length of the main river in statute miles, up through the valley of the basin, was ascertained from the official records of the United States government and otherwise, by these combined surveys and measurements from the Gulf to the Itasca Basin.

THE LENGTH OF THE MISSISSIPPI.

The length of the principal rivers of the terrestrial globe. always interesting and instructive, has, from time to time been ascertained and given, usually from estimates based upon astronomical observations for the position of the mouth. the source, and principal intermediate points.

To accurately ascertain the length of a river would require the adoption of some rule for the measurement, either:

1st. A shore line.

2nd. A line along the center of the stream equi-distant from each bank of the river, or—

3rd. A line along the thread of the main channel of water.

The proposition of measurement contained in the 2nd and 3rd rule, if adopted as a base of operation, would require a system of stationary floats the entire length of the river, and for that reason is deemed impracticable, though the third rules lays down the correct manner of ascertaining the

THE ITASCA BASIN. LOOKING NORTH-WEST FROM THE SUMMIT OF RHODES HILL.

239 true and actual length of a stream of running water, subject to natural or mechanical changes.

From the time of the first discovery of the Mississippi to the present date, various estimates have been made as to its length.

With a view to a more concise and accurate statement than has hitherto been possible to make, especial efforts have been made to ascertain and state its true length, based principally upon shore-line measurements.

It has not been thought advisable, however, to take into account as regards the upper part of its course at least, the inc made by the thread of the current in the main channel, even if obtainable, for the reason that it would be subject to constant revision and would have to be taken with that understanding, and, therefore, be practically useless as a basis for popular comparison.

The length of the lower portions of the river, as ascertained by the authorities of the United States, is adopted as a true length, for the purposes of this report, founded as it is upon scientific principles of civil engineering, and painstaking action thereunder.

By combining the distances derivable from three connected surveys, the total length of the channel of the river in all its windings, from the Gulf of Mexico to the foot of Itasca lake, can now be given:

From the Gulf of Mexico at S. W. pass to New Orleans 111.00 miles

Thence to the mouth of the Ohio river 965.50 "

Thence to the City of St. Louis 182.00 "

Thence to the mouth of the Illinois river 39.00 "

Thence to Hannibal 102.25 "

Thence to Quincy bridge 20.00 "

Thence to Keokuk 41.00 "

Thence to Burlington 46.50 "

240

Thence to Rock Island 82.50 miles.

Thence to Dubuque 107.25 "

Thence to Prairie du Chien 62.00 "

Thence to La Crosse 72.25 "

Thence to St. Paul 156.00 "

Thence to Falls of St. Anthony (Minneapolis) 13.00 "

Thence to outlet of Winnibigoshish lake 432.50 "

Total by U.S. Engineers 2,432.75 miles

Thence to Government meander, at intersection of Range 36, West of 5th Meridian by U.S. Deputy Surveyors 96.50 "

Thence to Itasca lake by J. V. Brower, Com'r 17.27 "

Total from Gulf to Itasca lake 2546.52 miles

Thus it appeared that the main river of the Mississippi basin extends from the Gulf of Mexico to the Itasca Basin, a limited, permanent depression upon the surface of the earth at the ultimate source of the river, subsidiary to the main basin below it.

The geologic and natural features predicating this conclusion, are so well known and established, that no reference to them seems necessary in this connection, excepting the possibility that the Missouri river, remotely suggested by occasional inquirers, might be called the main river; but in as much as it is a confluent branch of the main stream, coming in at one side, similar to the Ohio and Red rivers, there is no good reason for discussing that question at this time. The historic data, which have brought to our notice and knowledge the existence of the main river extending from the Gulf to the Itasca Basin, where it takes its rise, indicating the discovery of the Mississippi, by piecemeal, is coextensive with the discovery of the coast line of North America, and the facts are indisputable, in consequence of which the question as to the ultimate source of the main 241 river, must be based upon the facts as they have been found to exist at, above and beyond Itasca lake. To definitely determine those facts it became a necessity, to ascertain whence came the waters of Itasca lake. That necessity required a definite line of levels in the field, to ascertain elevations above the sea. The official reports of the United States government give the elevations to and including Cass lake, and an actual line of levels across the country from the railroad system of Minnesota to Itasca lake, run in 1889, and corrected by a second actual line, run from Park Rapids, Minn., in December 1891, demonstrates its actual elevation above the sea at its outlet. The railway levels connect with the government levels, and these ascertained elevations used in connection with this examination are believed to be, as corrected, very reliable, as great care has been exercised, recently, to perfect them.

The tabulated elevations, showing the sea levels, are not only as interesting, but deemed to be just as necessary, as the ascertained distances from the Gulf:

THE SEA LEVELS.

Elevation at the surface of the water at:

Gulf of Mexico 0.0 feet.

City of St. Louis 384.8 "

Mouth of the Illinois 399.4 "

Hannibal 444.9 "

Quincy 453.8 "

Keokuk 472.3 "

Burlington 505.1 "

Rock Island 533.7 "

Dubuque 578.2 "

Prairie du Chien 597.5 "

La Crosse 621.2 "

St. Paul 680.5 " -16

242

Above St. Anthony Falls 782.0 feet.

Below Pokegama Falls 1248.0 "

Above Pokegama Falls 1269.8 "

Winnibigoshish Lake 1292.8 "

Cass Lake 1302.8 "

To Itasca lake by a preliminary line in the month of April, 1889, from the Great Northern Railway system, at a located, but unconstructed railroad line, near Craig's crossing upon the Mississippi, nine miles north of Itasca lake, and a test line from the end of the track of the Great Northern branch line at Park Rapids, Minn., to the surface of the water at Itasca lake, definitely run in the month of December, 1891, determines the correct elevation to be 1457.01

1 Great Northern Railway Line, St. Paul, Minn., Jan. 2, 1892.

J. V. Brower, Esq.—Dear Sir:—In answer to your letter to Otto, would say, the bottom of the tie at depot at Park Rapids is an elevation of 428 feel above sea level.

N. D. MILLER. Chief Engineer.

Adding the thickness of tie, surface modification, and elevation of water surface at Itasca lake gives—1456.86, a corrected elevation of 1457 feet above sea level, correcting the error, appearing on chart of 1891, as 1470 feet, caused by commencing at the wrong bench-mark, near Craig's crossing, by a careless employee, who was discharged for wilful neglect and incompetency.

The test line from Park Rapids to Itasca lake, is believed to be entirely trustworthy and reliable.

With the distances and elevations ascertained, the survey of the ultimate source, commenced in March, 1889, upon the frozen surface of Itasca lake, at the center of the channel of the river, at its *debouchure* , from the extreme north end of the lake.

At a remote age, the Itasca Basin was formed, obtaining an existence from the lap of nature, an indenture upon the surface, oblong, irregular and limited, nearly surrounded by the summits of the *Hauteurs des Terres* , properly belonging to, and a part of, the extensive basin, containing a thousand lakes and streams, which forms, above Pokegama Falls, and north of the Itasca moraine, an upper or head-water drainage basin of the Mississippi. The subsidiary 243 basin at Itasca lake, is nothing more than the extreme limit of the upper drainage or head water basin, the most remote and the most elevated above the sea level.

At that unknown age the limited Itasca Basin, about seven miles long and less than five in width, was probably the bed of one lake, with bays and islands and beaches. That this is true, is beyond the inference of a mere conjecture, although it is not probable that its waters extended nearly to the summits of the heights of land found there, where there may have been other lakes. The Geological and Natural History Survey of Minnesota, may be able to solve an interesting problem as to what waters then constituted the source. Was it Lake Upham?1

1 In June, 1891, this extinct lake was named Lake Upham, by Prof. Geo. B. Alton and J. V. Brewer in honor of Prof. Warren Upham who has so carefully demonstrated the former existence of the extinct Lake Agassiz, at the valley of the North Red river.

From this one lake of unknown ages, by erosion, the waters, probably having been increased by copious precipitation, cut their way through the ice formation and alluvial stratum, to a natural condition of the river bed, as it now exists, immediately below Itasca lake. This process of nature, the waters passing to lower levels, has given us numerous lakes and lakelets, within the Itasca Basin, systematically divided apart, each of a different

elevation, up the inner flanks of the *Hauteurs des Terres* , surrounding the whole, from the summits of which the waters are returned to the oceans, through Hudson's bay and the Gulf of Mexico.

Lines of measurement to ascertain correct distances, and of levels to determine elevations, were extended to and up through the trough of these localities, and to all other localities, 244 on either side, where was found surface drainage, regardless of how unimportant the smaller brooks and streamlets might appear, carefully bearing in mind the preeminent fact, that the examination of headwater rivers and streams, and topographic surroundings, not simply some one or other particular lake of the locality, constituted the principal and paramount object, that the question might be carefully considered, and a correct answer, definitely stated, from ascertained hydraulic conditions, during a continuous period, covering the spring, summer, autumn and winter months, carefully noting all changes caused by meteorological influences.

BASE LINE ESTABLISHED.

Noted in the daily record of this examination is found written, at Patterson's cabin, the fact that the northwest corner of Hubbard county, Minnesota, the official corner of four government townships, thence west along the township line between Township 143, Range 36, and Township 144, Range 36, (west of the Fifth Principal Meridian) which crosses the north extremity of Itasca lake, should be adopted as a base line of operations, from which all measurements at and above Itasca lake, should be made and computed.

EQUIPMENT.

The following instruments and material were selected and used, during the continuance of this survey and examination:

One solar compass, one sextant, one chronometer, three thermometers, four aneroid barometers, one nautical almanac, 1889, one ephemeris, one theodolite, one transit, one chronograph, one large field level, one field glass, one

PATTERSON'S CABIN. NORTH END OF THE LAKE. MISSISSIPPI RIVER. THE NORTH EXTREMITY OF ITASCA LAKE, LOOKING EAST.

245 self-reading leveling rod, one steel tape, two surveyor's chains, two cameras, one drafting table, one row boat and one canoe, drafting paper, vellum, tin tubes, official government plats and field notes, surveyor's engraving tools, pocket compasses, note-books, drafting scale, rules, large tent, writing materials, journals of record and a miscellaneous list of necessary and convenient articles.

DATES AND TIME OCCUPIED.

The casual examination, which was the foundation for subsequent official examinations, occupied the time from October 2d, to November 17th, 1888.

The present official examinations and surveys were initiated March 4th, 1889, and continued without interruption, in the field and at St. Paul, Minn., until completed.

The actual time spent at the Itasca Basin and the dates are as follows:

October 19th to November 17th, 1888 Thirty days.

March 12th to May 1st 1889 Forty-eight days.

August 1889 Five days.

September 1889 Five days.

June and July, 1891, as State Park Com'r Forty-one days.

October and Nov., 1891, " " Twenty-five days.

December, 1891, " " Six days.

Making a total of more than five months time of actual surveys and examinations in the field. The time occupied in the preparation of reports and charts, covered a much longer period.

No Indians or guides were employed.

EMPLOYMENT OF INDIVIDUAL SERVICE.

During the continuance of the surveys and examinations, the following persons were employed from time to time.

246

J. V. Brower, Commissioner in Charge St. Paul, Minn.

Peter Turnbull, Civil Engineer and Surveyor Park Rapids, "

Maj. Charles Wanzer, Civil Engineer St. Paul, "

Charles A. Hunt, Civil Engineer St. Paul, "

E. Hayes, Surveyor Minneapolis, "

Frederick Kribs, Surveyor Park Rapids, "

W. A Hayden, Topographer Detroit, "

Henry Bohall, Rodman Park Rapids, "

Andrew Lange, Axman and Chainman Itasca Lake, "

B. McMullen, " " " Itasca Lake, "

Wm. McMullen, " " " Itasca Lake, "

Benjamin Inman, " " " Park Rapids,

E. Trask, " " " Elk Lake,

William Parks, Transportation Park Rapids, "

John Eddy, " Verndale, "

John Meguire, " Park Rapids, "

H. C. Mead, " Park Rapids, "

Prof. D. C. Rhodes, Photographer Verndale, "

F. J. Haynes, " St. Paul, "

E. S. Hill, " St. Cloud, "

Miss Beulah V. Bryden, Stenographer St. Paul, "

R. B. Brower, " St. Cloud, "

Miss Minnie Dassel, " St. Paul, "

W. H. Frisbie, Landscape Artist St. Paul, "

C. F. Jewett, Draughtsman St. Paul, "

And several others for brief periods of time.

Specific duties of a portion of the employes, were performed elsewhere than at Itasca lake.

CORRESPONDENTS.

During the time occupied in this examination, numerous officials and individuals were consulted, and from the list, the following are noted:

The Hon. Secretaries of State for Michigan, Wisconsin, 247 Illinois, Missouri, Iowa, Tennessee, Arkansas, Kentucky, Mississippi, Louisiana and Minnesota, for records, maps, etc.

A committee of the Minnesota Historical Society, consisting of Captain R. Blakely, Hon. I. V. D. Heard and Mr. Charles D. Elfelt, appointed by request, for consultation as to original discovery, sources, and the selection of proper geographical designations for unnamed lakes and streams within the Itasca Basin, and to harmonize designations for lakes bearing more than one name, and to eliminate names improperly applied.

Hon. Alexander Ramsey Ex Sec'y of War.

Gen. H. H. Sibley St. Paul, Minn.

Rev. W. T. Boutwell Stillwater, "

Rev. J. A. Gilfillan White Earth, "

Mrs. Jane Howard Richmond, Va.

Mrs. Georgiana Demaray St. Paul, Minn.

A. H. Siegfried, Esq. New York City.

Julius Chambers, Esq. New York City.

Hopewell Clarke, Esq. St. Paul, Minn.

Prof. N. H. Winchell State University "

Prof. Warren Upham Boston, Mass.

Geo. S. Frost, Esq. Detroit, Mich.

Edwin S. Hall, Esq Sank Rapids, Minn.

Charles Lanman, Esq. Washington, D. C.

Hon. Cushman K. Davis U. S. Senate.

The Register U. S. Land Office Crookston, Minn.

The Surveyor General's Office St. Paul, "

The General Land Office Washington, D. C.

Hon. S. G. Comstock, M. C. Washington, "

The War Department Washington, "

Office of Chief of Engineers Washington, "

Alfred J. Hill, Esq. St. Paul, Minn.

Rev. Edward D. Neill, D. D. St. Paul, "

Mrs. O. E. Garrison Garrison, "

248

Prof. T. H. Kirk, Dept. of Public Instruction St. Paul, Minn.

J. H. Rhodes, Esq. Little Falls, "

Mrs. Helen Hulbert Detroit, Mich.

Hon. W. H. C. Folsom Taylors Falls, Minn.

N. D. Miller, Chief Engineer Great Northern Ry Co

Wm. A. Truesdell, C. E. St. Paul, Minn.

The West Point Military Academy West Point, N.Y.

The Land Department of the Northern Pacific Railway St. Paul, Minn.

The Chicago Historical Society Chicago, Ill.

Messrs. J. M. Barnes and Lucien Wulsin, of Ohio.

She-na wi-gi-shick, an Ojibway Indian Leech Lake.

Rev. Jeremiah Porter Beloit, Wisconsin.

The American Geographical Society New York.

The Royal Geographical Society London.

Mr. Cyrus C. Adams New York.

Mr. Geo. C. Hurlbut New York.

Prof. W. M. Davis Harvard College.

Prof. Geo. B. Aiton Minneapolis, Minn.

The Goldthwaites New York.

The Wisconsin Historical Society Madison, Wis.

Prof. T. H. Lewis St. Paul, Minn.

Gen. James H. Baker Garden City, "

Hon. J. N. Castle, M. C. Washington, D. C.

Emil Geist, Esq. St. Paul, Minn.

Rev. W. E. Hopkins Park Rapids, "

Prof. L. J. Curtis Park Rapids, "

A. T. Warner, Esq. St. Paul, "

Henry R. Cobb, Esq. Park Rapids, "

Mr. J. C. Crane West Millbury, Mass

Hon. C. D. Cutting Riceville, Iowa.

John Leyendecker, Esq. Sauk Centre, Minn.

Col. W. P. Clough St. Paul, "

Hon. T. F. Oakes New York.

Rev. Stanley A. McKay Owatonna, Minn.

SCHOOLCRAFT ISLAND. ITASCA LAKE, FROM THE WEST SHORE.

Mr. Henry Gannett Washington, D. C.

And a large number of others

INCEPTION OF THE OFFICIAL SURVEY.

Distances were found as follows from the northwest corner of Hubbard county, Minnesota, along the base line adopted, to the east shore, north arm of Itasca lake:

U. S. Government Survey 8,350 feet.

True distance, by direct transit line 8,476 "

The Government line officially established in 1875, is plain and distinct over a rough, broken and brushy region. On the east shore of Itasca, are located the Government witness trees and meander corner on the township line mentioned, and immediately across the north point of the lake on the west shore, the official meander corner and one witness tree. At this meander corner on the township line, on the west shore of the north arm of Itasca lake, was erected an oak land-mark, bearing a sufficient inscription.

From this land-mark, north, 3° 45# west 208.7 feet is found the center of the main channel of the Mississippi river as it proceeds from Itasca lake. In the centre of that channel, below the bed of the stream, was placed another oak land-mark, properly engraved.

From this post, imbedded in the centre of the main channel of the river at the north end of Itasca lake, the measurements commenced, and thence were continued to the uttermost parts of the Itasca Basin, containing lakes, bodies of water, springs, pools and running streams.

ITASCA LAKE.

The formation of Itasca lake is a small body of water at and around Schoolcraft island, and three long, narrow arms 250 projecting—,one to the southeast, one to the southwest, and one to the north—from the last of which the waters of the Mississippi pass out from the lake. From the southeast and southwest extremities of the lake, picturesque valleys extend, denominated Mary valley and Nicollet valley, respectively, and up these valleys numerous lakes exist, each at a higher elevation as you pass up the respective valleys, than the one below, and each valley is drained by a stream of perennial flowage.

Nature's unerring law constitutes these two streams, by reason of their length and importance, its principal surface channels, through which, the inflow to Itasca lake is the most abundantly supplied, with a minimum fluctuation and an unyielding certainty. These are Nicollet's Infant Mississippi river and Mary creek.

All others come in at the side, are shorter, and less important.

SOUNDINGS.

The soundings taken, were not sufficient upon which to base an accurate calculation of the cubic gallons of water contained in the lake. The depth of water varies from four to fifty and sixty feet; an ordinary depth of from twenty to thirty-five feet was sounded in numerous places. The deepest sounding reported was off Turnbull point. The width of the lake varies from one-sixth to three-fourths of a mile. Many precipitous hills, covered with a growth of pine timber, nearly surround it, among which it is deeply imbedded. The shores are, in places, lined with boulders, thickly bordered with overhanging flora, characteristic of the locality, making it practically impossible to pass along at the water's edge, on foot; at occasional points along the

TURNBULL POINT. THE EAST ARM OF ITASCA LAKE, LOOKING SOUTH.

251 shores, springs of pure, cold water appear, around which cluster balsam, fir, spruce, the native tamarac, willow, aspen, ash and birch, with pine groves higher up. In the

summer season, a narrow rim of rushes and water grass extend, practically the entire distance around the lake. There are no sand beaches there. A continuous drouth of several years recently occurred, during which time precipitation was reduced to a minimum quantity, yet the lake remained stationary with a regular inflow and outflow, though somewhat reduced in volume. The years 1888 and 1889 were two periods of this drouth, which afforded an ample opportunity to notice and study its effect, and notwithstanding the absence of rainfall there, in the autumn months of 1889, the lake had risen in its surface elevation several inches, as ascertained by land marks at the water's edge, which were placed in position in 1888.

OTHER CHARACTERISTICS.

Distances were found as follows from the northwest corner of Hubbard county, Minnesota, along the base line adopted, to the east shore, north arm of Itasca lake:

Nicollet's Infant Mississippi, at extreme southwest angle.

Mary creek, at extreme southeast angle.

Chambers creek, at the east side of the west arm.

Boutwell creek, at the west side of the west arm.

Island creek, on the west side, opposite Schoolcraft island.

Floating Bog creek, at Floating Bog bay.

Sha-wun-uk-u-mig creek, at southwest angle.

North of Garrison point, south of Ozawindib point, north of Schoolcraft island and at the extreme north end of the north arm, are small and uncertain creeks of no special importance.

Itasca lake has gradually receded from a former and plainly distinct higher surface elevation since its first discovery in 1803. The indications of this recession are distinct. Bear point was formerly an island, the waters extending across from Floating Bog bay to the east shore of the main body of the lake, where is situated Schoolcraft island, its summit ranging from northwest to southeast, seventeen feet higher than the surface of the lake, and covered with a dense growth of birch, basswood, aspen, fir and diamond willow, one stately white pine, and an occasional buff oak. Its surface area is 2.62 acres.

A shoal of boulders has a permanent existence in the main body of the lake a short distance west of south from the island.

At the outlet of Itasca lake the Great River is scarcely fifty feet wide at the first appearance of a current, is three or four feet in depth in the centre of the channel, has muddy shores, and as the current increases in rapidity to the westward, the river narrows to an average of about thirty feet, is filled with debris, shoals and boulders, and for some distance down the stream, free passage with canoes is impeded by reeds, flag and water grass.

The spurs of the *Hauteurs des Terres* , trending inward, and extending to the shores of Itasca lake, dividing the waters in sectional divisons, are numerous, and by this means, this lake, situated at the lowest depression, receives and discharges *all* the flowing water found there, a characteristic of the locality not applicable to any of its neighboring lakes.

One peculiar significancy is demonstrated by the fact that Itasca lake has a flood plain of but little more than three 253 feet in elevation above the natural surface of the lake. The flood plains of the lakes higher up are ten, fifteen and twenty feet. Thus, while Itasca lake is always supplied and sometimes rises during dry weather, the lakes at the summit dry down rapidly to a lesser surface area, depending upon rainfall to re-supply them.

MEASUREMENTS AND DISTANCES.

Itasca lake has a shore line of twenty-three thousand yards and covers an area of 1130 acres. Distances to specific points were ascertained upon the ice, commencing at the centre of the channel of the river, at the north end of the north arm and thence to:

Mouth of Mary creek 22.639 feet

Mouth of Nicollet's Infant Mississippi 17.926 "

Mouth of Chambers creek 16.727 "

Mouth of Boutwell creek 13.627 "

These are the four principal streams contributing a perennial inflow to the largest lake at the lowest depression, and the only streams which discharge their waters into Itasca lake, worthy of especial consideration.

THE MARY VALLEY, LAKES AND CREEK.

From each extreme end of Itasca lake, there exists a well defined valley, bordered by the heights of land. Sibilant lake is situated at the summit of the *Hauteur de Terre* beyond the southern extremity of Mary valley, which extends south from the end of the east arm. Two small lakelets exist north of Sibilant lake, yet south of the point where the real characteristics of Mary valley are first observed in passing north on the Turnbull road, which descends into Mary valley at the north end of Josephine lake. At this point, the examination of Mary valley was commenced.

254

MARY LAKE, LOOKING SOUTHWEST.

255

Josephine lake is the head of the valley, is closely surrounded by high hills on either side, with a slight rise of the surface dividing its wafers from those of Ako lake. The elevation

of Josephine lake above the surface of the water of Itasca lake is fifty-eight (58) feet. Thence in the sharply defined valley descending to the north, were reached and passed Ako and Danger lakes, and lower down through a dry creek bed to the north a limited tamarac swamp was reached, in the midst of which is situated The Twins—two small connected lakes supplied by the waters higher up the valley. This swamp is connected with the Clarke lake locality and Midway Reservoir by a small well-defined watershed having a dry creek bed as one characteristic. The swamp extends to the south or upper end of Mary lake, the most important body of water in Mary valley, formed and maintained by the gathering of the water from the upper portions of the valley. From this lake flows Mary creek, a perennial affluent entering the south end of the east arm of Itasca. Mary lake is erroneously noted on the official plats of the United States as two small lakes. The lake is one-half of a mile long and covers an area of 75 acres, is 40 feet in depth and its surface is 31.3 feet higher than that of Itasca lake. During the most continued drouth, its surface elevation remains unchanged.

The distances from the main river so the head of Mary valley are as follows:

From centre of main channel of the Mississippi at north end of north arm of Itasca, to mouth of Mary creek 22,639 feet.

Up channel of Mary creek to Mary lake 3,658 "

Length of Mary lake 2,597 "

256

From Mary lake to the Twin lakes 2,222 feet.

Across the Twin lakes 320 "

From the Twin lakes to Danger lake 1,183 "

Across Danger lake 1,100 "

Danger to Ako lake 817 "

Across Ako lake 523 "

Ako to Josephine lake 275 "

Length of Josephine lake 1,345 "

Total 36,679 "

Width of Mary creek near its mouth 6 feet.

Depth of channel 6 inches.

Rapidity of current per minute 60 feet.

Depth of Itasca lake off mouth of Mary creek 25 and 35 feet.

The importance of Mary creek, lake and valley, as a perennial supply to the inflow of Itasca lake is augmented by the fact that its length is greater than that of any other valley, lakes and creek within the basin, excepting only the principal stream draining Nicollet's valley and its branches Upon a consideration of this importance it has been determined that Mary valley with its lakes and creek, constitute the Lesser Ultimate Reservoir bowl of the Mississippi river system, distinctly separated and apart from the western arm.

Mary valley is a deep, picturesque depression, rising gradually from Itasca lake to the summits where it reaches a narrowing limit in the immediate neighborhood of Josephine lake.

ELK LAKE AND ITS CREEKS.

An eroded surface, where formerly existed a narrow shoal, has created the bed of Chamber's creek1 , 1,100 feet long, connecting Elk lake with Itasca lake. Previous to the eroding

1 Formerly designated as “Elk creek.”

257 action of the waters, comparatively of recent date, Elk lake was a bay of Itasca; in the language of the Ojibway—“Peke-gu-mag”—“A water jutting off from another water.”

That it was, formerly, a part of Itasca lake, will be readily admitted by the casual observer; an estuary, east asunder by the gradual lowering of the surface of the parent lake, from protracted natural causes, leaving it 493 feet distant, and 12 inches higher, with a separating narrow strip of land intervening, at Morrison hill. Elk lake covers an area of 294 acres, is a mile in length, and seven soundings, through openings in the ice cut for that purpose, gave an average depth of 32 1/2 feet. Its general characteristics are indentical with those of Itasca lake, with these exceptions:

1st. It is situated at the side of the west arm of Itasca, not at an extremity.

2nd. It has no perennial stream, worthy of the name, falling into it.

3rd. Only an average of 1/10 of the water passing out from Itasca lake, is drawn from Elk lake, through Chambers creek.

4th. Instead of having well defined valleys, drained by perennial currents, it is imbedded in hills, which nearly surround it.

5th. The small and narrow creeks which fall into it, are of uncertain existence, and in March, 1889, all of them were entirely closed by frost and ice, excepting only Elk springs, situated on the east shore of the lake, and in the month of August following, they were all dry.

In the summer of 1890, after copious rainfall, Lake Itasca rose a foot or more *above* Elk lake, and Chambers creek -17 258 flowed *into* instead of out from it, a certain indication that Itasca lake draws its principal supply from beyond the narrow limits of Elk lake. It will thus be noticed that Elk lake has but limited characteristics of the locality, and is not entitled to a greater or more extended importance than its curtailed position will warrant. A dense forest borders it on the south shore. Its miniature creeks fall into it from that dense forest, while beyond and above rise the summits of the *Hauteur de Terre*. Elk lake is far below those summits, and its creeks are far removed from an ideal standard. and those who are induced to believe otherwise, are the lambs of creation led to the slaughter. These streams appear upon Nicollet's map of 1836, and for convenient geographical designation have been named as follows:

Elk springs, At east shore of Elk lake,

Keg-wed-zis-sag1

1 As spelled by Nicollet. The correct name is Gay-gwed-o-say.

creek, At S. E. extremity of Elk lake.

Clarke creek and pool, At southern extremity of Elk lake.

Elk creek, At S. W. extremity of " "

Siegfried creek, At west shore of " "

The flood-plain of Elk lake is practically the same as that of Itasca, limited, and its surface elevation remains practically stationary at all seasons of the year. The statement, recently made, that the basin of Elk lake is larger than that drained by Nicollet's Infant river, is erroneous, as may be readily observed upon an inspection of the accompanying chart. If the area of the limited drainage basin surrounding Elk lake, was greater than that of

Nicollet valley, the outflow would be greater. It is admitted by all who have examined the two localities. that it is much less.

CHAMBERS' CREEK. ELK LAKE, LOOKING SOUTHWEST.

259

THE DENSE FOREST.

Immediately bordering the southern shore of Elk lake, the dense forest of pine, fir, cedar, tamarac, birch, ash and aspen is situated, intermingled with such mats of willow, windfalls, swamps and underbrush as to constitute an examination of it for topographic conditions, a difficult undertaking. For the purposes of an accurate survey, the section and quarter-section lines were opened by axemen, making a passage through and around the entire forest, and a detailed examination of it an accomplished fact. The miniature creeks formed there, are local in character, and limited in length and capacity, indicating no existence of any considerable and permanent surface drainage or artesian pressure.

THE DISTANCES.

From the centre of the channel at the outlet of Itasca lake, on the surface of the ice:

Thence to the mouth of Chambers creek is 16,727 feet.

Thence up the channel of Chambers creek to Elk lake 1,100 "

Total 17,827 "

At the time this measurement was made, in March, 1889, diligent search failed to reveal any surface inflow to Elk lake, through either of the small creek beds. Notwithstanding that fact Chambers creek discharged a slightly increased volume of water from Elk into Itasca lake, than was discharged the previous November, and that fact indicated the existence

of a body of water above and beyond Elk lake, as a reservoir supply, for no rainstorms occurred during the intervening time1 .

1 There is no doubt whatever but that Elk lake is supplied to some extent by waters from the Greater Ultimate Reservoir bowl by tortuous ways through the mediums which nature in her grandeur has provided.

Subsequently, in April 1889, an attempt to ascertain the true length of creeks south of Elk lake resulted as follows:

At Elk springs, a small brook 50 feet.

Gay-gwed-o say creek, toice blocks in swamp 275 "

Clarke creek, from Elk lake to Clarke pool 875 "

Siegfried creek to Hall lake 4,355 "

Elk creek was still blocked with ice, and the thawing snows disseminated its substance over the icy surface, while in the following August the bed of the creek was entirely dry.

CHAMBERS CREEK MEASURED AND CONSIDERED.

The measurements of water in Chambers creek, from time to time, and the character of the creek as gathered from the observations of others, who have visited the place upon different occasions, give very accurate and concise information as to its importance.

The facts are so cumulative and convincing that the greater part of it is given, in order that the true character of this creek may be thoroughly understood by those who desire information upon the question as to which is the main stream within the Itasca Basin—Chambers creek or Nicollet's Infant Mississippi.

The running water between Elk and Itasca lakes, through Chambers creek, must be considered as being extremely variable from apparent causes, wholly meteorological the maximum and minimum for 1889, being given as a basis for the consideration of its importance.

Maximum depth, April, 1889 8 inches.

Minimum depth, September, 1889 1 inch.

Maximum width, April, 1889 5 feet.

Minimum width, September, 1889 3 feet.

DRY CREEK BED. VIEW AT EAST SHORE OF LITTLE ELK LAKE, LOOKING EAST.

261

Velocity of current, per minute, April, 1889 60 feet.

Velocity of current, September, 1889 not perceptible, the outlet from Elk lake being closed up with rushes, flag and sediment, a dense growth extending far out into he lake1 .

1 See view at Elk lake from a photograph by Rhodes.

Chambers creek has been examined from time to time, as to flowage with the following results:

By the distinguished Nicollet in 1836, when it appears to have been a short, sluggish channel.

By Julius Chambers in 1872, when he had much difficulty in passing up the creek, to Elk lake, with his canoe.

By O. E. Garrison in 1880, when he failed in an attempt to pass down the creek in his canoe, on account of low water, and portaged across the brow of Morrison hill, carrying his canoe and provisions from Elk to Itasca lake.

By W. Glazier in 1881, when sometimes they “found it necessary to lift the canoes over logs and occasionally to remove diminutive sandbars from the bed of the stream with our paddles. As we neared the head of this primal section of the mighty river. we could readily touch both shores with our hands at the same time.” P. 70, “Down the Great River.”

By Peter Turnbull, 1883–4, when at one time he “walked up the bed of the creek without wetting the soles of his shoes.”

By Hopewell Clarke, in 1886, “when its depth varied from two to eight inches.”

By Prof. Kirk, in 1887, when his party with great difficulty ascended the stream, in their boat, and also upon measurement found Nicollet's Mississippi five or six times larger in volume of water.

262

By J. V. Brower, N. W. Rice and John Leyendecker, in 1888, when the brook midway between the two lakes was thirty (30) inches wide and one (1) inch deep.

By John Leyendecker in November and December, 1889, who reported that the stream was about dried up; and that, on the other hand, Lake Itasca was several inches higher than in the month of November, 1888, as ascertained by land-marks made at the water's edge at that time and which, in 1889, he found under the surface of the water.

By “The undersigned, who on the dates set opposite our names, visited the source of the Mississippi and on said dates the creek connecting Elk with Itasca lake was much smaller in volume of water, length, width, depth and current, than the principal stream known as ‘Nicollet's Infant Mississippi.

L. J. Curtis, principal, Park Rapids Schools, June, 1891.

W. E. Hopkins, paster Baptist Church, Park Rapids, June, 1891.

Robert Dunn, settler, near Itasca, 1890.

F. A. Vanderpool, att'y at law, Park Rapids, 1887–1890.

Anna C. Grant, teacher, " " June, 1891.

Carrie B.Jacobia, " " June, 1891.

Henry R. Cobb, P.M., Park Rapids, June and August, 1891.

T. S. Finney, settler, near Itasca, 1890.

Mrs. T. S. Finney, Park Rapids, 1891.”

By Rev. Stanley A. McKay, Owatonna, Minn., an eminent clergyman, who in the month of June, 1891, celebrated the ceremonies of baptism at Itasca lake, under date of September 14th, 1891, wrote:

“ Dear Sir : Since receiving your communication two weeks ago, I have seen the newspaper reports of the late Glazier expedition and have also received your excellent

NICOLLET'S INFANT MISSISSIPPI RIVER FLOWING INTO ITASCA LAKE. PHOTOGRAPHED BY RHODES, 1889. THIS IS A VIEW OF THE MOUTH OF THE LARGEST AND LONGEST STREAM FLOWING INTO ITASCA LAKE.

ITASCA LAKE. CHAMBERS' CREEK. CHAMBERS' CREEK FLOWING INTO ITASCA LAKE FROM ELK LAKE, PHOTOGRAPHED BY RHODES, 1889. THIS IS A VIEW OF, THE STREAM WHICH THE GLAZIER PARTY HAS ATTEMPTED TO DESIGNATE AS THE MISSISSIPPI.

263 Hydrographic chart of the Ultimate Sources of the Mississippi, for which accept my thanks. I am sure that the chart is lacking in nothing to enable any one to make an intelligent study of the question who had not visited the lake, while for one who has, it is simply complete.

Granting that the question of the source of the river is between the two streams, the inlet from Elk lake and the stream entering from the west of this inlet, and it is my opinion that but one answer can be given, and that in favor of the stream you have called the 'Infant Mississippi.' Mr. Hopkins and I visited both streams and did not hesitate as between them to consider the latter stream the larger and in every way more entitled, so far as we could discover, to the distinction you have given it. While we did not ascend this stream very far, I met there, at Itasca, a Mr. Hayes, a surveyor connected with a Northern Pacific R. R. land party, who had only a day or two previous in his business been to the trouble of visiting the head of the stream and had traveled over the entire tract between Hernando de Soto lake and the Nicollet lakes. He is a very intelligent man and does not hesitate, after his personal inspection, to pronounce in favor of the 'Infant.' That this will be the ultimate verdict as between these two streams I entertain no doubt whatever.

"There is one question, however, that I have not seen brought forward in this discussion at all. It may have little bearing, but I should be glad to have it cleared up for my personal satisfaction. It *seemed* to me beyond question that the volume of water flowing out of Itasca at the outlet was far greater than the combined volume of all the four inlets, viz: the East arm inlet, the Elk lake inlet, the Infant 264 Mississippi inlet and the inlet marked Boutwell creek. If actual measurement should prove this to be true, and it seems to me to be probable, thus making the greater volume of the outlet to come from springs in the lake, would not that leave Itasca as yet the real source of the Mississippi? Has this 'volume' measurement ever been made, or even calculated? Have you any information that will settle this question? If it should prove that the inlet volume came anywhere near equaling the outlet volume then I should unreservedly express the opinion that the 'Infant

Mississippi' is the stream, the head of which must be called the ultimate source of the Great River.

Very truly yours, STANLEY A. McKAY."

By William McMullen, in 1890, who witnessed copious rainfall sufficient to reverse the current of Chambers' creek.

By the Glazier party of 1891, who reported on the 3rd day of September that the Nicollet stream "carries about twice the volume of water which leaves the Glazier (Elk) lake1 ."

1 See Minneapolis *Tribune*, September 3rd, 1891.

By Mr. A. T. Warner and companions, in 1891, who report in favor of the Nicollet lakes.

Subsequent examinations in 1891, found Chambers creek, practically unchanged, in its physical features.

It is believed that by this extended description, every important feature of Chambers creek may be made known. That its short and limited channel should not be designated as the principal stream above Itasca lake, is a conclusion, 265 warranted by every hydrographic and topographic fact existing there. Copious and continued rainfall in 1892 has swollen all the streams at Itasca lake to an overflowage, filled all the dry luke beds and re-supplied all lakes which have been reduced by drouth.1

1 This fact was ascertained in the months of May and June, during two separate visits to Itasca lake.

EXPLORATION OF BOUTWELL CREEK.

From the west shore of Itasca lake there is a gradual rise in the elevation of the surface, for two or more miles until the summit of the *Hauteur de Terre* is reached, which divides

the waters tributary to Hudson's Bay and the Gulf of Mexico. The elevation of this summit above the surface of Itasca lake averages about two hundred feet, broken and hilly, irregular in formation, and is covered with a dense growth of timber, principally pine of different varieties. At the top of this summit, there are ponds, small lakes and catch basins supplied entirely by precipitation. From this source, come the waters of Boutwell creek, which has its rise on the eastern slope, and in an easterly and northeasterly general course, finds its way to the western shore of Itasca lake, increasing its volume from numerous small tributaries coming in from either side.

This creek was thoroughly examined and the general impression that it takes its rise from the Crescent springs, proved to be erroneous, though waters of those springs find an outlet to a considerable extent, into and through its channel.

April 15th, 1889, its width, depth and flowage were ascertained:

266

Width, near Itasca lake 13 feet.

Depth, at above date 13 inches.

Rapidity of current 60 feet per minute.

Subsequently, in April 1889, an attempt to ascertain the true length of creeks south of Elk lake resulted as follows:

From outlet of Itasca lake to mouth of Boutwell creek 13,627 feet.

Length of Boutwell creek 8,700 "

Total 22,327 feet.

The locality drained by Boutwell creek is rough and broken, and in some eases is difficult to penetrate because of the fir, tamarac and cedar forests. The creek is rapid and deep in its meanderings from the summit of the hills, its channel often under the surface of a thatched covering, making its course difficult to trace in many places. Its source is a series of springs near the center of a marsh surrounded by hills.

THE CRESCENT SPRINGS.

Half-way up the valley drained by Boutwell creek is a peculiar natural formation, originating from underground currents, supplied by the waters at the summit of the hills to the westward. These currents have forced up sand, sediment and earthy substances, forming a hill about forty feet above the bed of Boutwell creek. The summit of this hill is crescent shaped, and from its numerous artesian fountains at the top of the hill, flow very small streamlets which soon disappear. Its waters find their way south as well as north and contribute to the supply of creeks in Nicollet's valley as well as to Boutwell creek. The time occupied by the water pressure, artesian in character, in the formation of this hill, has, no doubt, been many centuries.

267

Boutwell creek and the Crescent springs are distinctively important factors in the supply of water to Itasca lake.

The Crescent springs are a natural curiosity, worthy of an inspection by the adventuresome pedestrian.

OTHER CREEKS.

From a limited tamarac swamp extending from the west shore of Itasca lake to the northward, immediately opposite Schoolcraft island, a small creek comes in. This creek is

of no special importance, is small and limited in length and drains the swamp from which it issues.

Floating Bog creek is of the same general character, and likewise Sha-wun-uk-u-mig creek. The creeks north of Schoolcraft island partake more of the character of a boggy drain, from the adjacent marsh. The small creeks south of Ozawindib point and north of Garrison point discharge their waters into small and limited swamps and disappear among the bogs near the shores of Itasca lake.

The springs which are occasionally found around the shores of Itasca lake, are limited in number, and only a very small quantity of water is discharged into the lake by them. One appears under the surface of the water west of Turnbull point, and another west of the mouth of Mary creek. The two mentioned are the largest noticed upon an entire circuit of the shore line, and consequently it cannot be said that Itasca lake “springs forth” from or rises up out of the earth. The large and important springs are above and beyond.

268

NICOLLET'S INFANT MISSISSIPPI RIVER.

For the purpose of making a careful and detailed survey of the principal stream at Itasca lake, the camp of the expedition was removed from Patterson's cabin, at the outlet, to the Nicollet springs, five miles to the southward. At the extreme limit of Itasca lake, where the stream becomes a part of the lake, it is forty feet in width and two feet in depth; narrowing as you ascend the stream, it was found to be three feet in depth, twenty feet in width. with a brisk current, a short distance from the lake. The character of the locality is a deep valley, somewhat swampy along the stream, with prominent hills on either side, heavily timbered with the native pine. These hills also appear in detached groups in the tamarac and fir thickets, sometimes a hundred feet in height, and the pine a hundred feet higher than the hills beneath their stately and spreading branches, making the locality easy of access and not difficult to closely examine. Passing up the stream, the explorer is

impressed with its importance, as compared with all the other streams found there, by its sharply defined banks, its winding, meandering channel, deeply cut down into the stratum to a sandy, gravelly bed, with every appearance and characteristic of the Mississippi below Itasca lake. It has sandbars, sharp angles in its channel, deep and shallowing currents. and all the more striking features of a larger river. Large trees found near its banks incline toward the stream; a variety of fish, large and small, were found in its waters; the mink, otter and muskrat abounded, and wild ducks of many northern varieties were from time to time noticed in its waters. Trees have been felled in several places across its 269

VIEW OF THE COMMISSIONER'S CAMP AT NICOLLET'S SPRINGS. FROM A PHOTOGRAPH BY RHODES. LOOKING NORTH.

270 banks to permit of passage on foot. Upon the removal of these trees, canoes might be propelled nearly two miles up this principal channel from Itasca lake.

These are a portion of the characteristics of the stream, indicating its permanency and importance, and, what is true of no other stream within the basin, it has three affluent branches, flowing in from the heights of land, which augment its importance and permanency above any other stream found there. These are Demaray creek, Howard creek and Spring Ridge creek, each sustained by numerous springs, sharply indicating artesian pressure from the lakes higher up the flank of the Itasca moraine. A detached upper fork of the river, flows into Nicollet's upper lake, reappearing at the unique Nicollet springs, under a narrow, natural bridge, a singular formation of the earth's surface.

The lines of measurement were extended throughout the entire locality, thereby securing the distances, lengths and elevations; lakes were sounded for their depth, the streams were measured for width, depth and flowage, and the topography was carefully taken, even to the extent, when found necessary, of opening passages through the thickets around Nicollet valley, which practically occupies a depression extending from Itasca to the most elevated lakes above. A line penetrating the wilderness from Morrison hill, directly to the north shore of Hernando de Sore lake, discovered the existence and

continuance of a spur of the *Hauteur de Terre* , sharply separating the waters of Nicollet valley from those of Elk lake. It was also discovered that, from the Mississippi springs to Itasca lake numerous places exist where the waters bubble up and ooze out from the base of the hills, forming small streamlets flowing inward to the lowest depression

VIEW AT MORRISON HILL, LOOKING EAST. FROM A PHOTOGRAPHED BY RHODES.

271 occupied by the main stream, and thus, while the first flowage of water, down the incline, from the north end of Whipple lake, is but a foot in width and scarcely'more in depth, the stream reappearing from place to place, as noted on the chart, gradually increases in width, depth, flowage, rapidity of current and importance, as the waters accumulate, from place to place, until finally when Itasca lake is reached. this veritable and interesting “Infant River,” has completely ushered its waters into a growing importance, not to be again lessened to its entry into the sea.

The lines of measurement extended to every locality, gave the following results:

From the centre of the channel at the outlet of Itasca lake to the mouth of Nicollet's

Infant Mississippi 17.926 feet.

Thence up the channel to mouth of Demaray creek 3,797 "

Thence to Nicollet's lower lake 2, 760 "

Thence to Blicollet's middle lake 1,956 "

Thence to Nicollet springs 690 "

Thence to Nicollet's upper lake 315 "

Thence to centre of Mississippi springs 5.265 "

Thence to north end of Whipple lake 1.320 "

Thence to inner flank of the *Hauteur de Terre* at south shore of Hernando de Soto lake 12,060 "

Total, to extreme limit of Mississippi basin 46.089 "

Following the main channel up through the trough of the depression, from which it takes its rise, the party reached the highest and farthest waters from the Gulf of Mexico, nearly nine miles above and beyond the channel of the Mississippi at the north end of Irasea lake.

272

VIEW SHOWING THE MISSISSIPPI RIVER FLOWING OUT FROM NICOLLET'S MIDDLE LAKE. FROM A PHOTOGRAPH BY RHODES, LOOKING EAST.

273

BRANCH STREAMS.

During the progress of this measurement, numerous branch screams, springs and lakes were noted, several of which have not previously been laid down upon the charts, among which are Demaray creek. Spring Ridge and its peculiarities, and several lakes.

The length of Demaray creek is 5.950 feet.

The length of Howard creek is 3.739 "

The length of Spring Ridge creek is 900 "

Demaray creek. which takes its rise near Hayes lake, has several little branches coming in from numerous springs along its course, one of which heads near the Crescent springs, by which it is supplied; Howard creek forms a surface drainage, for a sharply defined ravine, drawing its supply from numerous springs, and Spring Ridge creek is but a small

brook, the waters of which flow directly out of the earth, from the summit of a long Spring ridge, the upheaval of a series of springs, extending along the ridge. Nicollet's lower lake is small and unimportant, while his middle lake is a permanent and beautiful sheet of water, twenty-five feet in depth, oblong in form, pointed at its north extremity, and is sustained by the constant flow of numerous springs, some of which were noted in little pits at the bottom of the lake, near the shore, and the stream, discovered by Nicollet, comes into it at its southern extremity from the Nicollet springs, undoubtedly the place where Nicollet, in 1836, noted the waters “oozing from the bases of the hills.” At the top of the hilt there situated, is the small body of water, with a brisk and rapidly flowing inlet, and no visible outlet, which -18 274 has been hesitatingly selected as Nicollet's upper lake, for there is much doubt if he ever saw the place.

Continuing up through the trough of the basin, the Mississippi springs, Floating Moss lake, Garrison's Beaver dam and Whipple lake, are noted as the most striking hydrographic characteristics of the locality, below which the springs and swamps occur and above which no springs and no swamps are found, and this fact was noted in all its peculiarities. Thence is reached The Triplets, Morrison, Mikenna, The Picard, Hernando de Soto and other lakes at the summit of the hills, with constantly receding waters, fluctuating until re-supplied and again to recede, while the lakes, from Whipple lake, down the depression of the incline, similar to Itasca lake, never recede, but, on the contrary, sometimes rise in their surface elevations, without the intervention of storms.

ELEVATIONS.

Subsequently, in April 1889, an attempt to ascertain the true length of creeks south of Elk lake resulted as follows:

At surface of water of Elevation above Itasca lake.

Nicollet's Lower lake 3 feet.

Nicollet's Middle lake 4 "

Nicollet's springs 19 "

Nicollet's Upper lake 39 "

Mississippi springs 78 "

Floating Moss lake 91 "

Whipple lake 94 "

The North Triplet (at low water) 98 "

Morrison, Hernando de Soto, Mikenna, Little Elk, and other lakes (at low water) 101 "

PROFILE OF ELEVATIONS ABOVE THE SEA LEVEL FROM ITASCA LAKE TO HERNANDO DE SOTO LAKE. REDUCED FROM AN ACTUAL LINE OF LEVELS IN THE FIELD, BY J. V. BROWER, COMMISSIONER, 1889.

275

It has recently been discovered that The lake marked on the chart of 1891 as “Allen lake” was formerly a part of Hernando de Soto lake, and the name was improperly applied.

NOTABLE SPRINGS.

The largest and most important springs of the Itasca Basin, are situated along its principal stream, and for convenient purposes of identification have been designated as follows:

Mississippi springs Below Floating Moss lake.

Nicollet springs Below Nicollet's Upper lake.

Spring Ridge springs Above Nicollet's Lower lake.

Crescent springs North of Demaray creek.

SOUNDINGS.

Soundings for depths of several lakes were taken with the following results:

Nicollet's Middle lake 25 feet.

Whipple lake 21 "

Morrison lake 40 "

Hernando de Soto lake 20 "

The lowest depression at Morrison lake placed the bottom of the lake sixty-one feet *higher* than the surface of Itasca lake,and this ascertained fact constituted a simple explanation of nature's hydrographic cause and effect, as demonstrated by the existence, immediately to the northward and lower down, of numerous springs and streams springing forth from the bases of the hills.

The average width of Nicollet's Infant Mississippi from Itasca lake to Nicollet's Lower lake, is nine feet, and the current of this stream, in its mean average, carries more than double the amount of water, found flowing there in any 276 other stream. In 1888, it carried more water than all the other streams combined.

Since it was ascertained beyond any reasonable doubt, that Nicollet discovered and laid down upon his chart, the largest and longest stream of the locality, an interesting and pains taking examination was had, to learn whence this stream is sustained, in its

perennial existence, resulting in the discovery of a head water system not heretofore known to exist as such.

THE GREATER ULTIMATE RESERVOIR.

The abundance of the water supply at and below Whipple lake, the numerous springs and the ultimate gathering of the water into a principal stream bed, the gradation of elevations above the sea level in a conspicuous and immediate rotation, up the inner flanks of the *Hauteurs des Terres* , from the Nicollet lakes to the summit above, the old creek beds at the Triplet lakes, one leading from Little Elk lake, and another between Floating Moss lake and the Mississippi springs, the character of the sandy, gravelly stratum, the enormous pressure from a large elevated body of water,seeking its level, and a careful examination of all topographic and hydrographic features, finally made the conclusion an easy task in the presence of an unalterable conviction that all of the several bodies of water from Hernando de Soto and Morrison lakes, through the Triplets, Whipple, Floating Moss and Nicollet's Upper and Middle lakes, constituted a Greater Ultimate Reservoir, the natural cisterns, by which and through which, the precipitated waters infiltrate and percolate, through conduits of nature, gathering, by a natural process, as perfect as any mechanical contrivance 277 would make possible, into the utmost limit of the remotest headwater branches of the Mississippi river at the ultimate source. This Ultimate Reservoir is situated within an Ultimate Bowl, as distinct as is the Reservoir itself, and, in all its physical features, it brings to light the hidden secrets of the true source.

MISCELLANEOUS CONSIDERATIONS.

The area covered by the lakes of the Greater Ultimate Reservoir, computed by official surveys and estimates, is as follows:

Hernando de Soto lake 220 acres.

Morrison lake 125 "

Whipple, Floating Moss and other lakes 155 "

Total 500 "

The elevations above the sea level at the Greater Ultimate Reservoir:

Hernando de Soto lake 1,558 feet.

Morrison lake 1,558 "

Whipple lake 1,551 "

Floating Moss lake 1,548 "

The Mississippi springs 1,535 "

Nicollet's upper lake 1,496 "

Nicollet's springs 1,476 "

Nicollet's middle lake 1,461 "

TRUE LENGTH OF MISSISSIPPI RIVER.

Gulf of Mexico to Itasca lake 2,546.52 miles.

Thence to Greater Ultimate Reservoir 6.48 "

Total 2,553.00 "

The mean average descent of the water from Whipple lake to the Gulf of Mexico, is a trifle more than 7¼ inches per mile.

Other distances are as follows:

Gulf of Mexico to Elk lake 2,549.90 miles

Gulf of Mexico to head of Boutwell creek 2,550.74 '

Gulf of Mexico to Mary lake 2,551.50 '

Gulf of Mexico to head of Howard creek 2,552.02 "

THE POSITION OF THE ITASCA BASIN.

From time to time, by Lieut. Allen, J. N. Nicollet and Julius Chambers, the latitude and the longitude of the Basin have been obtained, with somewhat different results, caused, no doubt, by long and rough journeys necessary to reach the place, occasioning injury and displacement to the delicate instruments necessary for correct astronomical observations. Twenty-five observations were noted at Schoolcraft island and Park's cabin by this expedition, with results slightly different from those mentioned.The results of the twenty-five observations are not strictly reliable and accurate, and for that reason are not now included in this reports, reference being had for the standard parallels correction, township and sectional surveys of the United States government, official and permanent in their character. which were adopted as a base of operations,a with results eminently satisfactory and reliably correct.

By dead reckoning, Mr. Alfred J. Hill computes the true position of Schoolcraft island at latitude 47° 13# 10#;long. 95° 12#.

The position of Brower island, at Hernando de Soto lake, is: North latitude 47° 8# 50#. Longitude west from Greenwich. 95° 12# 48#, as computed by dead reckoning from distances ascertained south and west from Schoolcraft island. The two islands mentioned

are the most prominently situated, 279 of any found there, each of which are surrounded by the main body of the lakes in which they are situated.

METEOROLOGICAL CONDITIONS.

The results of observations for meteorological facts in Northern Minnesota are so permanently established and well known, that no attempt has been made or believed to be necessary, to add information, or the results of further observation, upon questions of atmospheric phenomena. The district of country reaching from Lake Superior to the Red river of the north, in the midst of which is located the Itasca Basin, is susceptible to various meteorologic changes, a tropical sun of 100° above. and an arctic frost at 40° below zero, constituting the two extremes, and these extremes of August and February are closely reached each calendar year, for brief periods only, the mean average ranging slightly above 40°. Fahrenheit. These conditions permit the existence of a verdure of surpassing beauty, during the summer months, and a sheet of ice and snow from December until March. The ice and snow at Itasca have a perceptible effect upon the waters seeking an outlet from the heights of land to the lowest depression of the basin below in that they cause the formation of numerous ice blocks by congealed over flowage, thus closing for the frozen season several of the smaller creeks, occasionally causing new channels,or a modification of old ones. The principal affluent is never closed by frost. As to precipitation, seasons vary, and no opportunity was afforded for accurate observation, for the correct results of a year, for the reason that at no time did the sojourn at Itasca exceed sixty continuous days. Storms frequently prevail,deep snows in 280 winter and heavy rainfall in summer, each occurring periodically.During the month of August, 1889, a tremendous electric storm occurred, of sufficient power to twist asunder the tops of tree sand uproot numerous exposed growths. The camp of the party was seriously threatened, but fortunately escaped material injury. A wind storm occurred in April, 1889, when to traverse the lines of survey, was dangerous because of falling timber.

As to evaporation, what is true of the entire northwest, is also true of the Itasca lake region, and the same causes. and effects following therefrom, are, comparatively speaking, the same throughout the northern part of the State of Minnesota, and the question has been so sufficiently examined, that no attempt has been made to add to the information already extant. It seems needless to add that evaporation, and also precipitation, differ somewhat from year to year, in accordance with meteorologic conditions prevailing at the time.

The four principal seasons of the year, applicable to a temperate zone, occur with distinct regularity, the Indian summer of September and October, often continuing into the month of November, constituting the most desirable season to visit the headwaters of the river.

INFLOW AND OUTFLOW AT ITASCA LAKE.

The Rev. Stanley A. McKay has suggested a test of the measurement and computation of the water flowing out from Itasca lake, as compared with the amount of the inflow.

Particular attention was directed to this subject, in 1889, and at that time, the inflow appeared to be fully equal to the

VIEW AT MORRISON LAKE, FROM A PHOTOGRAPH BY RHODES.

281 outflow, the Mississippi river at the time being very low on account of a protracted drought then prevailing. During the heavy rain storms of recent occurrence there, the inflow did not equal the outflow. Computed from a basis, covering a protracted period of time, there is no doubt but that the supply of water flowing into Itasca, naturally maintains an equal flowage therefrom, but no greater. However, it might be well to remember that the process of evaporation, at Itasca lake, has some effect upon the displacement of water, and it would require tests and computations hardly obtainable at this time for an exact determination of the question.

Itasca lake is similar to other lakes, through which the river passes, the outflow, as a general rule, being controlled by the inflow, during seasons equalling the mean average of meteorological disturbances and influences.

The several springs which appear at and about Itasca lake are small and of but little importance and it cannot be said of the lake that it “springs forth” from the earth, because it depends largely upon surface drainage in its supply to the outflowing river.

SURFACE FLOWAGE.

During the continuance of the measurement of streams, creeks and brooks, and an examination of their character and permanency, at Itasca lake, thirty-nine running streams and brooks were found, principally branches and feeders to the main streams, within the basin. The old dry creek beds of past decades are too numerous to describe, as they are of no importance, except in case of flood, which would hardly be a proper criterion upon which to base a conclusion as to 282 the permanent origin of water supply, sufficient to constitute the source of a river. It is a striking feature of the Itasca Basin that each and every stream, creek and brook there situated, descending from the heights of land, flow into Itasca lake, coming from every point of the compass. Thus combined they constitute and form the largest lake of the locality, having the lowest surface elevation.

TRADITIONARY AND GEOGRAPHIC NOMENCLATURE.

The Mississippi river has been known by numerous designations. Prior to Soto's expedition, the savage tribes applied names to their respective possessions along its banks. From the Cortes map we have Espiritu Sancto—a name now found to be not applicable to the Mississippi, for Cortes never saw or named the river, and in nomenclatural construction, this name is, improperly applied to the Mississippi.

Of the numerous names of record, which have been applied to the river, the following are noted. The list, however, is by no means exhaustive.

Meche Sebe—The original Algonquin designation.

Chucagua—An Indian name, noted by Soto's expedition.

Tamaliseu—An Indian name, noted by Soto's expedition.

Tapatu—An Indian name, noted by Soto's expedition.

Mico—An Indian name, noted by Soto's expedition.

Rio Grande—A Spanish designation, noted by Soto's expedition.

“The River”—A Spanish designation, noted by Soto's expedition.

Palisado—A Spanish designation, from floating trees seen near its mouth, giving the appearance of a palisade.

283

Escondido—A Spanish designation; hidden from sight by the innumerable passes, cut offs, bayous, etc., at and above its mouth, making it difficult to discover the main channel.

St. Louis—A French designation.

Conception—A French designation, by Marquette.

Buade—So called by Joliet after the family name of Gov. Frontenac.

Colbert—After Jean Baptiste Colbert, an eminent French statesman.

Mischipi—Nicolas Freytas' visit to the Quivira tribes, 1661.

Messipi—Father Allouez, in *Relation* of 1667.

Meschasipi—Hennepin map of 1697.

Michi Sepe—Labal's version.

Misisipi—Labatt's version.

Missisipi—Marquette's version.

Mississipi—A later French version.

Mississippi—American version of 19th century.1

1 Recently the following was published as a version, but the name of the author was omitted:

“From the mouth of the Ohio to the source, it was known to the Indians as Pehe-ton-at, which in the Algonquin tongue signified, abode or habitation of furies; several of the branches were designated by names which, in our language, would mean ‘little fury,’” ‘big fury,’ ‘old fury,’ etc., ‘the sippi,’ or ‘sepe,’ being afterwards added to Pe-he-ton-at, simply meaning river.

As to the real meaning of the word L. M. Gould says: ‘An analysis of the word Mississippi will show that it does not mean ‘Father of Waters’ at all, thus:

‘Mis-sisk—grass. Mis-sisk-ke-on—weeds. Mis-sisk-ke—medical herbs, and Mis-ku-tuk. The broad bottom lands of the river were called Mis-ku-tuk; the tribes along the river were called Mis-shu-tan, signifying ‘meadow people’; thus the literal meaning of the word is ‘the river of meadows of grass.’”

The list is by no means an exhaustive catalogue. There have been names applied to the river which will never be known.

Of the names at the headwaters, Capt. Carver placed White Bear lake, whatever lake that may mean, as the source; the traders in Morrison's time knew Elk lake (now Itasca) to be the source. Pike was deceived into believing 284 that Leech lake was the principal water, and it remained for Gen. Cass to learn of *La Biche* as the name, and first make its approximate location known to civilized humanity. Beltrami's Julia lake existed as the source, in one mind only, that of the author of the Countess' Letters, while Morrison in his letter refers to the river above Cass lake as “Travers river,” and above Bemejigemug as, “River *La Biche* .”

Schoolcraft and Boutwell in the manner heretofore mentioned coined the final name for Itasca. However, an interesting incident might well be related: The first words given by Mr. Boutwell, it will be remembered, were Verum (true), Caput (head), but substituted the stronger word, Veritas, (truth). Had the first suggestion been followed, that of Verum-caput —“Rumca” would to-day be the name, and the word “Itasca” unknown.

The names at the Itasca Basin after whom, and by whom suggested, are as follows:

Omoskos Sogiagon—The Ojibway name. By aboriginal tribes.

Lac La Biche—The French translation, by the French traders.

Elk Lake1

1 Continued as a designation in 1876, to a minor lake of the locality, by Sur. Gen'l. Baker, an official of the United States government.

—The English translation after Morrison's time.

Itasca lake—Schoolcraft and Boutwell, from *Veritas Caput*, in 1832.

The Infant Mississippi2

2 Also called by Mr. Nicollet. “The Cradled Hercules,”

—Named by J. N. Nicollet, in 1836.

Nicollet's lower lake,

Nicollet's middle lake,

Nicollet's upper lake,

The Commissioner's Report3

3 “The Commissioner's Report,” when used in all cases refers to the action taken, from time to time, during the present examination, by the Commissioner in charge.

, after J. N. Nicollet.

VIEW AT NICOLLET'S MIDDLE LAKE, LOOKING WEST. FROM A PHOTOGRAPH BY RHODES.

285

North. East and West arm of Itasca lake—The Commissioner's Report.

Bear point—Named by Peter Turnbull, first resident.

Turnbull point—The Commissioner's Report, after Peter Turnbull.

Floating Bog bay—J. V. Brower's party of 1888.

Ozawindib point—The Commissioner's Report. After Schoolcraft's guide.

Garrison point—The Commissioner's Report. After O. E. Garrison.

Rhodes hill—The Commissioner's Report. After Prof. Rhodes, photographer of the expedition.

Morrison hill—The Commissioner's Report. After Wm. Morrison.

Island creek—The Commissioner's Report. Opposite Schoolcraft island.

Mary creek—Named by Peter Turnbull. After Mrs. Mary Turnbull.

Chambers creek—The Commissioner's Report. After Julius Chambers.

Boutwell creek—The Commissioner's Report. After Rev. W. T. Boutwell.

Mary valley—The Commissioner's Report. After Mrs. Mary Turnbull.

Nicollet valley—The Commissioner's Report. After J. N. Nicollet.

The Greater Ultimate Reservoir Bowl—The Commissioner's Report. The most remote and elevated water-shed in the Mississippi river basin, where the river takes its rise, at the Greater Ultimate Reservoir.

The Lesser Ultimate Reservoir Bowl—The Commissioner's Report. At Mary Valley, where exists the Lesser Ultimate Reservoir of the Mississippi river basin.

The Midway reservoir—The Commissioner's Report. At Clarke lake and its neighboring waters.

Crescent springs—The Commissioner's Report. Crescent 286 shaped at the summit of a hill, gradually formed by artesian pressure.

Elk springs—The Commissioner's Report. At the east shore of Elk lake.

Elk creek—The Commissioner's Report. At S. W. angle of Elk lake.

Elk pool—The Commissioner's Report. In the dense forest.

Elk lake1

1 Also called by Julius Chambers “Dolly Varden” lake.

—Named by Gen'l. James H. Baker, in 1876.

Clarke creek—The Commissioner's Report. After Hopewell Clarke.

Clarke pool—At Clarke creek.

Chambers bay—Commissioner's Report. After Julius Chambers.

Siegfried creek—The Commissioner's Report. After A. H. Siegfried.

Demaray creek—The Commissioner's Report. After Mrs. Georgiana Demaray, surviving daughter of William Morrison.

Howard creek—The Commissioner's Report. After Mrs. Jane S. Howard, surviving daughter of H. R. Schoolcraft.

The Mississippi springs—The Commissioner's Report. At the geographical center of the Greater Ultimate Reservoir.

Mary lake—Named by Peter Turnbull. After Mrs. Mary Turnbull.

The Twin lakes—The Commissioner's Report Suggested by the appearance of united waters.

Danger lake—Named by Peter Turnbull, from infiltration and percolation of waters from above, flooding the ice surface in winter at its south shore.

Ako lake—Named by Hon. I. V. D. Heard. After Hennepin's Companion Accault.

Josephine lake—J, V. Brower's 1888 Examination.

287

Sibilant lake—The Commissioner's Report. The lake is the form of the letter S.

Clarke lake—Named by Mr. A. J. Hill. After Hopewell Clarke.

Little Elk lake—The Commissioner's Report.

Hall lake—The Commissioner's Report. After Edwin S. Hall.

Groseilliers lake,

Radisson Lake,

The Commissioner's Report. After Des Groseilliers lake, Groseillier and after Pierre E de Radisson lake, Radisson, discoverers of the Upper Mississippi river,—1665.

Floating Moss lake—The Commissioner's Report. From its floating moss bed on the surface of the water.

Whipple lake—Named by Rev. J. A. Gilfillan. After Bishop H. B. Whipple, of the Episcopal Diocese of Minnesota.

The Triplet lakes—The Commissioner's Report. Three small lakelets closely identified with Morrison and Whipple lakes.

Morrison lake—The Commissioner's Report. After William Morrison.

Morrison hill—The Commissioner's Report. After William Morrison.

Lake Hernando de Soto1

1 The easier and more fluent designation is “Soto,” in lieu of “De Soto,” unless given in full, “Hernando de Soto.” Anglicized, the name is “Hernand of the Grove,” meaning Hernand of the thicket or forest. The forests along the shores of Hernando de Soto lake, south and west of Brewer island, and on the island itself, are surpassingly beautiful, as viewed from the north shore.

—The Commissioner's Report. In honor of the discoverer of the Mississippi river, 1541.

Brower island2

2 This committee, appointed by the Historical society, to confer with the commissioner, as to geographical names at the Itasca Basin, reported the several names selected, which report was adopted by the society. In this report, it is stated that “the committee, of their own motion, recommend that, the island in Hernando de Soto lake be named ‘Brower island,’ after J. V. Brower.”

—Named by Capt. R. Blakely, Mr. Charles D. Elfelt and Hon. I. V. D. Heard, acting as a committee.

288

Lyendecker lake—The Commissioner's Report. After John Lyendecker.

Mikenna lake—Named by Mr. A. J. Hill.

Allen lake—The Commissioner's Report. After Lieut. James Allen.

The Pickard du Gay lakes—Named by Hon. I. V. D. Heard. After one of Hennepin's companions.

The Itasca Basin,

So called by common acceptation, as applied to the territory constituting the utmost limit of the main basin.

Gay-gwed-o say creek The Commissioner's Report. After Nicollet's Ojibway guide. “Trying-to-walk.”

Andrus creek—Commissioner's Report After the treasurer of the Minnesota Game and Fish Commission.

Ocano springs—The Commissioner's Report. The head springs of Andrus creek. The word is found in Schoolcraft's Narrative.

Spring Ridge—The Commissioner's Report. A ridge thrown up by water pressure, with numerous springs at the summit.

Spring Ridge creek The Commissioner's Report. A small creek flowing into Nicollet's Lower lake from Spring Ridge.

Gilfillan lake—The Commissioner's Report. After Rev. J. A. Gilfillan, who celebrated the first known religious service at Itasca in 1881, from “Then had thy peace been as a river.”

McKay lake—The Commissioner's Report. After Rev. Stanley A. McKay, who celebrated the first known baptismal rites in the waters at the north end of Itasca lake, 1891.

Division creek—The Creek coming into the Mississippi, north of Itasca lake, from the heights, which divide the waters flowing to Hudson's Bay and the Gulf of Mexico.

Frazier lake—At Frazier's cabin. The waters of this lake flow to The Little Mantrap lake.

MR. ALFRED J. HILL.

289

Niemada lake Formerly a northern limit of The Little Mantrap lake.

The Hall road—First opened for the Government survey, by Edwin S. Hall, 1875.

The Turnbull road—Opened by the first resident, 1882.

The Itasca State park Name established by law.

Several other names will appear upon the final chart.

RELATION OF ALFRED J. HIll AND OF JOHN LYENDECKER.

Soon after Minnesota became a state of the Union, Mr. Alfred J. Hill commenced a study of geographic relations in the Northwest, which he has continued, uninterruptedly, until his information has reached the uttermost parts of the earth's surface, and he is, and should be accredited as, one of the best geographic authorities resident in the State he has adopted as his home. At the time of the discoveries of Schoolcraft and Nicollet at the source of the Mississippi were questioned, Mr. Hill took a philosophic and unprejudiced view of the matter, and refusing to accept a change of well established geographic facts, as given in 1832–36 by the explorers named, he commenced an investigation into the details concerning discoveries at Itasca lake, and the results of his study of the question were consolidated and published in 1886, under the title of “Captain Glazier's Claim to the Discovery of the Source of the Mississippi River,” which he illustrated with several maps. In Mr. Hill's showing of facts, he presented items of information, consolidated and condensed, succinctly stated, showing the published cartographical authorities relating to the source of the Mississippi to the date of his study of the question. His object at -19 290 the time seems to have been a desire to state the question of discovery exactly as it occurred, and in doing so, his subject was considered solely upon the question of geographic facts.

This action disclosed the true light in which should be viewed discoveries at the Itasca Basin, and did not and could not do otherwise than command respect and consideration, even of those who were neither students of history, nor versed in the rules of geographic

discovery, sufficiently to enable them to state a geographic fact without purloining from the records of predecessors.

At the time the present inquiry was well under way and a determination was arrived at to exhaustively consider the question of discovery, Mr. Hill personally tendered his services to the Commissioner. While at the headwaters, an invitation was extended to him to visit the camp of the Commissioner at Nicollet's lakes, with a view of securing his cooperation and assistance in the field, but the invitation never reached him.

A scholar of English birth and a student of the languages, his offer to assist in the formulation of a report was cheerfully accepted, and on the 1st and 9th of November, 1889, communications were addressed to him propounding questions relating to historical facts connected with the early discoveries of the river. His research into the Spanish and French occupancy of the Mississippi River basin for and on behalf of the Commissioner, brought to light in a consolidated form, findings of fact from the lines of historical and cartographical information, so accurate and valuable, that they have been incorporated and adopted as a part of this report, and to him full credit is due and awarded for that portion of the work placed in his hands.

291

When the committee of the society appointed to properly designate and name localities at the source, proceeded to perform the duty imposed by its appointment, Mr. Hill's services were called for, and in several instances his ideas and suggestions were not only interesting and valuable, but were adopted, always with credit, that a just and generous co-operation, prompted solely by a love of fairness and for facts, shall not remain unremembered by those who may secure profitable information from the results of researches made without the hope or expectation of reward. It has been stated that “every man is a valuable member of society who, by his observations, researches and experiences, procures knowledge for men”—an apt illustration which finds a well deserved application in a consideration of Mr. Hill's work.1

1 The following memorandum indicates the sincerity of purpose with which his labors were accomplished:

“Mr. Brewer requested me to collect together in a memoir, for the use of his report on the Source of the Mississippi, the most significant facts to be found in accessible Spanish and French writings, concerning the discovery of this river. There seemed to be no treatise or article on the subject as a whole, written from exclusively geographical point of view. The task of collation and selection has proved to be a greater one than was anticipated, and although all maps and books procurable at St. Paul and bearing on the subject have been consulted, the paper long as it is, is by no means exhaustive. Possibly it contains errors of various kinds, but they can scarcely be avoided when the work of a year has to be crowded into five months.”

Over two years have elapsed'since Mr. Hill wrote these lines, during which time he has made further historical researches, enabling him to thoroughly revise his work, materially adding to the value of this work, more especially on the Spanish discoveries.

From the very commencement of government surveys in Minnesota, up to the present time, he has drawn correct and complete geometrical abstracts for his personal use and study, and his dead reckoning, for the latitude and longitude of Schoolcraft island, corrected apparent errors in the observations taken from time to time in that distant interior, no two of which are found to agree.

292

The writer of this report is gratified to know that his survey of, and findings concerning the source of the Mississippi, meet the approbation of Alfred J. Hill.

It is intended to make suitable acknowledgements for assistance extended in the present examination and with that end in view it is thought not out of place to award to another, than Mr. Hill, the consideration due painstaking aid, before the close of this report.

Mr. John Lyendecker, whose energetic taste for inaccessible regions, made it convenient for him to penetrate to the inner wilds of the Adirondacks, followed a natural inclination by becoming a visitor at the source of the Mississippi, by protracted sojourns at Itasca and the morainic belt south and east of it. He rendered unselfish and valuable assistance in 1888, in a casual examination of the whole Basin. In 1889, Mr. Lyendecker entered upon another prolonged visit at Itasca, with his camp on the north arm, remaining from the month of October until about the first of January, 1890. He was requested to note particularly the appearance of the waters at the source as compared with the examination in 1888 and to report for this examination any and all changes or other items of interest at his convenience. His well known reliability and candor make the receipt of his report of special interest, confirmatory of the condition of the waters at Itasca as compared with the four seasons immediately preceding the month of December, 1889.

In Mr. Lyendecker's report, dated December 15th, 1889, at Itasca lake, it is stated that the creek recently designated as Chambers creek, by the Historical society, “is very low, about one inch deep and narrow, half way between the two lakes. I easily stepped across it. In the largest stream

BROWER ISLAND. VIEW AT HERNANDO DE SOTO LAKE, LOOKING SOUTH. FROM A PHOTOGRAPH BY RHODES.

293 entering Itasca lake a half a mile to the westward, the water is fully as abundant as at the date of our visit there in October, 1888. There is no change, except the waters of Itasca lake are a little higher, and in Morrison lake, six feet below high water marks on the shores.” * * *

Perhaps to another, Mr. E. Hayes, should be awarded credit for topographical labor, in October and November, 1891.

In his report the topography at and about Hernando de Soto and Morrison lakes, appears, which places them in their correct position on the final chart. Mr. Hayes says: “I have

visited this region on two different occasions and have examined the water systems. At the most southerly point of the west arm of Itasca lake, is Nicollet's infant river, the most important stream, both in volume of water and in length." * * *

Mr. A. T. Warner and companions,1 also visitors at Nicollet's discoveries, in May, 1891, united in an interesting report, in which they say: "* * * One of our party went up the Nicollet outlet, some three hundred yards in a canoe, and found it the larger, and as it proceeds from a point south of Elk lake, and as we believe Elk lake was once a part of Lake Itasca, it is our opinion, that the Nicollet lakes are the true source of the Mississippi."

1 Messrs. R. P. Warner, D. J. Scheffer and W. B. Flandrau.

THE CONCLUSIONS OF THE COMMISSIONER.

As the results of an investigation and examination, covering the period from October, 1888, to October 1892, a portion of which has been availed of for the purpose of an incidental research into the question relating to the original 294 discovery of the Mississippi river and its source, deemed necessary in order to trace the lines of discovery, from date to date, from the mouth of the river to its utmost origin, preparatory to an intelligent consideration of the question of the ultimate source, there are ample reasons, as presented herein, which warrant the following conclusions, founded upon the facts as stated:

First: The Espiritu Sancto, as originally laid down upon the earliest Spanish maps, was not the Mississippi river.

Second: The Lower Mississippi river was undoubtedly discovered by Hernando de Soto in June, A. D., 1541.

Third: Groseilliers and Radisson in A. D., 1665, discovered the Upper Mississippi river.

Fourth: Wim. Morrison. in 1804, H. R. Schoolcraft, in 1832, and Jean N. Nicollet, in 1836, were the first of white men to discover the source of the Mississippi, in the order in which they are named; Mr. Morrison being the first to reach the Basin; Mr. Schooleraft, the first to explore Itasca lake, and to publish the results of his exploration with a chart: and Mr. Nicollet, the first to discover the principal affluent, although he did not know of the existence of the Greater Ultimate Reservoir, of which his middle lake constitutes a northern limit.

Fifth: The Itasca Basin is the most remote water-shed upon the main river, from its mouth at the Gulf of Mexico.

This Basin is compact, limited and permanent, within which Itasca lake forms the central reservoir at the lowest depression; Morrison, Hernando de Soto, The Triplets, Whipple, Floating Moss, the Nicollet and other neighboring lakes, the Greater Ultimate Reservoir; Josephine, Ako, Danger, The Twin and Mary lakes, the Lesser Ultimate 295 Reservoir, and Clarke lake and the lakes surrounding it, the Midway Reservoir; with smaller intermediate contributory reservoirs intervening and gathered at the sides; the whole being formed by twenty principal lakes of different areas, and about fifty lakes and pools of water of lesser importance, with one principal, three intermediate and thirty-five minor streams of running water, and several large and important springs.

Sixth : The principal, longest and largest stream within the basin, is that particular stream discovered by Jean N. Nicollet, August 29th, 1836, heretofore known as “Nicollet's Infant Mississippi River,” It draws its supply of water from the Greater Ultimate Reservoir. This supply is the immediate result of secular aerial precipitation, gathered into the lakes of the locality, forming the Greater Ultimate Reservoir, which extends from Hernando de Soto, Morrison, The Triplets, Whipple and Floating Moss lakes, the Mississippi, Nicollet and other flowing springs, to Nicollet's middle lake from which the main river proceeds thence to the Gulf in an unbroken channel.

This stream is therefore found to be the Mississippi river.

Seventh : Elk lake is not the source of the Mississippi river.

Eighth : Since minute deductions are propounded, the distances being short and the waters limited, it was thought proper to go beyond Itasca lake and learn of the actual source whence these historic waters originate; the result being an interesting discovery of remote reservoirs, heretofore unknown to exist, as such; from which a constant and never ending supply reaches Itasca lake, sustaining it in a perennial out-flow.

296

Ninth: Going beyond the explorations of Nicollet, described in his report, intended to illustrate a map of the hydrographical basin of the Upper Mississippi river, ordered printed by the separate Houses of the Congress of the United States, the true and actual source of the Mississippi river is The Greater Ultimate Reservoir, from which the principal portion of the waters of Itasca lake are drawn, through the channels particularly described, and which waters are thence discharged into the river below.

In the hope that the result of conscientious research, performed with unremitting labor and care, may prove instructive and beneficial, this report and the conclusions thereon, based upon the facts as they have been found to exist, and as the most complete hydrographic and topographic survey of the source, is respectfully submitted, duly acknowledging that these explorations come after the labors of the distinguished gentlemen, who preceded me in 1803, 1832, 1836 and 1886 at the Itasca Basin, claiming only such measure of credit as a more extended survey and discovery may entitle me to receive.

Respectfully submitted, J. V. Brower.

297

Memorandum : The true and actual source of the Mississippi, required to be found, as a result of the examination for that purpose, as particularly described and set forth in the preceding sub-divisions has been designated as a district, preferable to a specific, determinable and particular location upon the earth's surface in a naturally permanent lacustral formation, because a water-shed, with well defined inner flanks, containing a permanent reservoir of water causing the existence and perpetual continuance of the source of a river, is in fact, the most remote source, notwithstanding the possibility of artesian pressure, which *does not* exist at Herondo de Sure and Morrison lakes, as a supply to those lakes.

To proceed upon the basis that the source of a river is at the particular spot most remote from its mouth, where the water first commences its flowage upon the surface, in an unbroken channel to the sea, would force upon the student of geographical explorations, a narrow and limited rule, resulting in the discovery of an inferior point, dependent entirely upon subsidiary channels, yet ignoring the existence of the real source from which the water may be or is drawn.

If to follow the channel of the Mississippi from the Gulf of Mexico to the most remote point of surface flowage in any way connected therewith, *is necessary* , in order to discover the source, we must turn aside from the grand and extensive valley of the Mississippi, reaching from the northern limit of the United States to the Gulf, with all its topographic features and well defined peculiarities, and pass up the channel of the Missouri river to some point in the Rocky Mountains, to the exclusion of the Itasca Basin, for the reason that the source of the Missouri—water coming in at one side—is more remote from the mouth of the Mississippi than is the Greater Ultimate Reservoir, at the utmost northern limit of the Mississippi River basin.

However desirable it might he to reverse the order of the well established geography concerning the Mississippi and Missouri rivers, in order that the longest channel may be designated as the one principal stream—a necessity, if this limited rale must be followed

—it should be remembered and properly considered that, from the earliest times coming within human knowledge, pre-historic, aboriginal, Spanish, French, English and American, every recognition has pointed to the great valley and its river as the main water-shed, to the exclusion of the Missouri, and upon this rule of action, tribal possessions, international boundary lines, enactments by Congress, Articles of War and Treaties of Peace in Europe and America, reciprocal concessions, government appropriations and improvements, commercial traffic, state boundaries, educational teachings and the nomenclature of portions of the Federal Union, have adhered—all this and more—in consonance with the great topographic features of nature as they exist the whole length and breadth of the Mississippi River basin, with the Missouri as as a confluent river coming in at one side. It would appear that this rule, “that the *longest* surface channel must be followed in order to find the utmost Source” of the Mississippi, iS in direct conflict with every natural cause that has brought into existence the history of the discovery, the occupancy, and the hydrographic and topographic charts of the basin of the Mississippi as it divides from north to south, the eastern and western limits of the United States, with its subdivisions, as divided by the Alleghany and other ranges, and the Rocky Mountains, bordeiring respectively upon the east and west, the basin of the river. If, for these and other reasons, such a rule is too narrow and limited to be effective and consistent, why follow it, when to do so would unsettle and bring into conflict the very foundations of tertorial organizations, commercial and other numerous municipal relations, heretofore deemed and believed to correspond with nature's topographic facts and conditions? Then again, follow the same rule, leaving the Missouri river out from any consideration thereunder, and in passing up the trough of the Itasca Basin by 298 the longest surface channel of running water, there must be selected from the interesting streams found there, the one whose head is most remote from the north end and outlet of Itasca lake, and that one, whether it be subsidiary or principal, confluent or affluent, must be, arbitrarily, pointed out and designated as the Mississippi river, in conflict with the existing topographic features as they are found there.

Selecting from the list the principal streams at Itasca, their respective lengths are as follows, by the *surface channel* from the north end of Itasca lake:

To the head of Howard creek 28,952 feet.

To the head of Demaray creek 27,673 "

To the head of The Principal Stream1

1 At the base of the hills, above Nicollet's Middle lake.

27,129 "

To the head of Mary creek2

2 The length of Mary lake not Included, because the creek flowing into it, above the lake, is not perennial.

26,297 "

To the head of Boutwell creek 22,327 "

To Elk lake3

3 Length of Elk lake not included, because the several creeks entering it have been found, on one or more dates, to be entirely dry, and in winter closed by freezing and ice.

17,827 "

Thus, following literally and strictly, this arbitrary rule, the head of Howard creek4 , would be discovered as the source of the Mississippi, to the exclusion of the larger and more important principal streams flowing out of the north end of Whipple lake, re-appearing at the Mississippi Springs and flowing in a detached upper channel, under a crust of earth, which forms a very narrow, natural bridge, between Nicollet's Upper and Middle lakes,

and, with Howard and Demaray creeks coming in at one side as branches, thence to Itasca lake and the sea.

4 See chart showing location of Howard creek, draining a limited ravine which forms a part of Nicollet Valley. This ravine is a part and portion of the Greater Ultimate Reservoir Bowl.

Howard creek is a picturesque little stream, with swift and permanent flowage, the minimum of which fills its bed constantly, and its head, surrounded by precipitous hills, is a spring or pool, the waters of which flow directly out of the earth, quite similar to the Mississippi Springs. But this creek is limited in size, compared with the main stream of whice it is a branch, the same as Demaray creek and Spring Ridge creek. Common sense prescribes a reasonable liberality in the inspection and examination of nature's process, and to force its cause would be a futile endeavor to dictate in matters over which we have no control, unless by artificial interferences and appliances. There is no reason why we should distort the facts of nature, in order to follow a limited and impracticable rule, in case it leads in an opposite direction from existing facts. The head of Howard creek is not the source of the Mississippi, because the channel of the main stream is broken by the peculiar natural formation at Nicollet's lipper lake, where the stream flows into the bowels of the earth and out to the surface again a few feet over the brow of the natural bridge there located.

Reference is made to the question of which point is the source of a river when a well defined permanent lake is the original water. There should be no question that the part of the lake where the first flow of water commences therefrom, is, minutely, the source, to the exclusion of the body of the lake itself, though for popular comparison the lake, as a lake, is usually designated as the source of the river. If the lake be one hundred miles long, and the river, having its source therein, one hundred miles long, it would force the construction of nature's invincible rule to say that the river was *two hundred miles in length* . The suggestion that the size of a lake giving source to a river, is material, is an absurdity.

A lake, however small and obscure, from which a river takes its rise, can well be popularly designated as the source.

299

The diametrical order of the flow of a river is adverted to. It is not necessary that a river should flow from one point of the compass to that directly opposite. Such a conclusion, long since suggested, is erroneous, and, if adopted, would, of necessity, ignore the topographic features which surround and constitute the water-shed and valleys from which and through which, the principal rivers of the world take their course. It matters not if the valley or basin be circuitous, provided the defined conditions of that part of the surface of the earth, forming the valley or basin, confirms the statement that it is the main water-shed, through which the chief river takes its flow, to the exclusion of subsidiary streams, coming in at the side from less extensive valleys or basins.

The Mississippi river from the Itasca basin, to the month of the Crow Wing, the St. Louis river, from its source to Lake Superior, and the Red River of the North, from its sourre to the forty-seventh degree of North latitude, each constitute a half circle in the condition of their respective courses, as controlled by the topography of the water-sheds which they drain, and each river mentioned, in its course, flows to every point of the compass in one or more portions of its surface flowage. The rivers mentioned, flow to the Gulf of Mexico, the Atlantic, and to Hudson's Bay, respectively, draining three of the principal water-sheds of North America, all taking their rise in the northern portion of Minnesota near to each other. The St. Louis river, in this reference, is deemed to be the head waters of the St. Lawrence.

It is not deemed necessary to take up a consideration of the entire list of the principal rivers of the world, whether in mountainous districts, deserts or productive regions, in frigid, temperate or tropical climates, to indicate the neceseity of adopting the common law of nature, which has formed the source, the water-shed, the course, flowage, continuance and ending of every river of permanent existence, and it will surely prove

futile to undertake the task of applying fictitious and untenable opinions, contrary to the natural conditions ever present upon the surface of the earth, as the waters are taken from the bosom of the oceans and precipitated, by meteorological and climatic action, when the source, the course and the ending of rivers, is determined, theoretically or by actual surveys in the field of operation or observance, Where is the water precipitated at the source of a river, and how is it gathered into the channel of the stream, are propositions which were ever present in the examination at the source of the Mississippi, for no other procedure would so well apply, in bringing to light the facts as nature has presented them there, and a distortion of those facts, would be but an erroneous theory. This applies, of course, to a lacustrine region, similar to the head water basin of the Mississippi.

The fact that there exist rivers in mountainous districts, which depend upon melting snows and ice, for a supply of water, rivers in arid regions, which are often entirely dry; rivers in rocky and limestone districts, depending upon artesian pressure for a supply, and various and widely different conditions extant at the source of all the rivers of the world, as compared with each other, the undisputed and indisputable proposition, that every river of the world, owes its existence to a natural cause and effect, as demonstrated by the process of precipitation, must be, of necessity, ever present An determining the true source of each, and if this be admitted, we must turn to the water-sheds at the utmost limit from the mouth of all our rivers to find the source. True, there may be isolated instances where the application of such a rule would seem to be fallacious, but can there not be remote exceptions to any known rule? An important instance is noted to show the effect of a water-shed. Situated in the very center of the northern half of the State of Minnesota is a well defined basin, oblong in its formation, about one hundred miles long and fifty in width1 . With in this basin there are nearly one thousand

1 See Chart.

300 lakes, large and small, and numerous streams. This basin is almost entirely surrounded by heights of land and the Mississippi descends out from it over the Pokegama Falls. From the inner flanks of these heights of land, the smaller streams flow down to

the center of the basin and form the Mississippi, the principal stream of the water-shed. The millions of gollons of water situated within this limited head-water basin has been drawn from the oceans by natural causes. It is interesting to note that while the waters of the inner flanks of this basin, flow to the Mississippi, the outer flanks supply waters which form streams to the eastward, flowing to Lake Superior; to the northward, flowing to the Lake of the Woods; to the westward, flowing to the Red River of the Nnrth, and to the southward, flowing to the Crow Wing river. Thus in this very limited territory, comparatively speaking, the summit of these heights of land discharge precipitated waters in all opposite directions. Within this basin at the head water system of the Mississippi, in following the channel of the main stream up through the trough of the basin, the Leech lake, Turtle and Yellow Head rivers, come in as principal tributaries, draining specific portions of the bowl, as likewise do other and less important streams, until the Itasca portion of the upper water-shed is reached, where a distinct and limited Basin exists, nearly surrounded by the *Hauteurs des Terres* of the locality, and passing up this basin the extreme limit of the Upper Mississippi water-shed is found at the Greater Ultimate Reservoir, with the principal stream of the locality flowing out of it. The mere rivalry of original discovery of some one particular lake of the locality, as compared with some other lake there, is not a correct basis upon which to determine the source. For popular comparison, Itasca lake has been known for over half a century, as the source of the Mississippi, but that does not and cannot make it the ultimate source in reality, when to remove the reservoirs above and beyond it, Itasca itself, as a lake, would cease to Supply the river running from it, and the lake would recede to narrower limits within its own shores, for want of the water supply now constantly coming from above it, the inflow regulating and controling the outflow. However desirable it might be to continue this preference for Itasca lake, it can be but a question of sentiment, for certainly it is not one of fact; and in determining that the Greater Ultimate Reservoir is the utmost limit of the water-shed of the Mississippi basin, a rule has been followed which nature itself dictates, as the only and reasonable procedure by which to find the true source of the Mississippi.

These conclusions are by no means hastily drawn, nor are they deemed to be of any very great importance It is simply a verification of the discovery of geographic facts. They become of interest, that the minutest fibers of nature's cause, shall not be infringed, so far as the present subject is treated.

It should not be held that these conclusions are drawn in opposition to distinguished authorities. The Royal Geographical Society of England, through its secretary, advises that it “has never laid down any rule defining what constitutes the source of a river.”

Prof. W. M. Davis of Harvard College has been kind enough to enter into a correspondence in an exchange of views, touching the question, and it would appear that he inclines to the longest surface channel, *wherever* it may be found. This view would take him to the summit of the Rocky Mountains for the source of the Mississippi, above, beyond, and at the side of the main basin of the river, and at Itasca lake it would take him to the head of Howard creek, distinctly not the principal stream, although it is the most remote of all permanent. *uninterrupted* surface channels found flowing there. Prof. Davis is regarded as a distinguished authority and from him a more extended and nearly oyposite opinion is expressed from that which comes from European geographers. He believes it to be the fault of terminology. Clinging to the limited rule of a longest surface channel, nature's principal topographic features must be ignored, that the lesser stream may be followed 301 to the heights of land, to the exclusion of the principal river, in searching for a source, solely upon the question of length as ascertained from actual uninterrupted *surface* flowage.

Following these varying and widely different opinions, confusion might be interpolated, were it not that an actual view of the premises, demonstrates the best evidence of existing facts, and though it may and doubtless will be suggested, that the framing of a general rule conforms to the source of the Mississippi, it might he well to bear in mind that the relation it bears, as compared with the river systems of the world, constitutes a pre-eminent reference, equaled by few, and exceeded by no principal water course of the earth,

maintaining perennial river drainage. Considering climatic extremes, various topographic features, mountain ranges, lakes and minor rivers and streams, which are contributory to the main river of the Mississippi basin, it may be well asserted, that it has no superior, and deliberate and considerate action in drawing conclusions from an examination as to its utmost source, ought not to be made conformidable to obscure streamlets, to which a general knowledge will never be directed.

The topographic and hydrographic features immediately connected with the extreme limit of the Mississippi basin, have been found to be au interesting study, and particular care has been observed in presenting only the facts, geographic and historic, sufficiently illustrated, which present in connection with the Spanish and French discoveries, to those who desire it, a more complete record from which to follow the rise and course of our greatest river.

APPENDIX.

HOW THE MISSISSIPPI RIVER AND THE LAKE OF THE WOODS BECAME INSTRUMENTAL IN THE ESTABLISHMENT OF THE NORTHWESTERN BOUNDARY OF THE UNITED STATES.

By Alfred J. Hill .

§ 1. INTRODUCTORY.

About one hundred and twenty miles north of the Itascan or true source of the Mississippi river, or eighty-five of those of Turtle river, its northern branch, lies the Lake of the Woods. At this lake begins that part of the boundary of the United States that is formed by the forty-ninth parallel of north latitude, which thence pursues its westward course until the waters of the Pacific ocean are reached in far distant Washington. But yet, leaving Alaska out of consideration, this line does not form the most northern limit of the American possessions; for, at the Lake of the Woods, by the boundary line being carried some thirty

miles to the northward and westward from the mouth of Rainy Lake river, and then due south to the forty-ninth parallel, a tract of land is included of about one hundred and fifty square miles in extent. This is the most northern land, with the exception noted, under American rule, but it is practically valueless, being mostly covered with a deep bog; and, in addition, is inaccessible from other American soil except by crossing the broad surface of the lake.

Why was this line so run? The question has been often asked, and at various times answered in print, but not so fully as the subject allows or, it may be, is worthy of. That the boundary was not originally established in order to include the tract of land described, nor yet any particular bay or other actual topographical feature of the lake, is sure. None of the statesmen who from time to time gave attention -20 306 to the matter, toward the end of the last century or in the first two decades of this one, had any correct knowledge of the lake in general, much less of any particular part of it.

The head-waters of the Mississippi are in no way connected with the Lake of the Woods; neither hydrographically, for they flow into different seas; nor commercially, for no trade route ever ran between them. Yet they were long connected politically, seeing that during a period of time equalling two generations their relationships were discussed at intervals by the diplomatists of two nations, and their names were often met with in the state papers of the two countries.

This article is not designed for a complete account of the Northwestern boundary of diplomacy, but only for a history of that portion of it which lies westward of the mouth of the Rainy Lake river, in order to illustrate the political connection referred to, and therefore as little matter as possible is introduced that does not concern the topic so restricted. Still, as some point on the upper Mississippi river was a *sine qua non* of the Very earliest projects for the establishment of a national boundary in the northwest, brief statements of them and their fortunes have to be given; for, if this were not done the reader would not be placed

in possession of a knowledge of all the most important incidents—now attainable—that contributed to the creation of a curious geographical and political *imbroglio* .

In the presentation of the facts a chronological order is followed as far as practicable.

§ 2. The first propositions for a northwestern Boundary to the United States; and the line finally agreed upon . 1779–1783.

Canada was ceded to Great Britain in 1763, and by this cession were necessarily ended all the persistent claims that had been made by the Hudson's Bay Company for a line of demarcation which should divide their occupancy and territory from those of the French in North America. But within twenty years another boundary line was defined that trenched upon the water-shed of the Bay of Hudson, and even entered the territory of the Company as they understood it; but with this new boundary neither of the former parties had anything to do.

307

In her turn Great Britain had been shorn of American possessions by the successful revolt of her colonies, but not deprived of all of them; for, in addition to Florida, she still retained the icy regions of the far north, as well as Canada, *i. e* ., whatever territory this latter term might be construed to imply.

The war between the *ci-devant* colonies and the mother country was still in full blast—and by no means displaying the most favorable aspect for the former in the light of the capture of Savannah by the English, which had occurred but a short time before—when the question of the future boundaries of the new nation first came up for discussion by its representatives in Congress.

It was in February, 1779, that Gérard, the minister from France to the United States, urged upon Congress the appointment of a commissioner to take part in negotiations for a general peace, when such should occur; as it became necessary to formulate conditions

beyond the main demand of independence. On the 23d of that month, therefore, a special committee, to whom had been referred certain “official letters and communications received from Paris,” reported that certain articles were absolutely necessary for the safety and independence of the United States and therefore ought to be insisted on as the ultimatum. The first of these articles was concerning the bounds, which were to be as follows:

“Northerly by the ancient limits of Canada, as contended for by Great Britain, running from Nova Scotia south-westerly, west, and north-westerly, to Lake Nepissing, thence a west line to the Mississippi; * * * * and westerly by the river Mississippi.”

On March 19, “Congress took into consideration the report of the Committee of the Whole, and agreed to the following ultimata:

“1. That the thirteen United States are bounded north by a line * * * * * thence due west in the latitude of forty-five degrees north from the equator, to the north-westernmost side of the river St. Lawrence, or Cadaroqui; thence strait to the south end of Lake Nepissing, and thence strait to the source of the river Mississippi; west by a line to be drawn along the middle of the river Mississippi from its source to where the said line shall intersect the latitude of thirty-one degrees north,” &c.

308

This second description of the boundary was, on August 14, embodied by Congress in the draft of instructions then approved by them for the use of the minister to be appointed to negotiate a peace. Continuing, the instructions read:

“But, notwithstanding the clear right of these States * * * that if the line to be drawn from the mouth of the lake Nepissing to the head of the Mississippi cannot be obtained without continuing the war for that purpose, you are hereby empowered to agree to some other

line between that point and the river Mississippi; provided the same shall in no part thereof be to the southward of latitude forty-five degrees north," &c.

John Adams was the man chosen for such commissioner, receiving his appointment from Congress on September 27. He was to treat with Great Britain whenever that power should be prepared to acknowledge the independence of the United States. So Mr. Adams went to France, but official influence there was thrown against the initiation of a treaty at that time, and by one man, unless the man were Franklin, the minister already on the ground. Next year he repaired to Holland, where he was appointed minister.

But on June 15, 1781, Mr. Adams' commission was annulled by Congress, and he was reappointed as one of five persons to negotiate the desired treaty with England. His colleagues were to be Benjamin Franklin, John Jay, Henry Laurens, and Thomas Jefferson. To these five commissioners, or a majority of them, or even one alone in case of accident, was given the power to make a treaty of peace; and they were not to be tied up by absolute and peremptory directions, except as to absolute independencee of the States and integrity of existing treaties with France. They were directed, however, that in the last recourse they were to take the advice of Vergennes, the French minister of foreign affairs, in their negotiations with the English commissioners.

On the English side there was but one plenipotentiary, Richard Oswald, though later he was reinforced by the presence and advice of Mr. Strachey, one of the British under-secretaries. Mr. Oswald went to Paris in the spring of 1782, though he was not fully commissioned, according to the American ideas, until September 21.

309

Benjamin Franklin had already been established in Paris some four years as minister plenipotentiary. Oswald and Franklin therefore had many interviews before any of the other commissioners arrived. Jay arrived on June 23d, and Adams on Oct. 26th. Just before the latter's arrival, Mr. Strachey had come over from London, accompanied by a

clerk of the Plantations office, who brought with him books, maps and papers relative to boundaries. Laurens could come only two days before the conclusion of the discussions, and Jefferson could not come at all.

The discussions of the commissioners in regard to the boundary of the United States have not yet, it seems, been published in detail. The records of their proceedings, kept by the secretary, are said to be lost. From the diplomatic correspondence of the American commissioners, however, so far as it has been published, the following facts have been derived:

On October 5th, Mr. Jay handed to Oswald the American articles, which had been drawn up very fully by him.

On the 8th of the same month certain articles were agreed upon between Frankin, Jay, and Oswald, which were sent to England for the king's consideration. The first one defined the boundary according to the description authorized by Congress on March 19, 1779, already copied here.

When the draft of October 8, returned from England, a second set was agreed upon, on November 5, by the four commissioners, Mr. Adams being now present. In this second set the western part of the boundary was given as running

“To the forty-fifth degree of north latitude, following the said latitude until it strikes the river Mississippi; thence by a line to be drawn along the middle of the said river Mississippi, until it shall intersect the northernmost part of the thirty-first degree of latitude north of the equator,” etc.

The very same day Mr. Strachey set out for London with these amended articles.

The next day John Adams, writing to Mr. Livingston, the Secretary of Foreign affairs, said: “We have at last agreed to boundaries with the greatest moderation. We have offered

them the choice of a 310 line through the middle of all the great lakes, or the line of fortyfive degrees of latitude, the Mississippi, with a free navigation of it at one end, and the river St. Croix at the other."

Mr. Strachey reached London on the 10th of the month, and receiving his new instructions on the 21st, was back in Paris again by the 24th.

On the 25th, Adams, Franklin and Jay, met at Mr. Oswald's lodgings, "and after some conference Mr. Oswald delivered to them the following articles as fresh proposals of the British ministry, sent by Mr. Strachey." In these articles the second one defined boundaries for the United States, and the words there used were precisely the same as those employed in the Provisional Articles of Peace, signed only five days later, on November 30. So far as concerned the northwestern boundary of the United States the said words ran as follows:

"Through Lake Superior and northward of the isles Royal and Phelipeaux, to the Long Lake: thence through the middle of said Long Lake, and the water communication between it and the Lake of the Woods, to the said Lake of the Woods; thence through the said lake to the most northwestern point thereof, and from thence on a due west course to the river Mississippi; thence by a line to be drawn along the middle of the said river Mississippi until it shall intersect the northernmost part of the thirty-first degree of north latitude."

In addition, the navigation of the river Mississippi, from its source to the ocean, was to remain forever free and open to the subjects of Great Britan, and the citizens of the United States.

An entry in Mr. Adams' journal, of the 30th, stated that the commissioners were told that the British government did not oppose the boundary, they only thought it too extended, too vast a country; but that they would not make a difficulty.1

1 The French and Spanish governments, however, though the first was an ally, and the second friendly to the cause of the United States, were, in their hearts, not so easily reconciled. They had desired to see the new nation restricted to the east of the Alleghany mountains, south of Pennsylvania, and to the east of the Chatahoochee river farther south. When the territorial pretensions of the American plenipotentiaries were fully understood the French statesmen were astounded. Vergennes, (writing on October 14.) even styled them “a delirium.” and secretly repudiated the idea of the United States being allowed to monopolize the continent.

311

Franklin, on December 5th, writing to Mr. Livingston, said that much of the summer was taken up by wrangling about powers. “After some weeks, an under-secretary, Mr. Strachey, arrived, with whom we had much contestation about the boundaries and other articles which he proposed and we settled; some of which he carried to London, and returned with other propositions, some adopted, others omitted or altered, and new ones added. * * * * They wanted to bring their boundary down to the Ohio, and to settle their loyalists in the Illinois country. We did not choose such neighbors.”

The four American commissioners in their joint letter so Mr. Livingston of December 14th, said that: “The court of Great Britain insisted on retaining all the territories comprehended within the Province of Quebec by the act of Parliament respecting it1 * * * * and they claimed not only all the lands in the western country and on the Mississippi, which were not expressly included in our charters and governments, but also all such lands within them as remained ungranted by the King of Great Britain.” He said that it would be use useless to enumerate all the discussions and arguments they had on the subject.

1 This act was passed in 1774—most probably to annoy the disaffected Yankees. Its southern boundary was the Ohio river, and its western was formed by the Mississippi, from

the mouth of the Ohio, running northward to the southern boundary of the territory granted to the Hudson's Bay Company.

In reply March 25th, 1783, Mr. Livingston said: “The boundaries are as extensive as we have a right to expect.”

Adams, Franklin, and Jay remained in Paris after signing the Provisional Articles, as commissioners for making a Definitive Treaty. Though ten months were spent in discussion by the plenipotentiaries of both powers, nothing further could be decided upon. Therefore, on September 3d, 1783, they signed the Definitive Treaty of Peace; which instrument was in exactly the same words as those used in the Provisional Articles that preceded it, boundary description and all.

The description of the northwestern boundary line looked at in the light of the geographical information the commissioners were guided by was clear enough, but as tested later by natural facts it was found insufficient; and even in part, where it regarded the extreme western 312 limitation of territory, a physical impossibility. Still, some sixty years elapsed before the final definition of this boundary was framed.

§ 3. The Geographical errors of the treaties of 1872–3.

Before defining the exact nature of the geographical error just referred to, and telling of the successive steps which were taken toward its rectification, a few cautionary words concerning the political moralities of the subject are in order.

The reader should dismiss from his mind any idea of injustice in the case. He must consider that international treaties are only bargains on a large scale, in which one or other of the high contracting parties is liable to be over-reached, and that sometimes the decisions made are not in accordance with reason and abstract justice; but yet, that the compacts having been signed the matter is settled. When, however, questions of territorial boundaries have been discussed with a view to international agreement, faulty decisions in

such cases are by no means always to be attributed to great astuteness on one side, and simplicity on the other; for a lack of previous correct geographical information, from which had resulted erroneous and misleading maps, is the most likely cause. After all, boundary agreements can scarcely be anything but compromises, and if it should appear later on that the decision was somewhat unfair to one party yet it would not be considered dignified for the other to then clamor for reconsideration.1

1 A curious instance of a great nation quietly abandoning part of its boundary line as established by treaty, and adopting another one which had been located erroneously as the true one, is shown in the behavior of Great Britain towards the United States in the matter of the northern boundary of New York and Vermont, where it is constituted by the forty-fifth parallel of north latitude. This line, running from the St. Lawrence to the Connecticut river, was surveyed and marked some years before 1770, but not correctly. Many years later, in ignorance of this fact, the United States government began to fortify Rouse's Point on Lake Champlain. In 1818, the surveys of the boundary commissioners proved that the fortifications were on British ground. The map of the survey by Col. J. D. Graham, of the U. S. Engineers, published in 1843, shows the established line at thai point to be 4,326 feet north of the true boundary. The first surveyors had intended to pursue a due east course from the proper intersection of the said parallel with the St. Lawrence river, but, deflecting to the left somewhat, and keeping to the left more or less all the way, they struck the Connecticut river three quarters of a mile to the northward of where they should have reached it. However, the British government accepted this old established line, and the boundary in the treaty of 1842 was described so as to conform to it.

313

As a matter of course, in the settlement of boundaries between nations, the statesmen delegated to do the work require maps of the regions concerned, all they can get and the best they can get; for they cannot go out and view the country like road commissioners. That the plenipotentiaries of 1782 in charge of the matter of deciding upon a line of demarcation between the possessions of the British Crown, and those of the United States

had all the maps they needed, printed at least, seems to be established by their own testimony.

John Adams, writing in October, 1774, said “We had before us, through the whole negotiations, a variety of maps, but it was Mitchell's map upon which was marked out the whole of the boundary lines of the United States.” Benjamin Franklin, likewise, in a letter to Jefferson, of April 8, 1790, thus expressed himself: “I can assure you that I am perfectly clear in the remembrance that the map we used in tracing the boundary, was brought to the treaty by the Commissioners from England, and that it was the same as that published by Mitchell twenty years before.”

These maps which the plenipotentiaries had before them were no doubt more particularly needed for the settlement of the line in the east, where for generations the French and English had been directly opposed. As for the extreme western part of the boundary, the chances are that but little criticism of a geographical kind was exercised in regard to it, or comparison of maps made; for if there had been the inferiority of their adopted map to the maps of the French geographers, and to such English maps as were founded on the French ones, in regard to the hydrography of the country beyond Lake Superior, would have been at once perceived.

Now this “Mitchell map,” which had been officially accepted by the commissioners, and on which they marked the boundary, was compiled in England by John Mitchell, at the request of the Lord Commissioners of Trade and Plantations. It bore their approval of date February 13, 1755, and was published in that year, two editions of it is said. The significance of it, as respects the topic under discussion, is this—it contained two very grave geographical errors.

The first one was, that the Lake of the Woods, instead of being represented as the lowest of a chain of lakes and connecting streams 314 whose waters ran northwestward, was

shown as being the head of such a chain whose waters ran to the eastward, to Long Lake and Lake Superior.

In other words the map ignored the dividing ridge or *hauteur des terres* that separates the waters running so the Lake of the Woods, from those that run a much shorter distance into Pigeon river, (the Long Lake of the treaty) and Lake Superior.

The result of this first error was that this lengthy “water communication” of the map was assumed to be the head of the St. Lawrence system of waters, and so was followed for the boundary; whereas the true head-waters of this great river are those that find their way into Lake Superior, through the channel of the smaller river of the *fond du lac* of the map, our present St Louis river.

The second error was the placing of the sources of the Mississippi some three degrees northward of their true latitude. The head of the river was not actually shown on the Mitchell map, for the southern border of a corner map hindered further delineation of it, but was mentioned on the main map in these words, viz:

“The head of the Mississippi in not yet known. It is supposed to arise about the fiftieth degree of latitude and western bounds of this map.” The result of this second error was, that in making the boundary run due west from the Lake of the Woods to the Mississippi river the plenipotentiaries of 1782 unwittingly called for a geometrical impossibility.

In some palliation of the errors of this map, in the matter of the Mississippi, and by way of excuse for the commissioners in being guided by it in their definition of the northwestern boundary, another official British map may be mentioned. This was an elaborate atlas of the Americas, in twenty sheets, compiled by Mr. Popple, under the auspices of the same Lords as Mitchell's, and published in 1732 or 1733. On the proper sheet of this Popple map was indicated “The head of the Mississippi, in about the fiftieth degree of north latitude, and in a very boggy country.”1

1 Popple probably took his information for this part of the country from the earlier maps of De I'Isle, the French geographer, on which the sources are laid down as far north as 50°, or even beyond; and indicated as being in a very “boggy country” too, *pays marecageux*.

Very likely the commissioners having found their map satisfactory as regarded the eastern country never dreamed of its enormous misapprehensions of the geography of the region beyond Lake Superior.

§ 5. The unexecuted article of the treaty of 1794.

The plenipotentiaries of 1783 had before them other questions than those settled in 1782, but, as before intimated, they were not able to agree upon any of them, and so left them for future negotiation. Besides these unsettled matters new ones had come up since the signing of the peace, arising from the failure of the contracting parties to respectively carry out certain stipulations of the treaty. Very naturally, therefore, in a few years steps were taken to reopen negotiations.

In 1791 the attention of the British government was called to the fact that their garrisons had not yet been withdrawn from the northern parts as required by the 7th article of this definitive treaty. The ready reply was that it was in consequence of the non-compliance of the American government with the agreements contained in the 4th, 5th and 6th articles of the same instrument. *Tu quoque* .

The next move was taken nearly three years later. On April 16th, 1794, President Washington commissioned John Jay—the hardest worker of the plenipotentiaries of 1782, now chief justice—as envoy extraordinary to proceed to London and enter into consultation with the British government, with a view to an amicable adjustment of the differences between the two countries.

Among the questions discussed by him and Lord Grenville, the British minister, was that of the northwestern boundary. The latter gentleman, giving voice to a suspicion that had been forming itself in the public mind, considered it to be an established fact that a due west line from the Lake of the Woods to the Mississippi river would pass entirely to the north of any of the sources of that stream.1 In accordance with this supposition he suggested to the American envoy two new lines between the waters of Lake Superior and the

1 Most probably, after the treaty of 1783 was signed, there had been some examination in British government offices of other maps than the Mitchell one. Not to mention those of France, they would find that the maps in the Jefferys atlas of 1776, and those of 1778 in Capt. Carver's book of travels, gave no countenance to the theory that the Mississippi headed in a higher latitude than that in which lay the Lake of the Woods.

316 Mississippi, either of which would rectify the geographical error of 1782–3. The first was, a line drawn due west from “the bottom of West Bay in the said Lake” to the “river of the Red Lake, or eastern branch of the Mississippi, and down the said branch to the main river of the Mississippi.”1 The other plan was, to follow the “water communication” described in the treaties until a point due north of the mouth of the St. Croix river should be reached, whence a line should be run direct to the Mississippi at the mouth of its said tributary. Mr. Jay would not listen at all to such proposals, which involved a cession or territory. Nor was he willing to concede to his lordship that the position of the head of the Mississippi in relation to the Lake of the Woods was certainly known. He suggested, however, that the truth should be ascertained by actual survey, and to this proposition the British minister agreed.

1 This would have been an as impossible a line as the one they were trying to find a substitute for.

On the 19th of November, these two gentlemen signed a treaty on behalf of their respective governments. The fourth article of it is the only one necessary to recite here—it was as follows:

“ Article IV. Whereas, it is uncertain whether the river Mississippi extends so far to the northward as to be intersected by a line to be drawn due west from the Lake of the Woods, in the manner mentioned in the treaty of peace between his majesty and the United States: it is agreed, that measures shall be taken in concert between his majesty's government in America and the government of the United States, for making a joint survey of the said river from one degree of latitude below the Falls of St. Anthony, to the principal source or sources of the said river, and also of the parts adjacent thereto; and that if on the result of such survey, it should appear that the said river would not be intersected by such a line as is above mentioned, the two parties will thereupon proceed by amicable negotiation, to regulate the boundary line in that quarter.”

However much geographers of the time—and some, even, of the present day—may have regretted it, no survey of the kind was ever made by the governments interested. It was, not very long after, found to be unnecessary, so far as the question of the relative latitudes of the lake and the river were concerned; for the visit of the astronomer David Thompson, in 1798, to the most northern sources of the 317 Mississippi at Turtle lake, proved that they lay nearly two degrees south of the northern end of the Lake of the Woods.

It may therefore not be deemed unreasonable to suppose that the project for the survey required by the treaty of 1794 was abandoned, as a useless expenditure of time and money, in view of the reliable observations made by Mr. Thompson. The results of his survey, so far as they pertained to this question, were published a few years later by Sir Alexander Mackenzie, and seem to have been accepted by all interested in the discussions concerning the northwestern boundary.

§ 5. The unratified convention of 1803.

Though the official survey of the upper Mississippi river was never undertaken yet the clause of the preceding treaty, requiring the two parties to “proceed by amicable negotiation to regulate the boundary line in that quarter,” was not neglected.

Mr. Madison. Secretary of State, on the 8th day of June, 1802, wrote to Rufus King, minister at London, commissioning him to ad adjust what remained unsettled as to the boundaries between Great Britain and the United States. In his communication he recited how that the second article of the treaty of 1783 was rendered nugatory by reason of the impossibility of running a line due west from the Lake of the Woods to the Mississippi, and suggested another one in lieu, which was: “A line running from that source of the Mississippi which is nearest to the Lake of the Woods, and striking it westwardly on a tangent, and from the point touched along the water-mark of the lake to its most northwestern point at which it will meet the line running through the lake. The map in McKenzie's late publication is possibly the best to which I can refer you on this subject.”1

1 “Voyage from Montreal, on the river St. Lawrence, through the continent of North America to the Frozen and Pacific Oceans, in the years 1789 and 1793. With a preliminary account of the rise, progress and present state of the fur trade of that country.” London, 1801.

At the time of the arrival of this letter Mr. King was absent from London, and the *chargé d' affaires* , Christopher Gore, acted in his stead, and was afterwards commissioned from Washington to carry on the negotiations. On Sept. 28 Mr. Gore had an interview with Lord 318 Hawkesbury, the British minister, in regard to the business intrusted to him, and coming to the boundary from the Lake of the Woods to the Mississippi, proposed the line suggested by Mr. Madison. He also mentioned the propriety of appointing commissioners “to ascertain the local relation of the Mississippi to the Lake of the Woods, and, if as was supposed by the treaty of peace, to run the line there agreed on.”

Mr. Gore, on October 6, 1802, reported to the Secretary of State his interview with Lord Hawkesbury. In this letter, referring to his lordship's views, he wrote as follows: “On that part of the boundary which is to connect the northwest point of the Lake of the Woods with the Mississippi, he observed that it was evidently the intention of the treaty of peace that both nations should have access to and enjoy the free use of that river; and he doubtless meant that their access should be to each nation through their own territories.” Lord H also agreed that such a commission as Mr. Gore had proposed, and running the line between these two waters as Mr. Madison had proposed, might establish such a boundary as would secure to each nation this object. To this Mr. Gore made no reply other than by observing that the line suggested was naturally what seemed to be demanded by just interpretation, when such a mistake had happened as was herein supposed.

On December 16 Madison wrote to King that he judged from Mr. Gore's communication that the proposition made for the adjustment of the boundary in the northwest corner of the United States was not pleasing to the British government. The provision, however, was considered by the President as a liberal one, inasmuch as the, more obvious remedy for the error of the treaty could have been by a line running due north from the most northern source of the Mississippi, and intersecting the line due west from the Lake of the Woods; and inasmuch as the branch leading nearest the Lake of the Woods may not be the longest or most navigable one, and may consequently favor the wish of the British government to have access to the latter,”1

1 This reasoning is not very clear, except on the assumption that the administration at that time took the view that the British possessions reached southward as far as the head of the Mississippi. If such a view were entertained, however, at that time, it was, not long after, abandoned for one more favorable to the territorial aggrandizement of the United States. A study of the “possibilities” of the Louisiana cession probably suggested the change.

319 Mr. Madison further wrote that as the settlement of that particular boundary would not for some time be material it would be better to postpone it for the present and attend to the other questions of boundary; and in the meantime further information with respect to the head-waters of the Mississippi, and the country around them, might be sought by both parties. But that the United States were to be as free to be guided by the results of such inquiries as if they had never made the proposition referred to. If most agreeable to the British government to institute an early survey, the President authorized Mr. King to concur in such an agreement.

However, the British government was not obstinate, and the convention was drawn up by Mr. King on the 11th of April, and signed on the 12th of May, 1803.

Mr. King, when transmitting the document the next day to Mr. Madison, wrote as follows:

“The convention does not vary in anything material from the tenor of my instructions. * * * The source of the Mississippi nearest to the Lake of the Woods, according to Mackenzie's report, will be found about twenty-nine miles to the westward of any part of that lake, which is represented to be nearly circular. Hence a direct line between the northwesternmost part of the lake, and the nearest source of the Mississippi, which is preferred by this government, has appeared to me equally advantageous with the lines we had proposed.”

But at the time this convention was signed in London, there had been already signed in Paris an instrument by which western Louisiana, which had just come into the possession of France, was ceded to the United States; which fact turned out to have a very important bearing on the King treaty. But it happened that the news of this session did not reach the American minister in the former city until the 15th of May, so that he and the British nobleman had come to an agreement on the northwestern boundary question without any reference to the ownership of the country west of the sources of the Mississippi,

The convention was laid before the Senate by the President for their approval on October 24th. The part of this instrument referring to the 320 “boundary in the northwest corner of the United States” read as follows:

“ Art . V. Whereas, it is uncertain whether the river Mississippi extends so far to the northward as to be intersected by a line drawn due west from the Lake of the Woods, in the manner mentioned in the treaty of peace between his majesty and the United States, it is agreed, that instead of the said line, the boundary of the United States in this quarter shall, and is hereby declared to be, the shortest line which can be drawn between the northwest point of the Lake of the Woods, and the source of the river Mississippi; and for the purpose of ascertaining and determining the northwest point of the Lake of the Woods, and the source of the river Mississippi that may be nearest to the said northwest point, as well as for the purpose of running and marking the said boundary line between the same, three commissioners, upon the demand of either government, shall be appointed,” etc.

The committee of the Senate to whom it was referred, stated that they were satisfied that the said treaty was drawn up by Mr. King three weeks before the signature of the treaty with the French Republic of the 30th of April. “But, not having the means of ascertaining the precise northern limits of Louisiana, as ceded to the United States, the committee can give no opinion whether the line to be drawn by virtue of the third [fifth] article of the said treaty with Great Britain, would interfere with the said northern limits of Louisiana or not.”

President Adams, writing to Secretary Madison, on December 16th, 1803, in reference to the feeling of the Senate, said that they feared that the said boundary line might, by a possible future construction, be pretended to operate as a limitation to the claims of territory acquired by the United States in the former of the two instruments, that concerning the purchase of Louisiana.

After due consideration the Senate on February 9th, 1804, consented to the ratification of the convention, with the exception of the fifth article. On the 14th, Secretary Madison wrote

so minister Monroe, desiring him to urge the British government to accede so the change made: and in the same letter told him the reasons why the fifth 321 article was rejected—reasons foreshadowed here in the report of the committee and in the letter of the president already cited. He also said that he thought that the British government would make no difficulty in concurring with the action of the Senate for various reasons. First. It would be unreasonable that any advantage against the United States should be constructively authorized by the posteriority of the dates in question, etc. Second: That if the article were expunged the northern boundary of Louisiana would remain the same in the hands of the United States as it was in the hands of France, to be adjusted and established according to the principles and authority which would in that case have been applicable. “Thirdly. There is reason to believe that the boundary between Louisiana and the British territories north of it were actually fixed by commissioners appointed under the treaty of Utrecht, and that the boundary was to run from the Lake of the Woods westwardly in latitude 49°; in which case the fifth article would be nugatory, as the line from the Lake of the Woods to the nearest source of the Mississippi, would run through territory which on both sides of the line would belong to the United States.” * * * “Fourthly Laying aside, however, all objections to the fifth article, the proper extension of a dividing line in that quarter will be equally open for friendly negotiation after, as, without agreeing to the other parts of the convention, and considering the remoteness of the time at which such a line will become actually necessary, the postponement of it is of little or no consequence. The truth is, that the British government seemed at one time to favor this delay, and the instructions as given by the United States readily acquiesced in it.”

The above letter of Mr. Madison seems to be the first official utterance on the part of the American government that the parallel of latitude 49° should be claimed by the United States as the northern boundary of Louisiana and southern boundary of the English possessions west of the Lake of the Woods. But in what was written about the action of the commissioners under the treaty of Utrecht, of 1713, the cabinet erred; and the English ministry seem to have been no wiser. The line of 49° was merely the latest and most

southern of various lines proposed from time to time by the Hudson's Bay Company for their -21 322 southern limits during the period of the French occupancy of Canada, and had no reference whatever to the boundary of Louisiana, nor restored the territorial rights of the British crown in the northwest. The commissioners under the said treaty met in Paris in 1719, but never came to any agreement on the subject, though in after years it was popularly supposed that they had, and so recorded in many books and maps.

The American senators seem to have been justifiably suspicious in this matter. Were a direct line adopted between the two waters there would be danger, whenever negotiations should be instituted for a continuation of the boundary line westward, that it might occur to the British government to claim the heights of land just beyond the Mississippi as the southern limit of their possessions in that region. The cabinet also showed great shrewdness in now next bringing into diplomacy this old provisional Hudson's Bay Company line of 49°, as If it had really been an international boundary; though, more likely, it might have been only an honest ignorance on their part, but one that resulted fortunately for their people.

Although the settlement of the northwestern boundary by the Convention of 1803 had failed for the time, the matter was not neglected by Mr. Monroe in London. There were other burning questions, too, such as impressments of American seamen, fishery privileges &c. to attend to. In reference to these latter, on April 7, 1804, Monroe presented to Lord Hawkesbury the project of a convention with a view to their settlement, but a change of ministry occurred not long after, and the latter statesman was replaced by Lord Harrowby.

As soon as circumstances would allow him. Mr. Monroe drew the new minister's attention to the unratified treaty of 1803, and briefly discussed with him the reason of its failure. But Lord Harrowby would not act upon the subject for the time being. On Sept. 1 Mr. Monroe again had an interview with his lordship in which the boundary question was further discussed. In a few days, that there might be no misunderstanding as to what they

had talked about, Monroe drew up a paper which succintly stated the history of boundary relations in the northwestern region from the time of the treaty of Utrecht The paper was of date Sept. 5, and was that day delivered to Lord Harrowby.

323

In it the writer maintained the position first advanced by Mr. Madison, that the commissioners under the treaty of Utrecht had fixed the line between the British possessions and Louisiana as being on the 49th parallel of north latitude. He also wrote, that after it was found out that the Mississippi river did not head as far to the north as had been supposed, Great Britain showed a desire to have the boundary of the United States modified so as to strike the river; but that neither party contemplated this as doing more than to simply define the American boundary; nor as conveying to Great Britain any right to the territory lying westward of that line which belonged to Spain.

There is, apparently, nothing to show that Lord Harrowby ever gave any opinion on the matter after the receipt of this paper. Nor, indeed, from that time till February 25, 1806, do the printed documents of the United States have anything to say about the northwestern boundary in general, or the lapsed convention of 1803 in particular. On the said date Mr. Monroe wrote to the English minister, Mr. Fox, in reference to certain unsettled topics, among others the boundary, and spoke of the convention between Lord Hawkesbury and Mr. King. On May 15 Secretary Madison wrote to Monroe telling him about the appointment of Mr. Pinkney as joint commissioner with him to negotiate a treaty. “As the joint commission does not include the subject of the convention of limits not yet acceded to by Great Britain, as varied by the Senate here, it will remain with you alone, or your successor, to continue the endeavors to bring that business to a conclusion.” If any repugnance should be shown to the erasure posed by the Senate, thereby leaving unsettled for the present the boundaries in the northwest quarter of the Union, and preference should be given to a proviso against any constructive effect of the Louisiana convention or the intention of the parties at the signature of the depending convention,

the might concur in the alteration with a view to bring the subject in that form before the ratifying authority of the United States.

But as nothing further appears printed, showing any action of the British government on the matter, it may be concluded that the convention of 1803 came to be considered as laid on the shelf forever.

324

§ 6. The abandoned treaty of 1807.

In May, 1806, the American government appointed Monroe and Pinkney special commissioners, to meet like appointees of the British government in London, and take measures towards the framing of a treaty; rendered very necessary now by reason of the many unsettled questions between the two governments. Their instructions however did not include the unsettled boundary question, which, with some other matters, was to be postponed for the time being. Lords Holland and Auckland acted for the British government in the negotiations. The treaty agreed upon by the plenipotentiaries was signed on December 31st, and bore the title of “Treaty of amity, commerce and navigation.” For lack of an article relating to impressments the President did not send it to the Senate, and so it perished. But the conclusion of this treaty left the American envoys free to turn their attention to a supplementary one, in which one of the subjects to be handled would be that of boundaries.

In their joint letter to Mr. Madison, of April 25, 1807, the American commissioners informed him how that, in compliance with the proposal of the British commissioners, considerable progress had been made in digesting the plan of a supplemental convention relative to boundary and other matters, when their business was brought to a stop by reason of an entire change of the ministry. They wrote: “After many intermissions and much discussion, the British commissioners at length presented to us their project, of which a copy is now

transmitted, differing in many essential particulars from that which had been originally offered on our part.”

A certain prolixity may now be pardoned, in treating the matter here, seeing that the conclusions arrived at by the respective sides to this discussion were not all in vain, but served as a basis of negotiations in future years. The project referred to as brought forward by the British commissioners was headed “Additional explanatory articles to be added to the treaty signed December 31st, 1806.” Of these articles the fifth one treated of the unsettled northwestern boundary, and read thus:

“ART. 5. It is agreed that a line drawn due west from the Lake of the Woods, along the forty-ninth parallel of north latitude shall be 325 the line of demarcation [division line] between his majesty's territories and those of the United States to the westward of said lake, as far as the territories of the United States extend in that quarter; and that the said line shall, to that extent, [#] form the southern boundary of his majesty's said territories and the northern boundary of the said territories of the United States; provided that nothing in the present article shall be construed to extend to the northwest coast of America, or to the territories belonging to, or claimed by, either party, on the continent of America, to the westward of the Stony Mountains.”

The joint letter already quoted, now goes into a discussion of the above article, thus: “To the fifth article, regulating our boundary in the northwest, which has encountered much jealous opposition here, even in the form suggested by the British commissioners, from the prejudices, supposed interests, and mistaken views of many persons, an explanation of some of which will be found in an idle paper written by Lord Selkirk, (of which a copy is enclosed,1) we finally objected, that the division line between our respective territories in that quarter ought to be drawn from the most northwestern part of the Lake of the Woods due north or south until it shall intersect the parallel of forty-nine degrees, and from the point of such intersection due west along and with that parallel. This was agreed to by the British commissioners.”

1 Not printed in the American State Papers however.

The terms defining the extension of the west line, viz: “As far as the territories of the United States extend in that quarter,” were also objected to by the American commissioners. They considered that the provision would perhaps do no more than establish “the commencement of the line, and might, of course, leave it open to Great Britain to found a claim hereafter to any part of the tract of country to the westward of that commencement, upon the motions of occupancy or conquest, which you will find stated by Lord Selkirk in the paper above mentioned, or upon some future purchase from Spain, as intimated by others.” So they suggested the omitting the words in question altogether, as being unnecessary in the light of the concluding proviso. This was not agreed to, but it was said there would be no objection to give to this part of the description a character of reciprocity, so as to make it read “as far as their said respective territories extend in that quarter.”

326

Then coming to the 6th article—that pertaining to the navigation of the Mississippi—the commissioners, in the same communication, further wrote: That the project of the British commissioners contemplated what had not been in their plan, a permanent concession of access through American territories in the northwestern quarter to the river Mississippi, as secured to them by the treaties of 1783 and 1794, and the like access to the rivers falling into the Mississippi from the westward, and a right to the navigation of the said river. But this amounted simply to a right of passage, and was claimed not only as an equivalent for such permanent adjustment of boundary as was here thought, or affected to be thought, highly advantageous to the United States and injurious to Great Britain, but (as regarded access to the Mississippi) upon the idea, among others, that the treaty of peace, which secured to Great Britain free navigation of that river, appeared to have looked to it, in common with that of 1763, as overreaching “our northern limit,” and consequently as being accessible to the British in the territory of Hudson Bay. It was probable, they thought, that

this demand, so far as respected the waters failing into the Mississippi, from the westward, would not be persisted in, if no other difficulty should present itself.

After the action above detailed the fifth article ran thus:

“ Article 5. As proposed by the American commissioners.

It is agreed that a line drawn due north or south (as the case may require) from the most northwestern point of the Lake of the Woods until it shall intersect the forty-ninth parallel of north latitude, and from the point of such intersection due west, along and with the said parallel, shall be the dividing line [#] to the westward of the said lake; and that the said line, to and along and with the said parallel, shall” —the remainder is the same as that which the British form gives, from its sixty-ninth word, indicated thus [#] for present reference.

The “proposed American changes” having been submitted to the British commissioners, the article now appeared in the following shape:

“ Article 5. As the British commissioners would agree to make it.

It is agreed that a line,” &c., (being the same as the American version down to word “line” indicated above their [#], after which it read) 327 “between his majesty's territories and those of the United States to the westward of the said lake, as far as their said respective territories extend in that quarter; and that the said line shall, to that extent” &c. The remainder now follows the British and American versions from the sign [#] here used to the end.

Secretary Madison, writing to the commissioners Monroe and Pinkney, under date of July 30, 1807, explained the terms in which the President authorized them to close and sign the instrument. As to the modification of the fifth article, (which the British commissioners would have agreed to,) it might be admitted in case their own were not obtainable. It was

his wish that the proviso to both drafts should be omitted, as unnecessary and liable to give offense to Spain.

Nothing further can be added on the subject of these negotiations of 1807; for, by reason of the change of ministry in England, as before noted, all further discussion was suspended, and never afterwards resumed by the same plenipotentiaries. Thus it was that they were not able to sign the convention so nearly completed, and the question of the northwestern boundary was not discussed again in diplomacy for several years.

§ 7. “ The Treaty of Ghent” of 1814.

The war of 1812, which occurred in a few years, did not galvanize the suspended animation of the boundary question into life or movement; for no fighting between the English and Americans took place any higher up the Mississippi than Prairie du Chien, on the Wisconsin river, beyond which the former practically controlled the country.

But within a year of the commencement of this war, the Russian government used its influence to bring about a peace. On April 15, 1813, therefore, Mr. Monroe sent instructions to the American plenipotentiaries at St. Petersburg, on the course they should pursue. Writing to them again on June 23, he said that if a restitution of territory should be agreed upon, provision should be made for settling the boundary line between the two powers from the St. Lawrence to the northwest corner of the Lake of the Woods, on account of the valuable islands in the river and lakes claimed by both parties, and suggested the appointing of commissioners to adjust the matter. But he was silent as to the line beyond the Lake of the Woods. On March 22d, 1814, he 328 wrote to the American plenipotentiaries that they must not in any way countenance a pretension to territory south of the northern boundary of the United States.

At the request of the British ministry the city of Ghent, in Flanders, was selected as the place of meeting, and there, on the 8th of August, the joint commission met to deliberate upon a treaty of peace. On the part of Great Britan the plenipotentiaries were Lord

Gambier, Henry Goulburn and William Adams; on the part of the United States, John Quincy Adams, James A. Bayard, Henry Clay, Jonathan Russell, and Albert Gallatin. In the matter of the boundary line west of the Lake of the Woods, it was the British commissioners who seemed most anxious to discuss it; for the Americans were not instructed on the subject of this boundary. The former, however, disclaimed any idea of acquiring increase of territory, in their request for a revision of the boundary line between the United States and Great Britian.

Writing to Mr. Madison on August 19th, 1814, the American commissioners gave the views of the other side in this matter, in the following words:

“2d. The boundary line west of Lake Superior, and thence to the Mississippi, to be revised; and the treaty right of Great Britian to the navigation of the Mississippi to be continued. When asked whether they did not mean the line from the Lake of the Woods to the Mississippi? the British commissioners repeated that they meant the line from Lake Superior to that river.”

On the 24th of the same month, the American commissioners wrote to the British that they perceived that Great Britain proposed, “without purpose specifically alleged, to draw the boundary line westward, not from the Lake of the Woods as it now is, but from Lake Superior;” and they objected to that intention as demanding a cession of territory.

To this, on September 4th, the British commissioners replied as follows:

“As the necessity for fixing some boundary for the northwestern frontier has been mutually acknowledged, a proposal for a discussion on that subject cannot be considered as a demand for a cession of territory, unless the United States are prepared to assert that there is no limit to their territory in that direction, and, that availing themselves 329 of the geographical error upon which that part of the treaty of 1783 was formed, they will acknowledge no boundary whatever; then, unquestionably, any proposition to fix one, be it what it may, must be considered as demanding a large cession Of territory from the United

States," etc. Were the American government prepared to assert such unlimited right? Or were the plenipotentiaries willing to acknowledge the boundary from the Lake of the Woods to the Mississippi agreed to, but not ratified, in 1803? The British plenipotentiaries would be contented to accept favorably such a proposition, or to discuss any other line of boundary which might be submitted for consideration.

The American commissioners do not seem to have been offended at the bluntness of their British fellows; for, on September 9th, they said, that in regard to the boundary of the northwest frontier, in the light of the explanation now given, they would have no objection to discuss the subject, so soon as the proposition concerning an Indian boundary should be disposed of.

On the 19th, the British commissioners intimated that they were very happy to find that no material difficulty would be likely to occur concerning this question.

On October 21st, the American commissioners stated, as they had said on August 24th, that they had no authority to cede any point of the territory of the United States, and would subscribe no stipulation to that effect. The same day, the British commissioners wrote that they were led to expect, from the discussions already had, that the northwestern boundary from the Lake of the Woods to the Mississippi (the intended arrangement of 1803) would be admitted without objection. In their reply of the 21st of October, the Americans made no reference to this boundary of 1803.

On the 31st the British wrote to the American commissioners that they were ready to receive specific propositions.

On November 10th the American commissioners wrote to the British that they could not agree to fix the boundary of the United States in the northwest corner unless that of Louisiana were also provided for in the arrangement. They now submitted their entire *projet* in a specific form.

The sixth article of the draft provided for the fixing and determining by commissioners of that part of the boundary which extended from Lake Huron, to the most northwestern point of the Lake of the Woods; and for particularizing the latitude and longitude of the said point. The British commissioners did not alter the geographical part of this article at all, when they returned the *projet* on November 26th.

The eighth article was the same as the fifth one of the still-born treaty of 1807, in the form agreed to by the British plenipotentiaries of that time.1 But the British plenipotentiaries of the present negotiations now substituted for it the original British article of 1807,2 to which they added a clause granting British subjects free access to the Mississippi river, an of the enjoyment of its free navigation.

1 See page 326 *supra*.

2 See page 324 *supra*.

At the meeting of December 1st, the American commissioners proposed various amendments to the British substitute for article eight. One was to insert after the words “to the westward of the said lake as far as,” the words *their respective territories* , instead of the words “the territories of the United States;” which change was agreed to by the British commissioners. A second was, to strike out the words “and it is further agreed,” to the end that stipulation about access to the Mississippi. This was reserved by the British for the consideration of their government. A third was, to secure both the right to fish and the right to the navigation of the Mississippi to the respective parties. It also suggested that British subjects “should have access from such place as may be selected for that purpose in His Britannic Majesty's aforesaid territories, west, and within 300 miles of the Lake of the Woods, in the aforesaid territories of the United States, to the river Mississippi, in order to enjoy the benefit of the navigation of that river,” &c. This was left with the British plenipotentiaries for consideration. They also intimated their willingness to omit article

eight altogether, if the British plenipotentiaries thought it best. The British plenipotentiaries wanted to add to the eighth article, after the words Stony Mountains, a stipulation agreeing to negotiate the fisheries question for the Americans, and the navigation of the Mississippi for the British. This was received by the American plenipotentiaries for consideration.

331

At the meeting of December 10th, the American plenipotentiaries stated that possibly doubts might arise as to the geographical accuracy of the words at the beginning of the eighth article—the present British substitute—“a line drawn due west from the Lake of the Woods along the forty-ninth parallel.” It was agreed that an alteration should be made to guard against such possible inaccuracy. The eighth article was further discussed on the 12th of the month.

The American plenipotentiaries in their note of the 14th, stated that they could not agree to the stipulations proposed as a substitute for the last paragraph of the eighth article. The first alteration in their *projet* respecting the navigation of the Mississippi was unexpected, seeing that the British neither in their note of October 21st, nor in the first conference to which it referred, mentioned the matter. To obviate, therefore, any difficulty arising from a presumed connection between that subject and that of the boundary proposed by the eighth article, they now expressed their willingness to omit the article altogether. To meet the supposed wishes of the British government they had proposed the insertion of an article recognizing the right of Great Britain to the navigation of that river and that of the United States to certain fisheries, which the British government considered as abrogated by the war. To such an article, which they considered merely declaratory, they had no objection, but did not want any new article, and offered to be silent in regard to both. To this stipulation or any other abandoning, or implying the abandonment of, any right in the fisheries claimed by the United States they could not subscribe. But to an engagement embracing all subjects of difference not yet adjusted, implying no abandonment of right, they were ready to agree.

In their communication of December 22d, the British plenipotentiaries said that, as they had stated in their note of August 8th, they did not wish to give fishing privileges without equivalent, however: “With a view of removing what they consider as the only objection to the immediate conclusion of the treaty, the undersigned agree to adopt the proposal made by the American plenipotentiaries at the conference of the first instant, and repeated in their last note, of omitting the eighth article altogether.”

332

Both parties being thus willing to postpone the settlement of the boundary line beyond the Lake of the Woods, the treaty was signed on December 24th; and thus was established a peace between England and the United States not since broken, though often imperilled.

This treaty, it will be seen, only advanced the boundary question by providing, in the seventh article, that certain commissioners, who were to fix the boundary from Lake Huron westward, were to “particularize the latitude and longitude of the most northwestern point of the Lake of the Woods, and of such parts of the said boundary as they may deem proper. And both parties agree to consider such designation and decision as final and conclusive.” It was certainly high time to fix this “point” seeing that none of the statesmen knew where it was, though they and their predecessors had its name so often in their mouths and at the points of their pens.

The day after the treaty was signed the American plenipotentiaries made a full report to the Secretary of State. They said that the majority of their body were “determined to offer to admit an article confirming both rights [that of the Americans to the fisheries, and that of the English to the navigation of the Mississippi] or to be silent in the treaty upon both, and leave out altogether the article defining the boundary from the Lake of the Woods westward.”

In a *quasi* controversial paper written nearly eight years later, on May 3, 1822, John Quincy Adams, the first in order of the American plenipotentiaries concerned, reviewed

the proceedings of 1814 somewhat elaborately, so far as they referred to the question of the northwestern frontier. The British government maintained, he said, that the treaty of 1783 was abrogated by the subsequent war, and yet they claimed the right to navigate the Mississippi under its provisions. Being asked for an explanation, they replied that the equivalent they offered for it was their acceptance of the forty-ninth parallel of latitude for the northwestern boundary, instead of the line to which they were entitled by the treaty of 1783 to the Mississippi. They had said the same thing to Monroe and Pinkney in 1807, and the principle had been assented to by them, with the subsequent sanction of President Jefferson. Still, all depended on the continuing validity of the treaty of 1783; for, if abrogated, the boundary as well as the navigation of 333 the Mississippi was null and void. The American commissioners replied to them that though willing to agree to the forty-ninth parallel, and that they thought it of mutual interest that the line should be fixed, yet they were not tenacious. But they could not agree to their articles of mutual surrender, the fisheries for the right of navigation of the Mississippi, with a pledge of future negotiation. But they would consent to omit the boundary article itself and leave the whole subject for future adjustment; to which proposition the British commissioners finally agreed. By the convention of October 20th, 1818, which gave the United States the boundary of forty-nine degrees from the Lake of the Woods westward, was proved the total indifference of the British government to the right of navigating the Mississippi, by abandoning their last claim to it, without asking an equivalent for its remuneration.

§ 8. The convention of 1818.

The very next summer after the signing of the treaty of Ghent trouble arose concerning the seizure of American fishing vessels, which, together with complaints that American slaves had been carried off in British ships at the conclusion of the war, showed the necessity of a speedy adjustment of the questions remaining unsettled between the two nations.

On September 17th, 1816, the Secretary of State, Mr. Adams, made overtures to the British government, on behalf of the United States, for a supplementary treaty of commerce.

On March 19th, 1817, the British government produced a draft of four articles towards the initiation of such a treaty.

On November 6th, Mr. Adams forwarded to Richard Rush, the envoy plenipotentiary at London, full power to conclude a commercial treaty.

On May 21st, 1818, he wrote again to him, informing him that the President desired him to propose an immediate general negotiation of a commercial treaty, which was, however, to embrace other subjects of discussion between the two governments than trade and commerce. Among these other subjects was indicated “the boundary line from the Lake of the Woods.”

In these negotiations Albert Gallatin was to be associated with Mr. Rush, as joint plenipotentiary, and instructions were furnished him 334 by Mr. Adams on May 21st. In this letter he was told that the British government wanted to refer some of the subjects to commissioners, like those authorized by the treaty of Ghent. Among these other subjects were, “the boundary line from the northwest corner of the Lake of the Woods westward, which you will remember was all but agreed upon, and went off upon a collateral incident at Ghent. * * * As to the line from the Lake of the Woods, as some dissatisfaction has already been excited here by the expense occasioned by the two commissions already employed in settling this boundary, another commission to draw the line through the depths of the deserts, and to an indefinite extent, would be still more liable to censure; besides the apprehensions which it might raise, that the issue of the commission would be to bring the British territory again in contact with the Mississippi.”

But on the 28th of July a more elaborate paper was addressed by the Secretary to Messrs. Gallatin and Rush, which embodied the President's instructions to the two commissioners. The third heading was:

“3. Boundary from the Lake of the Woods, westward.” Under this title he gave a brief statement of the geographical force of the treaties of 1783, 1794, and 1803. “The cession of Louisiana gave them a new and extensive territory westward of that river.” He then proceeded at length to tell about the doings of the plenipotentiaries and governmental views in 1807 and 1814; and how an agreement was made in the said last year to omit all reference to the boundary line beyond the Lake of the Woods. Then continuing, he wrote:

“From the earnestness with which the British government now return to the object of fixing this boundary, there is reason to believe that they have some other purpose connected with it, which they do not avow, but which in their estimation, gives it an importance not belonging to it, considered in itself. An attempt was at first made by them, at the negotiation of Ghent, to draw the boundary line from Lake Superior to the Mississippi. But, as they afterwards not only abandoned that pretension, but gave up even the pretension to an article renewing their right to the navigation of the Mississippi, it was to have been expected that they would thenceforth have considered their westward boundary of no importance to them.” He thought 335 that that indicated a design of encroaching by new establishments upon the forty-ninth parallel, or that it manifested a jealousy of the United States and a desire to cheek the progress of their settlements.1

1 See also Mr. Adam's resumé, of a later date, on page 332 supra.

Frederick John Robinson and Henry Goulburn were the commissioners representing the British government, and the place of meeting was in the city of London. As, however, all the geographical aspects of the subject—in the light of the scanty knowledge obtainable—had been fully discussed in the former international negotiations, there is nothing to be found in the protocols of September 17th, October 6th, 9th and 13th, requiring notice here.

On the 20th of October, 1818, the plenipotentiaries had come to an agreement, and the convention was signed by them that day.

On the same day Messrs Gallatin and Rush forwarded their copy of the convention to Washington. In their letter accompanying it they said that the boundary was definitely fixed at the forty-ninth degree of north latitude, and that an attempt was again made to connect it, with an article securing to the British access to the Mississippi and the right to its navigation; but they would not consent to the article and the British abandoned it.

The part of this document referring to the northwestern boundary is the following:

“ Article 2. It is agreed that a line drawn from the most northwestern point of the Lake of the Woods, along the forty-ninth parallel of north latitude, or, if the said point shall not be in the forty-ninth parallel of north latitude, then that a line drawn from the said point due north or south, as the case may be, until the said line shall intersect the said parallel of north latitude, and from the point of such intersection, due west, along and with the said parallel, shall be the line of demarcation between the territories of the United States and those of His Britannic Majesty, and that the said line shall form the northern boundary of the said territories of the United States, and the southern boundary of the territories of His Britannic Majesty, from the Lake of the Woods to the Stony mountains.”

This second article of the convention of 1818, ended a boundary discussion of thirty years standing, but as a matter of theory and law only; for the practical settlement and final description of the line of demarcation were yet a long way off.

336

DIAGRAM CHART OF LIMITARY LINES DRAWN BY A. J. HILL, 1892. NOTE: IN “H. B. CO'S. LINE OF 17TH CENTURY,” READ 18TH CENTURY.

337

§ 9. The work of the Boundary Commission at the Lake of the Woods, in 1823.

Peter B. Porter on the part of the American government, and Anth. Barclay for the British, were appointed commissioners under the sixth and seventh articles of the treaty of Ghent, to survey and mark the northern boundary of the United States from the point where the line of latitude of 45° intersects the St. Lawrence river to the most northwestern point of the Lake of the Woods. On June 18th, 1822, they made their decision concerning the line which they had established under the sixth article. This done they proceeded to the consideration of the boundary to be fixed under the seventh article, which was to commence at the water communication between Lake Huron and Lake Superior.

But concerning this part of their duties they came to no full decision, and no report of their doings is to be found printed; at least, not among the public papers of the United States. What is written here, then, under the heading of this section, has been compiled from works of private origin, or from official works not necessarily binding in their views concerning this particular subject.

The commissioners themselves did not accompany the party destined for the region west of Lake Superior; and, so far as can be ascertained, the principal personages who did go were the following:

Colonel Delafield, the American agent of the commission; the two astronomers, (of whom David Thompson was one), and their staff; and Dr. John J. Bigsby, the secretary of the commission.

Up to this time the “most northwestern point of the Lake of the Woods” had been only a name, first brought to the notice of the world by the treaties of 1782 and 1783, whose makers, apparently, had no definite knowledge of the lake and its surroundings. It was the principal object of this official surveying party therefore to now seek out the place so named, and ascertain its true geographical position. That they had before them a work of much delicacy and difficulty may be imagined.

There must have been one condition also to militate strongly against their doing their work here in any very elaborate manner, and that was the necessity of economy. Those were not millionaire days, either -22 338 in a private or a public sense. and the few thousands spent in former years by the commissioners under the fourth and fifth articles of the treaty, on the eastern part of the boundary, had been a rock of offense. In 1817, a committee of the House of Representatives had given it as their opinion that so complete a survey as had been carried on was not necessary. They maintained that the running of the line through the middle of the lakes and rivers was not intended to be performed literally, as that would be to cut islands into two parts at times, and to cross and recross the center of the current instead of following it. To ascertain where the current ran, they said, required no surveying, unless at some special points. In April of 1818, another House committee reported on the complete trigonometrical survey hitherto employed, and recommended that some mode of designating the boundary line under the sixth and seventh articles of the treaty should be arranged between the British government and the President of the United States requiring less time and expense. Two or three days later, a select committee was appointed to inquire into the expenses already incurred by the boundary commission.

Now, however correct these economical views were as regarded the boundary in general they were not suited to the business of ascertaining the terminal point of it. This was not, in the light of the little geographical knowledge of the lake then possessed by those most interested, some particular spot so prominent and well known that it could be readily found, but it was one that had to be sought out, as they supposed, from among competing points. To do this satisfactorily would require a thorough survey of the entire western half of the whole lake with all its bays and inlets.1

1 One is apt to wonder how it came that the views of the two American statesmen yet living, of the plenipotentiaries of 1782, were not asked for, as to their understanding of the oft repeated “point.” It is true that they were now quite old, Adams being 84, and Jay 81 years, but they still retained their intellectual vigor—Adams indeed yet exercised a public

influence through his pen. Perhaps such application was made, but if so no mention of it is readily found.

It may be imagined then that these gentlemen were limited as to time and means, and would not therefore be able to make their examination exhaustive. What they did do at the Lake of the Woods was to sail along the shores, establishing a few points astronomically and 339 filling in the topography between by methods of reconnoisance. This gave them the material for constructing a map of the lake.

Dr. Bigsby, writing many years later concerning this expedition, describes their following along the western shore from the south to the north. On July 18th they camped near the mouth of River la Platte, which came from a very large and shallow lake of the same name. Arriving at Rat Portage, at the outlet of the lake, they took observations for its position, and found it to be in latitude 49° 46# 22# and longitude 94° 39#. His words now are: “We left it on the 22d of July, and made an earnest but vain attempt, on the west of the portage, to find out any well marked spot entitled to be called, in the language of the treaty, ‘the most northwestern point of the Lake of the Woods.’ An idea then prevailed that the locality lay hereabouts; but the decision of 1842 has properly placed it many miles to the S. S. W. of Rat Portage.”1 The doctor elsewhere wrote that the place which they considered to be the said “point” was “at the bottom of a narrow, marshy cul-de-sac, eight miles and a half deep, situated at the northern part of” a bay debouching on the lake.

1 It so happened that the United States exploring expedition to the Red River of the North, commanded by Major S. H. Long, passed through this lake a couple of weeks after the surveyors of the boundary commission had been there. The *Narrative* of the expedition says: “Rat Portage has become a point of some Importance. as it appears probable that the northwesternmost point of the boundary line of the United States will be at or near its extremity,”

§ 10. Cartography of the Lake of the Woods; what the Commissioners of 1782–3 understood to be its most Northwestern Point .

The Lake of the Woods—the southern part of which is crossed by the line of latitude 49°—comprehends a series of four distinct sheets of water but so connected that, taken as a whole, they form a veritable labyrinth, by reason of their innumerable islands, peninsulas, and bays. Only its most northern subdivision was known to the Indians by the name now applied to its southern part, which term came after awhile to be applied by the French and English traders to the four lakes together. It is one of the larger of the innumerable lakes, that, connected by interlocking streams, go to form the southeastern part of the basin of the Nelson river of Hudson's Bay.

340

OUTLINE MAP OF THE LAKE OF THE WOODS. REDUCED FROM CANADIAN SURVEYS.

341

The time that it was first visited by white men is not known, though the Canadian officials were aware of its existence as early as 1711; and in 1731 the first post built there was erected by command of the elder Verendrye. When, later, the country to the westward of Lake Superior came to be mapped and engravings of it published this lake naturally found a companion place on the charts; but, as may be supposed, with a shape that bore little, if any, resemblance to the outline that modern maps have furnished us.

Yet it was from these early maps alone that the public men of the last quarter of the eighteenth century could derive their ideas of its contour, position, and hydrographical relationships.1

1 Travers Twiss, in his *The Oregon Question Examined*, London, 1846,at the place where he speaks of the introduction of maps of unsurveyed districts into definite description, well says:

“The pictorial features of a country which, in such cases, have been frequently assumed as the basis of the negotiation, have not unusually caused greater embarrassment to both the parties in the subsequent attempt to reconcile them with the natural features, than the original question in dispute, to which they were supposed to have furnished a solution”

On maps published prior to the date of the innocently mischievous Mitchell map this lake presented by no means any very complicated appearance. Four of such maps are now cited, in this connection.

The earliest, or presumed earliest, delineation of the Lake of the Woods to be found on any engraved map, is to be seen on the one illustrating Dobbs' *Account of the Countries adjoining to Hudson's Bay* , published in 1744. Here it appears as of simple oblong form, lying east and west, and having nine islands in it. Two streams are seen at the west end of the lake, the northern one being its outlet and flowing into Winnipeg Lake. The want of recognizable resemblances on this map, in the case of the Lake of the Woods, would seem to show that the information might have been obtained from some Indian sketch.

Four years later than the above work, was published Henry Ellis' *Voyage to Hudson's Bay* , which contained a general map too. This, though not precisely like the Dobbs map, much resembles it, and displays the same general hydrography, the waters running westward and other features; but there is more finish and detail to it. The lake in question also lies east and west, and has six islands in it; but though its shores are more indented, its representation bears no greater resemblance to the truth than the delineation of it on the former map.

On the map of D' Anville, bearing date 1746, the lake shows a rounder figure, but one whose salient points are recognizable as those now known, the peninsula jutting into the lake from the right, the outlet at the farther end, and the inlet, and also the bay with affluent streams to the left of the latter. It errs however in its orientation; for the inlet and outlet are placed due east and west of each other, as in the English maps, instead of south and north respectively.

T. Jefferys' chart of the Atlantic ocean, 1753, extends far enough to the west to take in the lake. It shows it as of an elongated form, its longest diameter also east and west; with two streams entering at the west end, and with nine islands, like the Dobbs map, but without any stream being shown at all elsewhere, though two bays appear at the east end. The absence of the eastern stream was probably a draughtsman's or engineer's error.

French maps of the date 1755 can hardly be said to be earlier than Mitchell's. They give, however, like the D'Anville map, some true idea of the lake; though the entire outlines need turning around similarly, from forty-five to ninety degrees, in order to make them correspond reasonably with the points of the compass.

The *Gentleman's Magazine* of July, 1755, contains a map of the possessions of the English and French in North America, which looks very much like a reduced copy of Mitchell's map, but any name of maker or compiler is carefully omitted from it and from the explanatory text accompanying it. On this map the waters of the boundary chain of lakes not only flow to the eastward, but the Lake of the Woods shows no stream at all entering into it at the west end, or elsewhere, thus unmistakably proving the map-makers belief to be that this lake was the head o the hydrographical system he had drawn.

There need be no description given here of the shape of the Lake of the Woods as represented by Mitchell; for it can speak for itself in the copy now given.1

1 The diagonal line drawn on this little map at the west end of the lake, and similar lines marked on the modern Canadian map of the same, appearing on page 340, form no part of the original maps. They are merely interpolated to illustrate the “cutting” theory described in the next section.

Of course between 1755 and 1782 there were other delineations of the lake on published maps, but naturally Mr. Mitchell could not have 343

PART OF THE MITCHELL MAP OF 1755.

344 used these—though the commissioners of the latter date might have paid them more attention—which delineations approximated more and more to the true topography; but they do not require any further reference here.

What the plenipotentiaries assumed—not knew—to be the most northwestern point of the lake requires no lengthy dissertation to establish. They had only one map by which they were ultimately guided, and on that they marked the whole boundary —the northwestern equally with all the rest.1

1 There is no avoiding the conclusion that everything hinges on the delineations of this map. Adams and Franklin, as already quoted, testified to their use of this map, and so did Jay. Mr. Adams, some twelve years after his first letter on the subject, wrote in still stronger terms, viz.:

“Mitchell's map was the only one which The Ministers Plenipotentiary of The United States and the Ministers Plenipotentiary of Great Britain made use of in their Conferences and Discussions relative to The Boundaries of The United Stratos in their Negotiations of the Peace of 1783 and of the Provisional Articles of the 30th of November, 1782. Upon that Map, and that only, were the Boundaries delineated,”

In addition, it may be stated that this map was formally recognized as past authority by the treaty of 1827, in the following words: “ Article IV. The map called Mitchell's map, by which

the framers of the treaty of 1783 are acknowledged to have regulated their joint and official proceedings," &c.

On this map they saw a named lake, which they understood to be the head of the largest stream running into Lake Superior, and to it and through it they therefore ran the line of demarcation The obvious intention was to run to its farthest point or head, and as the map showed that to lie to the northwest they naturally used that term in their description; having no misgivings, presumably, as to the accuracy of the drawing. It is not at all likely that they had much, if any, discussion about this; and that they studied brevity of description is shown by their only naming the two extremes of the chain of lakes selected for the boundary.

§ 11. The official designation of the most northwestern point of the Lake of the Woods, and its establishment by the treaty of 1842.

Although the designated boundary line had been examined by the party sent to the Lake of the Woods as stated, and its location indicated on their maps from the outlet of Rainy lake to the head of the 345 bay referred to in the former lake; yet it appears that the two commissioners could not agree upon the terminal point of the line.

"The matter, not being of immediate and pressing importance," Dr. Bigsby writes, "was suffered to remain in suspense. It was thought advisable by the British government, about 1841, that Dr. Tiarks should make a personal inspection of the Lake of the Woods, which he accordingly did."

So astronomer Tiarks decided the case against Rat Portage, and this is the peculiarly practical method he employed to come to his conclusion. If a line whose bearing is exactly N. E. and S.W. be passed westwardly over the surface of the lake, on paper, that point on the main shore which is last cut by it will be the most northwestern point required.

With all due respect to the learned astronomer who invented this plan, and to the eminent statesmen who accepted it—now probably all dead and gone—a common-sense man cannot well have much respect for it, unless it were understood to have been used by way of compromise, and for that occasion only, where a point had already been supposedly chosen by the method. Were the rule actually meant as one of general application it would be a strange piece of empiricism. Suppose, for example, that nature had made the bay at the southwest end of the lake in question to extend 29 more miles to the westward, and 3 more miles to the southward, than it does, and to terminate in a sharp point as at the bay that was chosen; then the N. E. and S. W. line would last leave the lake at the supposed point, as would also one bearing N. W. and S.E. It would result then that at the place of the intersection of these two lines, on the water's edge, we would have both the most northwestern point of the lake and its most southwestern. And not only that, but would have found a *north* -western point that would be more *southern* than any other place on the lake shores!

But, turning away from all geometrical paradoxes, if an examination be made of the simple outline of the lake as drawn by Mr. Mitchell, it will be readily seen that a N. E. and S. W. line would cut its shore exactly at what appears to be the inlet, but really is the outlet, in other words, at Rat Portage.

346

As a matter of geographical interest alone, having no other significance now, it may be said that by a strict application of the arbitrary line and cut rule just explained, the most northwestern point of the Lake of the Woods would not be found where Dr. Tiarks placed it. For this fact the commissioners of 1823 are not to be blamed; the hasty survey of the lake was doubtless the most that their means permitted. Still, had the thorough survey objected to in the east been allowed here, it would have shown that the point they were looking for accord to their geometrical understanding of the wording of the treaty, was one

situated sixteen or seventeen miles farther to the northward than the one they did select; being a point on the western shore of the Lac Plat they passed by unvisited.

That such assertion as to the availability of this lake is not unwarranted may be seen by what two practical men wrote about it, many years afterward. The first one was Alexander Wells, assistant surveyor on the Canadian exploring expedition of 1858, whose words are as follows:

“Lac Plat is more a Bay of the Lake of the Woods than a separate lake, its discharge being through a long deep bay, which in some places has the appearance of a broad river. * * * The Indians also said that at high water the current would be for some days from the Lake of the Woods into Lac Plat.”

Captain W. J. Twining, the chief astronomer of the American party of the boundary survey of 1872, when also speaking of the lake, wrote thus of it in his report: “It is, however, a little difficult to understand the process of reasoning by which those commissioners, while including the Clear Water and the Lake of the Sand Hills under the general title, yet rejected the Lac Plat.”

With a view to the adjustment of the unsettled questions between Great Britain and the United States, of Which the most important was the boundary line in the east, Sir Robert Peel, the English premier, sent Lord Ashburton to the United States to enter into negotiations with Mr. Webster the American Secretary of State. Now these two gentlemen were as much pleased with each other as were Oswald and Franklin before them, so there was no clashing, and affairs were amicably arranged in due course of such friendly diplomacy.

347

With regard to the line at the Lake of the Woods, they adopted for its termination the point which had been selected under the Tiarks plan as already described.

The treaty was signed on August 9th, 1842. That part of it which is of importance here was contained in the second article, toward the end, the wording being as follows:

“Through the several smaller lakes, straits, or streams connecting the lake here mentioned, [Namecan], to that point in Lac la Pluie, or Rainy Lake, at the Chaudière Falls, from which the commissioners traced the line to the most northwestern point of the Lake of the Woods; thence along the said line, to the said most northwestern point, being in latitude 49° 23# 55# north, and in longitude 95° 14# 38# west from the Observatory at Greenwich: thence, according to existing treaties,, due south to its intersection with the forty-ninth parallel of north latitude, and along that parallel to the Rocky Mountains.”

§ 12. Concluding Remarks .

This simple statement of a somewhat complex subject now nears its end, there only remaining to be given a short statement of the last acti of the two governments in reference to the boundary line at the Lake of the Woods.

It will be remembered that the surveys of 1823 terminated at a selected point on the lake, whence the remainder of the boundary was to follow two designated straight lines—one a short one due south to the forty-ninth parallel, the other the parallel itself from the intersection of the short to the to the Stony Mountains. No provision was made in the treaty of Ghent for surveying them; for their marking on the ground was not needed at that time.

How long, however, these lines would have remained unsurveyed it is hard to guess; the ordinary official mind, being somewhat literal and perfunctory, does not readily look beneath the surface of records, or interest itself in matters that happened before its time, and thus may be ignorant of important matters well known to “outsiders.” It happened that in the year 1870, it was incidentally discovered that the boundary line at Pembina, as hitherto accepted there, was about 4,700 feet south of the true position, which of course was in latitude 49°.

The fact was brought to the attention of President Grant, who, in his message to Congress of December 5th, 1870, recommended that a proper survey should be made of what remained unmarked of the international boundary. In compliance with his recommendation an act was passed, approved March 19th, 1872, which provided for the survey and marking by engineer officers of the boundary between the Lake of the Woods and the Rocky Mountains; the work to be done under the direction of a joint commission appointed by the two governments concerned.

The field work of this survey was performed during the years 1872–3–4, and the commissioners signed the maps and protocol on May 29th, 1876.1

1 Although the following paragraphs refer entirely to the line east of the inlet of the Lake of the Woods, and consequently do not come within the proper scope of this paper, yet, as they treat of a very important matter which no one of late years seems to have brought to public attention, I venture their introduction in the shape of this note.

Listen first to what Dr. Bigsby said in 1850. “None of the islands on the old route and in this great lake, embracing a line 430 miles long, are as yet appropriated to the United States or Great Britain. Some of them must very speedily become valuable mining property, as on Gunflint lake, Iron lake,” &c.

What he said then is still in force. There is no boundary line actually established between the mouth of Pigeon river and the Chaudière falls near the head of Rainy lake; for the mere recapitulation in the treaty of 1842, of the names of the various minor lakes through which the line should run is no practical boundary, seeing that it cannot account for the ownership of the innumerable islands. The surveyor general of public lands on this side of the line may instruct his deputies to survey only islands on the Minnesota side of the channel, and the officials in charge of the Dominion land surveys similary instruct their people working from the Ontario side, but that may not always suffice, Suppose a case

where there are two channels, one broad, shallow, and sluggish, the ether narrow, but deep; who shall decide to which country the island or islands lying between the two should belong? It may be remembered that not so very many years have elapsed since there was trouble on the Pacific coast concerning the San Juan islands, which had practicable channels on each side of them. In that case there was no question of great wealth concerned in the dispute, it was the question of sovereignty only. And yet, such was the warmth of feeling, that but for the remoteness and inaccessibility of the locality, the Americans and English would have come to unofficial blows over it. Suppose further, that between any such channels on our northern boundary there should be found an island rich in ores, another Silver isles for instance, would there not be from both countries a rush for it and for the neighboring shores? How long then would it be before there came a conflict of jurisdiction? And when too there is considered the excitability of the American temperament, and the proved custom of the people to take up arms on the spur of the moment, as shown by very recent events, blood might be shed before the governments of the two countries dreamed of danger.

As Mr, Gore, the *chargé d' affaires*, wrote in 1802, the adjustment of the matter should not be neglected until “private gain and individual possession shall intermingle themselves in the question.”

But this humble statement will probably meet with little attention, and be but the voice of Cassandra.

A few further observations concerning the nominal “point” of the Lake of the Woods, in the light of the information supplied by the modern survey of 1872 may be added now. It was very essential that the astronomers of this second expedition should find the original point, and they did; for after a long search they succeeded in discovering, below the water, the remains of the wooden monument erected by their predecessors, as a datum from which the point at the head of the marsh could be traced at any future time. From this reference point, by running the old recorded courses, they were easily able to fix upon the very spot

in the water—not on the land—where the agreed upon most northwestern point was to be found. There is however a certain 349 anomaly connected with the matter of this extreme end of the boundary well worth mentioning. The modern map shows the boundary line winding along the channel of the bay of the Northwest Angle until it intersects the surveyed north and south boundary at a point about 4,250 feet south of the commencement of the latter, across which boundary the dotted line representing the water meanders back and forth for a quarter of a mile, when it crosses it for the last time and for the rest of the distance of nearly half a mile its waving coarse is entirely to the westward till it strikes the initial “most northwestern point” where the boundary survey begins. The general likeness of direction comes from the generally north and south bearing of the narrow water course or slough. This marshy strip continues for half a mile farther, in a direction a little east of north, till it begins to divide into little branch swamps, whose final course is hidden by the margin of the map.

Judging then by the map of to-day, it would appear that the commissioners of 1823 selected a point where no point was, but the explanation of this action is simply that in that year what is now water was then land, though marshy; for in 1872 the water was several feet higher—the Indians said eight—than when the first survey was made. But irrespective of these hydrographical considerations, remains the peculiarity of an international boundary line which for over three 350 quarters of a mile bounds nothing, by reason of its being to that extent entirely within the territory of one of the nations concerned. Can anyone think that such niceties of location were contemplated by the treaty makers of 1782–3?1

1 Still this is merely a matter of surplusage, and can infringe on no one's rights; for a mathematical line has no breadth, and if straight can include nothing. By making the most northwestern point on Lac Plat there would have been no such anomalous line, and more than as much again of land would have accrued to the United States than by the present boundary. But had the said point been placed at Rat Portage by the commissioners of 1823—which I verily believe to be the place contemplated by the treaties of 1782–3—

there would have been formed the most curious politico-geometrical situation that can be imagined, in view of the fact that there was no Mississippi river lying exactly west, and of the next fact that instead of abandoning the policy of a point on the lake the convention of 1818 required it to be connected by a due north or south line with the 49th parallel. By the carrying of the boundary to Rat Portage, under these circumstances, the Americans would have gained a geographical victory, but it would have been very embarrassing.

Let the reader inspect the modern map of the Lake of the Woods and work out the problem as to what the Americans would then own—if he can.

The geographical position of this time honored point in the swamp, was accurately ascertained by the commission of 1872. It was in latitude 49° 23# 50#.28 and longitude 95° 08# 56#.7. These figures then supersede those embalmed in the “Ashburton Treaty,” which were derived from observations made in a time of less perfection of instruments, and of scantier astronomical facilities generally, than the present affords.

* * *

It is somewhat strange that the peculiarity of configuration of the international boundary line at the Lake of the Woods should have required years for its complete recognition on our American maps, in view of the plain wording of the treaty of 1842. At times before this final settlement, the line to the most northwestern point of the lake appeared on some printed maps, but during a couple of decades or so succeeding this treaty it seems to have been pretty generally forgotten, and was not to be found on current maps of the United States. The absence, at that time, of any resident population in Minnesota, or the British possessions, near enough to the lake to make the position of the boundary line there a matter of importance or interest, served also to keep the subject in the background.

351

In the winter of 1860–1, the present writer was temporarily employed as the clerk in the office of the Superintendent of Public Instruction for the State of Minnesota, and while

there had occasion to inspect a proof sheet of a small map of the State, which had been sent to the office with a request that any errors in it should be corrected. As its publishers, (Monteith and McNally, of New York,) had not made use of the information desirable from the government land surveys, which at that time had already progressed over more than one-half of the area of the State, the map was entirely obsolete, and the firm was so informed. Up to this time eastern map-makers had scarcely learned that it was their place to abandon the topography of the Nicollet map of 1842, as fast as it was superseded by the actual surveys of the general land office. At the request of the publishers named an entirely new map was compiled in the office mentioned, for the school geography it was intended to be a part of. This afforded an opportunity for indicating the northwestern boundary of Minnesota correctly, in connection with the named lakes of the treaty referred to that defined it in detail.

It is to Nicollet's map, however, that should probably be laid most of the blame for the omission, on maps in general, of the boundary line through the Lake of the Woods north of the forty-ninth parallel; for this map, which was about the only authority for the geography of the upper basin of the Mississippi—the region personally visited by the explorer—was not extended far enough north to show the lake, though all the rest of the boundary lakes appear on it, having been copied from the old maps of the boundary commissioners of 1823.

Little by little the eastern publishers corrected their maps in this matter of the boundary line at the Lake of the Woods, but it took many more years for the departments of the United States government to get their eyes opened in the same way, at least that was the case with the General Land Office. This office published every year a series of maps, showing the state of the surveys ordered by it, but as regarded the Minnesota map, that continued for years to represent the line as running direct from the Rainy Lake river, to the west shore of the lake to the forty-ninth parallel. Not until the year 1867, and then only because the Rev. E. D. Neill—the Superintendent of Public 352 Instruction referred to—called the attention of the commissioner to the matter, did the “most northwestern point of

the Lake of the Woods” receive recognition on the annual maps of progress of the office, by its appearing as a point to which was drawn the international boundary line.

FORT SNELLING.

INDEX.